



**2016**  
Registration Document  
including annual financial report



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# 2016

# Registration document

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This Registration Document was filed with the *Autorité des Marchés Financiers* on March 23, 2017, in accordance with the provisions of Article 212-13 of the General Regulations of the AMF.

It may be used in support of a financial transaction if supplemented by an information memorandum approved by the *Autorité des Marchés Financiers*.

This document has been prepared by the issuer, and its signatory is responsible for its content.



GÉRARD MESTRALLET Chairman of the Board of Directors

“

THE GROUP  
CAPITALIZES ON  
ITS HISTORICAL  
STRENGTHS TO BUILD  
A LOW-CARBON  
ENERGY WORLD

”

# ENGIE IS TRANSFORMING ITSELF!



Implementation is on track for the three-year strategy and transformation plan that Isabelle Kocher and I introduced to you last year and which aims to make ENGIE a leader of the global energy transition.

It confirms the relevance of the strategy decided three years ago and confirmed since by the Board of directors.

The evolution of our sector continues to accelerate. A triple revolution deeply changes our business.

First of all, it is a technological revolution, made possible by the rapid advances in photovoltaic, battery storage, green mobility - electric and gas. Renewable energy prices are falling rapidly, and miniaturization of facilities is accelerating. Tomorrow, large power plants and networks will coexist with a multitude of small local systems. Add to this the digital revolution. Smart solutions, which have already transformed our daily life, allow us to offer our customers new ways of managing production and energy consumption.

Finally, a societal and cultural transformation is underway. Mentalities are changing. Increasingly, the consumer aspires to reduce energy consumption. He or she wants to have low carbon solutions tailored to manage their consumption, and sometimes produce their own green energy.

True to its pioneering spirit, the Group capitalizes on its historical strengths to accompany this energy revolution and helping to build a low-carbon energy world where gas and renewables are more than ever the energies of the future.

Committed and responsible player, ENGIE extends its strategic choices by bringing its convictions on the European and international scene. As a continuation of the Paris Agreement, we are defending a CO<sub>2</sub> price high enough to allow companies to direct their investments towards low-carbon technologies. Within the European Union, this commitment is in line with the one we continue to pursue with our peers, within the framework of the Magritte Group, for the reform of the carbon market and the advent of a “Europe of Energy”.

The Board of Directors is proud to ensure the strategy and the principles behind our large industrial, environmental and human project.

# A NEW ENERGY WORLD IS EMERGING



**W**e have a clear three-year strategic vision and transformation plan, and are ahead of schedule.

Along with our Board of Directors, we have decided to focus our efforts on our core businesses: low-carbon power generation, global networks (mainly gas ones), and integrated solutions for our customers - nearly 80% of our portfolio.

We have also decided to sell off operations that do not fit with our strategy. A deliberate choice.

Our plan to sell off €15 billion worth of assets within three years is already more than 50% complete in just one year. As a result, we have reduced our coal-based power-generation capacity by half.

We are reinvesting the income from these sales in our strategic activities. There will nevertheless be a gap between the time we make these investments and the time they start contributing to our results. In 2016, we invested almost €5 billion in our growth as part of a program worth €16 billion.

To improve the Group's profitability, we have launched an operating efficiency program "Lean 2018". We have exceeded our target for 2016 and realized gains of €530 million. The entire organization contributes to these efforts, allowing us to raise our 2018 target by 20%.

We are also working to develop incremental growth drivers for the next 5 to 10 years that will accelerate our development. These include green mobility, hydrogen, decentralized and autonomous power-generation solutions. This is all made possible thanks notably to our technological and digital innovations.

The new organization that we set up a year ago, one that we wanted to be more diverse, more open to our stakeholders and more agile, allows us to capture the opportunities of this new energy world.

The Group expects a return to organic growth in 2017.

In addition to combating climate change, the energy transition is a major opportunity to reduce or even erase the disparities regarding access to energy. Whether in public lighting, healthcare facilities, access to drinking water and education, or exposure to air pollution:

better access to sustainable energy will lead to huge progress in all these critical areas.

Solar – a quasi-unlimited, more and more affordable and universal source of energy – is today's one of the best option for meeting the dual challenge of combating climate change and providing access to energy for all.



ISABELLE KOCHER Chief Executive Officer



**AHEAD OF SCHEDULE ON  
OUR TRANSFORMATION PLAN**



## Annual Financial Report, Management Report and Chairman's Report

This Registration document includes (i) all the items of the Annual Financial Report mentioned in section I of Article L. 451-1-2 of the French Monetary and Financial Code, and in Article 222-3 of the General Regulations of the *Autorité des Marchés Financiers* (AMF), the French Financial Markets Authority, (ii) all the mandatory information included in the Management Report of the Board of Directors to the Annual Shareholders' Meeting of May 12, 2017 as provided for in Articles L. 225-100 and L. 225-100-2 of the French Commercial Code, and (iii) all the information included in the Chairman's Report on corporate governance and internal control and risk management procedures as provided for in Article L. 225-37 of the French Commercial Code.

In Appendix B of this Registration document is a comparison table between the documents mentioned in these texts and the corresponding headings in this Registration Document.

## Incorporation by reference

In accordance with Article 28 of European Regulation No. 809/2004 of April 29, 2004, this Registration Document incorporates by reference the following information, to which the reader should refer:

- in relation to the ENGIE fiscal year ended on December 31, 2015: the management report, consolidated financial statements prepared according to IFRS and the related Statutory Auditors' report appearing on pages 170 to 186 and 187 to 306 of the Registration Document filed with the AMF on March 23, 2016 under number D. 16-0195;
- in relation to the ENGIE fiscal year ended on December 31, 2014: the management report, consolidated financial statements prepared according to IFRS and the related Auditors' reports appearing on pages 176 to 193 and 195 to 328 of the Registration Document filed with the AMF on March 23, 2015 under number D. 15-0186;

This information should be read in conjunction with the comparative information as of December 31, 2016.

The information included in these Registration Documents, along with the information mentioned above, is replaced or updated, as necessary, by the information included in this Registration Document. These reference documents are available under the conditions described in Section 7.3 "Documents available to the public" in this Registration Document.

## Forward-looking information and market data

This Registration Document contains forward-looking information including in Section 1.1.4 "Strategic priorities," Section 1.1.6 "Competitive positioning," Section 1.1.5 "Transformation Plan" Section 1.3 "Description of the Group's activities lines" and Section 6.1.1.2 "Outlook." This information is not historical data and therefore should not be construed as a guarantee that the events and data mentioned will occur or that the objectives will be achieved, since these are by nature subject to unpredictable events and external factors, such as those described in Section 2 "Risk factors."

Unless otherwise stated, the market data appearing in this Registration Document comes from internal estimates by ENGIE based on publicly available data.

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## Note

In this Registration Document, the terms "ENGIE," the "Company," the "Issuer," and the "Enterprise" refer to ENGIE. The term "Group" refers to ENGIE and its subsidiaries.

A list of units of measurement, short forms and acronyms and a glossary of the frequently used technical terms are featured in Appendix A of this Registration Document.

Copies of this Registration Document are available at no cost on the Company website ([engie.com](http://engie.com)), on the website of the *Autorité des Marchés Financiers* ([amf-france.org](http://amf-france.org)), as well as from ENGIE, 1 place Samuel de Champlain, 92400 Courbevoie (France).

# 01

## Presentation of the Group

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# 1.1 Profile, organization and strategy of the Group

## 1.1.1 General Presentation

The ENGIE Group is one of the world's leading industrial companies and a benchmark in the fields of gas, electricity and energy services.

It is active throughout the entire energy value chain, in electricity and natural gas, upstream to downstream in:

- purchasing, production and marketing of natural gas and electricity;
- transmission, storage, distribution, management and development of major natural gas infrastructures;
- energy services.

In a world of energy that is undergoing a period of unprecedented change, marked by persistently weak commodity prices and the

acceleration and globalization of the energy transition, ENGIE can count on its strong positions in regulated infrastructure, customer services and its dynamic of growth in renewable power generation. The development of these activities, together with a bold plan for asset rotation (see Section 1.1.5 "Transformation Plan") will transform the Group and position it as a pioneer in the new world of energy.

Listed in Paris and Brussels, ENGIE is represented in the major stock indices (see Section 5.1.1.1 "Share capital and voting rights").

The Group's fundamental values are drive, commitment, daring and cohesion.

## 1.1.2 History and evolution of the Company

The Company is the result of the merger-absorption of SUEZ by Gaz de France, following the decisions of the Combined Shareholders' Meetings of Gaz de France and SUEZ of July 16, 2008. The merger took effect on July 22, 2008.

Initially incorporated in 1946 as an EPIC (French public industrial and commercial enterprise), it became a limited liability company with a 99-year term under Law 2004-803 of August 9, 2004 on the electricity and gas public service and electricity and gas companies (amending Law 46-628 of April 8, 1946) whose provisions were aimed at organizing the change in the Company's legal status.

On July 7, 2005, the Company publicly floated its shares on the stock market. The Company's shares, under its former name, Gaz de France, were first listed on July 7, 2005.

Law 2004-803 of August 9, 2004, as amended by Law 2006-1537 of December 7, 2006 governing the energy sector and Decree 2007-1784 of December 19, 2007, authorized the transfer of the Company from the public to the private sector. On July 22, 2008, the Company absorbed SUEZ in a merger which entailed transferring the majority of the Company's share capital to the private sector. The new company took the name "GDF SUEZ".

SUEZ itself was the result of the merger in 1997 of Compagnie de Suez and Lyonnaise des Eaux. At the time, Compagnie de Suez – which had built and operated the Suez Canal until its nationalization by the Egyptian government in 1956 – was a holding company with diversified stakes in Belgium and France, particularly in the finance and energy sectors. Lyonnaise des Eaux was a diversified company in the management and treatment of water, waste, construction, communications and technical facility management. SUEZ became an international industrial and services group whose objective was to meet essential requirements in electricity, gas, energy and industry services, water and waste management.

The deregulation of European energy markets in the early 1990s promoted the international development of both Gaz de France and SUEZ, which progressively expanded their activities beyond their respective traditional markets, both in Europe and internationally.

On February 3, 2011, the Company completed a merger with International Power. In 2012, it confirmed its strategy as a global energy

player, finalizing the purchase of shares held by the minority shareholders of International Power on June 29, 2012.

The shareholders' agreement for SUEZ Environnement Company expired on July 22, 2013 and was not renewed. The cooperation and shared functions agreement and the financing agreement between the Company and SUEZ Environnement Company have also come to an end. The Company now uses the equity method to consolidate SUEZ Environnement Company's activities in its financial statements, rather than full consolidation.

The Company intends to maintain its role as a long-term strategic partner of SUEZ Environnement Company and as its majority shareholder. The guiding principles of the industrial and commercial agreements between the Company and SUEZ Environnement Company were confirmed in January 2013, and form the basis of a framework agreement between the two companies, similar to what might have been concluded with third parties outside the Group. They relate to reciprocal preference, under market conditions, in purchasing/sales, continuing cooperation in certain industrial activities, development of potential joint commercial offerings and cooperation in sustainable development, innovation and research and development.

In early March 2016, the two companies signed an agreement providing for the contribution of all of SUEZ IP's share capital from ENGIE to SUEZ Environnement Company (now SUEZ), which owns all intellectual property rights related to the SUEZ brand. The main terms and conditions of this transaction as set out in the contribution agreement are detailed in section 4.5.1.

On July 29, 2015, the Extraordinary Shareholders' Meeting approved a change in the company name, and adopted "ENGIE" as its new legal name.

The name of the share listed on the stock market was also changed to ENGIE, and its ISIN code changed to "ENGI", with effect from July 31, 2015.

ENGIE has its head office at 1, place Samuel de Champlain, 92400 Courbevoie, France. The telephone number is +33 (0) 1 44 22 00 00. ENGIE is listed in the Nanterre Trade and Companies Register under reference number 542,107,651. Its NAF (French business sectors) code is 3523Z.



ENGIE is a public limited liability company (*société anonyme*) with a Board of Directors subject to the laws and regulations governing public limited companies and any specific laws governing the Company, and to its by-laws.

The Company's 12-month fiscal year runs from January 1 to December 31 of each year.

### 1.1.3 Organization

In response to the challenge of the global energy revolution and to get closer to its customers, on January 1, 2016, ENGIE put in place a simplified structure based on a territorial and decentralized approach. The Group now comprises 24 operating entities (Business Units, or BUs)<sup>(1)</sup>, five Métiers and a range of support functions and operational functions (see the Group organizational chart p.08).

Most of the BUs are constituted on the scale of a country or group of countries, according to the density of the activities carried out in the geographical areas concerned. They bring together the Group's activities to meet the expectations of their customers and stakeholders in a given area.

The following were therefore created:

- Eleven geographical BUs, in Europe and worldwide (Africa; North America; Latin America; Asia Pacific; Benelux; Brazil; China; North, South and Eastern Europe; Middle East, South and Central Asia, and Turkey; United Kingdom; and Generation Europe) responsible for the central management of all Group activities within their region;
- France has a special structure, given its size and the presence of regulated entities. It has eight BUs, four specialized in gas infrastructures (transmission, distribution, terminals and storage) and four related to the BtoB, BtoC, networks, and renewable energy businesses;
- Lastly, in addition to the operational entities, there are five global BUs, whose scope is worldwide: Exploration and Production International; Global Energy Management; Global LNG; Gaztransport & Technigaz (GTT); and Tractebel.

Each of these BUs is represented on the Group Executive Committee (COMEX) by an Executive Vice-President, which oversees it.

Five Métiers have been created in addition to this geographical structure: gas value chain; centralized generation; decentralized solutions for cities and territories; solutions for businesses; and solutions for residential and professionals.

The support functions and the operational functions complete the organization. They aim to reinforce the action of the Métiers to develop synergies within the Group and support the BUs.

- The support functions are as follows: General Secretariat; Finance Department; Group Human Resources Department; Group Strategy Department; Brand and Communication Department; Group Digital and Information Systems Department; Innovation Department; Group Environmental and Societal Responsibility Department; Group Real Estate Department; departments reporting to the Chief Executive Officer (Internal Audit and Risk Management Department; Institutions France and Territories Department; European and International Relations Department).
- The operational functions are as follows: Strategic Sourcing & Supply Department; Research & Technology Department; Business Development Oversight Department; Industrial Projects Department; and Nuclear Development Department.

The Métiers, the support functions and the operational functions are grouped within the scope of the NewCorp.

In addition, the Global Business Support entity groups together the Group's Shared Service Centers in France and Belgium. It covers six functional areas: general procurement and IT, finance, human resources, real estate and logistics, information systems, and internal consulting.

The Company operates its own business. At the end of 2016, the number of the Company's direct or indirect subsidiaries (controlling interest) was approximately 2,000. The Group's main consolidated subsidiaries are listed in Section 6.2 "Consolidated financial statements – Note 2 (Main subsidiaries at December 31, 2016)". For a list of major subsidiaries and investments directly owned by the Company, see Section 6.4 "Parent company financial statements – Note 2".

The presentation of the Company's activities and the strategic economic assets of its main subsidiaries as well as their geographical location are presented in Section 1.3 "Presentation of the Group's activities".

(1) There is also a 25<sup>th</sup> BU comprising the holding company and corporate activities, including entities dedicated to the Group's centralized financing, the activities of the Solairedirect entity and the equity-accounted contribution of SUEZ.

# AN ORGANIZATION CLOSE TO CUSTOMERS AND TERRITORIES

## 24 Business Units

### 11 BUs in Europe and worldwide

- Africa
- Asia Pacific
- Benelux
- Brazil
- China
- Generation Europe
- Latin America
- North America
- North South, Eastern Europe
- Middle East, South and Central Asia, and Turkey
- United Kingdom

### 8 BUs in France



- Elengy
- France BtoB
- France BtoC
- France Renewable Energy
- France Networks
- GRDF
- GRTgaz
- Storengy

### 5 Global BUs

- Exploration and Production International
- Global Energy Management
- Global LNG
- GTT
- Tractebel

## NewCorp

### 5 Métiers



### Support Functions

- General Secretariat
- Finance Department
- Group Human Resources Department
- Group Strategy Department
- Brand and Communication Department
- Group Digital and Information Systems Department
- Innovation Department
- Group Environmental and Societal Responsibility Department
- Group Real Estate Department
- Departments reporting to the Chief Executive Officer
  - Internal Audit and Risk Management Department
  - Institutions France and Territories Department
  - European and International Relations Department

### Operational Functions

- Strategic Sourcing and Supply Department
- Research and Technology Department
- Business Development Oversight Department
- Industrial Projects Department
- Nuclear Development Department

## Global Business Support

### 1.1.4 Strategic Priorities

The markets in which the Group is expanding are currently undergoing profound change:

- the increase in energy demand is concentrated in the fast-growing economies;
- natural gas is playing a growing role at global level;
- the energy transition has become a global reality;
- energy management is more and more decentralized, at local and even individual levels.

The economic slowdown in Europe and energy efficiency policies have led to a fall in consumption which, in combination with continuing development of renewable energy and plentiful cheap coal, has generated surplus capacity and low electricity prices in the long term. This situation has caused a significant crisis in thermal power generation.

The energy revolution has been ongoing for several years at three different levels:

- the technological revolution is accelerating, thanks to the advances made in photovoltaic energy, battery storage, electric mobility, and the use of hydrogen;
- added to this is the digital revolution: smart solutions have changed people's relationships with the city, home and car, and the Internet of Things is becoming standard in energy management;
- and finally, a cultural and societal transformation is playing out. Today's consumers are looking for a more thoughtful use of energy and they want to use customized low-carbon solutions to manage their consumption and even produce their own green energy.

ENGIE has been anticipating this change of paradigm for several years, and is now stepping up its shift in strategy, aiming to position itself as a pioneer in this new world of energy.

To deploy its industrial activities in line with the energy revolution, the Group is concentrating its new development in three areas: low-carbon activities, integrated solutions for its customers, and activities not exposed to commodity prices.

- ENGIE is thus prioritizing low-carbon options. The fight against climate change is an ambition driven by both societal and economic concerns. Low-carbon activities will account for over 90% of the Group's EBITDA by 2018.
- In an increasingly decentralized world, the Group aims to strengthen its activities downstream in the value chain. The contribution to EBITDA of integrated solutions for customers will increase by more than 50% by 2018, as compared with 2015.
- Lastly, in a context of ongoing high volatility, the Group intends to turn towards activities that are less exposed to wholesale market prices, to enhance the consistency of its performance. By 2018, regulated activities or activities under contract will represent more than 85% of EBITDA.

To achieve these objectives, the Group relies on its strong capital structure, robust cash-flow generation, and the three business segments in which it has forged leading historical positions:

- power generation from gas and renewable energy;
- global energy infrastructures, particularly in natural gas;
- energy supply and service solutions tailored to each type of customer (businesses, residential, professionals, cities and territories).

In this context of transformation, ethics and the safety of people are core elements of the Group's strategy.

To become more agile and adapt to the trends in its environment, the Group has been implementing a far-reaching action plan since 2014 that places human beings at the heart of its transformation in three main areas:

- developing and advancing employees (training, responsibilities, internal mobility);
- animating the Group and spreading its values;
- enhancing performance to serve customers (innovation, managing complexity) and rolling out a new leadership model for managers.

In April 2016, a European Social Agreement was signed, which places forward jobs and skills planning and universal employability at the center of the Group's human resources policy. This agreement embodies the Group's social ambitions, and includes training and mobility targets for all companies in the European Union.

On the financial front, the Group prioritizes maintaining a sound financial structure in the long term (aiming to retain an "A" credit rating), which will mainly be achieved through strict investment criteria. ENGIE's financial objective is to offer its shareholders attractive returns while maintaining a solid financial structure and robust cash flow generation (see Section 6.1.1.2 "Outlook").

Within ENGIE, environmental and societal responsibility plays an integral part in drawing up business strategy, through the development of:

- sustainable business, which involves identifying environmental and societal issues and transforming them into opportunities for the Group's businesses;
- the management of non-financial risks, which involves managing the risks associated with the Group's activities and facilities that relate to the environment, local and international acceptability, health and safety, human resources management, ethics and governance.

ENGIE has formalized its environmental and societal responsibility commitments, mainly through the publication of its policy in 2014. In early May 2016, ENGIE announced its commitment to six new non-financial targets for 2020 (see Section 1.2.2 "CSR Indicators").

### 1.1.5 Transformation Plan

To accelerate its shift in strategy, adapt its portfolio of activities to its long-term vision and deploy its development priorities, ENGIE announced in February 2016 an ambitious three-year transformation plan. At the end of 2016, this plan is very well advanced.

The first pillar of the transformation plan involves redesigning and streamlining the portfolio, based on:

- a portfolio rotation program (€15 billion net debt impact targeted over 2016-18). The Group has already announced €8.0 billion of disposals (i.e. more than 50% of total program), of which € 7.2 billion finalized (before March 2017).
- an investment program (€16 billion growth CAPEX over 2016-18, including €1 billion CAPEX on innovation and digital). €4.7 billion are already invested at end December 2016

The second pillar entails investment in innovation and digital transformation, to prepare for the future.

ENGIE's operational efficiency and competitiveness are central to the third pillar of the transformation plan. The new performance program, Lean 2018, was launched in January 2016 to bring about long-term

improvements in the Group's performance. It initially aimed to achieve recurring cost savings with a net aggregate impact on EBITDA of €1 billion by 2018. Thanks to significant progress made, in March 2017, the Group has decided to raise its objective for 2018 by 20%, i.e. €1.2 billion of net gains.

- To achieve their objectives, adjusted for their specific situations, the BUs can make use of three main groups of levers: operations, the support functions, and procurement.
- The 2016 objectives were achieved, with a net impact on EBITDA of €530 million.
- The year was marked by the mothballing of some assets, the expansion of Shared Service Centers (with the pooling of support functions) and work to optimize and streamline working methods. Particularly extensive transformations have been launched in the Exploration and Production International BU and for NewCorp's activities.

The fourth pillar involves transforming ENGIE internally to make the Group more agile and connected, to attract future talent and to create an environment that fosters career development.

### 1.1.6 Highlights

Driven by its strategic activities, ENGIE achieved multiple industrial successes:

#### Low CO<sub>2</sub> power generation

- Several projects won in solar: 140 MW and 75 MW in India, 180 MW in Mexico and 40 MW in Peru. ENGIE also won nearly 78 MW of photovoltaic projects in France, consolidating its leading position in solar in this country;
- In South Africa, start of the construction of Kathu 100 MW solar project;
- In Mexico, ENGIE wins a wind project for 52 MW;
- In India, closing of the Meenakshi coal plant disposal to India Power Corporation Limited;
- ENGIE invests in Heliatak, a pioneer in organic photovoltaic technology;
- Inauguration of France's first marine geothermal power station: Thassalia, in Marseille;
- ENGIE will close Hazelwood coal power plant in Australia at the end of March 2017;
- Azzour North One Independent Water & Power Project (IWPP) has started full commercial operations in Kuwait;
- ENGIE inaugurates Jirau in Brazil, the Group's largest hydropower project in the world (3,750 MW);
- ENGIE sells its Polaniec coal-fired power plant in Poland to Enea;
- ENGIE and Crédit Agricole Assurances strengthen their onshore wind power partnership in France;
- ENGIE builds in Indonesia its first geothermal power generation plant in the world;
- ENGIE awarded the Fadhili Independent Power Project in Saudi Arabia;
- ENGIE and EDPR bidding in the third offshore wind call for tenders in Dunkirk, France ;

- ENGIE successfully issues its second Green Bond of EUR 1.5 billion.

#### Global networks, mainly gas ones

- ENGIE shores up its presence in Ukraine and signs an agreement on gas transportation and storage;
- Two new major collaborations for ENGIE to foster new innovative green gas production methods across Europe: cooperation with Göteborg Energi in Sweden for the industrialization of the dry biomass-to-gas production approach and development of the AMBIGO project, the first dry biomass-to-gas project located in the Netherlands;
- ENGIE inaugurates the first floating LNG import terminal in Turkey;
- Planned acquisition of ENGIE by GRTgaz (at 100%);
- Agreement on the price revision of long-term gas supply contracts with Gazprom and Statoil;
- In Panama, signing of a contract to supply LNG to an AES Andres power plant;
- ENGIE and AES Andres sign an agreement to provide reliable and competitive LNG supply in the Caribbean;
- In China, ENGIE and Beijing Gas Group strengthen their strategic partnership in security of supply with a delivery of 10 LNG cargoes to Beijing.

#### Integrated solutions for clients

- In the Paris region, in Saint-Ouen, inauguration by the Compagnie Parisienne de Chauffage Urbain (CPCU) of the conversion of a boiler plant to biomass;
- In the United States, closing of the OpTerra acquisition, which reinforces ENGIE's offer in innovative energy services;
- Contracts related to the supply of public electric charging stations: in Rotterdam and in The Hague, ENGIE to install 4,000 charging points



and in Luxembourg ENGIE and Powerdale are selected to provide Luxembourg with 800 public charging stations;

- In France, ENGIE offers 100% green electricity for all new contracts for both residential and small businesses customers and proposes new power offers (week-end, green electricity production/self-consumption, electric cars);
- Signing of a memorandum of understanding with SUSI Partners to finance grid-scale energy storage projects;
- Investment in StreetLight Data, an industry-leading mobility analytics company to accelerate the development of smart cities;
- Green mobility in Europe: up to €100 million of investments by 2020 to promote natural gas as a fuel for trucks. Through its wholly owned subsidiaries GNVert and LNGeneration, ENGIE is contributing to the development of a new “green gas” sector: Bio-LNG (Liquefied Biomethane). La Poste and ENGIE partner to develop green mobility in France and Europe;
- ENGIE announces the acquisition of EV-Box, the largest European electric vehicle charging player;
- ENGIE acquires an 80% stake in Green Charge Networks, an industry-leading battery storage company based in California;
- ENGIE Digital creation, signature of new global partnerships with C3 IoT, Kony, Thales and choice of Fjord, Accenture’s design and innovation studio, to reinvent ENGIE’s commercialization model.

Other partnerships were signed with IBM (smart cities solutions), GE (digital) and Schneider Electric (digital);

- ENGIE and Thales selected for a €225 million rail systems contract in Dakar, Senegal;
- ENGIE launches the first “frequency support” service using a storage system connected to the French power grid;
- ENGIE joins Michelin in investing in Symbio FCell to accelerate the development of hydrogen mobility solutions;
- ENGIE acquires Siradel, the leading high-tech player in 3D modelling and a supplier of innovative urban solutions, based in France;
- ENGIE innovates with its new global Novaldi offer and discloses its Uses Performance Contract – CPU Building®;
- ENGIE wins public service delegation contract for the new geothermal heating network in the Plaine Rive Droite area of Bordeaux in France;
- ENGIE Hellas wins its largest contract for total facility management services in Greece;
- ENGIE acquires the regeneration business of Keepmoat, and becomes UK’s leading provider of regeneration services for local authorities;
- ENGIE will sign up to the capital increase related to the takeover of GE Water & Process Technologies by SUEZ, up to its participation in SUEZ, namely around EUR 240 millions.

### 1.1.7 Competitive positioning

Electricity production and marketing and gas marketing are business sectors that are largely open to competition in Europe. However, they are still regulated differently according to the country, particularly with regard to residential energy prices. Activities that constitute natural monopolies – such as the transmission and distribution of electricity and, to a large extent, of gas – are more tightly controlled by national regulators and European rules.

Elsewhere in the world, with few exceptions, private players often operate under long-term contracts issued on a tender basis.

ENGIE is a European and world leader in the areas of electricity and natural gas:

- ENGIE is one of the top three gas sellers in Europe<sup>(1)</sup>. ENGIE is one of the world’s leading LNG traders and the biggest gas importer in Europe<sup>(2)</sup>;
- The Group is the leading gas infrastructure operator in Europe: it owns the second-largest transmission network, is number one in distribution, European number one in storage capacity (in terms of useful storage) and the second-largest owner/operator of LNG<sup>(3)</sup> terminals. It also owns Turkey’s third-largest gas distributor<sup>(4)</sup>;
- In electricity, ENGIE is a key player in international tenders, particularly in Latin America and the Middle East, with strong positions in Brazil, Peru, Chile, the Gulf countries and Thailand. In solar energy, ENGIE is

developing its positions in France and internationally through Solairedirect. The Group is one of the leading power producers in Europe;

- Worldwide, ENGIE provides gas and electricity by means of 23 million contracts to end-customers, nearly half of which are located outside France<sup>(1)</sup>.

This global and European leadership is fortified by the Group’s deep French-Belgian roots:

- In France, ENGIE is the historic leader of gas<sup>(3)</sup> marketing and the second-largest producer and supplier of electricity<sup>(4)</sup>. In renewable energy, ENGIE is the second-largest hydropower operator in France and the leader in wind and solar energy<sup>(3)</sup>;
- In Belgium, ENGIE, through its subsidiary Electrabel, is the leading producer and supplier of electricity and the leading supplier of natural gas<sup>(4)</sup>.

The Group is also one of the European leaders in BtoB energy services in France, Belgium, the Netherlands, Switzerland and Italy. ENGIE also holds strong positions in Germany, Spain and the United Kingdom in heating networks (where it is number one), as well as facility management<sup>(3)</sup>. Lastly, it has set up the initial bases for development in Central Europe, Asia, North America and Latin America.

(1) Source: ENGIE internal analyses of 2015 data.

(2) Sources: IHS, Kpler.

(3) Source: ENGIE internal analyses of 2016 data.

(4) Source: ENERDATA.

## 1.2 Key figures

### 1.2.1 Group financial data

<i>(in millions of euros)</i>	2012	2013 reported	2013 restated <sup>(a)</sup>	2013 restated <sup>(b)</sup> pro forma <sup>(b)</sup>	2014 reported	2014 restated <sup>(c)</sup>	2015	2016
<b>1. Revenues</b>	<b>97,038</b>	<b>89,300</b>	<b>87,898</b>	<b>79,985</b>	<b>74,686</b>	<b>74,686</b>	<b>69,883</b>	<b>66,639</b>
of which generated outside France	61,124	54,331	52,944	47,947	46,852	46,852	44,817	41,693
<b>2. Income</b>								
EBITDA <sup>(d)</sup>	17,026	14,775	14,223	13,017	12,138	12,133	11,262	10,689
• Current operating income	9,520	7,828	N/A	N/A	N/A	N/A	N/A	N/A
• Current operating income after share in net income of entities accounted for using the equity method	N/A	N/A	8,254	7,665	7,161	7,156	6,326	6,172
• Net income, Group share <sup>(d)</sup>	1,544	(9,289)	(9,198)	(9,646)	2,440	2,437	(4,617)	(415)
• Net recurring income, Group share <sup>(d)</sup>	3,825	3,440	3,449	3,449	3,125	2,725	2,588	2,477
<b>3. Cash flow</b>								
Cash flow from operating activities	13,607	12,024	11,980	11,333	8,751	8,751	10,383	10,174
of which cash generated from operations before financial income and income tax	16,612	14,313	14,129	13,125	11,776	11,771	10,942	10,263
Cash flow from investment	(8,451)	(5,611)	(5,103)	(4,368)	(3,939)	(3,939)	(6,230)	(3,655)
Cash flow from (used in) financing activities	(8,322)	(6,982)	(7,027)	(7,041)	(4,973)	(4,973)	(3,295)	(6,034)
<b>4. Balance sheet</b>								
<b>Shareholders' equity<sup>(d)</sup></b>	<b>59,834</b>	<b>47,955</b>	<b>47,971</b>	<b>47,971</b>	<b>49,257</b>	<b>49,548</b>	<b>43,078</b>	<b>39,578</b>
Total equity <sup>(d)</sup>	71,303	53,490	53,659	53,659	55,959	55,981	48,750	45,447
Net debt	43,914	29,840	28,800	28,800	27,511	27,511	27,727	24,807
Net debt/EBITDA	2.58	2.02	2.02	2.21	2.27	2.27	2.46	2.32
Total assets <sup>(d)</sup>	205,448	159,611	155,932	155,932	165,305	165,304	160,658	158,499
<b>5. Per-share data (in euros)</b>								
• Average outstanding shares <sup>(e)</sup>	2,271,233,422	2,359,111,490	2,359,111,490	2,359,111,490	2,366,768,979	2,366,768,979	2,392,150,727	2,396,131,620
• Number of shares at period-end	2,412,824,089	2,412,824,089	2,412,824,089	2,412,824,089	2,435,285,011	2,435,285,011	2,435,285,011	2,435,285,011
• Earnings per share <sup>(d)(e)</sup>	0.68	(3.94)	(3.90)	(4.09)	1.00	1.00	(1.99)	(0.23)
• Net recurring income Group share, per share <sup>(d)(e)</sup>	1.68	1.46	1.46	1.46	1.32	1.12	1.02	0.97
• Dividend paid <sup>(f)</sup>	1.50	1.50	1.50	1.50	1.00	1.00	1.00	1.00
<b>6. Total average workforce</b>	<b>236,156</b>	<b>223,012</b>	<b>223,012</b>	<b>223,012</b>	<b>236,185</b>	<b>236,185</b>	<b>241,913</b>	<b>241,509</b>
• Fully consolidated entities	219,253	178,577	178,870	139,134	150,589	150,589	155,494	153,950
• Proportionately consolidated entities	12,477	3,431	3,138	3,138	769	769	777	764
• Entities consolidated by the equity method	4,426	41,004	41,004	80,740	84,827	84,827	85,642	86,795

(a) December 31, 2013 data restated to reflect the retrospective application of consolidation standards. The calculation method for the EBITDA has been changed since December 31, 2014. 2013 EBITDA was calculated for comparison (see Note 2 of Section 6.2 "Consolidated financial statements" of the 2014 Registration Document).

(b) December 31, 2013 data restated to present SUEZ Environnement as if it were consolidated by the equity method as of January 1, 2013 (see Section 6.1.1.6 "Pro forma financial information" of the 2014 Registration Document).

(c) December 31, 2014 data restated to reflect the retrospective application of IFRIC 21 (see Note 1.1 of Section 6.2 "Consolidated financial statements" of the 2015 Registration Document).

(d) December 31, 2012 data restated to reflect the retrospective application of IAS 19R (see Note 1.1 of Section 6.2 "Consolidated financial statements" of the 2013 Registration Document).

(e) Earnings per share are calculated based on the average number of shares outstanding, net of treasury shares.

(f) 2016 dividend: proposed dividend, including an interim dividend of €0.50 paid in October 2016.

## 1.2.2 CSR indicators

The Group's CSR performance is based on dated, quantified targets and an overall assessment organized around different resources (high level of governance, indicators, reporting, performance reviews and CSR rating indices).

The Board of Directors' Ethics, Environment and Sustainable Development Committee defines the scope of the policies undertaken, outlooks and action plans in the area of corporate societal responsibility. The Executive Committee makes key decisions in this area (see Section 4. "Corporate governance"). The role of the Group's Environmental and Societal Responsibility Division is to prepare annual action plans, monitor their implementation, gather feedback from the various entities and encourage exchange on major strategies.

A CSR report is submitted every year to the Executive Committee for approval and future direction, then to the Ethics, Environment and Sustainable Development Committee to provide a progress report on the policy's implementation and the achievement of Group CSR objectives.

In response to changes in the energy sector and to the gradual integration of environmental and societal aspects into stakeholder requirements, ENGIE set itself six new CSR goals in 2016 to be achieved by 2020: (1) an 85% satisfaction rate among BtoC customers; (2) a 25% share of renewable energy in the Group's generation capacity portfolio; (3) a 20% reduction in the CO<sub>2</sub> emissions ratio for energy generation compared to 2012. This target strengthens that previously set by the Group and is the result of ENGIE's decision in October 2015 to focus exclusively on low-carbon projects based on renewable energies and natural gas and to discontinue coal-based projects; (4) 100% of the Group's industrial operations to be covered by an appropriate mechanism of dialog and consultation with stakeholders, such mechanism being based on regular meetings with the NGOs and non-profits concerned, as well as on the development of long-term partnerships related to the Group's activities; (5) the Group's workforce to be 25% female; and (6) an internal workplace accident frequency rate of below 3.

Regarding environmental targets, in 2016 ENGIE posted a 1.2% increase year-over-year of its installed renewable energy capacity and an 11.3% decrease of its specific CO<sub>2</sub> emissions compared to 2012 (see Section 3.3.4.1 "Climate change"). The latter result reflects the first effects of the Group's strategic shift (reduction of coal-fired production

and increase of renewable production) and the restarting in 2016 of the Belgian nuclear fleet which had been shut down in 2015.

With regard to social and governance targets, ENGIE's employee accident frequency rate in 2016 was 3.6 (see Section 3.2.6 "Health and safety policy"), while the rate of gender diversity in its workforce was 21.9%, up slightly year-over-year. The Group achieved an overall satisfaction rate among its BtoC customers of 81%. This indicator was calculated for the first time in 2016 using a standard methodology in the 10 countries where the Group sells to individuals and business customers. A new mechanism for structured dialogue with stakeholders was established in 2016. The percentage of the Group's industrial activities in compliance with the standards related to this dialogue is 20% and reflects the Group-wide launch of this initiative.

With regard to its investment plans, the Group is updating its criteria to include ethics, CO<sub>2</sub> emissions, social impact, human resources, environmental management of ecosystems, cooperation with stakeholders, local purchasing, and health and safety. The Group also takes an internal carbon price into account when deciding on new projects.

The Group's social reporting (see Section 3.2 "Social information"), environmental reporting (see Section 3.3 "Environmental information") and societal reporting (see Section 3.4 "Corporate societal commitments") form the basis of a published group of indicators that are verified in part by an independent third party.

With regard to non-financial ratings, in 2016 ENGIE continued to be listed in the Dow Jones Sustainability (DJSI) World and Europe indices, established on the basis of ratings by the non-financial ratings agency RobecoSAM. With a score of 85/100, the Group was named "industry leader" in its sector, Multi and Water Utilities, and was awarded Gold Class distinction in the *Yearbook*.

In 2016, ENGIE was ranked "advanced" by ESG ratings agency Vigeo Eiris with a score of 61/100, an improvement over its 2015 score. As a result, the Group maintained its listing in four indices: Euronext Vigeo Eiris World 120, Europe 120, Eurozone 120 and France 20.

Lastly, ENGIE completes an annual questionnaire from CDP (formerly the "Carbon Disclosure Project"). In 2016, the Group was included for the first time in the "A-list" of companies recognized for their leadership regarding strategies and initiatives to combat climate change.

## 1.3 Description of the Group's activities

Under the Group's new organizational structure, which is presented in detail in Section 1.1.3 "Organization," ENGIE now comprises 24 BUs<sup>(1)</sup>, mostly geographic. For financial reporting purposes, the Group has grouped operating segments in accordance with IFRS 8. Its segment information is organized around 10 reportable segments (see Section 6.2 "Consolidated financial statements"— Note 6).

In this section, the description of the Group's businesses and strategic economic assets is primarily structured around financial reporting requirements. The first 10 subsections correspond to the reportable segments, composed of one or more BUs, while the 11<sup>th</sup> subsection describes the Group's five Métiers.

### 1.3.1 North America

The North America reportable segment corresponds to the North America BU. It includes power generation, energy services, and natural gas and electricity sales activities in the United States, Canada and Puerto Rico.

#### KEY FIGURES

In € millions	2016	2015	Total change (%)
Revenues	3,814	3,673	+3.9%
EBITDA	475	633	-25%

#### 1.3.1.1 Role & Strategy

The North American market is undergoing a fundamental energy transformation, driven by technology and policy developments, and evolving customer expectations. Three major trends are guiding energy policy and the business environment: 1) Shale gas and its impact on natural gas prices; 2) Energy policy that supports de-carbonization of the power plant fleet, as well as new models in distributed generation and transactive energy flow; and 3) Disruptive technology and digitalization: distributed energy solutions, mobile device engagement and advances in computing are the catalysts to drive higher expectations from end-customers around service delivery, responsiveness and personalized interaction with their service providers.

As such, the North America BU has re-aligned its mission as to "Provide a cleaner, more innovative energy future" to its stakeholders by:

- developing renewable energy sources for businesses and territories, via both utility-scale and community sharing programs;
- building on its BtoB stronghold, served by its large energy and sustainability capabilities. The BU will offer its customers a spectrum of solutions from grid-based and local power supply, real-time energy management, to project development and ongoing services support;
- growing its nascent position in new customer segments of BtoC and BtoT:
  - the BU will grow a BtoC presence, through Ecova, via digital-engagement models to offer customers energy offer choices,
  - the BU will build a BtoT presence, notably through energy efficiency, energy supply and smart lighting solutions offers;
- maintaining operational excellence in central power generation and gas value chain.

#### 1.3.1.2 Description of activities

The North America BU manages the Group's electricity, gas and energy services activities in the United States, Canada, and Puerto Rico. Operations are organized into five business segments: retail, power generation, portfolio management, natural gas/LNG and energy services.

In 2016, the North America BU announced the sale of its production assets on the wholesale markets. The sale was fully completed in February 2017. The first part of the sale was finalized in June 2016, when the 1.4-GW hydroelectric component was bought by PSP Investments, a Canadian pension investment manager. The sale of the remaining 8.7 GW of merchant thermal production assets was completed in February 2017, when it was sold to a joint venture between Dynegy and ECP.

As of the end of 2016, the North America power generation business operates a fleet of 11,348 MW. Subsequent to the close of the aforementioned Dynegy transaction, this fleet is 3,194 MW in size (in custody at 100%), in which nearly 90% produces no or very few carbon emissions, and of which 800 MW are powered by renewable sources.

In the US, the BU markets power to commercial and industrial customers, and to small business and residential customers, in 13 States as well as the District of Columbia, and is a leading non-residential retail electricity supplier in the US. The natural gas/LNG business includes a LNG receiving facility, a gas sales business in New England, a LNG receiving facility in Puerto Rico, a gas storage in Canada, as well as the Cameron LNG liquefaction facility (under construction and anticipated to enter into operation in 2018).

(1) A 25<sup>th</sup> BU combines the Group's holding and corporate activities. These mainly include the entities responsible for the Group's central financing activities, Solairedirect's activities, and the equity-accounted contribution of SUEZ.





Its energy services businesses, with clients in both the US and Canada, manage over 25 million square feet of buildings. They help customers to achieve over \$4 billion energy savings in commercial, industrial and municipal sectors; and process \$20 billion in energy billing costs.

The North America business also made two acquisitions in 2016:

- in February 2016, acquisition of OpTerra Energy Services and its affiliated companies. Headquartered in Oakland, California, OpTerra

designs and implements customized projects that help public- and private-sector clients reduce energy consumption and cost;

- in May 2016, acquisition of an 80% stake in Green Charge Networks (Green Charge). Located in Santa Clara, California, Green Charge is a leader in turnkey energy storage solutions based on battery systems installed at the customer's premises.

## 1.3.2 Latin America

The Latin America reportable segment includes the activities of two BUs: the Latin America BU (Argentina, Chile, Mexico and Peru) and the Brazil BU. The subsidiaries concerned are involved in the centralized power generation and gas chain businesses, as well as energy services.

The Latin America and Brazil operating segments were grouped together within the Latin America reportable segment as they share relatively similar growth prospects. Furthermore, a substantial proportion of their revenue is generated by electricity sales under long-term agreements.

### KEY FIGURES

In € millions	2016	2015	Total change (%)
Revenues	4,075	4,197	-2.9%
EBITDA	1,696	1,563	+8.5%

### 1.3.2.1 Latin America (excluding Brazil)

#### 1.3.2.1.1 Role & Strategy

The Latin America BU's role in the four countries where ENGIE currently operates (Chile, Peru, Mexico and Argentina) is to develop:

- energy supply solutions:
  - supply of power generated from renewable sources, solar and onshore wind power, and thermal power plants;
  - supply of gas through (GNL and pipeline gas) supply agreements and gas infrastructure management, such as a regasification terminal and transmission and distribution networks.
- energy services.

The Latin America BU is involved in the development of new solutions, particularly through ENGIE Factory (an incubator for energy-related startups) and by expanding the BtoB, BtoC and BtoT segments.

#### 1.3.2.1.2 Description of activities

##### Peru

In Peru, ENGIE owns a 61.73% stake in ENGIE Energía Peru (formerly EnerSur). At the end of 2016, following the commissioning of the Nodo Energético open-cycle thermal power plant at the Ilo site in southern

Peru in October 2016 and the commissioning of the 112 MW Chilca Plus combined cycle power plant in the Lima region in December 2016, this entity had an installed capacity of 2,514 MW (36% gas, 10% hydro, 5% coal and 49% liquid fuel). ENGIE Energía Peru is the country's leading operator with a market share of around 20% in installed capacity. In February 2016, ENGIE Energía Peru was awarded a 20-year contract as part of a renewable energy auction to deliver power that will be generated by a 40MW solar plant located in southern Peru.

In December 2016, the Group sold its stake in TGP (Transportadora de Gas del Peru), a natural gas and natural gas liquids transportation asset, to a subsidiary of CPPIB (Canada Pension Plan Investment Board). ENGIE Energía Peru shares are traded on the Lima stock exchange. ENGIE Services Peru was established in 2015 and developed its first contracts in partnership with MWF, a company specializing in multi-technical building services.

##### Chile

In Chile, ENGIE owns a 52.76% stake in ENGIE Energía Chile (formerly E-CL). This company, listed on the Santiago Stock Exchange, is the largest power generator in northern Chile, with installed capacity of 2,081 MW, and it manages as well 2,290 km of transmission lines. Its subsidiary, Electroandina, operates a port in Tocopilla, and its gas transmission subsidiary, Gasoducto NorAndino, owns a gas pipeline of approximately 1,000 km between Chile and Argentina.

To comply with the supply contract with distribution companies awarded in December 2014, ENGIE Energía Chile began the construction of a new 375 MW power plant in the area of Mejillones, in addition to the TEN transmission line (2x500kV, 1,500 MW) between the cities of Mejillones and Copiapó, interconnecting Chile's two main grids. Following the sale of 50% of TEN to Red Eléctrica Española, finalized in 2016, the Group now owns a 50% stake in the project.

In the services area, ENGIE operates through three wholly owned companies grouped under the ENGIE Services Chile brand, which mainly handles operation and maintenance of the technical facilities at all shopping centers belonging to the Mall Plaza chain (50% of the market in Chile).

ENGIE also holds a 63% stake in the Mejillones LNG regasification terminal (GNLM). Since April 2011, ENGIE Gas Chile (previously Solgas, the wholly owned ENGIE subsidiary) has been selling natural gas sourced through GNLM to industrial customers and power plants located in northern Chile.

The Group has two main assets through its wholly owned subsidiary, Eólica Monte Redondo. These are the Monte Redondo 48 MW wind farm, and the 34.4-MW Laja hydropower plant, which began operating commercially in May 2015.

### Mexico

In Mexico, ENGIE operates six local distribution companies providing natural gas to more than 440,000 customers through a 10,500 km network, and two gas transmission companies operating over 900 km of pipeline. ENGIE also manages two steam-electricity cogeneration plants with a total installed capacity of 320 MW. Output from these power plants is sold under long-term contracts to industrial customers. Following the introduction of energy reform, which primarily focused on renewable energy development, ENGIE was awarded two volume tenders in March and September 2016, for 180 MW in solar power and 50 MW in onshore wind power. Together with its partner PEMEX, ENGIE built the Ramones Phase II South pipeline (Ramones II South), a segment of the Ramones natural gas pipeline system, which is one of the largest energy infrastructure projects in Mexico's history, extending from the Texas border to central Mexico.

### Argentina

In Argentina, ENGIE holds a 64.2% stake in Litoral Gas SA, a gas distribution company with a market share of 12% in terms of volume delivered in the Santa Fé region and in the northeast of the province of Buenos Aires. In addition, it holds a 46.7% stake in Energy Consulting Services (ECS), an electricity and gas sales and consulting firm. ENGIE also holds an interest in Gasoducto Norandino, a gas transmission company with a pipeline of approximately 1,000 km between Argentina and Chile, which is wholly owned by ENGIE Energía Chile.

## 1.3.2.2 Brazil

### 1.3.2.2.1 Role & Strategy

The vision of the BU is to transform people's relationship with energy aiming at a sustainable world. Its mission is to provide innovative and sustainable solutions in energy and services to people, companies and territories.

### 1.3.2.2.2 Description of activities

#### ■ Centralized Energy Generation: ENGIE Brasil Energia (EBE) and *Energia Sustentável do Brasil* (ESBR)

The installed capacity of EBE's, formerly Tractebel Energia, is 7,010 MW and it operates a generating complex of 8,730 MW, accounting for approximately 5.4% of Brazil's total capacity. Its assets are composed of 28 plants operated by the company: 79% of the installed capacity are hydroelectric power plants, 16% thermoelectric and 5% complementary plants (biomass, wind, small hydroelectric power plants and solar). The company is the largest private energy generator in Brazil.

The company is controlled by ENGIE Brasil which accounts for 68,71% in its capital. Its shares are traded on the Brazilian stock exchange, following the utmost Governance Principles.

Besides the assets of EBE, ENGIE Brasil owns 40% of Jirau hydroelectric powerplant (HPP, 3,750 MW), through its subsidiary *Energia Sustentável do Brasil S.A.* (ESBR). The plant achieved has been fully put into service in November 2016. The company has started to issue the first 1.7 million carbon credits, equivalent to 1.7 million tons of avoided carbon, which were generated in 2014. This certification recognizes Jirau as the world's largest renewable decarbonization investment.

In addition to Jirau HPP, ENGIE has a total of 763 MW of projects under construction: one thermoelectric, two wind farms and one solar power plant.

- **Solar:** "*ENGIE Geração Solar Distribuída*". The company is a vertical integrator of photovoltaic solar energy and acts in the whole value chain of the photovoltaic system.
- **Integrated Solutions:** "*ENGIE Brasil Soluções Integradas*". The company acts in the development and integration of telecommunications, security and safety systems, public lighting and urban mobility for smart cities, infrastructures and the oil & gas industry.
- **Energy Services:** "*ENGIE Brasil Serviços de Energia*". The company projects and implements maintenance engineering and energy efficiency solutions tailor-made for clients, using heating, ventilation and air-conditioning systems, thus allowing an increase in the equipment availability and a reduction in energy consumption.

### 1.3.3 Africa/Asia

The Africa/Asia reportable segment comprises the activities of four BUs: the Africa BU (Morocco, South Africa), the China BU, the Middle East, South and Central Asia, and Turkey BU (including India and Pakistan), and the Asia Pacific BU (Australia, New Zealand, Thailand, Singapore, Indonesia and Laos). In all of these regions, the Group is active in electricity generation and sales, gas distribution and sales, energy services, and seawater desalination in the Arabian Peninsula.

The Asia Pacific, China, Africa and the Middle East, South and Central Asia, and Turkey operating segments have been grouped together within the Africa/Asia reportable segment as all these regions have high power generation requirements and consequently represent significant growth prospects for the Group in the energy and energy services businesses. A substantial portion of their revenue is generated by electricity sales under long-term agreements.

#### KEY FIGURES

In € millions	2016	2015	Total change (%)
Revenues	3,804	4,244	-10.4%
EBITDA	1,162	1,237	-6.0%

#### 1.3.3.1 Africa

##### 1.3.3.2.1 Role & Strategy

The Africa BU is in charge of developing ENGIE activities in the African countries where it already operates (Morocco, Algeria and South Africa) and of entering a selection of new countries, which offer a promising balance between risks and rewards for the core activities of ENGIE. More specifically, the BU aims at developing:

- centralized power generation with a systematic focus on renewable energy (wind, solar photovoltaic and concentrated solar power, hydro, biomass, geothermal) and gas;
- gas infrastructure (regasification terminals, storage, transport) and import of LNG, mainly for power production;
- energy solutions for territories, from urban areas connected to the grid to remote rural areas with the deployment of off-grid solutions or innovative micro-grid solutions;
- sale of energy and energy efficiency services to businesses, as well as facility management, installations and maintenance;
- sale of energy to residential customers, including through solar home systems with mobile phone payment solutions.

##### 1.3.3.1.2 Description of activities

In Morocco, the **Tarfaya wind park** (301 MW) is operated by a 50/50 joint venture (TAREC) between ENGIE and Nareva Holding and represents 40% of Morocco total wind capacity. It is operated under a 20-year "Build, Own, Operate and Transfer" contract. The **Safi power project** involves the construction of two state-of-the-art thermal power generation units (2x693 MW). After its commissioning, scheduled for 2018, the electricity produced will be sold to the *Office National de l'Électricité et de l'Eau Potable*, under a 30-year power purchase agreement. This plant is the first in Africa to use ultra-supercritical clean coal technology. ENGIE holds 35% in the project company SAFIEC. In South Africa, **West Coast I (Aurora) Wind Power** is a 94 MW wind farm, commissioned in June 2015, with a 20-year contract. ENGIE holds 43% in Aurora Wind Power.

In South Africa, the **Dedisa** and **Avon** peaking power plants are two new open-cycle gas turbine plants (335 MW and 670 MW). Dedisa achieved first dispatch to the grid in October 2015; Avon started full commercial operation in July 2016, under a 15-year power purchase agreement that was signed with Eskom Holdings. ENGIE holds 38% in the two project companies that own the plants.

**Kathu** is a 100 MW concentrated solar power (CSP) plant under construction in the Northern Cape province. The parabolic trough technology will be completed with a molten salt energy storage system able to provide 4.5 hours of battery life. The construction of the CSP plant has started mid-2016. The shareholders of Kathu Solar Park comprise a group of investors, including ENGIE (48.5%).

Next to large scale grid-connected power generation projects, ENGIE is also active on the **off-grid market**. In October 2016, ENGIE inaugurated its first "**PowerCorner**" pilot project, a 16 kW micro-grid unit – consisting of solar panels, batteries and a back-up diesel generator – in the remote village of Ketumbeine (Tanzania) and plans to develop and install more units in the coming years.

ENGIE has a partnership agreement with **Orange** in two fields: **rural electrification** and **energy efficiency streamlining** by ENGIE of Orange telecom infrastructure (telecom towers) in Africa. A **Solar Home System** pilot project is currently ongoing in three countries, namely Senegal, Ivory Coast and Cameroon.

ENGIE's energy services activities are spread in 17 African countries via a number of companies (but with a particularly strong presence in Algeria and Morocco (with Cofely Morocco)).

Cofely Morocco develops multi-technical maintenance, energy efficiency and facility management solutions to major multinational and local companies: Renault, Sanofi, Aircelle (group Safran), Lafarge, etc.

Cofely Morocco is furthermore responsible for the supervision and maintenance of equipment for the Tangier Med port.

### 1.3.3.2 China

#### 1.3.3.2.1 Role & Strategy

Leveraging on the Group's know-how and solutions as well as on Chinese innovations, the China BU aims at becoming a benchmark player in China's energy transition by selecting a few initiatives to bring them at mass scale. Priorities are in this regard to: (1) develop solar power in China; (2) develop solutions related to Cities of Tomorrow (CoTs), leveraging on existing local partnerships in the cities of Beijing, Shanghai, Chongqing, and the Sichuan province; (3) explore the Internet of Things (IoT) potential with the support of the Group; (4) support the Group and assist other entities of the Group who wish to develop in China or with Chinese partners abroad.

#### 1.3.3.2.2 Description of activities

- *Solar power*: the China's BU ambition in centralized power generation is focused on solar power development.
- *Combined cooling, heat & power (CCHP)*: the China BU has developed a CCHP partnership with Sichuan Energy Investment Company (SCEI) for industrial parks through the YUECHI project in Sichuan province, which commissioning is expected in 2017.
- *Gas value chain*: the China BU develops services and its retail LNG business notably through the participation of the XINWEI liquefaction company in Shaanxi province.
- *Strategic sourcing*: the China BU aims to support the Group by developing a sourcing platform in China in collaboration with the Group's corporate level.
- *CoTs*: the China BU has ambition to develop internal/local expertise to competitively offer solutions for the development of CoTs.

### 1.3.3.3 Middle East, South and Central Asia, and Turkey (MESCAT)

#### 1.3.3.3.1 Role & Strategy

The MESCAT BU will continue to develop its strong positions in centralized, low-carbon power generation (natural gas) in its traditional region of operation. It is also developing new activities in this region as well as in new regions, specifically renewable energy-based power generation projects; BtoB/BtoT/BtoC services; and projects related to the gas value chain. At the same time, the BU is committed to safeguarding the value of existing activities by improving their competitiveness and contractual conditions and reducing financial expenses.

#### 1.3.3.3.2 Description of activities

##### Centralized Energy Generation

**Gulf Cooperation Council (GCC) Countries:** in the GCC countries, the MESCAT BU acts as an asset developer, owner and operator, selling the electricity and water it produces directly to government-owned Power (and Water) Purchase Agreements (P(W)PAs). It is the leading private power and water developer in the region with total generation capacity of 30 GW and 1,212 MIGD (5.5 million m<sup>3</sup> water/day) of desalination capacity in operation and under construction. It is common

in the Middle East Independent Power (and Water) Producer (IP(W)P) business model for projects to be partly owned by the host governments/ off-takers alongside partners.

The regulatory frameworks in the different countries of the GCC are similar, with competitive tenders launched by the power authorities calling for private power producers to bid for concessions to build, own and operate plants. The output is then sold by the private producer to public utility under long-term contracts, the terms of which are stipulated at the tender stage.

The MESCAT BU has ownership interests and/or operates the following natural gas-fired power and water producing plants in the GCC:

- Saudi Arabia: Marafiq, Riyadh PP11, Tihama;
- Bahrain: Al Dur, Al Ezzel, Al Hidd;
- Qatar: Ras Laffan B, Ras Laffan C;
- UAE: Fujairah F2, Al Taweelah A1, Shuweihat S1, Shuweihat S2, Umm Al Nar, Mirfa;
- Oman: Al Kamil, Barka 2, Barka 3, Sohar 1, Sohar 2, Al Rusail, Al Manah<sup>(1)</sup>;
- Kuwait: Az Zour North.

A dedicated organization, ENGIE Power & Water Middle East, was created to manage the asset portfolio and the associated Operations & Maintenance facilities in the GCC and Pakistan.

**South Asia:** in Pakistan, in the Baluchistan province, ENGIE holds 100% in Uch 1, a 551 MW CCGT, and Uch 2, a 381 MW combined cycle gas turbine (CCGT). Power is sold under long-term PPAs to the distribution companies. The end-consumer market is not liberalized.

**Turkey:** the Turkish power market is currently going through a process of liberalization with the aim of becoming a fully merchant market. Merchant market trading has been gradually introduced with daily settlements on the Balancing and Settlements Market beginning at the end of 2010. ENGIE holds 95% stake in Baymina Enerji, a CCGT of 763 MW, and a 33.3% stake in Uni-Mar Marmara, a CCGT of 480 MW. The electricity is sold to TETAS, the national electricity off-taker, under long-term PPAs.

##### Gas Value Chain

**South Asia:** in India, ENGIE holds 26% in the Kakinada floating LNG terminal under development, which has a total capacity of 5 MT/year. Along with Shell, ENGIE will be responsible for sourcing LNG and marketing regasified LNG from the terminal.

**Turkey:** ENGIE also owns 90% of Turkey's third largest natural gas distributor, IZGAZ, which distributes and markets natural gas to more than 300,000 residential, commercial and industrial customers in the Kocaeli region.

ENGIE ETP, a Company established in 2010, has been involved in natural gas wholesale and retail businesses since 2011. It holds a spot LNG license to run the natural gas business in Turkey.

ENGIE officially opened the first floating LNG import terminal in Turkey. The Group was selected by Turkish construction companies Kolin and Kalyon to provide a "fast-track" solution for importing LNG based on an FSRU (floating storage and regasification unit). The Group chose the Neptune, one of its two FSRUs, for the project.

(1) ENGIE has no ownership interest in Al Manah but operates this asset.

## Services

GCC Countries: through its subsidiary COFELY BESIX Facility Management (CBFM), formed in 2008 in a joint venture with Belgian construction group BESIX, ENGIE is a leading facilities manager in the United Arab Emirates and Qatar. CBFM manages a number of customers such as Masdar City & Institute in Abu Dhabi, the Qatar Foundation in Doha, and Emirates SkyCargo and Emaar Properties in Dubai. In addition to technical facility management, the company also provides a variety of outsourced efficiency services and airport services.

Turkey: ENGIE Turkey provides O&M services to industrial energy generation and energy distribution customers.

ENGIE started electricity retail business in 2015, holding a supply license in the Turkish electricity market.

### 1.3.3.4 Asia Pacific

#### 1.3.3.4.1 Role & Strategy

The Asia Pacific BU has strongholds in Australia, Indonesia, Singapore and Thailand with a pipeline of projects in other countries of the region. The Asia Pacific BU is undergoing a large scale decarbonization with the divestment and closure of some of its coal-fired power plants, coupled with a strong ambition to grow in renewable generation, services, and new businesses around rural electrification, green mobility and smart cities.

#### 1.3.3.4.2 Description of activities

##### Australia and New Zealand

In Australia, activity has traditionally focused on power generation (2,630 MW). However, the Group announced that the Hazelwood coal-fired power plant in the state of Victoria would close on March 31, 2017.

Simultaneously a new entity focused on developing renewable assets was incorporated and has a pipeline of solar and wind projects under development. The portfolio also includes a growing energy retail business called "Simply Energy", serving electricity and gas accounts in the B2B and B2C segments (around 600,000 clients).

ENGIE's services business in Australia and New Zealand is centered on four core activities: Mechanical services, Fire services, Energy services – energy efficiency and decentralized energy (ENGIE is building a low carbon district heating and cooling network in Christchurch, New Zealand as part of the earthquake recovery program) – and electricity services related to data, communication and security.

##### Indonesia

December 21, 2016, ENGIE closed the sale of its 40.5% stake in Paiton a 2,035 MW coal-fired capacity, located on the island of Java. In cooperation with PT Supreme Energy, the business is developing two

geothermal projects in Sumatra (Muara Laboh, Rantau Dedap). ENGIE also has a number of other renewable projects in the pipeline with various local partners

The state-owned incumbent PLN has the monopoly on transmission and distribution systems, with independent power producers (IPPs) allowed to build and operate generation capacity. In 2014, the new Jokowi administration has set a target to develop 35,000 MW of new generating capacity by 2019, out of which 25,000 MW will be built by IPPs. ENGIE is participating in this program through consortiums tendering for gas-fired generation, as well as through bilateral negotiations to develop centralized and decentralized renewable generation assets.

##### Thailand, Laos & Myanmar

The Glow group, in which ENGIE holds a majority interest (69.1%), is listed on the Stock Exchange of Thailand. It is a major participant in the Thai energy market with a combined installed capacity in Thailand and Laos of 3,216 MW. The Glow group generates and supplies electricity to the Electricity Generating Authority of Thailand (EGAT) under Thailand's Small Power Producer (SPP) and IPP programs, in addition to supplying electricity, steam, industrial water and services to large industrial customers for the most part.

ENGIE also owns a 40% stake in PTT NGD, a distributor of natural gas to industrial customers in the Bangkok region.

ENGIE is present since 2001 in the energy services sector, providing complete energy efficiency solutions to industrial and commercial services sectors, local communities, public authorities and infrastructures.

##### Singapore

ENGIE holds a 30% stake in Senoko Energy, the largest vertically-integrated gentailer in terms of generation capacity in Singapore. Senoko Energy owns and operates a portfolio of power generation assets with a combined capacity of 3,300 MW and with a market share of around 20%. Senoko is also present in the B2B electricity retail market with 20% share, and is positioning itself for the B2C retail market opening in mid-2018.

The Asia Pacific BU also has two key businesses in energy services:

- ENGIE Services Singapore (Cofely FMO) whose core business is integrated facility management and energy efficiency solutions with key expertise in critical facilities such as airports, healthcare, rail and education;
- ENGIE ITS (Cofely Data Centers) is a specialist in data centers with core capabilities in the design, building and maintenance of data centers;

ENGIE has entered into a joint venture with SIGFOX S.A. and Unabiz Pte. Ltd. to develop, own and operate a network of Internet of Things in Singapore, with full deployment planned for the first half of 2017.

### Malaysia

In Malaysia, the Group has been active through ENGIE Services since 2012, following the acquisition of a 49% stake in Megajana, operating the district cooling plants of CyberJaya.

ENGIE Services Malaysia is an accredited Energy Services Company (ESCO) with key delivery capability and expertise in energy and environmental management.

### Philippines

ENGIE Services has been present since 2010 providing complete energy efficiency solutions to industrial and commercial clients in Manila, Alabang-Batangas and Cebu regions, and currently building a brownfield 40 MWth district cooling plant in Northgate – Filinvest City Alabang.

## 1.3.4 Benelux

The Benelux reportable segment corresponds to the Benelux BU which includes the Group's activities in Belgium, the Netherlands and Luxembourg, specifically power generation from the Group's nuclear

power plants and renewable power generation facilities, natural gas and electricity sales activities, and energy services and installation activities.

### KEY FIGURES

<i>In € millions</i>	2016	2015	Total change (%)
Revenues	9,044	8,732	+3.6%
EBITDA	755	445	+69.5%

#### 1.3.4.1 Role & Strategy

The Benelux BU is the leading provider of gas and electricity in the Belgian market, a challenger in the Netherlands, and the leader in the services segment in the Benelux countries. The BU has made a commitment to its customers, employees and local partners in Belgium, Luxembourg and the Netherlands to develop and implement energy and industrial solutions for the future:

- reliable, competitively priced carbon-free power generation that complies with the highest standards in terms of safety and environmental protection;
- the supply of energy and energy services for energy efficiency in the home and mobility solutions anchored in the energy and digital revolution, which simplify the life of its retail customers;
- a broad range of know-how and expertise leveraged on behalf of industrial customers, cities and local authorities to implement sustainable solutions in the field of energy efficiency for buildings, development and optimization of energy systems and infrastructure, and the comfort and mobility of people.

#### 1.3.4.2 Description of activities

The Benelux BU operates and maintains, in compliance with the strictest nuclear safety standards, the Doel and Tihange nuclear plants in Belgium, representing a total installed capacity of 5,913 MW with total drawing rights of 997 MW.

A stable economic and legal framework for the operation of the nuclear plants was put in place on December 22, 2016: the vote on the bill setting the contributions for the Doel 3 and 4 and Tihange 2 and 3 units means that the agreement to extend Doel 1 and 2 and Tihange 1 enters into force, extending the life of these plants by 10 years until 2025 and setting their nuclear contributions. The BU is investing €700 million in the Long-Term Operation (LTO) of the Doel 1 and 2 units.

As of December 31, 2015, nuclear provisions in the Group's consolidated financial statements amounted to €8.4 billion (€3.6 of which related to the dismantling of the facilities and €4.7 billion to the

management of the downstream side of the fuel cycle). Following the triennial review, the discount rate will fall from 4.80% at the end of 2015 to 3.50% at the end of 2016, with inflation unchanged at 2.0%. Nuclear provisions in the Group's consolidated financial statements will therefore increase by €1.8 billion, taking account of the triennial review conclusions in their entirety.

The BU also operates renewable energy production assets, comprising onshore wind capacity of 256 MW (+45 MW in 2016) in Belgium and 56 MW in the Netherlands, and solar capacity of 5 MW. It is responsible for developing, building, operating and maintaining these assets. Its goal is to increase its installed capacity in line with the Group's targets: in Belgium, the BU wants to exceed 500 MW of wind capacity by 2020. The BU also wants to work with its industrial customers to develop solar capacity of at least 60 MW in Belgium and the same in the Netherlands.

In the retail market, the Benelux BU manages approximately 2.65 million electricity contracts (11.4 TWh) and 1.37 million natural gas contracts (22.2 TWh) in Belgium, and approximately 270 thousand electricity contracts (1.3 TWh) and natural gas contracts (4.8 TWh) in the Netherlands. It also has a portfolio of small business customers (industrial and tertiary) who buy electricity (12.6 TWh sold in Belgium and 7.1 TWh in the Netherlands) and natural gas (14.4 TWh in Belgium and 7.4 TWh in the Netherlands), as well as energy services. Lastly, the BU develops a range of innovative products and services for all customer categories, including insulation, home boiler replacement, smart technologies, solar power, and assistance services.

Through its specialized subsidiaries ENGIE Cofely, ENGIE Axima and ENGIE Fabricom, the Benelux BU provides customers with multi-technical services (electrical engineering, information and communication systems, HVAC engineering and refrigeration, mechanical engineering, and industrial maintenance) to extend the working life and improve the reliability and energy efficiency of their facilities. The BU operates in the tertiary, industrial, energy and transport sectors and helps local authorities with sustainable urban development by offering solutions for:

- greater energy efficiency and limited environmental impact of buildings (energy efficiency audits, technical management-maintenance, energy efficiency agreements, etc.);

- production, operation and distribution of local and renewable energy sources (cogeneration plants, industrial utilities, heating and cooling networks, etc.);
- integrated services (facility management, multi-site management, public-private partnerships, etc.).

## 1.3.5 France

The France reporting sector combines the activities of four BUs: France Renewable Energy (development, construction, financing, operation and maintenance of all renewable power generation assets in France, excluding Solairedirect), the France BtoB BU (energy sales and services for buildings and industry, cities and regions and major infrastructure), the France BtoC BU (sales of energy and related services to residential and small business customers), and the France Networks BU (which designs, finances, builds and operates decentralized energy production and distribution facilities, and power, heating and cooling networks).

The France Renewable Energy, France BtoB, France BtoC and France Networks operating segments include all French downstream energy business lines and renewable energy production, which is becoming increasingly decentralized. These are complementary businesses that are supported by a strong regional network and primarily aim to develop a combined offering for local customers consisting of energy services, decentralized production resources, and combined gas and electricity supply contracts.

### KEY FIGURES

In € millions	2016	2015	Total change (%)
Revenues	20,332	20,248	+0.4%
EBITDA	1,315	1,274	+3.2%

### 1.3.5.1 France Renewable Energy

#### 1.3.5.1.1 Role & Strategy

The role of the France Renewable Energy BU is to develop, finance, operate and maintain ENGIE's renewable power generation assets in France which are based on hydro, wind, solar and marine power.

The BU also provides technical expertise and industrial support, including procurement, to the Group and in particular its European subsidiaries, through pooled teams of experts.

It carries out its tasks through ENGIE companies that report to the BU and are described in Section 1.3.5.1.2.

The goal of the BU, which operates close to its local stakeholders, is to make the energy transition a concrete reality at the heart of ENGIE's business. The BU is active in all activities that are, or will be, promoting green growth in France's energy mix. This includes the most mature existing technologies (hydro, wind and solar) and new technologies (fixed and floating offshore wind, hydrogen, etc.). At the end of 2016, the BU had 5.7 GW of installed renewable energy capacity (at 100%). It aims to substantially boost its development in wind and solar and bolster its positions in hydroelectricity. The BU's goals are as follows:

- Onshore wind: in a market expected to more than double by 2023, strengthen the Group's leadership to achieve almost 3 GW in installed capacity in this technology by 2021. The BU is competitively positioned with regard to future regulatory developments (end of purchasing tariffs);
- Solar power: in a favorable environment, with a market that is expected to more than triple by 2023, significantly step up development to attain almost 1 GW in installed capacity in this technology in 2021;

- Hydroelectricity: maintain a leadership role by seizing opportunities that will arise on hydraulic concessions while continuing to protect the Group's positions;
- Marine energy: leverage the Group's expertise in order to continue to develop this area (fixed and floating offshore wind farms).

#### 1.3.5.1.2 Description of activities

The France Renewable Energy BU comprises a set of subsidiaries owned by ENGIE, either alone or in partnership:

- ENGIE Green (resulting from the merger of Futures Energies and Maia Eolis): onshore wind, solar and renewable marine energy;
- SHEM (Société Hydro-Électrique du Midi): hydroelectricity;
- LCV (La Compagnie du Vent): onshore wind, solar power;
- CNR (Compagnie Nationale du Rhône), and its subsidiary CN'Air: hydroelectricity, onshore wind, solar power;
- Dieppe/Le Tréport, and l'Île d'Yeu/Noirmoutier projects: offshore wind power (2x500 MW in potential installed capacity);
- Altiservice: management of four ski resorts in the Pyrénées, 100% powered by renewable energy.

### 1.3.5.2 France BtoB

#### 1.3.5.2.1 Role & Strategy

Facing a highly challenging backdrop in terms of energy efficiency and the environment, the France BtoB BU designs and produces high-performance energy solutions for regions (local authorities and major infrastructure), tertiary or industrial buildings, and condominium buildings (public or private).

These solutions rely not only on the strong expertise of each BU entity, but also on an extensive regional presence, solid customer intimacy, and a constant drive for innovation. As a result, the BU is able to anticipate and support the new customer expectations (data modeling for buildings, smart cities, virtual machine monitoring, predictive maintenance, and so on).

To sustain its position as France's leader in environmental and energy efficiency solutions, the France BtoB BU focuses its strategy on three priorities:

- developing comprehensive (multi-site) and integrated (multi-technical and multi-service) offerings, taking advantage of the Group's multidisciplinary expertise and regional footprint to stand out from the competition;
- integrating innovative digital solutions that are faster, more efficient and more sustainable;
- optimizing processes, organizational structure and tools to be ever more effective and competitive.

### 1.3.5.2.2 Description of activities

The France BtoB BU is made up of five entities that have strong reputations and well-established expertise in their fields:

- ENGIE Cofely: energy efficiency solutions and facility management;
- ENGIE Ineo: electrical engineering and communication systems;
- ENGIE Axima: HVAC engineering and refrigeration;
- ENDEL ENGIE: industrial and nuclear maintenance;
- Entreprises & Collectivités: energy sales (gas and electricity)<sup>(1)</sup>.

These additional skills mean that the BU can provide solutions at every stage in a facility's life:

- design;
- construction/refurbishing (with possibility of financing);
- technical maintenance;
- full-service operation (with options for energy supply, energy efficiency, and integrated services);
- deconstruction/dismantling.

### 1.3.5.3 France BtoC

#### 1.3.5.3.1 Role & Strategy

The France BtoC BU teams handle energy sales and related services for residential and small business customers.

The France BtoC BU's goal is to become a leading player in the energy transition and remain a leader in energy supply.

Its strategic priorities are:

- growth of electricity and services sales;
- customer satisfaction;
- operational excellence;
- innovation.

Note that the changing regulatory context has resulted in the promulgation of the following:

- a self-consumption statute, which establishes a framework for individual and collective energy self-consumption and is expected to simplify the process of connecting relevant facilities to the grid;
- the opinion of the Court of Justice of the European Union (CJUE) on regulated sales tariffs for gas. The French Council of State is expected to deliver its opinion in 2017.

#### 1.3.5.3.2 Description of activities

The BU is still the leading seller of natural gas in France, despite intense competition.

With regard to electricity, it accelerated its expansion in 2016 and has maintained its advantage over alternative power suppliers with a portfolio of 3 million customers at the end of 2016.

ENGIE also holds positions across the home energy efficiency value chain, offering energy audits, advice, financing of works, design, and equipment installation and maintenance. In particular, the Group is the market leader in individual boiler maintenance.

New offerings were launched in 2016, illustrating the BU's capacity for innovation and its desire to support customers in the energy transition:

- manouvellechaudière.fr: an innovative online boiler analysis and sales offering;
- Le Pack Chauffage: a financing offer that combines new boiler installation and maintenance;
- Elec'car: a green electricity offer that is 50% cheaper during off-peak hours, reserved for owners of rechargeable electric or hybrid vehicles;
- Electricité Verte Pour Tous: no-surcharge green electricity for all new customers.

### 1.3.5.4 France Networks

#### 1.3.5.4.1 Role & Strategy

The France Networks BU partners with local authorities in cities and island territories to help accelerate their energy transition by providing innovative, integrated solutions in renewable energy and energy efficiency.

The BU has leadership positions in the design and management of large heating and cooling networks as well as in power generation and distribution.

With their strong local base, employees work alongside their customers, either public, private or residential, to achieve a greener energy mix.

The France Networks BU's strategic priorities are to:

- boost its portfolio of assets by safeguarding and building on its existing contracts and capturing new networks;
- strengthen its renewable energy production resources (solar, wind, hydro, geothermal, biomass, biofuel, waste-to-energy, etc.);

(1) Starting from 14<sup>th</sup>, February 2017, a new positioning of the "Entreprises & Collectivités" entity is set up, based on a closer proximity to the GEM BU. Starting from this date, this entity is no longer part of the France BtoB BU perimeter.



- achieve the highest customer relationship standards.

In mainland France, ENGIE France Networks uses diversified, local and renewable energy sources to provide an efficient, virtuous and sustainable method of heating and cooling in urban areas.

In the island territories, the France Networks BU is developing a comprehensive range of industrial and energy services to support the territories' sustainable development, along with a renewable electricity generation system.

#### 1.3.5.4.2 Description of activities

The France Networks BU provides integrated, customized solutions tailored to the geographical characteristics, economic constraints, and local climate and ecological challenges according to each territory through six operating entities and their subsidiaries:

- CPCU, the Greater Paris heating network (France's leading district heating network);
- Climespace, the City of Paris authority's cooling network (Europe's leading district cooling network);
- ENGIE Réseaux, responsible for France's large heating and cooling networks with recognized expertise in geothermal energy;
- SMEG and SMA in Monaco, active in gas and electricity distribution and supply, public lighting, heating and cooling production and distribution, waste cleaning and collection services, and waste-to-energy production;
- EEC, Alizés Energies, Pacific Airport, Socometra, Somainko and Endel NC in New Caledonia, EEFW in Wallis and Futuna, Unelco and Vanuatu Services in Vanuatu: active in power production and distribution, energy services, installation and multi-technical management, and airport facilities management;
- EDT, Marama Nui, INEO Polynésie, Cofely Polynésie and Poly-Diesel in French Polynesia: active in power production and distribution, installation and technical maintenance, facility management and energy services.

### 1.3.6 Europe (excluding France and Benelux)

The Europe reportable segment groups together the activities of two BUs: the United Kingdom BU (management of renewable power generation assets and district heating and cooling network assets, supply of energy services and solutions), and the North, South and Eastern Europe BU (sales of natural gas and electricity and related energy services and solutions, operation of renewable power generation assets, management of distribution networks).

The United Kingdom and North, South and Eastern Europe operating segments have been grouped together within the Europe reportable segment as both BUs have a similar business mix (energy services, production and sales of renewable energy) and operate in mature energy markets that are undergoing a process of transformation as part of the energy transition.

#### KEY FIGURES

In € millions	2016	2015	Total change (%)
Revenues	8,118	8,491	-4.4%
EBITDA	612	559	+9,5%

#### 1.3.6.1 United Kingdom

##### 1.3.6.1.1 Role & Strategy

The United Kingdom (UK) BU has a defined mission to improve the lives of communities and customers that it serves by leading the way in innovative services and sustainable energy solutions for its chosen markets. The BU is using its capabilities to lead the UK's transition towards a more secure and sustainable future, through a strategy based on investment in critical energy infrastructure, integration of its energy expertise with its broad services offer, and innovation in customer-led solutions and technologies.

##### 1.3.6.1.2 Description of activities

- **Energy infrastructure** (power generation, renewables development and trading and portfolio management):

The BU is one of the UK's largest independent power generators and has stakes in 4 GW of production assets (2.2 GW owned and operated by the UK BU and 1.8 GW owned by the Generation Europe BU and operated by the UK BU). These include the UK's main

pumped storage plant (First Hydro) and a well-established renewable energy development business (wind and solar). The UK BU provides support services to ENGIE's large thermal power stations in the UK which report into the Generation Europe BU. The UK business itself also operates multiple customer sites with large-scale embedded generation with the ability to export to the grid. The trading function provides the market interface for ENGIE's generation portfolio in the UK managing commodity price exposure within the wholesale energy market.

- **Energy solutions** (energy efficiency, energy supply & power purchase, localized energy generation, district heating & cooling):

ENGIE works as an energy partner delivering sustainable energy and energy management solutions to meet each customer's current and future requirements. The business has extensive capabilities designed to service both public, BtoT and BtoB organizations – including businesses of all sizes, from small and medium enterprises to largest multinationals. Unified solutions are also offered to enable customers to fully take control of their energy needs and address the challenges of an ever-changing energy environment.

- **Services** (technical services, facilities management, business services):

ENGIE is a leading provider of services designed to improve the performance and efficiency of buildings, industry, infrastructure and cities. Across the public, private and healthcare sectors, ENGIE works closely with customers to integrate solutions using its strengths in technical services, facility management and the outsourcing of business processes often combining these with its energy expertise. Integrated services add value to customer operations while helping to reduce their costs and carbon footprint.

### 1.3.6.2 North, South and Eastern Europe

#### 1.3.6.2.1 Role & Strategy

The North, South and Eastern Europe BU is active today in Austria, Czech Republic, Germany, Greece, Hungary, Italy, Norway, Poland, Portugal, Romania, Russia, Slovakia, Spain, Sweden and Switzerland.

The BU's goal is to be a forerunner of the European energy transition. Its environment is characterized by a rapid succession of far-reaching changes, such as decentralization and digitization, although these vary from country to country and have different levels of maturity.

The BU implements its strategy through a country-based organizational structure which allows it to strengthen its current position while driving innovation, all to the benefit of its customers.

The BU's main strategic priorities can be summarized as follows:

- to strengthen its current positions as a basis for growth;
- to expand development in more integrated and digitalized energy efficiency services;
- to scale up positioning in centralized and decentralized renewable energies;
- to become an energy architect for territories.

#### 1.3.6.2.2 Description of activities

The North, South and Eastern Europe BU is active in three main business lines:

- **customer solutions:** the BU provides gas and electricity supply as well as energy efficiency services to its residential and small business customers, as well as to large businesses and local authorities. With regard to energy efficiency, the BU provides, among others, services in integrated facilities management, energy decentralization (cogeneration, for example) and urban infrastructure (heating networks, public lighting);
- **green energy generation:** the BU designs, builds and operates renewable energy installations, particularly in wind, biomass, hydro, and solar power;
- **energy infrastructure:** the BU runs the distribution networks, mainly natural gas, and storage infrastructure.

In the **Czech Republic**, ENGIE is active in engineering services, installation and maintenance.

In **Germany**, ENGIE is particularly active through its subsidiaries specializing in the installation, operation and maintenance of energy efficiency solutions, as well as the supply of natural gas and electricity. BtoB sales in 2016 amounted to 13 TWh of electricity and 7.6 TWh of natural gas. ENGIE also supplies energy to retail customers, mainly in connection with its stakes in four municipal utilities through which the Group is also active in heating networks, energy distribution, and decentralized energy production solutions. Lastly, ENGIE operates an installed onshore-wind capacity of 196 MW and hydroelectric plants

with output of 142 MW. Energy market reform is continuing, especially around the idea of a capacity market, the introduction of auctions for renewables, support for gas-fired cogeneration plants, instead of coal, and, in the longer term (2050), the definition of a carbon-free industrial economy.

In **Greece**, ENGIE supplies electricity and gas to retail, industrial and commercial customers. Its ENGIE Hellas subsidiary is active in energy efficiency solutions and technical services for buildings.

In **Hungary**, the Group is active in natural gas distribution, with 16,169 GWh distributed. It also provides energy services to industrial and tertiary-sector customers.

In **Italy**, ENGIE is active in natural gas and electricity sales with 0.9 million contracts. The Group also supplies heating and cooling via cogeneration units and networks. Moreover, it provides energy efficiency solutions to a variety of clients (residential, businesses and municipalities). The Group is particularly active in the BtoT segment, developing energy efficiency solutions for towns and public buildings (universities, hospitals, etc.) especially through the Consip process set up by the Ministry for the Economy and Finance. ENGIE also operates around 170 MW of wind and ground- and roof-mounted solar power assets, as well as biomass units. In 2016, Italian authorities launched a number of initiatives to reform the energy-efficiency regulatory system. They also decided to remove regulated energy tariffs for consumers effective mid-2018, and negotiated with the European Commission on the design of the capacity remuneration mechanism that could be launched in 2017.

In **Poland**, the Group is mainly active in wind-based power generation, with an installed capacity of 138 MW, as well as in heating networks. The BU has a BtoB customer portfolio of 597 GWh in electricity and is also active in installation and integrated services for buildings.

In **Portugal**, ENGIE is mainly involved in renewable energy power generation via Trustwind and Generg (a 50-50 joint venture with Marubeni) with 488 MW of operated wind power. It also distributes heating and cooling to the city of Lisbon through its Climespaco subsidiary, and provides energy efficiency solutions (installation, maintenance and integrated solutions for buildings).

In **Romania**, the main activity is natural gas distribution via the Distrigaz Sud Retele subsidiary, which operates a 19,100 km distribution network. ENGIE Romania supplies natural gas to almost 1.7 million retail consumers, mostly in the south of the country, and electricity to industrial customers. ENGIE is also active in the retail energy services sector serving almost 650,000 customers through ENGIE Servicii specialized in maintenance of home installations. In addition, the Group operates in the BtoB services sector via ENGIE Building Solutions, an ENGIE Servicii subsidiary. ENGIE operates two wind farms in Gemenele and Baleni, for an installed capacity of 98 MW. Lastly, the Group is active in natural gas storage through its Depomures subsidiary. The process to deregulate gas and electricity prices for residential consumers continues, while gas and electricity producers and suppliers have an obligation to trade a portion of their portfolios in the markets. Regarding renewable energy, after a weakening of the regulatory framework between 2013 and 2015, the current government is trying to readjust the support mechanism to rectify the difficult situation in which producers find themselves.

In **Slovakia**, ENGIE is the second largest private heating network operator and provides operation and maintenance installation solutions for buildings. ENGIE also has gas storage activity through its subsidiary Pozagas.

In **Spain**, the entities operate 66 MW in power generation assets based on solar and hydropower through a partnership with Mitsui, as well as cogeneration units and heating networks of Barcelona. Gas and electricity sales and marketing activities are focused on the industrial

market with 333 TWh sold in natural gas and 310 TWh in electricity. ENGIE is also active in installation, operation, maintenance and supply of energy efficiency solutions.

In Switzerland and Austria, ENGIE supplies energy and energy efficiency services, and is active in installation and maintenance for buildings.

## 1.3.7 Infrastructures Europe

The Infrastructures Europe reportable segment groups together the activities of four BUs: GRTgaz, GRDF, Elengy, and Storengy. These BUs develop, operate and maintain – primarily in France and Germany – natural gas transmission, storage, and distribution networks and facilities, along with LNG terminals. They also sell access rights to these infrastructures to third parties.

The GRTgaz, GRDF, Elengy and Storengy operating segments, which comprise the gas infrastructure businesses in Europe (distribution, transport, storage, and LNG terminals), have been grouped together within the Infrastructures Europe reportable segment as they are all regulated businesses (or businesses likely to be regulated) with similar risk profiles and margins.

### KEY FIGURES

In € millions	2016	2015	Total change (%)
Revenues	3,267	3,027	+8.0%
EBITDA	3,459	3,381	+2.3%

### 1.3.7.1 GRTgaz

#### 1.3.7.1.1 Role & Strategy

GRTgaz is an independant subsidiary of ENGIE. In addition to GRTgaz collaborators who owns 0.35% of the society capital, GRTgaz shareholders are ENGIE and the Société d'Infrastructures Gazières (SIG), a consortium composed of CNP Assurances, CDC Infrastructures and Caisse des Dépôts. ENGIE and the SIG respectively own 75% and 25% of the remaining part of the capital.

GRTgaz develops, operates and maintains the main transmission network in France, manages the natural gas flows that flow through it, and markets network access services to gas suppliers. It manages gas transmission operations in Germany through its GRTgaz Deutschland subsidiary.

GRTgaz's strategy is to ensure the company's development in the long term both in France and internationally. GRTgaz is intent on:

- being a leader in gas infrastructure in Europe, in particular by contributing to better integration of the European markets;
- being a driving force in the energy transition, particularly by promoting new uses of natural gas (industry/mobility), developing renewable natural gas by injecting biomethane into the transmission network, and research on monetizing surplus renewable energy (power-to-gas);
- continuing to expand internationally in countries where natural gas consumption is growing fast, in close collaboration with other Group entities.

#### 1.3.7.1.2 Description of activities

GRTgaz is a European leader in natural gas transmission and a global expert in gas transmission systems and networks. In France, it owns and operates more than 32,000 km of buried pipeline and 27 compression stations to take gas from suppliers to consumers (distributors or manufacturers directly connected to the transmission network). GRTgaz has a public service mandate to guarantee the continuous supply of gas to consumers. It also sells transmission

services to network users. GRTgaz plays an active role in the energy transition, investing in innovative solutions to adapt its network accordingly and combine competitiveness and security of supply with environmental protection.

GRTgaz's business is conducted within a general framework designed to guarantee the independence of the grid manager.

France's Energy Code states that the construction and operation of natural gas transmission pipelines must be authorized by a competent administrative body, the conditions for which are set by Articles L. 555-7 *et seq.* and Articles R. 555-2 *et seq.* of the Environment Code. Authorizations are nominative and non-transferable. Entities that obtain natural gas transmission authorizations must comply with the terms and conditions of the authorizations.

Pursuant to its ruling of December 15, 2016, the French Energy Regulatory Commission (CRE) defined the methodology and set the tariffs known as "ATRT 6," set to enter into force on April 1, 2017 for a period of four years.

The methodology is consistent with the principles used in the previous tariffs. The tariff structure is updated on April 1 each year so as to adjust the income authorized by the CRE based in particular on changes in inflation and the best available forecasts of energy loads and capacity subscriptions for the year in question. The blueprint for net operating expenses includes a productivity objective. There is an incentive for cost control in investment, along with a revision clause after two years enabling adjustment of the blueprint for net operating expenses, subject to certain conditions.

The new tariff set by the CRE provides GRTgaz with all the resources needed to respond to the challenges of energy transition and takes account of the changes in the gas market. The CRE is also strengthening the GRTgaz performance incentives and the incentive scheme for the creation of more selective interconnection capacity.

This new framework will result in a 3.1% reduction in the average unit tariff in 2017, excluding changes in the tariff structure and inter-operator compensation mechanism. Over the ATRT6 period, the tariff decreases by an average of 0.4% per year. These changes are the result of various factors:

- on the one hand, the diminishing subscriptions for capacity expected for the ATRT6 tariff period, the commissioning of significant investment projects, particularly with regard to the creation of the single marketplace in France, and the increase in operating expenses resulting in particular from projects designed to prepare the future of gas transmission networks and to support energy transition; and
- on the other, the reduction in energy prices, the reduction in the weighted average capital cost from 6.5% to 5.25% (actual, before tax) and the efficiency targets set for GRTgaz.

### 1.3.7.2 GRDF

#### 1.3.7.2.1 Role & Strategy

In France, GRDF, independent subsidiary ENGIE, develops, operates and maintains the distribution networks, delivers gas for suppliers and consumers, and connects biomethane producers to the network. GRDF is tasked with giving all natural gas suppliers equal access to its network.

Its strategy is revised every four years. At the end of 2015, GRDF reported on its former corporate project and set new objectives for 2018 as follows:

- operational excellence in the performance of its businesses to be recognized as committed professionals;
- gas to be promoted as an energy of the future by demonstrating its relevance to the energy mix;
- a model, to be created with all business lines, of a responsible, more open and collaborative company.

#### 1.3.7.2.2 Description of activities

The distribution activity has specific features related to its classification as a local utility. Each municipality where natural gas supply is available grants a concession to an authorized distributor to operate the natural gas utility in its territory. Concessions are entered into or renewed based on standard specifications established jointly by the French national federation of concession-granting and state-controlled municipalities (FNCCR) and GRDF. Concession-granting bodies exercise control to ensure the proper execution of the obligations resulting from these specifications.

Distribution structures belong to the municipalities even when they are built and financed by the distributor, who has an exclusive right to use them. The Energy Code recognizes the entitlement of exclusive concession rights to historic concession-holders, i.e., GRDF and 22 local distribution companies (ELD), to exclusive service areas. As holders of a "distribution monopoly," they are the sole operators with whom municipalities may renew the concession. The grounds for terminating a concession contract early are strictly controlled (listed exhaustively) as is the date the concession can be terminated (cannot be in the first half of the contracted term). Termination also requires two years' notice and the concession-granting authority must pay compensation to the concessionaire for early termination.

Apart from the exclusive service areas of GRDF and the local distribution companies, the Energy Code allows all municipalities not supplied with natural gas to entrust their public gas distribution to the operator of their choice.

In addition to the special case of public service delegations recently acquired after a competitive bidding process, GRDF's activity is remunerated by a tariff set by the CRE. Following the CRE's decision of March 10, 2016, the new GRDF natural gas distribution tariff, "ATRD5," entered into force on July 1, 2016 for a period of four years. It applies to the GRDF exclusive service area. The structure of this tariff is consistent with the previous tariff. The CRE took into account all major projects that GRDF will take on during the period, allowing the company to continue its industrial safety and development initiatives while at the same time requiring it to increase its productivity. This new tariff framework led to a tariff increase of 2.6% effective July 1, 2016.

The Energy Code assigns a joint service, primarily responsible for construction, worksite project management, network operations and maintenance, and metering operations. GRDF and Enedis (formerly ERDF) are linked by an agreement defining their relationship within the Joint Department, the services it provides, and the distribution of the resulting costs. This agreement, signed for an indefinite period, may be terminated at any time, subject to 18 months' notice, during which period the parties undertake to renegotiate this agreement.

### 1.3.7.3 Elengy

#### 1.3.7.3.1 Role & Strategy

LNG terminals are port facilities that allow liquid natural gas (LNG) to be received and regasified. New services have been proposed since 2012: reloading and transshipment of LNG tankers and LNG truck loading (road-transported LNG).

Elengy is the second-largest European LNG terminal operator (*source: GII/GNL*), with three LNG terminals in France. The facilities operated by Elengy have a total regasification capacity<sup>(1)</sup> of 21.25 billion m<sup>3</sup> of gas *per annum* as of December 31, 2016.

Elengy's strategy is centered on the following key points:

- to optimize operation methods for each of the three sites in order to get best value from them regardless of their utilization rate;
- to create and offer new services at the terminals, similarly to what is being done in terms of reloading, transshipment between LNG tankers and the loading of tanker trucks;
- to find growth opportunities internationally by highlighting the asset management and operations expertise developed over the past 50 years.

#### 1.3.7.3.2 Description of activities

- **Fos Tonkin Terminal:** Brought into service in 1972, Fos Tonkin is located on the Mediterranean coast and receives LNG primarily from Algeria. Its regasification capacity stands at 3 billion m<sup>3</sup> per year. Its jetty can accommodate vessels carrying up to 75,000 m<sup>3</sup> of LNG and its tank has a total capacity of 80,000 m<sup>3</sup>.
- **Montoir-de-Bretagne Terminal:** Montoir-de-Bretagne, which was brought into service in 1980, is located on the Atlantic coast and receives LNG from various sources. It has a regasification capacity of 10 billion m<sup>3</sup> per year, two jetties that can accommodate vessels transporting up to around 260,000 m<sup>3</sup> of LNG (Q-Max) and three tanks with a total capacity of 360,000 m<sup>3</sup>.

(1) Quantity of natural gas, expressed as a volume of gas in a gaseous state, that the terminal is capable of receiving over a given period as LNG and routing to the adjacent transmission network as a gaseous gas.

- **Fos Cavaou Terminal:** the Fos Cavaou terminal was brought into commercial service in 2010. It has a regasification capacity of 8.25 billion m<sup>3</sup> per year, a jetty that can accommodate Q-Max-size tankers, and three tanks with a total capacity of 330,000 m<sup>3</sup>. The terminal is owned by a dedicated subsidiary, Fosmax LNG, in which Elengy has a 72.5% stake, while Total Gaz Electricité Holding France SAS holds a 27.5% stake. It is operated by Elengy.
- **Access to LNG terminals (principles and tariffs):** the LNG terminals are accessible to all LNG suppliers. The tariffs are regulated. Current tariffs were adopted following the CRE ruling of December 13, 2012 and adjusted mid-period by the CRE ruling of December 17, 2014. New tariffs will apply from April 1, 2017 pursuant to the decision of December 8, 2016.

The current tariff package consists of five terms depending (i) on the number of unload operations, (ii) quantities unloaded, (iii) use of regasification capacity, (iv) gas-in-kind and (v) seasonal adjustment. The package applicable from April 1, 2017 will be simplified with just three terms: (i) number of unload operations, (ii) quantities unloaded, and (iii) gas-in-kind.

### 1.3.7.4 Storengy

#### 1.3.7.4.1 Role & Strategy

With Storengy, the Group is the leader in underground gas storage in Europe, with net storage capacity of 12.2 billion m<sup>3</sup>. Against a backdrop of long-term adverse market conditions and major shakeups in the energy sector, Storengy must adapt its operations in the face of risks weighing on its core business and develop new ambitions made possible by the energy transition. Its strategy is to:

- bring highly effective, innovative solutions to its customers by optimizing its operations in its traditional markets;
- be a driving force in the energy transition, leveraging its sites to best serve its territories;
- develop business in growth markets – renewable gas, natural gas storage (internationally), energy storage, geothermal power – by making the most of its core competencies (drilling, geosciences, surface processes, risk management, and so on).

#### 1.3.7.4.2 Description of activities

- **France:** As of December 31, 2016, Storengy was operating in France:
  - 14 underground storage facilities (13 of them wholly owned).  
Nine of these storage facilities are in aquifers (total useful

storage volume of 9 billion m<sup>3</sup>), four are in salt caverns (total useful storage volume of 1 billion m<sup>3</sup>), and one is in a depleted field (useful storage volume of 80 million m<sup>3</sup>); three of these sites have been mothballed (corresponding to a total useful volume of 880 million m<sup>3</sup>);

- 51 compressors with a total power of 219 MW, needed to withdraw and inject natural gas;
- surface facilities required to process the gas withdrawn, before injection into the transmission network.

**Legislative and regulatory environment in France:** Underground storage facilities fall under the Mining Code and are operated pursuant to a concession granted by the French government following a public inquiry and competitive tenders. ENGIE holds mining rights that it farms out<sup>(1)</sup> to its subsidiary Storengy, which operates them and thus holds the corresponding authorizations.

According to the Third Gas Directive, access to storage is organized according to a system known as “negotiated system.” Storage prices are set by Storengy in a transparent, non-discriminatory manner. The French Energy Code and the decrees of August 21, 2006 and March 12, 2014 set the access conditions for storage facilities. The decrees specifically set out the conditions for granting and assigning storage capacity access rights and their distribution, and require the authorized supplier or agent to maintain sufficient stores in order that, on October 31 of every year, they have enough natural gas to supply their customers from November 1 to March 31. An annual decree sets out the storage rights in question and related obligations. Pricing conditions vary according to the tanks’ technical capacity, the basic storage service and the type of additional operating services selected.

- **Germany:** Storengy Deutschland GmbH, a wholly owned subsidiary of Storengy, is one of the leaders in the German underground gas storage market, with over 8% market share by volume. The company owns and operates six storage sites for a working capacity of nearly 1.7 billion m<sup>3</sup> (three salt sites: Harsefeld, Lesum and Peckensen; and three depleted sites: Fronhofen, Schmidhausen and Uelsen). It also holds a 19.7% stake in the depleted site at Breitbrunn (992 million m<sup>3</sup> in total).
- **United Kingdom:** Storengy UK Ltd, a wholly owned subsidiary of Storengy, is dedicated to the construction and marketing of storage capacity in saline cavities at Stublich, in Cheshire. The planned storage capacity at the site is 400 million m<sup>3</sup> of useful volume, divided into 20 cavities. Half of the capacity (10 cavities) is already in operation and being sold. The UK’s Office of Gas and Electricity Markets (Ofgem) granted it a third-party access exemption for the entire project.

(1) Farming out: in mining law, the name given to an agreement by which the holder of the operating rights (national government or concessionaire) leases the mine to a third party in return for a royalty.

### 1.3.8 Global LNG and Global Energy Management

The Global LNG and Global Energy Management reportable segment includes the activities of two BUs: Global LNG (GLNG) and Global Energy Management (GEM).

The Global LNG BU manages a portfolio of long-term supply contracts, has stakes in LNG facilities, and operates a fleet of LNG tankers. The GEM BU manages and optimizes the Group's portfolios of physical and contractual assets (excluding gas transmission, distribution and storage infrastructures), particularly in the European market, on behalf of the BUs that hold power generation assets and of customer portfolios. It is

also responsible for selling energy to national and pan-European key industrial accounts and for supplying energy to the BUs which sell it on to their customers. Lastly, it leverages its expertise in the energy-related financial markets to provide solutions to third parties.

The Global LNG and GEM operating segments were grouped within the Global LNG and GEM reportable segment because they are both responsible for managing and optimizing the Group's gas supply contracts.

#### KEY FIGURES

<i>In € millions</i>	2016	2015	Total change (%)
Revenues	8,981	11,320	-20.7%
EBITDA	3	196	-98.3%

#### 1.3.8.1 Global LNG (GLNG)

##### 1.3.8.1.1 Role & Strategy

The GLNG BU has two core missions:

- supply LNG to the various ENGIE entities and increase sales to third parties, focusing on high-growth areas (Asia, Latin America...);
- increase the value of the portfolio value by optimizing sales/purchase contracts and the shipping fleet.

Given current market conditions, three strategic priorities have been defined:

- renegotiation of purchase and sales contracts that do not reflect current LNG market conditions;
- creation of new downstream markets, particularly through the supply of LNG to countries dependent on oil and/or coal for power generation;
- promotion and development of new LNG usages, such as for bunkering (fuel for ships) and to clients that are not connected to the gas grid (France, Belgium, United Kingdom and United States).

##### 1.3.8.1.2 Description of activities

The GLNG BU has a recognized expertise over the entire LNG value chain, from the development of liquefaction projects to shipping, sales and also as an operator of FSRUs (floating storage and regasification units). Its activities can be divided into five categories:

- Long-term developments: long-term supply and sale of LNG;
- Short and medium-term operations: trading (purchasing/sale) of LNG and portfolio optimization;
- Fleet management: management and improvement of the efficiency of the LNG fleet while supporting development projects;
- New LNG usages: promotion and development of LNG bunkering, ex-terminal sales and supply chains for customers not connected to the gas network;
- Engineering: technical support for various Group and BU projects.

The GLNG BU works closely with the Group's downstream businesses.

	Annual long-term commitment <sup>(4)</sup>		ENGIE's stakes in liquefaction plants
	In millions of metric tons of LNG <i>per annum</i> (Mtpa)	TWh equivalent	
Algeria (long-term DES contract) <sup>(1)</sup>	6.8	102	-
Egypt	3.7	55	5% of Idku train 1
Nigeria (DES contract) <sup>(1)</sup>	0.4	6	-
Norway (12% stake connected to the Snøhvit deposit)	0.5	7	12% of the Melkøya plant
Trinidad and Tobago <sup>(2)</sup>	2.0	30	-
Yemen	2.6	39	-
Shell (long-term DES contract) <sup>(1)</sup>	0.4	6	-
Total (2016)	16.4	245	
United States (Cameron LNG)	4 <sup>(3)</sup>	60	16.6% of the Cameron LNG plant
Russia (Yamal LNG)	1 <sup>(3)</sup>	15	

(1) Delivered ex-ship. The sellers unload LNG cargoes directly at the customer's regasification terminal.

(2) The contract with Trinidad and Tobago is handled contractually by ENGIE Energy North America.

(3) LNG production will start in 2018.

(4) Nominal contractual quantities.

### 1.3.8.2 Global Energy Management (GEM)

#### 1.3.8.2.1 Role & Strategy

The GEM BU is responsible for the trading and asset management activities of the ENGIE Group's assets as well as for third parties.

As specialist in energy risk management services and markets, the GEM BU provides expertise to all Group BUs ensuring their competitiveness. The BU also manages its own commercial activities for external customers providing new products and solutions.

The GEM BU is active in the following four domains:

- Supply and logistics management (gas, electricity, biomass, emissions, etc.);
- Asset management through market positions;
- Risk management and hedging;
- Energy markets access.

#### 1.3.8.2.2 Description of activities

The GEM BU's activities are as follows:

- Gas assets supply and management:** gas-supply management and structuration and associated logistical support, optimization and valorization of asset flexibility in the market, logistic capabilities agreement management (transmission and storage) and gas regulation;
- Electricity assets management and valorization:** optimization and balancing of positions, valorization of ancillary products, markets access and proactive monitoring of regulations, electricity assets management and development of third parties asset management;

- Trading and risk management activities:** commercialization of gas, electricity and energy services to major pan-European or national industrial accounts, internal sourcing for sales entities within the Group in the northwest Europe region and commercialization of standard and structured products for energy risk management and markets access;
- Renewable assets management services and valorization:** market solutions development accelerating the energy transition, aggregation services for distributed renewable sources (wind/solar) and flexibility (demand response).

Starting from February 14<sup>th</sup>, 2017, a new positioning of the "Entreprises & Collectivités" entity<sup>(1)</sup> is set up, based on a closer proximity to the GEM BU. It will strengthen the synergies between these two entities and enhance both competitiveness and commercial development by encouraging, in particular, the development of high value-added services for clients.

#### Significant regulatory changes in 2016:

Firstly, the publication of a legislative package called "*Clean Energy for all Europeans*" by the European Commission. The embedded measures aim to reform the energy market, in particular to allow a greater integration of renewable energy sources and energy autonomy for the consumer.

The intraday markets – essential tools for managing renewable energy – have undergone major changes. For instance, an implicit allocation mechanism has been introduced for interconnections between Belgium and France, which will lead to a substantial increase of these markets' liquidity.

There is also the entry into force of the European "*Forward Capacity Allocation*" governing cross-border electricity markets operations in Europe.

Lastly, the French capacity market was implemented in 2016 and a successful first auction held in December.

(1) Starting from this date, this entity is no longer part of the France BtoB BU perimeter.

### 1.3.9 Exploration and Production International

The Exploration and Production International reportable segment corresponds to the Exploration & Production International BU. It comprises exploration, development and operation of the Group's natural gas and oil fields.

#### KEY FIGURES

In € millions	2016	2015	Total change (%)
Revenues	1,799	2,242	-19.8%
EBITDA	1,198	1,514	-20.9%

#### 1.3.9.1 Role & Strategy

The Exploration and Production International BU (ENGIE E&P) mission is to be a reliable operator in Europe and the Mediterranean area by:

- Producing gas and oil in a safe, efficient and sustainable manner;
- Leading best in class operations in the offshore Northern Europe, from exploration to decommissioning;
- Targeting profitability and value creation;
- Being economically resilient in lukewarm oil barrel price environment;
- Self-funding its activity;
- Fitting in an expected consolidation between portfolios and companies in the offshore Northern Europe.

ENGIE E&P continuously prioritizes Health Safety Environment (HSE) excellence.

Following the change of market environment, ENGIE E&P's response started with a geographic re-focus continued with drastic changes in terms of new investments, and significant reductions in operational costs in order to strengthen ENGIE E&P activity sustainably.

ENGIE E&P focuses around its producing assets, and medium size development projects with a short time-to-market.

An ambitious Transformation of ENGIE E&P into a sustainable and profitable company in a volatile and low price environment has been undertaken and is a key factor in attracting talents and skills to manage, support and further develop the company.

#### Principal key indicators

Europe and North Africa are the core areas of the Group's exploration and production business.

As of December 31, 2016, the Group published the following results:

- operations in 12 countries;
- 319 exploration and/or production licenses held (of which 57% are operated by the Group);
- proven and probable (2P) reserves of 672.4 million barrels of oil equivalent (Mboe), of which 79% is natural gas and 21% liquid hydrocarbons;
- production of 56.3 Mboe, of which 63% is natural gas and 37% liquid hydrocarbons.

#### 1.3.9.2 Description of activities

**Legal framework of the Exploration & Production activities:** the Group conducts its exploration and production activities through its subsidiary ENGIE E&P International SA, in which it holds a 70% stake (with the remaining 30% held indirectly by the China Investment Corporation), and the company's affiliates (wholly owned), which together constitute the Exploration & Production International BU.

**Proven and probable (2P) reserves:** to estimate its 2P reserves, the Group uses the "SPE PRMS" classification, based on the common definitions of the SPE and the World Petroleum Congress (WPC).

The tables below show all of the Group's proven and probable (2P) reserves (including developed and undeveloped reserves<sup>(1)</sup>) and their geographical distribution.

2016

Group's reserves in Mmboe (Million Barrels Oil Equivalent)	Natural gas	Liquid hydrocarbons	Total
<b>Reserves as of December 31, N-1</b>	<b>531.5</b>	<b>167.6</b>	<b>699.2</b>
Revision + discoveries	34.6	1.1	35.7
Assets bought and sold	-1.9	-4.2	-6.1
Production sales	-35.3	-21.0	-56.3
<b>Reserves as of December 31</b>	<b>528.9</b>	<b>143.6</b>	<b>672.4</b>

(1) Developed reserves are those that can be produced from existing facilities. Undeveloped reserves are those needing new wells, new facilities or significant additional investments, starting from existing facilities, such as a compression unit.



Group's reserves by country in Mmboe <sup>(1)</sup>			2016
	Natural gas	Liquid hydrocarbons	Total
Germany	27,9	53.4	81.3
Norway	177,1	79.7	256.8
United Kingdom	43,7	1.0	44.7
Netherlands	59,7	4.8	64.5
Other*	220,5	4.6	225.0
Total	528,9	143.6	672.4
Change	-1%	-14%	-4%

\* "Other" covers Algeria, Egypt and Indonesia

As of December 31, 2016, ENGIE E&P's 2P reserves of liquid hydrocarbons and natural gas ("entitlement")<sup>(2)</sup> were 672.4 Mboe, compared with 699.2 Mboe in 2015. Gas accounts for 79% of these reserves, which represent a volume of 529 Mboe, or 85 billion cubic meters.

The 2P reserves replacement ratio for a given period is defined as the ratio of additions of 2P reserves for the period (discoveries, net acquisitions and revisions of reserves) to production for the period. The

2P reserves replacement ratio for ENGIE E&P is 26% over the 2014-2016 period.

**Production:** during the fiscal year ended on December 31, 2016, the production of gas and liquid hydrocarbons sold by ENGIE E&P was 56.3 Mboe.

The table below sets out ENGIE E&P's production, including the share from companies consolidated by the equity method, by country:

Group production by country in Mmboe			2016
	Natural gas	Liquid hydrocarbons	Total
Germany	3.4	2.7	6.1
Norway	17.0	15.6	32.6
United Kingdom	1.6	0.1	1.7
Netherlands	12.1	1.9	14.0
Egypt	1.3	0.7	2.0
<b>TOTAL</b>	<b>35.3</b>	<b>21.0</b>	<b>56.3</b>

### 1.3.10 Other

The Other reportable segment includes the activities of the Generation Europe BU, which comprises the Group's thermal power generation activities in Europe, the Tractebel BU (engineering companies specializing in the areas of energy, water, and infrastructure), the GTT BU (specializing in the design of cryogenic membrane confinement

systems for sea transportation, and onshore and offshore storage of LNG), and the Group's holding and corporate activities, which include the entities centralizing the Group's financing requirements, Solairedirect's activities, and the equity-accounted contribution of SUEZ.

#### KEY FIGURES

In € millions	2016	2015	Total change (%)
Revenues	3,405	3,710	-8.2%
EBITDA	15	472	-96.9%

(1) As amounts are rounded by the database, there may be insignificant variances between line-items and totals.

(2) Unless otherwise specified, the references made to 2P reserves and production must be understood as ENGIE E&P's stake in these reserves and production (net of all license charges taken in kind by third parties in the form of crude oil or natural gas (entitlement)). These references include the total of these net 2P oil, gas, and other hydrocarbon reserves estimated as being extractable for the remaining duration of the licenses, concessions, and production-sharing agreements. ENGIE holds an equity interest of 70% in ENGIE E&P International SA, which it consolidates by the full consolidation method.

### 1.3.10.1 Generation Europe

#### 1.3.10.1.1 Role & Strategy

The market environment in which the Generation Europe BU is active strongly evolves. An ever-increasing share of renewable energy sources (RES) combined with a stable or even decreasing demand for power intensifies competition on these mature markets.

Moreover, the rise of intermittent RES calls for more intervention by the European Transmission System Operators (TSO). In times of high volatility of RES, market participants need to react in order to stabilize the grid. Natural gas plants play a key role in today's energy markets, by offering enormous flexibility. The Generation Europe BU as provider of flexibility services (so-called ancillary services) can benefit from this ongoing development.

To guarantee security of supply over the longer term, governments have adopted mechanisms for additional capacity or reserves which pay electricity producers. This allows the power plants to remain operational and, for example, to produce power at times of weak power generation from renewable sources.

Against a backdrop of massive change in the markets, the Generation Europe BU wants to become a leading player in the energy transition as an ally of renewable energy. To fulfil this objective, the Generation Europe BU aims to:

- offer power energy competitively on mature commodity markets by bringing to market the most economically priced energy;
- capture value from increasing flexibility needs (ancillaries and capacity remuneration mechanisms);
- serve large industrial customers based on the Generation Europe BU know-how of energy markets and operations and maintenance (O&M) of large industrial sites, in collaboration with other BUs as needed;
- and be a sustainable complement to RES by decreasing its environmental footprint (e.g., the signing end of 2016 of the sale of the coal-fired power plant "Polaniec" in Poland which leads to a reduction of ENGIE's CO<sub>2</sub> emissions by 6.2%).

#### 1.3.10.1.2 Description of activities

The Generation Europe BU is managing a portfolio of thermal generation assets with an installed capacity of 24.3 GW<sup>(1)</sup> in 10 European countries (Belgium, The Netherlands, Germany, France, Italy, Portugal, Spain, Greece, Poland and UK). The installed capacity split by technology is the following: gas (18 GW), coal (4.4 GW), hydropower and pump storage (1.3 GW), biomass & others (0.6 GW). Out of this 24.3 GW installed capacity, approximately 2 GW are (seasonally) mothballed according to market demand.

Next to its power generation business, the BU is developing services towards large industrial customers around energy and O&M solutions.

### 1.3.10.2 Tractebel

#### 1.3.10.2.1 Role & Strategy

Together with its clients, Tractebel's mission is to shape the world of tomorrow, by providing them with first-class engineering, consulting and project management services and being their partner in innovative solutions, energy transition and digital transformation. Moreover,

Tractebel wants to play an active role in the new world of energy by developing solutions to mitigate climate change and its effects and to bring electricity to everyone.

#### 1.3.10.2.2 Description of activities

Tractebel provides a full range of services throughout the life cycle of its clients' projects. As one of the world's largest engineering consultancy companies and with more than 150 years of experience, it is able to offer its customers multidisciplinary solutions in energy, water and infrastructure. Its broad range of expertise extends across Europe, Africa, Asia and Latin America, allowing it to rise to its clients' most demanding challenges with high-quality engineering and consulting services, no matter where their projects are.

Tractebel offers:

- solutions for energy: renewables, energy system consulting, digital and decentralized energy solutions, hydropower, nuclear, thermal energy, transmission & distribution, gas & LNG;
- solutions for water: coasts & estuaries, reservoirs & dams, flood protection, water transfer, water treatment and supply, irrigation, dredging consultancy, offshore infrastructures;
- solutions for infrastructure: smart & complex buildings, transport & mobility, urban design & master planning, energy efficiency, environmental, sanitation & social programs.

### 1.3.10.3 Gaztransport & Technigaz (GTT)

#### 1.3.10.3.1 Role & Strategy

The company specializes in systems of cryogenic, or very low temperature, membrane containment used for sea transportation and onshore and offshore storage of LNG and other liquefied gases. It was created in 1994 after the merger of Gaztransport and Technigaz, and benefits from more than 50 years of LNG experience.

The liquefied gas market includes several types of vessel: LNG tankers, floating storage and regasification units (FSRUs), floating LNG units (FLNGs) for the liquefaction, storage and unloading of LNG, and multi-gas vessels (especially ethane and LPG). GTT also provides solutions for LNG land storage tanks and the use of LNG as a shipping fuel (bunkering), and offers a broad range of high value-added services aimed at the entire liquefied gas chain.

GTT aims to:

- provide the chain's various stakeholders with containment systems designed by the company for safe and reliable bulk transportation and storage of liquefied gas;
- provide engineering, consultancy, training, maintenance assistance and execution of technical studies at every stage of the liquefied gas chain; and
- adapt its technologies to promote new outlets for LNG, including helping to develop LNG as a shipping fuel and encouraging the transportation of LNG by sea or river in small or mid-sized vessels.

GTT has been listed on Compartment A of Euronext Paris since February 27, 2014. Since June 23, 2014, GTT's shares have been included in the SBF 120, CAC Mid 60, CAC Mid & Small and CAC All-Tradable indices. ENGIE has a 40.41% interest in GTT.

(1) Net installed capacity at 100% as of December 31, 2016 independently of the actual detention rate and of the consolidation method.

### 1.3.10.3.2 Description of activities

- Over the past 50 years, GTT has developed tried and tested technologies for sea transportation and onshore and offshore storage of LNG and other liquefied gases. Used by LNG tankers, these technologies allow LNG to be transported in bulk in the ship, as the hull is protected by thermal insulation that maintains the LNG at cryogenic temperature (-162°C at atmospheric pressure). As the LNG is contained by a thin metal lining, this double membrane complies with regulatory requirements.
- The confinement systems designed by GTT are based on its membrane technology (particularly the Mark III, Mark V and NO96 systems for LNG tankers and other floating units, and GST for LNG land storage tanks). These systems make it possible to transport and store liquefied gas in bulk, safely and reliably. They are made of materials that are thinner and lighter than those used by the main competing systems. This optimizes storage space and reduces the construction and operating costs of the vessel or tank. GTT's membrane confinement systems are primarily used by shipyards, ship owners, gas companies, and terminal operators.
- GTT's customers can access its technologies by implementing licensing agreements that give them access to protected rights to the technologies and to the know-how of GTT, which supports its customers throughout their construction projects.
- GTT also provides its customers with engineering services irrespective of whether they enter into a licensing agreement.
- GTT provides ad hoc services that include training, maintenance assistance, certification assistance and execution of technical studies.
- GTT's technologies have long been accepted and endorsed by the classification companies in the maritime domain.
- GTT, which has been ISO-9001-certified since December 2010, is now focused on fine-tuning its quality management system.

### 1.3.10.4 Solairedirect

#### 1.3.10.4.1 Role & Strategy

Solairedirect develops, finances, builds and operates ground-based photovoltaic power plants with output exceeding 1 MW. It aims to

industrialize these various steps to make the cost of photovoltaic power generation as competitive as possible. Solairedirect is positioned in markets where conditions are conducive to competitive solar power, thanks to high levels of irradiance, land and financing availability, and market depth (tenders).

#### 1.3.10.4.2 Description of activities

Capitalizing on its experience in France and through its network of investors and leading financial institutions in the solar energy market, Solairedirect is positioned to take advantage of emerging opportunities offered by markets combining high levels of solar irradiance, easy access to financing and a market dynamic that favors the competitiveness of solar energy compared to other energy sources.

The company operates in three main areas to capture maximum value at each life stage of a photovoltaic project:

- development and construction: the company develops and supplies design, supply and installation services for building solar parks for its own projects or those of third parties, including Group subsidiaries;
- asset services: the company provides operating and maintenance services to all the solar parks it builds, as well as administrative and financial services to the project companies it has set up to own these solar parks. The company offers these operating and maintenance services through long-term contracts (20-25 years) for each solar park that it builds, thus providing investors with a comprehensive range of turnkey solutions for operating and maintaining solar parks throughout their life cycle and giving them a clear overview of operating costs. Under these agreements, the company receives a regular flow of income throughout the solar parks' life cycle, helping to establish lasting relationships with investors and local stakeholders;
- asset management: the company manages its portfolio of interests comprising investments in projects that have been built and may be sold during the post-construction phase (brownfields), and residual non-controlling interests in projects that have already led to a sale during the pre-construction phase (greenfields). The team in charge of managing the company's interests manages the portfolio in such a way as to maximize the return on capital invested in photovoltaic project companies and to monetize these investments, primarily by selling stakes at the right time and on attractive terms.

### 1.3.11 Description of the Métiers

The Métiers develop the medium-term strategy of their various business segments in conjunction with the Group Strategy Department. They are also tasked with accelerating the BUs' development by:

- mobilizing and sharing the Group's key skills which involves promoting best practices, identifying relevant expertise in the various BUs, circulating the most significant commercial references, and leading communities of practice;
- managing major programs for the future (energy storage, smart cities, energy renovation for buildings, green mobility, biogas, etc.) and key projects (hydrogen, e-commerce platform for connected homes, etc.);
- providing daily support to BU activities and speeding up the process for capturing new markets by developing a key accounts policy and seeking out and coordinating major technical and commercial partnerships;
- encouraging the process of continuous improvement to better operating performance;
- offering the General Management a second opinion on key decisions (e.g., investment and disinvestment), decisions on whether or not to undertake an operating project, and competitive analysis.

#### 1.3.11.1 Métier Gas Chain

The Métier Gas Chain covers all activities in the gas value chain up to its supply to the Group's customers. The Métier's ambition is to promote natural gas as a driver of the energy transition worldwide, to introduce innovative solutions, and to develop new uses for natural gas.

The Métier's main activities are:

- the gas chain's "traditional" activity (across the value chain) in different contexts where sales activities may or may not be separated from infrastructure activities;
- new gas activities (new products and solutions such as biogas, small-scale LNG, transported LNG, hydrogen, etc.).

#### 1.3.11.2 Métier Centralized Production of Electricity

The Métier Centralized Production of Electricity is active in renewable and thermal power projects and in power distribution projects.

The Métier's objectives are to:

- support the development and acquisition of centralized thermal power generation units;
- accelerate the increase in production from renewable resources;
- maximize the value of existing assets;
- develop the most innovative and competitive solutions;
- adapt thermal energy production in mature markets to the demands of the new markets (for instance to ensure stable supply) by strengthening operating flexibility and reducing operating costs.

#### 1.3.11.3 Métier Decentralized Solutions for Cities and Territories

The Métier Decentralized Solutions for Cities and Territories aims to guide the Group's approach to the long-term challenges of massive urbanization and the digital revolution by:

- helping to transform new ideas into new products and services within each BU;
- promoting the sharing of best practices and knowledge management within the BUs;
- creating the Group's strategy for each activity within its particular scope.

#### 1.3.11.4 Métier Solutions for Businesses

The Métier Solutions for Businesses comprises energy sales and services, two activities characterized by highly competitive markets that require Group entities to adapt to customers' changing needs and expectations.

The Métier promotes the creation of more local, flexible and innovative offerings, its main role being to:

- provide the BtoB entities with a strategic approach to the market through strategic analyses, and maintain competitive and technological intelligence to monitor changes in their environments;
- guide investments and disinvestments;
- leverage and share skills;
- support the business activities of current Group customers and prospects by promoting existing offerings or developing new ones, forming partnerships, and so on.

#### 1.3.11.5 Métier Solutions for Residentials and Professionals

The goal of the Métier Solutions for Residentials and Professionals is to speed up and facilitate the energy transition in the residential and small business market by offering cutting-edge solutions.

To deliver on this objective and deal with the unprecedented changes that are shaking up the energy world, the Métier has set itself four key priorities:

- to increase ENGIE's presence by developing the customer portfolio and providing access to energy in emerging countries;
- to provide customers with more solutions, more quickly, via new activities and innovation;
- to open up new opportunities and support operational excellence by increasing customer satisfaction and improving commercial performance;
- to align skills with accountability and customer focus by facilitating the ability to develop new ideas.

## 1.4 Real estate, plant and equipment

The Group owns or leases a significant amount of industrial real estate around the world. Many Group activities involve operating very large plants that the Group only partially owns.

As of December 31, 2016, the Group operated electricity power plants, natural gas terminals and storage facilities in over 40 countries.

The tables below show the main facilities currently in operation, either wholly or partially owned by the Group. Leased properties are covered in Notes 21 and 22 of Section 6.2 "Consolidated Financial Statements".

### POWER PLANTS (CAPACITY > 400 MW EXCL. UNITS UNDER CONSTRUCTION)

Country	Site/plant	Total capacity <sup>(1)</sup> (MW)	Type of plant
South Africa	Avon	670	Fuel-oil fired
Germany	Wilhelmshaven	731	Coal
	Zolling	538	Coal-, biomass-, fuel oil-fired
Saudi Arabia	Marafiq	2,744	Natural gas
	Ju'aymah	484	Natural gas
	Shedgum	484	Natural gas
	Uthmaniyah	484	Natural gas
	Riyadh PP11	1,729	Natural gas
Australia	Hazelwood	1,554	Lignite
	Loy Yang	953	Lignite
	Pelican Point	479	Natural gas
Bahrain	Al Dur	1,234	Natural gas
	Al Ezzel	954	Natural gas
	Al Hidd	929	Natural gas
Belgium	Amercœur	451	Natural gas
	Coo	1,164	Hydraulic pumping
	Doel	2,905	Nuclear
	Herdersbrug	480	Natural gas
Brazil	Tihange	3,008	Nuclear
	Cana Brava	450	Hydroelectric
	Estreito	1,087	Hydroelectric
	Jirau	3,750	Hydroelectric
	Ita	1,450	Hydroelectric
	Jorge Lacerda	773	Coal
	Machadinho	1,140	Hydroelectric
	Salto Osório	1,078	Hydroelectric
Salto Santiago	1,420	Hydroelectric	
Chile	Mejillones	884	Coal-fired and natural gas
	Tocopilla	963	Natural gas, coal- and fuel oil-fired
United Arab Emirates	Fujairah F2	2,000	Natural gas
	Shuweihat 1	1,500	Natural gas
	Shuweihat 2	1,510	Natural gas
	Taweelah	1,592	Natural gas
	Umm Al Nar	1,532	Natural gas
Spain	Cartagena	1,199	Natural gas
	Castelnou	791	Natural gas
USA	Astoria 1	575	Natural gas
	Astoria 2	575	Natural gas
	Armstrong <sup>(2)</sup>	620	Natural gas
	Bellingham <sup>(2)</sup>	527	Natural gas
	Blackstone <sup>(2)</sup>	478	Natural gas
	Coleto Creek <sup>(2)</sup>	635	Coal
	Hays <sup>(2)</sup>	893	Natural gas

Country	Site/plant	Total capacity <sup>(1)</sup> (MW)	Type of plant
	Midlothian <sup>(2)</sup>	1,394	Natural gas
	Troy <sup>(2)</sup>	609	Natural gas
	Wise County Power <sup>(2)</sup>	746	Natural gas
France	CombiGolfe	435	Natural gas
	CyCoFos	490	Natural gas and steelworks gas-fired plant
	DK6 (Dunkirk)	788	Natural gas and steelworks gas-fired plant
	Génissiat	423	Hydroelectric
	Montoir-de-Bretagne	435	Natural gas
Greece	Viotia	570	Natural gas
Italy	Torre Valdaliga	1,134	Natural gas
	Vado Ligure	782	Natural gas
Kuwait	Az Zour North	1,539	Natural gas
Oman	Al-Rusail	665	Natural gas
	Barka 2	678	Natural gas
	Barka 3	744	Natural gas
	Sohar	585	Natural gas
	Sohar 2	744	Natural gas
Pakistan	Uch 1	551	Natural gas
Netherlands	Eems	1,931	Natural gas
	Flevo	846	Natural gas
	Rotterdam	731	Coal
Peru	Chilca	917	Natural gas
	ILO Nodo	600	Fuel-oil fired
	ILO 31	564	Fuel-oil fired
Poland	Polaniec <sup>(2)</sup>	1,717	Coal-, biogas- and biomass-fired
Puerto Rico	Ecoelectrica	507	Natural gas
Portugal	Elecgas	840	Natural gas
	Pego	576	Coal
	Turbogas	990	Natural gas
Qatar	Ras Laffan B	1,025	Natural gas
	Ras Laffan C	2,730	Natural gas
United Kingdom	Deeside	515	Natural gas
	First Hydro	2,088	Hydraulic pumping
	Saltend	1,197	Natural gas
Singapore	Senoko	3,201	Natural gas and fuel oil-fired
Thailand	Gheco One	660	Coal
	Glow IPP	713	Natural gas
Turkey	Ankara Boo	763	Natural gas
	Marmara	480	Natural gas

(1) Capacity of assets held by ENGIE, all of which are taken into account irrespective of the real ownership percentage.

(2) Sale agreement in progress

#### UNDERGROUND NATURAL GAS STORAGE (> 550 MM<sup>3</sup> OF TOTAL USEFUL STORAGE VOLUME <sup>(1)</sup>)

Country	Location	Gross useful volume (Mm <sup>3</sup> ) <sup>(1)</sup>
France	Gournay-sur-Aronde (Oise)	1,310
France	Germigny-sous-Coulombs (Seine-et-Marne)	820
France	Saint-Illiers-la-Ville (Yvelines)	690
France	Chémery (Loir-et-Cher)	3,710
France	Céré-la-Ronde (Indre-et-Loire)	570
France	Étrez (Ain)	690
France	Cerville (Meurthe-et-Moselle)	650
Germany	Uelsen	840
Slovakia	Malacky	655

(1) Useful storage volume held by ENGIE, all of which is taken into account irrespective of the real ownership percentage.

**METHANE TERMINALS**

Country	Location	Total regasification capacity (Gm <sup>3</sup> (n) per annum) <sup>(1)</sup>
France	Montoir-de-Bretagne	10
France	Tonkin (Fos-sur-Mer)	3
France	Cavaou (Fos-sur-Mer)	8.25
USA	Everett	6.3
Chile	Mejillones	2.0
Puerto Rico	Penuelas	0.8

(1) Capacity of assets held by ENGIE, all of which are taken into account irrespective of the real ownership percentage.

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## 1.5 Innovation, research and technologies policy

### 1.5.1 Innovation

To be leader in the energy transition in Europe, the Group relies on innovation to meet its customers' new requirements.

The "Innovation and New Business" entity was created to support changes on mature energy markets and the convergence between energy services and information technologies. Its aim is to position the Group at the forefront of these changes by developing additional growth vectors and new ways of doing business within the Group.

A number of tools and processes have been deployed to foster entrepreneurial creativity and ensure that innovation promotes the Group's long-term commercial development. The "innov@ENGIE" collaborative platform was designed for ENGIE employees to boost the innovation dynamic in the Group and promote innovation among employees. On December 31, 2016, innov@ENGIE had over 10,000 members. On average, 5 to 10 new product or business ideas are submitted each week. At the end of 2016, 560 ideas had been submitted.

To turn these ideas into products, an incubation process for employee projects was created. On December 31, 2016, 21 teams of Group employees were developing projects in external incubators located primarily in France (Paris Région Lab, Le Village, Atlanpole, Euratechnologie, and Midi-Pyrénées), Belgium (Co-station and WSL), the Netherlands, the United Kingdom and Brazil.

This process enhances existing initiatives such as the Trophées de l'Innovation ("Innovation Awards"), an in-house competition held each year for innovative projects submitted by Group employees. In 2016, the eighth annual Innovation Awards attracted around 600 projects submissions.

To strengthen its links with the innovation ecosystem of its host regions, the Group partners with major innovation-themed events. In 2016, ENGIE participated for the first time in the CES in Las Vegas and in the inaugural Viva Technology trade show in Paris. In June 2016, ENGIE's "Innovation Week" saw the organization of 150 events involving Group employees, customers, startups and entrepreneurs in 25 countries, for a total of almost 10,000 participants.

ENGIE launched around 50 calls for projects aimed at startups. Almost 1,000 proposals were received in response to the technological or commercial needs of the Group's operating entities.

The ENGIE New Ventures investment fund, with a €115 million endowment, was created in May 2014 to back innovative startups. This fund was designed to take minority stakes in developing startups linked to the Group's activities, offering them dual leverage: financial leverage through investment, and operational leverage.

At December 31, 2016, the fund's portfolio held investments in 14 start-up spread. The most recent include Heliatek (Germany – organic photovoltaic film), SymbioFCCell (France – hydrogen fuel cell range-extendors for electric vehicles), and Serviz (USA – on-demand home services platform).

The Group established in 2016 a new internal platform called ENGIE Fab dedicated to the creation and development of new businesses with major growth potential, such as in hydrogen, energy storage and shared energy. ENGIE Fab relies on a broad range of skills, drawn for the most part from the Group's own teams, in business development, financial modeling, technology sourcing, innovation processes and investment in startups.

## 1.5.2 Research & Technologies

ENGIE conducts research in an effort to harness and bring to maturity tomorrow's technologies, which will set its businesses apart. Research is also carried out to improve operational performance. This research, which relies on partnerships with globally renowned organizations (e.g. laboratories, universities, manufacturers and startups), helps promote widespread recognition of the Group's expertise and allows the Group to win new contracts.

In 2016, Group expenditure on research and technological development amounted to €191 million.

Some 1,100 researchers make up the Research and Technologies network, which includes the Research & Technologies Department and all Group entities conducting research specific to their fields of activity.

### 1.5.2.1 Priorities of the Research & Technologies Department

In 2016, the Research & Technologies department:

- continued to expand internationally with the opening of ENGIE Lab Singapore in July 2016. Focused on the "smart city" and green energy, this Lab allows the Group to develop relationships with the local innovation ecosystem and to be involved in technological developments in the Asia-Pacific region;
    - continued to develop pilot projects, especially in hydrogen, biogas, and energy storage technologies;
    - promoted the Group's skills and R&D know-how at international events such as the Consumer Electronics Show, Biogaz Europe, Viva Technology, the World Cities Summit and European Utility Week;
    - rolled out the ENGIE Lab brand to all research entities to raise the Group's R&D profile among business units and across the external innovation ecosystem.
- Corporate office research programs support technology intelligence and coordinate prospective research in priority areas. The major achievements in 2016 in priority research areas are as follows:
- **Renewable energies:** construction at the ENGIE Lab Laborelec site of a pilot project that includes organic photovoltaic technology from Heliatek, a company that Corporate R&D has been following for a number of years and in which the Group has now taken a stake; a study into the potential of solar heat in manufacturing; support given to the floating offshore wind farm in the Mediterranean after the concept's validation in Portugal; positioning in key biomass gasification technologies and international partnerships with Goteborg Energi (Sweden) and the Alkmaar consortium (Netherlands); start of testing of the Gaya biomass gasification pilot project (Lyon, France); study on the industrialization of the biomass gasification sector;
  - **Cities and energy use:** support provided for the use of 3D city and building modeling technologies within ENGIE (projects in conjunction with Enodo and Dassault Systemes, plus Siradel, which ENGIE has now acquired); development of a tool for regional energy planning for residential and commercial buildings; assessment of fuel cell/reversible electrolysis systems;
  - **Green mobility:** development of electric vehicle recharging solutions and a dedicated smartphone application; continued collaboration with the Francorchamps campus for the training of natural gas mobility professionals and the set-up of a two-way recharging microgrid; research into compounds such as *Metal Organic Frameworks* (MOFs) for the development of on-board natural gas tanks; program to optimize bus line operations;
  - **Energy storage:** continued development of the ENGIE Batteries Lab whose know-how in battery technology serves the Group's operating entities as well as external customers; partnerships in the fields of Li-ion, Lithium Titanium Oxide and Redflow batteries and metal-on-metal systems; active technology intelligence on heat, compressed-air and cold storage;
  - **Digital technologies and smart energy management:** establishment of an operational center to manage cyber-security at the Group's industrial facilities; development of a tool for real-time simulation of an electrical microgrid taking account of energy storage solutions and the massive increase in renewable energies; program to share the management of self-produced energy via an electronic platform; creation of a connected device for remote reading of fuel levels in tanks; finalization of the Smart Energy Aware System based on intelligent interoperability of energy equipment for buildings; pilot projects incorporating the blockchain concept;
  - **Hydrogen development:** continuation of French and European partnership projects related to the use of H<sub>2</sub>/natural gas mixtures for sustainable cities, and high-temperature, high-pressure water electrolysis using solar energy; development of a technical and economic sizing and modeling tool for hydrogen chains and "power to X"; studies on new hydrogen plants; support for establishing a development strategy for hydrogen within ENGIE, leading, among other things, to investment in Symbio FCell;
  - **Liquefied natural gas (LNG):** development of on-board instruments for trucks and tankers as well as for commercial transactions; optimization of supply infrastructure at LNG stations; characterization of LNG quality for engines; development of innovative solutions for ship bunkering; identification of technology solutions to reduce methane emissions from road and maritime LNG fuel supply chains;
  - **Reduction and recovery of CO<sub>2</sub>:** analysis of CO<sub>2</sub> prices to make technologies in the CO<sub>2</sub> chain competitive; assessment of the market potential of industry services; technical and economic analysis of the methane-reforming and CO<sub>2</sub> storage channels. Participation, via a collaborative project, in a second full-scale test of a burst CO<sub>2</sub> pipeline.
- Activities coordinated by the Research & Technologies Department are carried out in the Group's specialized centers for research and expertise around the world which serve the Group's operating entities and external customers.



### 1.5.2.2 An international network of research units

- The ENGIE CRIGEN Lab (*Centre de Recherche et Innovation Gaz et Énergies Nouvelles*) is the Group's laboratory dedicated to natural gas, new energies and emerging technologies. Located in the Paris region, it has 330 employees, seven test centers, one scientific computing center, and customers in over 30 countries. It also runs ENGIE's Singapore lab. CRIGEN develops working methods that promote innovation.

Key achievements in 2016:

- **Innovation:** organization of the Big Brain Elengy/CRIGEN Challenge designed to develop new offers and innovative ideas for operating performance; housing of the "Hydrogen Taskforce" which has submitted 10 proposals to the "Hydrogen and Territories" call for proposals issued by French government authorities;
- **Decentralized energy management:** progress made with the microgrid demonstrator on Semakau Island in Singapore (under the REIDS – *Renewable Energy Integration Demonstrator in Singapore* – project). This offgrid demonstrator integrates a multi-fluid energy management system combining renewable energy generation and hydrogen and battery energy storage;
- **Energy uses:** continuation of the program in collaboration with GRDF on high-performance natural gas technologies associated with renewable energy, in particular via a European project to test fuel cells; deployment at the *Cité Universitaire Internationale de Paris*, in synergy with ENGIE Cofely, of the PowerZee application that encourages residents to play an active role in saving energy;
- **Drones:** development of an insulator-cleaning drone for high voltage lines in partnership with ENGIE Fabricom; development of drones equipped with infrared cameras to perform diagnostics on a building's energy performance;
- **Networks:** qualification of temperature-resistant polyethylene tubes that reduce the cost of implementing heating networks; production launch of a tool to optimize network capacity for GRTgaz.
- **ENGIE Laborelec Lab** specializes in electricity technology. Located near Brussels, it has branch offices in the Netherlands and Germany and runs the Group's laboratories in the Middle East and Chile. Laborelec has a staff of 240. Its expertise focuses on reducing environmental impact, improving facilities' availability and maintenance, and developing energy systems of the future.

Key achievements in 2016:

- **Renewable energies:** tests of various solar home systems; continued participation in the deep water windfloat Atlantic offshore wind project;
- **Energy storage:** study of plans to convert the Drogenbos power plant in Belgium into an energy storage facility; establishment of a benchmark for battery solutions for households and small businesses;

- **Additive manufacturing:** production via 3D printing of various prototypes of metal parts for the Amercoeur and Doel power plants and for ENGIE Fabricom, following the establishment of the ENGIE 3D Printing Lab in 2015;
- **Technical assistance** at nuclear production facilities, especially the Doel 3 power plant (to reduce steam generator fouling) and Doel 4 power plant (to limit flow-accelerated corrosion in the secondary circuit), and the Group's thermal power plants.
- **ENGIE Cylergie Lab**, an economic interest grouping based in Lyon and whose partners are Group entities, focuses on energy services (especially heating and cooling networks, energy performance of buildings, indoor comfort and indoor air quality) in conjunction with the other ENGIE Labs.

Key achievements in 2016:

- **demonstration of the usefulness of artificial intelligence techniques in BtoB business activities:** optimized operation of complex systems integrating heating networks and biomass production plants with heat storage; running of a positive energy building (heating and air conditioning);
  - under a partnership with the BtoB business line and CRIGEN, adaptation and qualification of **new technologies for on-site measuring** of a building's envelope performance.
  - **Cofely Ineo**, based in France, structures its R&D and innovation activity around the notions of systems and "systems of systems" and has expertise in energy, communication networks and information systems.
- Key achievements in 2016:
- development of a module-based **detection and signaling solution for automatic piloting of trains** and a low-profile antenna for bidirectional communication with satellites for high-speed trains and aircraft to reduce drag effects from the antenna's dome cover;
  - development of **intelligent digital platforms for the management of specific areas** (cities, airports, military bases and areas to be secured).
  - **Tractebel Engineering** exercises activities of engineering consulting firm specializing in energy and complex infrastructures. Its activities focus on energy systems (particularly those that integrate renewable energies), smart grids, energy efficiency, hydraulic engineering and nuclear power.

Key achievements in 2016:

- **energy transition:** contribution to a European project to develop a future offshore electrical grid for wind power production in the North Sea; development of floating solar power plants on dam reservoirs; development of solutions to reduce greenhouse gases in the steel industry (Brazil); pilot roll-out of a stand-alone rural electrification solution (Tanzania);
- **infrastructure:** analysis of seismic behavior of dams; analysis of the behavior of deep tunnels in anisotropic, squeezing ground; assessment of extreme flood flows using satellite data.

- The Gaztransport & Technigaz BU focuses its R&D on improving the performance of its LNG containment technologies and developing new product and service offers with high technological content.
- The Exploration & Production International BU carries out R&D in geosciences and operations/production to meet the operating needs of its subsidiaries and the Group's underground storage needs.

With regard to nuclear power, R&D activities are mainly organized under cooperation agreements with the French Atomic and Alternative

Energies Commission (CEA) and Belgian Nuclear Research Center (SCK-CEN). R&D focuses on improving operating performance and providing support to nuclear power plants. Areas involved are nuclear waste management, final shutdown and dismantling of nuclear facilities, operating flexibility of existing plants, improvements in chemicals and materials, the safe extension of a plant's lifespan, optimized fuel use, societal impacts of nuclear energy, and the safety of third-generation reactors/technologies and SMRs (Small Modular Reactors).

# 02

## Risk factors

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## 02 Risk factors

The material risks to which the Group is exposed, based on its own assessment, are described below. Other, lesser risks or risks unknown to date could also affect the Group. If these risks were to materialize, they could have a significant negative impact on the Group's operations, financial position and earnings, image and outlook, and/or on the ENGIE share price.

## 2.1 Risk management process

### 2.1.1 Enterprise risk management policy

The Group has adopted a policy of Enterprise Risk Management (ERM), whose principles are consistent with professional standards (including ISO 31000, Federation of European Risk Management Associations). The policy sets out ENGIE's ambition to "manage its risks in order to ensure its performance."

The Group's Enterprise Risk Management Policy applies to the Group's business processes and controlled entities, while observing the rules of governance that apply to each entity.

This policy promotes risk-taking at a reasonable level from a legal perspective, acceptable to generally held opinion and economically viable. It stipulates that all managers are risk managers. Generally, the Management Committees of the Group's entities are the main bodies that determine the actions to be taken to manage risk, except where an ad hoc risk committee has been created, such as for market risk.

To achieve this aim, the Group has appointed the Director of Audit and Risk as the Chief Risk Officer, who oversees the Risk Management Division. The Chief Risk Officer's role is to ensure that the Group has

adequate expertise in all areas for effective risk management. Risk analysis and coordination of action plans are performed in collaboration with all the Group's functional lines.

Each year, the Group's ERM process begins with a risk review by the Executive Committee. Each priority risk identified is coordinated by a member of the Executive Committee. The ERM campaign is then launched across the Group, setting out guidelines for risk management throughout the year. Finally, the Audit Committee examines the risk review and issues an opinion on the effectiveness of the risk management system, before reporting to the Board of Directors (see Section 4.1.4 "Standing Committees of the Board of Directors").

Knowledge of risks resulting from feedback from operating entities and functional departments is supplemented by interviews with directors, analysis of publications by external observers and review of major events. The current risk management system has been maintained and strengthened in the new Group organization. To this end, a Chief Risk Officer has been appointed in each BU.

2

### 2.1.2 Crisis management

ENGIE may have to face crisis situations. The Group has defined a crisis management and communication policy, which sets out general operating principles and the roles of the various participants, and has set up a dedicated organization.

The Group is thus equipped with a warning, analysis and decision-making system to manage crises at the relevant organizational level.

The efficiency of the system and the way that it is structured (emergency plans, business continuity plans, etc.) are regularly assessed using internal controls and appropriate training exercises.

### 2.1.3 Risk and insurance coverage

The ENGIE Insurance Department is responsible for preparing, establishing and managing insurance programs in the areas of Group asset protection (against property damage and losses in earnings), personal protection, third-party claims (civil liability) and automobile insurance and prevention.

For each of these areas:

- the amounts insured depend on the financial risks resulting from potential claim scenarios and coverage conditions offered by the market (available capacities and tariff conditions);
- financing is optimized: low or moderate-level hazard risks are covered by self-insurance plans, through deductibles and retentions or through the use of the Group's reinsurance company, whose commitments on a cumulative basis represent a maximum estimated loss of approximately 0.23% of the Group's 2016 revenues.

However, the Group could, in certain cases, be required to pay out sizable compensation that the current insurance program does not cover or could incur very high costs that its insurance policies do not reimburse or reimburse inadequately. Although the Group has excellent insurance coverage, specifically with regard to civil liability and environmental risks, it could be liable beyond the maximum insured amount or for events not covered (primarily due to the common insurance exclusions).

#### 2.1.3.1 Civil liability

A civil liability program for corporate officers and managers covers the representatives of ENGIE, its subsidiaries and Group representatives within its equity holdings.



## Risk factors

### 2.2 Risks related to the external environment

A general civil liability program (including for environmental damage) has been taken out for all the entities in a total amount of €800 million. This program operates either at the first euro of liability or in excess of the underlying coverage taken out by some entities (usually with cover of \$50 million).

#### 2.1.3.2 Nuclear civil liability

As an operator of nuclear power plants in Doel and Tihange (Belgium), Electrabel's civil liability is governed by the Paris and Brussels Conventions, which aim to ensure that victims receive compensation and to encourage solidarity among signatory countries, and by the Belgian Law of July 22, 1985, amended by the Law of June 29, 2014 and by the Law of December 7, 2016.

This liability falls exclusively on the operator of the facility where the nuclear accident occurs. In return for this strictly objective liability, the amount of the compensation is capped per accident and limited in time to a period of ten years. This period was increased to 30 years by the amended Law of June 29, 2014, and reduced again to ten years by the Law of December 7, 2016. The signatory states to the conventions also created a mechanism that provides additional compensation beyond the maximum amount.

The nuclear civil liability insurance program taken out by Electrabel complies with the Belgian national law requiring the operator to provide financial guaranties or to take out civil liability insurance up to €1.2 billion. Insufficient capacity in the insurance markets, however, resulted in a shortfall of up to €891 million, only for the liability extended by the Law of June 29, 2014 for a nuclear accident that allegedly occurred between January 1, 2016 and December 24, 2016, when the Law of December 7, 2016 came into force.

#### 2.1.3.3 Property damage

The Group's entities have property insurance covering the facilities that they own, lease or manage on behalf of third parties, with the exception

of transmission and distribution network pipelines and heating networks in France. The main programs provide cover based either on new replacement value or on contractual limits per loss event. In the latter case, the limits are set on the basis of major scenarios in accordance with insurance market rules and available offers (cost and capacity).

Insurance covering business interruption and additional operating costs is taken out based on each risk analysis and in consideration of existing assistance plans.

Construction projects are covered by "Erection All Risks" programs taken out by the owner or operator, project manager or prime contractor.

Exploration-production activity, which is carried out primarily off-shore, is covered by a specific insurance program tailored to this sector's risks and in accordance with its practices.

#### 2.1.3.4 Marine liability

An insurance contract covers LNG transportation by LNG vessel, limited to €30 million per shipment.

Marine insurance contracts cover liability as ship owner (limited to \$6 billion, except for war risk limited to \$500 million and pollution risk limited to \$1 billion) or as charterer (limited to \$750 million). Damage to ships is covered up to their agreed value.

#### 2.1.3.5 Employee protection programs

The operating entities develop programs covering employees against the risk of accidents and medical expenses, in accordance with legislation in effect and pursuant to company agreements.

## 2.2 Risks related to the external environment

The Group is sensitive to the structural and economic risk factors that affect the energy sector. These risks are all analyzed and measured as part of strategic planning processes that allow the Group to anticipate certain changes in the external environment and prepare for them. The

Group's research and innovation policy also helps to deal with strategic developments (see Section 1.5.1 "Innovation" and 1.5.2 "Research & Technology").

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### 2.2.1 Economic and competitive environment

The Group's activity is impacted by the level of energy demand and commodity prices, as well as by far-reaching changes in the energy sector (e.g. decentralization and carbon reduction of generation, renewable energy, new technologies, digitization, new competitor profiles, etc. (see Sections 1.1.4 and 1.1.7).

In Europe, the lack of substantial growth, the rise of renewable energy and the competitiveness of coal are generating excess capacity in

thermal power plants, impacting the Group's generation fleet. Weak growth in natural gas demand could also result in overcapacity in the gas infrastructure. The abundance of current supply continues to weigh on natural gas prices.

In service activities, changes in the economic environment increase the risks associated with adaptation and competitiveness.

In its different businesses, the Group competes with players with increasingly diverse profiles, both in terms of size – with major international players and local emerging players – and sectors. The decentralization of systems due to the energy transition has lowered barriers to entry to some activities (photovoltaic power, services), allowing smaller players to compete with the Group.

The emergence of digital and smart energy technologies has impacted the gas and electricity value chain, as well as services in general, with new competitors from information technology, telecommunications and equipment manufacturers.

In response to these uncertainties and changes:

- in the short term, the Group is rationalizing its generation fleet, managing market risk (see Section 2.5.1 “Commodities market risk”), adapting its asset portfolio and keeping an active watch on the changes taking shape;
- in the medium term, the Group intends to propose a new energy market model in Europe, notably as part of the Magritte initiative. It is also taking steps in France to propose a change in the natural gas market and in Belgium to create economically sustainable conditions in the nuclear market. It is also transforming its business model (see Sections 1.1.4 and 1.1.5).

## 2.2.2 Regulatory and political environment

The legal and regulatory landscape for the Group’s businesses is changing in terms of both environmental and social issues and due to energy sector regulation.

### 2.2.2.1 Environmental and social legislation

The Group’s businesses are subject to a host of laws and regulations that address environmental protection, promote energy systems with zero or low greenhouse gas emissions, reduce energy consumption, protect health and develop safety standards. The legislative bills and regulatory texts mentioned below, or others yet to come, could particularly impact the Group’s strategy and results:

#### On the international front:

- after the adoption of the Paris Agreement at the COP21 climate conference in Paris in December 2015, which was the first universal agreement on climate, the COP22 in Marrakesh in November 2016 was a first step in defining the roadmap for Member States and determining how to implement the agreement, the common objective being to step up national policies to combat CO<sub>2</sub> emissions. The Group played an active role in this work.

#### In Europe:

- European climate change and energy policy to the 2030 horizon is aimed at promoting energy efficiency, reducing CO<sub>2</sub> emissions, and increasing the contribution of renewable energy sources to the energy mix;
- changes in European and national regulations on CO<sub>2</sub> allowances and prices have affected the CO<sub>2</sub> market in Europe and have consequences for the relative competition between natural gas and coal power generation. Increasing numbers of countries are adopting such regulations. At the European level, the post-2020 review of the European GHG allowance trading system, which is currently being negotiated by the Member States and the European Parliament, is a major factor;
- the revision of the policy document referring to the best available techniques for large combustion facilities could lead to substantial changes at some European sites. Similarly, the new directive for medium-sized combustion facilities, adopted in 2015, imposes new constraints;
- the adoption of the European regulation on personal data protection, which will enter into force in May 2018, strengthens sanctions in the

event of default. The Group has launched the One Security project, and has teamed up with Thales to ensure that its business is conducted in an environment of optimum safety;

- the Digital Single Market, which has been a priority for the European Commission since 2015, aims “to tear down regulatory walls and finally move from 28 national markets to a single one”. This should favor the development of our digital activities but, depending on the direction of the legislation being defined, could lead to additional costs and constrain the Group’s activities in terms of data circulation (e.g., access and ownership). The Group is monitoring the development of the proposals in order to anticipate the consequences.

#### In France:

- as part of the French law on the energy transition for green growth, the *Programmation Pluriannuelle de l’Énergie* (PPE, or Multi-Year Energy Program), published in October 2016, confirmed its two priorities of decreasing the CO<sub>2</sub> footprint and developing renewable energy sources. The Group continues to pay close attention to measures aimed at achieving these objectives, particularly support mechanisms for renewable energy, competitive tendering for hydropower concessions, and measures to combat fuel poverty;
- with regard to the “Carbon” objectives, the implementation of a floor price applicable to coal-fired power plants from January 2017 has been deferred. In the non-ETS (EU Emissions Trading System) sector, a carbon price has been established in the French Energy Transition Act to calculate national taxes on the consumption of energy products, including natural gas;
- the EU Directive on energy efficiency adopted in late 2012 has to be transposed into the various Member States’ laws. In France, for example, this entails a doubling of the Energy Savings Certificates obligation in the third period (2015-2017), which could have an impact on the Group’s margins in France;
- the future 2018 thermal regulation, depending on how it addresses the CO<sub>2</sub> footprint of new buildings, could give a boost to electric heating, to the detriment of gas;
- the bill providing a framework for biodiversity regulation in France includes a provision to include the “Avoid, Reduce, Offset” principle in the environmental code. This principle has also been applied to the regulations of other countries.

**In Australia:**

- authorities are formalizing their intention to reduce emissions levels in 2030 by the equivalent of 26% to 28% compared with 2005, which would represent a reduction of nearly 200 million tons of CO<sub>2</sub> equivalent by this time horizon.

The increasing implementation of “soft law” worldwide requires the Group to analyze its activities through an additional lens that includes even more inputs and expectations from stakeholders.

The Group is shifting its strategy and rationalizing its generation fleet and its project portfolio, so that it can take advantage of opportunities, and is working to limit all of these risks, principally as part of a proactive environmental and social policy (see Section 3.3 “Environmental information”). In 2015, the Group decided not to launch any new developments in coal. In November 2016, it also decided to close its coal-fired power station at Hazelwood in Australia at the end of March 2017.

**2.2.2.2 Sector regulations**

In Europe and in some other regions including the United States, Asia Pacific, Mexico and Brazil, public authority measures have been implemented in the energy sector through regulation and the extension of regulatory powers in the area of competition. They can occur through increased taxation of the profits made by energy companies, the withdrawal of funds established for the dismantling of nuclear power plants, by changes to the market operating rules and supply security, by the regulator’s intervention in the deregulated sector to encourage the development of competition or else by the desire to hand back control of utilities to local authorities. The high levels of indebtedness of the Member States and regional authorities increases this risk.

Some regulatory changes may alter the risk profile of the Group and impact its earnings and its business model:

**In Europe:**

- on February 25, 2015, the European Commission published the key elements of its “Energy Union” policy. Some developments are positive, mainly because they introduce greater visibility, such as the formalization of an energy and climate framework for 2030 based on a stronger carbon market, and the redesign of the electricity market model. Others might have a variable impact on the Group’s activities, such as new rules on security of gas supply, the reworking of the Third Energy Package and the oversight of intergovernmental agreements. In the work under way on the new electricity market structure and its development, the Group is paying close attention to the framework that will enable coordinated development of national capacity markets;
- the implementation of common rules for the European internal electricity and gas market (including the electricity and gas network codes) are intended to complete the creation of a real internal energy market. These changes may require the adjustment of our operations;
- in February 2013, the European Commission adopted a Council Directive proposal to levy a tax on financial transactions whose entry into force is subject to the outcome of negotiations under way. The implementing provisions and exemptions, specifically the criteria for categorizing businesses as financial institutions, have yet to be agreed by the Member States participating in enhanced cooperation;

- the guidelines for state aid for energy and the environment, published in 2014, have impacted the Group’s activities, particularly support mechanisms for renewable energy sources (to gradually integrate them into the market) and energy efficiency, infrastructure financing, environmental tax exemptions and fee waivers linked to the financing of renewables (preferential rates for industrial partners), and capacity payment mechanisms;
- Brexit, and its effect on exchange rates, has had little impact to date on the Group’s activities. However, certain “Hard Brexit” scenarios point to the potential effects of decoupling gas markets between the UK and northwest Europe, with, for example, a possible increase in transit costs;
- in France, a delay in reforming the conditions of third-party access to storage facilities (initially provided for in the energy transition law) could affect the Group’s revenues.

**In the rest of the world:**

- in Brazil, the Group is exposed to changes in the regulation of electricity markets;
- in the United States, changes in the regulation of the electricity market could result in uncertainty about the Group’s performance in this region. Changes in market rules could come from the energy policy announced by the new US president;
- in the Asia Pacific region and in Mexico, energy market deregulation and tariff renewal could also increase uncertainty about performance;
- in Turkey, deregulation of the energy market could result in decreased revenues from 2017 onwards.

Through concerted action as part of the “Magritte” initiative, which brings together the CEOs of the European energy companies, and through its presence in EU and Member State institutions, the Group tries to anticipate any legislation likely to affect it, and formulates proposals for decision-makers. The Group also partially diversifies regulatory and legislative risk by conducting its business in a number of different countries. However, some regulatory developments offer new opportunities for the Group’s activities.

**2.2.2.3 Controlled, administered or regulated tariffs**

In France, a portion of the Group’s sales are made in the context of regulated tariffs. French laws and rules, European regulation and decisions by regulators (in particular, the French Energy Regulation Commission (CRE) for decisions on tariffs for access to certain infrastructures) may affect the Group’s sales, profits or profitability, in the event of the partial impact of procurement, infrastructure and commercial costs on natural gas selling prices or the partial impact of costs on gas infrastructure access tariffs or electricity sales from renewable energy.

Also in France, the opening of the electricity market to suppliers other than the traditional operator, in addition to the opening for very large customers, is still limited and could be jeopardized by the emergence of price reductions arising from regulated tariffs that remain and compete with commercial offers.



The deletion of the gas regulated sale tariffs to individuals, without the same deletion measure applied to the electricity regulated sale tariffs, may penalize the Group market share in France.

Price control mechanisms also exist in other countries, specifically Belgium, Italy, Romania, Brazil and Mexico, for energy generation, distribution, and sales, which may potentially impact the Group's results.

### 2.2.2.4 Social acceptability

To engage in its activities, the Group must hold various permits and authorizations. Dealing with the regulatory authorities concerned to obtain or renew these can involve long and costly procedures. The Group may face opposition from the local population or associations during the installation or operation of certain equipment, or in relation to public energy price protests.

The Group therefore implements widespread consultation upstream of its projects, forges partnerships with civil society and ensures the positive economic impact of its activities, in line with community expectations (see Section 3.4 "Social information").

## 2.2.3 Impact of climate

Information presented in this section and in section 3.3.4.1 "Climate change" reflects the financial risks associated with the effects of climate change and the measures taken by the company to mitigate them by implementing a low carbon strategy in all the components of its activity as required by Article L. 225-37 of the Commercial Code.

In the short term, climate phenomena (e.g., temperature variation, wind, drought) affect energy generation and gas and electricity demand. They have a direct effect on the Group's results.

To manage fluctuations in annual demand, ENGIE actively balances supply and demand by optimizing its portfolio of assets, gas resources (by modulating its supplies and managing its underground storage), and power generation, which the Group can optimize by relying on its diversified fleet.

In the longer term, climate change could have a bigger impact on the Group's activities, for example through changes in regional or seasonal

### 2.2.2.5 Country risk

The Group is present, operates or procures natural gas in a growing number of countries. The Group is therefore exposed to risks including changes in regulation, sovereign default, convertibility, expropriation, corruption, acts of war or terrorism, and the extra-territorial effects of some legislation. Moreover, the Group might be unable to defend its rights in certain countries due to a lack of independence of local courts in the event of a dispute with national governments or other local public entities.

The diversity of the Group's locations results in some reduction of country risk. Attention thresholds by country or group of countries enable the Group's exposure to be monitored. The Group also manages these risks within partnerships or contractual negotiations adapted to each location. It chooses its locations by applying a formal investment procedure that appraises risk. The inclusion of international arbitration clauses in major contracts is applied as widely as possible. Regular monitoring of economic and non-economic indicators relating to corruption, human rights, and inequality is done in each country to assess the Group's exposure to country risk.

energy demand, the obligation to reduce CO<sub>2</sub> emissions, the depletion of water resources, etc.

To manage this risk, ENGIE acts on different levels:

- the Group made a strong commitment ahead of COP21 to an ambitious international climate agreement, including investment in low-carbon technologies and the reduction of greenhouse gas emissions. The Group promotes international carbon pricing in order to accelerate the transition to a low-carbon society, while guaranteeing a level playing field for all players;
- the Group has set new targets for greenhouse gas emissions and renewable energy by 2020 (see Section 3.3). The expansion of its renewable energy fleet and the development of service offerings are the main drivers of ENGIE's energy transition strategy;
- the Group is gradually developing adaptation plans to prepare for an increase in extreme weather events (see Section 3.3).

## 2.2.4 Reputational risk

The energy sector is the subject of various public debates due to the profound changes that it is undergoing.

The Group is exposed to reputational risk, both directly and indirectly, especially when the Group's values, ethics, operational excellence or legitimacy as a utility are called into question.

In 2015, GDF SUEZ became ENGIE, in order to give the Group greater visibility in relation to its commitment to the energy transition. The flagship brand "ENGIE" (name and logotype) is registered in over one hundred countries. As a vital part of the Group's intangible corporate

assets, the brand is constantly monitored to protect it against any fraudulent use that could harm the Group's image.

Through its policies, organization, procedures and governance, the Group endeavors to prevent operational risks (see Sections 2.3, "Operating risks" and Section 2.4 "Industrial risks") and smear campaigns that could affect its reputation.

The Group takes its environmental and societal responsibilities seriously, deciding, among other things, to close the Hazelwood coal-fired power plant in Australia and managing nuclear activities without compromise in terms of safety.

## 2.3 Operating risks

### 2.3.1 Purchases and sales

#### 2.3.1.1 Purchase and sale of natural gas

The Group has established a procurement portfolio composed in part of long-term contracts, including some with a take-or-pay clause which stipulates that minimum quantities will be taken during a period.

In case of major gas supply interruption (for example, due to an interruption of Russian deliveries or an interruption of transit in Ukraine) or an interruption of LNG supply (for example, from Yemen or Egypt), or difficulty in renewing certain contracts under favorable economic conditions, the replacement cost for gas, including transportation, could be higher and affect the Group's margins. To mitigate this risk, the Group has a number of tools for flexibility and modulation (flexibility in long-term contracts, storage and regasification capacity, and purchasing in the marketplaces) as well as a diversified portfolio.

Prices of long-term purchase contracts (partially indexed to the price indices of oil products) may be decorrelated from selling prices or prices in the gas markets. This spread might have a significant impact on the Group's results. Long-term contracts include price adjustment clauses, so that the economic balance between producer and buyer can be altered. The Group's buy/sell margin may therefore change according to price adjustments in LNG or gaseous gas contracts and the state of the gas market in general.

Negotiations in recent years have led to the integration of market indices in long-term contracts and/or to the reduction of the difference between the contract price and market price. They have also led to increased frequency of price revisions.

#### 2.3.1.2 Purchase and sale of electricity

The Group is an electricity producer with a major presence in Europe, the United States and Australia, where the profitability of its assets is linked mainly to prices in electricity markets. The economic climate or decisions by some states regarding the electricity sector may lead to volatility in electricity prices, which may have an impact on Group earnings.

The Group may also have to buy power to supply its customers, for example to cover any temporary non-availability of its fleet. These purchases are optimized but could generate extra supply costs.

The Group monitors changes in its risk exposure and makes decisions accordingly (see Section 2.5.1 "Commodities market risk").

#### 2.3.1.3 Operational risks related to the purchase and sale of energy

The main risks related to regulated sales are outlined in Sections 2.2.2.2 "Sector regulations" and 2.2.2.3 "Controlled, administered or regulated rates".

In its portfolio optimization activities for physical assets (power plants, long-term contracts, etc.) and customers, as well as in managing the associated financial positions, the Group is exposed to operating risks such as fraud, execution error, and process and system failure. Operations are monitored via appropriate processes, and risks are taken into account as part of the Group's internal control program, "INCOME". In addition, a specific system for increased monitoring of operating risks has been set up in some of the Group's entities.

#### 2.3.1.4 Purchase risks and supply chain risks (excluding energy)

The performance of the Purchasing and Procurement function and its ability to manage the associated risks affect all of the Group's activities. Management of purchasing and supplier risks is monitored at Group level: specifically, external risks that are regarded as having the biggest impact, such as the failure of a major supplier, or the dependence of the Group on a critical supplier, or vice versa.

The implementation of purchasing management by homogenous supplier market has strengthened processes for selecting and qualifying suppliers, and has enabled their performance to be monitored, thereby limiting the impact of these risks on the Group's activities. Similarly, for new projects, risk management covers specific procurement, supplier and subcontractor risks (see Section 2.3.2.2 "Risks related to development and major projects").

## 2.3.2 Management of assets and development

### 2.3.2.1 Optimization of the asset and investment portfolio

For its external expansion, notably by means of acquisitions, the Group may issue equity securities, or borrow. Acquisitions present risks related to integration difficulties and failure to achieve expected benefits and synergies. Risks related to the valuation of assets or liabilities or non-achievement of expected results could arise at the end of the acquisition process, resulting in provisions for asset impairment. The Group also sells assets for which it may retain certain liability guarantees.

The acquisition processes implemented by the Group, particularly during due diligences, aim to assess to the greatest possible extent the uncertainties related to these risks in such cases. The resulting appraisal depends on the quality of the information transmitted to the Group and is limited by the judicial and regulatory framework applicable under local corporate law.

### 2.3.2.2 Risks related to development and major projects

The Group bases its growth on various major industrial construction projects, such as gas and electricity plants and dams, where it usually acts as owner and/or operator. The profitability of these assets – whose service life is several decades – depends greatly on cost control and construction times, the operational performance of the industrial asset, external phenomena (e.g. natural disasters and strike actions), regulatory and fiscal changes and changes in the competitive environment and markets over the long term, which could reduce the profitability of certain assets or result in lost revenues or asset impairment.

The Group is also responsible for the facility design and construction phases of some projects. Although these projects are always subject to in-depth studies and the Group has acknowledged expertise, construction deadlines may not always be met resulting in penalties, construction costs may be higher than anticipated, the facilities' performance may not comply with the specifications and subsequent accidents may trigger the Group's civil liability, professional indemnity or criminal liability. This could have a negative impact on the Group's image, financial position, or earnings.

The Group has strengthened operational monitoring and oversight of projects and is monitoring the portfolio of projects at Group level, which provides the warnings needed to launch corrective actions. A policy governing supervision of construction projects and joint project management methods have reinforced existing mechanisms within the entities executing industrial projects. In addition, training focused on

managing project risks has been developed for all project managers and developers.

Furthermore, the implementation of contract management measures enables part of these risks to be managed, including by compensation mechanisms. Insurance underwriting allows for insurance claims to be indemnified and also improves prevention.

### 2.3.2.3 Risks linked to nuclear development

The Group is prudently pursuing its projects in the development of nuclear plants. The Group has continued to work in association with Toshiba (Westinghouse's AP1000 technology) in the UK, prioritizing confirmation of the project's viability. It is also working - in a renewed framework and without a firm long-term commitment - with Mitsubishi Heavy Industries (MHI), for which it provides technical and commercial support for a feasibility study on a project in Turkey (MHI-AREVA's ATMEA1 technology).

It should be noted that these projects are currently still in the initial development stage, and that the Group's financial exposure therefore remains limited.

The Group has established governance principles for development, construction, operation and decommissioning based on its experience as a nuclear power plant operator. It is also active in employee recruitment, training and retention, both for facilities in operation, nuclear services entities and Group projects.

### 2.3.2.4 Risks relating to partnerships and minority investments

Partnerships and acquisitions of minority interests are one of the ways in which the Group can share the economic and financial risks inherent to some projects, by limiting its capital employed and allowing it to adapt more appropriately to the specific context of local markets (see Note 3 to Section 6.2 "Consolidated financial statements"). As much as possible, the Group protects itself against the risks resulting from joint control or lack of control with the signing of shareholders' agreements on governance and information reporting, and with the role of the director representing the Group.

However, changes to the project, the economic situation, the partner's strategy or even the local political and economic environment may, in some cases, lead to the failure of a partnership or changes in its control or governance, or to a disinvestment.

These situations may lead the Group to develop contractual arrangements for deadlock resolution or, in the event of conflict with the partner(s), to seek a solution before the relevant bodies.

### 2.3.3 Legal risks

The Group faces legal risks in all its businesses and markets. These risks arise from the legal and regulatory framework, from operations, from partnerships, from purchases of companies, and from contracts signed with customers and suppliers (see respective subsections of this Section 2).

In the course of its operations, the Group is engaged in a certain number of legal disputes and arbitration procedures, and is also subject

to investigations and procedures. The main investigations and procedures are described in Note 27 to Section 6.2. "Consolidated financial statements". With the exception of these procedures, and to the Company's knowledge, no other governmental, legal or arbitration procedure (including a suspended or threatened procedure<sup>(1)</sup>) exists that is likely to have, or has had, material impact on the financial position or profitability of the Group in the past 12 months.

### 2.3.4 Ethical risks

Any breach of the ethical principles of the Group could expose it to reputational and legal risks (see Note 27 to Section 6.2 "Consolidated financial statements").

Ethics and compliance policies and procedures are established to avoid, as far as possible, the occurrence of such risks. The Ethics and Compliance Division promotes their implementation within the Group, through the managerial line and the Ethics and Compliance network.

Ethical risks are analyzed annually and action plans are implemented if necessary. Moreover, risks relating to corruption and human rights are specifically assessed as part of the Group's risk analysis process (see Section 3.1 "Ethics and compliance").

In addition, the policy on the analysis of ethical risks relating to investment projects and major projects, and human rights guidelines applicable to the whole Group require the entities to analyze respectively corruption risks and human rights risks for every new project.

### 2.3.5 Risks related to human resources

The dual energy and digital revolution strongly impacts the Group's strategy, activities, and organization, as well as its businesses, jobs, and, consequently, the skills required for its activities.

In response, ENGIE has launched an ambitious and rapid transformation plan to reinvent its business models. This requires the development of new activities and the acquisition of new skills, but also a cultural "revolution" in its existing activities (more innovation, digital, etc.).

In this context, the Group could encounter difficulties in ensuring that it has the right skills to support its development and to unite employees around its enterprise project.

The European Social Agreement, signed on April 8, 2016, also contains strong commitments to the development of skills through training. The agreement provides for the maintenance, over a three-year period, of the €100 million annual training budget, which is mainly focused on developing the professional skills needed by the Group's Métiers. It also provides for the creation of the "Energy Transformation" learning center.

#### 2.3.5.1 Workforce competencies

The Group has recently implemented the "ENGIE Skills" program, which aims to anticipate changes in its businesses and its skills needs, to develop the employability of all its employees - who play a key role in the Group's professional excellence and sustainable development success - and to support the far-reaching changes in its organizations. This forward-looking approach (identification of skills requirements over a three-year horizon) is now used to inform HR action plans in the area of skills management across the Group and in each of the BUs.

#### 2.3.5.2 Employee commitment

The scale and rapidity of the Group's transformation means that managers and employees need support and guidance to give meaning to the changes and promote buy-in.

In September 2016, the Group rolled out its "ENGIE & Me" engagement survey, to measure employee buy-in.

The Group has implemented its new "ENGIE leadership model" to promote managerial behavior that fosters innovation and employee development (see Section 3.2.1.4 "Targeted development policies"). It is also particularly attentive to the prevention of psychosocial risks.

By communicating regularly about innovation, new business models, and other topics related to the transformation, the Group aims to strengthen internal support and encourage dialogue with employees.

(1) This term refers to investigations or audits underway.

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## 2.3.6 Risks related to health and safety and protection of Group assets

### 2.3.6.1 Health and safety at work

The Group is committed to eradicating fatal accidents and reducing occupational accidents and illnesses. The Group health and safety policy was agreed with the union federations at European level and subsequently worldwide. An action plan was drawn up for 2010-2015, and a new plan was defined for 2016-2020 (see Section 3.2.6 "Health and safety policy").

Addressing the risk of death at the workplace is part of the overall system for controlling the risk of occupational accidents. On this basis, a specific plan for the sustainable prevention of fatal accidents was launched in 2012. It relies specifically on adherence to the nine "life-saving rules" in all of the Group's businesses.

### 2.3.6.2 Employee safety

The international scope of the Group means it may be exposed to a number of health and safety risks, the threat of which warrants a specific organization entrusted to the Safety Department which has established a country watch. In this way, the Group continually evaluates the risks of terrorism, armed conflicts and confrontation with criminal organizations. Geographic areas are subject to classification according to specific prevention and protection measures. To accomplish this mission, the Group relies on State services as well as specialized providers. Should a

specific situation occur, the crisis unit can be mobilized to provide exceptional resources, for instance in the event of an evacuation.

### 2.3.6.3 Protection of tangible and intangible corporate assets

The Group's sites and industrial or tertiary facilities, which make up its tangible Group assets, may be exposed to malicious acts. Information, whether digital, physical or even verbal in form, constitutes the Group's intangible assets and may also be exposed to the malicious acts.

To combat this type of risk, the Group implements a policy for the protection of tangible and intangible Group assets, covering technical (including IT), legal, managerial and organizational areas. Sensitive sites where tangible corporate assets are located are subject to protective measures tailored to the local situation and revised according to the actual threat status. The Group is continuing to act to protect its intangible Group assets, particularly against cyber-attacks, in order to deal with any reported incidents and to prevent any internal or external action aimed at capturing and using sensitive information. An Information Security Committee, with members from all Group functional departments under the authority of the **Executive Vice-President** in charge of Digital and Information Systems, coordinates and manages the Group's security policies. It reports to the Executive Committee.

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## 2.3.7 Risks related to information systems

The Group is continually exposed to new threats from the introduction of new technologies, particularly the multiplication of connected objects, the development of industrial control systems, the spread of mobility tools, and the development of new uses (e.g. social networking). Cyber-attacks and hacking attempts are increasingly targeted and carried out by specialists, and can target the company as well as its customers or partners. More generally, IT system failure could result in information losses or leaks, delays and/or extra costs that could be detrimental to the Group's activities or its reputation.

In response, the Group has set up prevention and security measures for all of its information systems and data. Large-scale attacks are managed

by the Incident Management Committee (IMC), which reports to the Safety Department. In connection with its internal control policy and security policy, these organizational, functional, technical and legal security measures are subject to continuous controls (alert monitoring, infrastructure supervision, etc.), testing operations (intrusion tests, social engineering tests, cyber-crises management tests, etc.), and campaigns to raise awareness. The Group also invests in its systems' architecture to improve their security and performance. A Global Safety Operations Center (GSOC) has also been set up, in partnership with Thales.

## 2.4 Industrial risks

The areas of activity in which the Group operates entail major industrial risks capable of causing harm to persons and property, and exposing it to claims for civil, criminal and environmental liability. These risks may concern facilities that belong to the Group or are managed by the Group on behalf of third parties (manufacturers or local authorities), or facilities

where the Group's employees work. The industrial safety of the facilities that the Group operates is one of its major concerns. The handling of these risks is subject to in-depth monitoring and specific targeted investments, and audits of the facilities in question are performed regularly.

### 2.4.1 Industrial facilities and Seveso sites

The Group operates and builds systems for gas transmission, distribution and storage systems, exploration-production facilities, LNG tankers, regasification and gas liquefaction facilities, bio-methanization plants, electrical power plants, and hydro facilities and provides services in an industrial environment. Some of these facilities are classified as high-threshold Seveso sites.

Risks can stem, for example, from operating incidents, design flaws or from external events beyond the Group's control (including third-party actions and natural disasters). Industrial accidents can cause injuries, loss of life or major property and/or environmental damage, as well as activity interruptions and operating losses.

The Group carries out its industrial activities in compliance with a framework of safety regulations, including the "Seveso III"<sup>(1)</sup> European directive. These industrial risks are controlled by implementing a safety management system at these sites based on the principle of continuous

improvement, which is intended to reduce the level of residual risk by responding to the highest risks on a priority basis. Moreover, industrial security is part of the Group's internal control program. The Group conducts periodic audit and control missions to ensure that these measures are effectively implemented.

A specific action plan for the protection of industrial control systems, linked to industrial processes, is being implemented. It aims to prevent the risk of activity interruption or accidents due to cyber-attacks.

For the most part, these risks are covered by insurance policies. In the event of a major claim, these policies could prove insufficient (see Section 2.1.3 "Risk and insurance coverage").

Lastly, in 2016 a Group Industrial Security Committee was set up, mainly to encourage the inter-BU and inter-Métier exchange of information on risks and accidents and the sharing of best practices in the Group's various activities.

### 2.4.2 Pollution of the surrounding environment

Facilities that the Group owns or manages on behalf of third parties may entail risks of damage to the natural environment (air, water, soil, the habitat and biodiversity), and may pose health risks to consumers, neighboring residents, employees and subcontractors. These health and environmental risks are governed by strict national and international regulations. Non-compliance with these environmental standards or a process failure can have a significant negative impact on the Group's image, its business, financial situation, earnings and outlook, and lead to

the engagement of its liability as a legal entity. Any amounts set aside, insured or guaranteed may be insufficient. Complaints and convictions relating to the environment are given in Section 3.3.4.9, "Active prevention of environmental risks".

Health and environmental risks are regularly monitored by the Group, by external auditors and by governmental authorities, both for operational sites and closed facilities, such as former gas plants.

### 2.4.3 Nuclear power plants in Belgium

Electrabel, a Group subsidiary, owns and operates seven nuclear reactors of the pressurized water type at two nuclear electricity production sites at Doel and Tihange in Belgium. Since the commissioning of the first reactor in 1974, these sites have been without any major nuclear safety incidents that could have resulted in danger to employees, subcontractors, the general population or the environment. However, they could present civil liability risks for Electrabel, specifically in the event of a nuclear accident or the discharging of large quantities of radioactive material into the environment.

All persons working at Group nuclear power plants have appropriate qualifications and are aware of their personal responsibility with regard to nuclear safety, in particular control room operators. During operations, compliance with safety rules and conditions at the facilities are subject to inspection by the Belgian Federal Agency for Nuclear

Control (FANC), assisted by Bel-V, its technical support subsidiary. Independent checks are also carried out by Electrabel's nuclear safety department, which reports directly to the Chief Executive Officer, independently of the nuclear operating sites' line management. In addition, both nuclear sites are OHSAS 18001, ISO 14001 and EMAS-certified.

Electrabel takes account of feedback from accidents or incidents to continuously improve the safety and security of its facilities. Electrabel has pursued the BEST action plan implemented after the Fukushima accident in 2011, particularly in response to more severe natural disasters and the risk of cyber-attack. Similarly, after the sabotage of a turbine at the Doel plant in 2014, Electrabel stepped up its existing action plan to reduce the risk of internal threats at all its nuclear sites. In 2015, Electrabel established the "Rigor and Responsibility" action plan,

(1) Directive 96/82/EC ("Seveso II"), amended and superseded by Directive 2012/18/EU ("Seveso III").



designed to reinforce the safety culture at its nuclear sites. This was in response to a statement drafted by the FANC on August 3, 2015 which noted that the safety culture at the Tihange plant had declined. This plan was reinforced following a second statement by the FANC in June 2016, among other things by the appointment of new managers. Moreover, the terrorist risk is addressed with the competent authorities of the Belgian State.

In late November 2015, the FANC authorized the restart of Doel 3 and Tihange 2, after a positive assessment of the case with the help of the Oak Ridge National Laboratory (ORNL-USA). The two reactors had been shut down after the detection of hydrogen-induced flaws in the vessel walls, created in the manufacturing process. Both units are once more fully operational. An inspection after one year of operation showed no changes in the flaws in the vessel walls of Doel 3. The Tihange 2 vessel will be inspected during the unit outage in April 2017.

The Belgium government agreed to an extension of the operating life of Doel 1 and Doel 2 beyond 40 years. The parliament voted to confirm this decision at the end of June 2015, and an extension of up to 50 years was granted by the FANC in December 2015, on the basis of an active modernization program that will run until 2019. The last part of the agreement signed by ENGIE with the government (relating to nuclear taxation) was finally consolidated by a law passed at the end of 2016. In addition, the 10-year extension from 2015 for Tihange 1 took effect on October 1, 2015, with a program of associated works that will continue until 2019 (see Note 8 to Section 6.2 "Consolidated financial statements").

The operation of nuclear power plants is regulated in part by radioactive waste authorizations. The Group therefore reduces its discharges of radioactive liquid and gaseous effluents as much as possible, while controlling the volume of low and medium radioactive waste. In Belgium,

all nuclear waste management is the responsibility of the National Agency for Radioactive Waste and Enriched Fissile Material (ONDRAF). In 2013, barrels of medium radioactive waste from the Doel plant, stored at Belgoprocess, were subject to additional checks related to the discovery of a gel-like substance on the surface of the barrels. Electrabel will be entirely responsible for the reconditioning of this waste, using a process that has not yet been developed and for which a provision has been made. A new conditioning process is being developed for new barrels to reduce the use of silica-rich materials. Studies are in progress in liaison with ONDRAF. At Tihange, the new conditioning process for resins using thermo-compaction was ultimately rejected by ONDRAF following changes to the design of the surface storage system, particularly for accidental circumstances. Tihange then decided to join the project developed at Doel.

The application of the treatment procedures of low radioactivity wastes have been revised by ONDRAF. Electrabel adapts its procedures in collaboration with ONDRAF in order to maintain its accreditation. During this transitional period, this could cause some additional costs that may impact its results.

Finally, spent nuclear fuel is stored at electricity generation sites pending recycling or geological storage. This decision has to be approved by the Belgian government. Costs associated with the management of spent fuel and the dismantling of facilities are included in the costs of electricity production from nuclear sources and are the subject of provisions. The assumptions and sensitivities regarding the assessment of these amounts are detailed in Note 16.1 to Section 6.2 "Consolidated financial statements".

Objections have been raised in various EU countries to the Belgian government's extension or starting up of some nuclear plants (see Note 27 to Section 6).

## 2.4.4 Exploration & Production of hydrocarbons

The exploration and production of hydrocarbons are activities subject to significant risks such as geological hazards and risks of industrial accidents.

Geological hazards are related to difficulties in investigating subsoil, the physical characteristics of oil or gas fields and those of hydrocarbons. In fact, estimates of discovered reserves must be large enough and have a positive economic analysis in order for said reserves to be exploited. During production, reserves may turn out to be lower than expected and this may adversely affect the economics of their use.

Risks of industrial accidents are related to hydrocarbon leaks, fire, explosion and the loss of control of wells.

In order to reduce the impact of these risks, the Group:

- conducts its activities by sharing risks as part of consortia in which it may be an operator or simply a partner. As far as possible, the Group teams up with companies that are known for their expertise, rules and high level of commitment to safety and accident prevention;
- carries out its operations under the rules of a safety management system (see also Section 2.4.1) based on the ISO 14001 and OHSAS 18001 international standards, and takes into account good practices in the E&P industry, particularly those of the International Association of Oil and Gas Producers (IOGP);
- has its hydrocarbon reserves regularly assessed by an independent third party;
- insures its facilities against structural damages, losses of production and civil liability lawsuits, including pollution, in accordance with industry practice.

## 2.5 Financial risks

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### 2.5.1 Commodities market risk

The Group is chiefly exposed to two kinds of commodity market risk: price risk relating directly to fluctuating market prices, and volume risk (weather risk and/or risk depending on economic activity). The Group is exposed to these risks, particularly in relation to gas, electricity, coal, oil and oil products, other fuels, CO<sub>2</sub>, and other green products (see Section 6.1.1.2 “Outlook”).

With the exception of trading activities, market risks are assessed by means of their impact on EBITDA. Accordingly, the main risk indicators for managing the energy portfolios include sensitivity to unit price changes, the EBITDA at Risk, portfolio hedging ratios and stress tests based on predefined unfavorable scenarios. For trading activities, and in accordance with market standards, risk indicators include sensitivities, Value at Risk (VaR) and stress tests (see Note 16.1 to Section 6.2 “Consolidated financial statements”).

The Group has implemented a specific governance process to control market and counterparty risks based on (i) the general principle of

separation of risk management and operational activities, (ii) a Group-level Energy Market Risks Committee that is responsible for validating risk policies and monitoring consolidated exposure, (iii) following market and counterparty risk mandates, and (iv) a specific risk control functional line coordinated by the Finance Department.

Most of its electricity generation activity outside Europe and the United States is secured by long-term PPAs, often with local authorities, in which variations in operating expenses, in particular fuels, are transferred as “pass-throughs” into electricity sale prices. This substantially limits exposure to price fluctuation risks, even if the transfer is imperfect in some contracts.

The Group also relies on derivative products linked to energy in order to provide its customers with hedging instruments and to hedge its own positions.

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### 2.5.2 Counterparty risk

Due to its financial and operational activities, the Group is exposed to the risk of default by its counterparties (customers, suppliers, partners, intermediaries, and banks).

The impact of this may be felt in terms of payment (non-payment for services or deliveries made), delivery (non-delivery of paid supplies or services) or assets (loss of financial investments).

These risks are managed via framework agreements that use standard mechanisms such as third-party guarantees, netting agreements and margin calls or by the use of dedicated hedging instruments. Operational activities may also involve prepayments or suitable recovery procedures (especially for retail customers).

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### 2.5.3 Foreign exchange risk

The Group is exposed to foreign exchange risks defined as the impact on the balance sheet and the income statement of exchange rate fluctuations as it performs its operational and financial activities. These are broken down into (i) a transactional risk related to current operations, (ii) a specific transactional risk related to investment, merger-acquisition or disposal projects, (iii) a translational risk related to assets outside the Eurozone, and (iv) a risk related to consolidation in euros of the subsidiaries’ accounts where the functional currency is not the euro. The three main exposures to translational and consolidation risks correspond, in order of importance, to assets in US dollars, Brazilian real and British pounds.

For an analysis of foreign exchange risk sensitivity, see Note 16.1.3 to Section 6.2 “Consolidated financial statements”.

As part of the Group’s foreign exchange risk policy, recurring transactional risk is subject to systematic hedging as soon as this risk is material and almost certain to materialize. During the examination of investment projects, the specific transactional risk is subject to a case-by-case hedging strategy. Finally, translational risk is covered by partial hedging strategies subject to a reasonable hedging cost and sufficient market liquidity related to the risk of currency depreciation.



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## 2.5.4 Interest rate risk

The Group is exposed to interest rate fluctuations. The Group's objective is to control its borrowing costs by limiting the impact of interest rate changes on its income statement. To do this, the Group seeks to achieve a balance between fixed, variable and protected variable ("capped variable") rates. This distribution may change within the limits set by management according to the market situation.

The breakdown by type of interest rate of the outstanding financial debt and sensitivity analysis for interest rate risk are presented in Note 16.1.4 to Section 6.2 "Consolidated financial statements."

In order to manage the interest rate structure for its net debt, the Group uses hedging instruments, particularly rate swaps and options. Managed centrally, rate positions are reviewed periodically and when any new financing is raised. This management is subject to a risk mandate: any substantial change in the rate structure requires prior approval from the Finance Department.

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## 2.5.5 Liquidity risk

Liquidity is based on the regular renewal of various financing tools available to the Group such as credit lines, bond financing or other financing tools, to ensure their availability and their adequacy in relation to financing requirements. These facilities are pre-agreed and appropriate for the scale of its operations and for the timing of contractual debt repayments. Note 15.2 to Section 6.2 "Consolidated financial statements" explains the distribution of the various forms of financing used.

ENGIE pools the majority of the cash flow requirements and surpluses of the Group's majority-owned subsidiaries, as well as most of their medium- and long-term external financing requirements. Financing vehicles (long-term and short-term) provide centralization, as do the Group's dedicated cash-pooling vehicles in France, Belgium and Luxembourg.

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## 2.5.6 Impairment risk

Assumptions and estimates are made to calculate the recoverable value of goodwill and tangible and intangible fixed assets, with particular reference to market outlook, which is more sensitive for certain operations. These assumptions and estimates are needed to assess cash flows and the discount rate to apply. Any variances with these

assumptions could have a significant effect on the amount of the recoverable value and could lead to changes in the impairment to be recognized (see Note 1.3.1 to Section 6.2 "Consolidated financial statements").

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## 2.5.7 Equity risk

As of December 31, 2016, the Group holds a number of non-consolidated interests in listed companies (see Note 15.1 to Section 6.2 "Consolidated financial statements"), the value of which fluctuates according to trends in the world stock markets and/or the position of the relevant companies.

In addition, the Group holds interests in listed companies consolidated using the equity method, including SUEZ (see Note 3 to Section 6.2 "Consolidated financial statements"), for which a significant or extended fall in the price below the value on the balance sheet is an indication of impairment.

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## 2.5.8 Tax risk

Given their tightening budget constraints, national governments are increasingly introducing anti-abuse measures, both general and special, with a broad and subjective scope, and are giving their supervisory authorities increased powers of investigation. This has created a climate of tax insecurity that may have an impact on the Group's results. Similarly, the increasing involvement of the European Commission in

both state aid and draft directives in the area of combating tax avoidance (see ATAD, the Anti-Tax Avoidance Directive) and European harmonization (see CCCTB, the Common Consolidated Corporate Tax Base) may impact the Group's results over various time periods (see Note 27 to Section 6.2 "Consolidated financial statements").

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### 2.5.9 Pension funding risk

A significant portion of the Group pensions commitments and the assets associated with these plans are concentrated in France and Belgium. Other defined-benefit pension plans are mainly located in Europe, Brazil and Australia.

In recent years the Group has terminated a number of defined-benefit plans and replaced them with defined-contribution plans. The defined-benefit plans still in operation notably include, in France, the special Electricity and Gas Industry (EGI) plan, which is a statutory plan.

Note 19 to Section 6.2 “Consolidated financial statements” details the items measured and recognized.

The calculation of commitments is estimated with actuarial methods using methods, assumptions and models to assess liabilities or determine asset allocations and associated risks that could have a significant impact on asset/liability levels and financing requirements.

In France, commitments within the scope of the EGI are estimated using actuarial assumptions and rules respectively governing benefits paid out by statutory plans and amounts that remain the Group’s responsibility.

These assumptions and rules may be subject to changes that increase the Group’s commitments and therefore require an increase in the relative relevant provisions.

Substantial commitments exist in the form of other post-employment benefits and other long-term benefits, in addition to pension liabilities. These mainly comprise energy-related benefits provided to retired employees within the scope of the EGI.

Hedging levels and financing requirements for the Group’s pension plans vary according to the performance of financial markets and asset allocations, as well as interest and inflation rates and changes in the applicable legal and regulatory framework.

For some plans outside the scope of the EGI, ENGIE may be required to fully or partly finance any difference between the market value of these assets and the hedging levels projected for these plans, or any insufficiency in the return on the assets in respect of the guaranteed minimum average rates.

# 03

## Social and environmental information, corporate social commitments

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## 3.1 Ethics and compliance

To implement the four fundamental ethics principles put forward in its Ethics Charter <sup>(1)</sup>, ENGIE deploys an ethics and compliance program structured around the following pillars:

### 3.1.1 Commitment at the highest Group level

The Group's senior executives, particularly the Chief Executive Officer and all other members of the Executive Committee, including the General Secretary, drive and oversee the ethics and compliance policy and ensure that it is properly applied.

A strong message of "zero tolerance" with respect to ethics - especially in the fight against corruption and fraud - runs throughout the Group's ethics and compliance framework. This message is regularly communicated by the Chief Executive Officer and passed on by managers at all Group levels.

ENGIE's principles of action are based on international standards, in particular those aimed at combating corruption and fraud and protecting human rights. The Group has taken a proactive stance in the fight against corruption by joining the United Nations Global Compact - the tenth principle of which relates to combating corruption - the Extractive Industries Transparency Initiative (EITI), and the French section of the Transparency International NGO.

### 3.1.2 Organization and structure

The organization of ethics and compliance is overseen by the Board of Directors via its Ethics, Environment and Sustainable Development Committee ("EESDC").

The **Compliance Committee** assesses the handling of ethical incidents and monitors the process for updating the Group's ethics and compliance framework. Chaired by the Group's General Secretary, the Committee brings together the Group Audit and Risk Director, the Group Legal Director, and the Group Ethics and Compliance Director.

Within the General Secretariat, the **Group Ethics and Compliance Department** manages the integration of ethics into the Group's strategy, management and practices. It proposes ethics and compliance policies

and procedures for the Group and works with all organizational levels to help implement them. It leads a network of over 250 individuals who are actively involved in implementing the Group's ethics commitments at all organizational levels. The network's positioning and coverage were strengthened in 2016 when an ethics and compliance officer, member of the Executive Committee, and a deputy ethics and compliance officer were appointed at each BU.

Several **other Group functions** include compliance in their activities. For example, the Group Legal Department has a Center of Expertise in competition law and a Group Personal Data Delegate, both of which rely on a network of coordinators throughout the Group BUs.

### 3.1.3 Risk assessment

The assessment of ethical risk is included in the Group's risk analysis process (see Section 2.3.4). Seven risks have been identified: corruption; human rights violation; failure to take account of competition law and/or embargoes; non-compliance with commitments to corporate responsibility; fraud; end-customer dissatisfaction and loss of trust in the event of unethical conduct or practices; and lack of ethics management.

The Group's risk analysis process also includes the risk related to the handling of personal data.

The process for assessing risks of corruption and human rights violations was strengthened in 2016, most notably under the Group's ERM process, through the use of a common analysis methodology for all BUs (a self-diagnostic scorecard on corruption risk, and a checklist regarding human rights violation risk).

(1) All document : under the reference are published on [www.engie.com](http://www.engie.com)

### 3.1.4 Reference texts

ENGIE's ethics and compliance policy aims to develop an ethics culture and practice based on:

- the **Ethics Charter<sup>(1)</sup>** which sets the general framework for the professional conduct of every employee and specifies ENGIE's four fundamental ethics principles. It also describes the Group's ethics and compliance organization;
- the **Practical Guide to Ethics<sup>(1)</sup>** to implement ethics on a daily basis.

These two documents, translated into 20 languages, apply to all Group employees and are shared with external stakeholders. They were updated in 2016, mainly to bring them in line with the more stringent legislative anti-corruption framework and to incorporate the Group's decision in 2016 to no longer participate in financing political activities in countries where such practice is still permitted.

The "**Integrity**" referential is a collection of policies and procedures for preventing fraud, corruption and influence peddling (covering business

consultants, gifts and invitations, ethics due diligence on stakeholders, conflicts of interest, etc.).

The "**Human Rights**" referential contains ENGIE's commitments to human rights (including amongst others the rejection of all forms of forced or compulsory labor, and of all forms of child labor) and provides analysis tools for assessing this risk for projects and business activities.

The "**Compliance Management**" referential sets out how the Group is organized to help implement Group ethics and compliance program and to measure compliance (see Sections 3.1.5 and 3.1.7). It also includes the Group's procedures for complying with rules on embargoes, personal data protection, and competition law.

**Codes of conduct** are used to apply ENGIE's ethics commitments to business practices and operations. The codes of conduct include, for example, the "Ethics of Business Relationships: Governing Principles", the "Code of Conduct in Supplier Relations", and the "Code of Conduct on Lobbying".

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### 3.1.5 Whistle-blowing and reporting of ethics incidents

The [ethics@engie.com](mailto:ethics@engie.com) email address is one of the systems set up by the Group for **reporting ethics incidents**. It allows any employee, as well as any person outside the Group, to report cases (or suspected cases) of non-compliance with ethics rules.

Ethical failures are monitored using the INFORM'ethics **reporting tool** deployed in the BUs as well as at NewCorp and GBS. It covers six areas

of ethics incidents: accounting and financial integrity, conflicts of interest, social responsibility and human rights, business ethics, confidential information, and the protection of intangible assets.

The above two systems have been declared to the CNIL (the French National Data Protection Commission).

### 3.1.6 Training and awareness

The Group conducts a series of awareness campaigns and training programs, including a mandatory awareness seminar on fraud and corruption risk for senior executives. At the end of 2016, some 84% of those managers had gone through the course, which is also mandatory for the BUs' Executive Committee members. In addition, there is a mandatory training program for the ethics and compliance network, a

mandatory training for purchasers from the purchasing line (see also Section 3.4.4), training courses in competition law, training for data protection officers, and training in human rights.

E-learning courses on a variety of ethics and compliance topics are available to all employees.

### 3.1.7 Control system

The monitoring of the implementation of the Group's ethics and compliance policy is based on an annual compliance procedure and a dashboard of some 15 indicators (including the distribution of ethics documentation, training, and the implementation of ethics policies, etc.). At each organizational level, ethics officers produce an annual report on the work and progress accomplished by their entity in this area. This report is submitted to the relevant supervising entity and accompanied by a compliance letter from the manager certifying his or her commitment to the application of the ethics and compliance program

within the organization for which he or she is responsible. The consolidated annual compliance report resulting from this process is submitted to the Group's Executive Committee and to the EESDC.

Key controls aimed at ensuring compliance with the Group's ethics and compliance reference texts are incorporated into the INCOME internal control program.

Internal and external audits are performed to assess policy implementation and, where applicable, define areas for improvement.

In 2015 the Group was awarded anti-corruption certification by Mazars, an accounting and auditing firm, and ADIT, a business intelligence firm.

(1) All document : under the reference are published on [www.engie.com](http://www.engie.com)

## 3.2 Social Information

The revolution in the energy world and ENGIE's strategic choices impacts the Group's skills needs significantly. It requires a fundamental transformation of the Group's culture, especially the human resources aspect. In 2016, the Human Resources function structured its actions around four key priorities:

- anticipating and steering changes in ENGIE's businesses and skill sets;
- increasing the employability of all its employees, who play a key role in the Group's professional excellence and sustained growth;

- supporting major changes in the Group's organizational structure;
- creating conditions for an agile and efficient learning organization.

All HR actions are also focused on two cross-cutting aspects: the Group's commitment to the health and safety of everyone, and its desire to mark its actions and conduct with a social imprint.

In 2016, the Group's strategy, its new organization and new mode of governance led the HR function to change its approach to human resources and relationships and strengthen the leadership role of communities and managers.

### 3.2.1 Human resources development and mobility policies

Personal development is key to the Group's performance, requiring the cross-functional and shared knowledge of employees at every level of the organization (managers and HR managers).

In 2016, ENGIE adopted a cross-functional, digitized system of HR management. The Group is gradually rolling out a single shared system called "One HR" across all Business Units and entities. This will:

- optimize, harmonize and simplify all HR processes via a shared tool;
- facilitate data analysis to help with employee development;
- improve the visibility of talented individuals and their monitoring by managers and HR staff.

#### 3.2.1.1 Internal mobility to support the Group's transformation

More than 7,000 transfers were made in 2016, an increase of 16% over 2015 partly due to the new organizational structure that took effect on January 1, 2016.

ENGIE will continue to reinforce internal mobility to better support the transformation of its business lines and to increase employee engagement by offering greater internal development opportunities.

A European social agreement signed in the first half of 2016 strengthens the Group's professional mobility policy with regard to employee support and training. A new mobility program called "ENGIE Mobility" was implemented in the second half of 2016 to support the BUs and promote cross-functional coordination in France and Belgium.

#### 3.2.1.2 Forward planning of jobs and skills to prepare for the future

To prepare employees for tomorrow's challenges, the Group has introduced a new program called "ENGIE Skills" which develops synergies between the Group's initiatives: the HR aspect of the medium-term action plan, the professional observatory, and the careers of tomorrow.

#### 3.2.1.3 Developing employee skills and employability through training

To meet the challenges of the energy transition, the Group has reaffirmed its commitment to developing the skills of its employees and managers by creating a network of professional development schools.

The Group and Human Resources have continued to help employees and managers adapt to the digital age, a process that began in 2015 via the e.campus platform, through its Digital Academy and the creation of its first MOOC (Massive Open Online Course) on Finance.

ENGIE University supports the Group's transformation through a broad range of programs, most notably customized e-learning and the Senior Management Forum (SemaFor). Topics include industrial and commercial partnerships with medium-sized and large organizations, implementing a new management culture, and implementing new management systems.

In 2016, approximately 10,000 employees had signed up to use the SynerFORM tool for optimized, shared learning in France.

### 3.2.1.4 Targeted development policies

To offer appropriate career development tools to senior managers, experts and managers, ENGIE deploys targeted policies through:

- the ever-expanding use of coaching and mentoring: more than 200 mentoring pairs were set up in 2016. A digital platform connects new applicants to this international, cross-disciplinary program, which increases cooperation and shared knowledge;
- personalized career coaching for senior managers and education about digital technologies through the Digital Reverse Mentoring program;
- development and showcasing of experts and selected segments (business lines, operational and support functions);
- deployment of “Development Centers” as a resource for development and personal awareness;
- development programs based on 360° feedback, i.e. evaluations by line managers, peers and subordinates.

At the end of 2016, the Group had 559 senior managers, 21% of them women (compared with 18.5% at the end of 2015). Since the beginning of the year, 33% of newly appointed senior managers have been women.

Work began in 2016 to define a new Leadership Model in line with the Group’s strategy and transformation. This model is now an integral part of training aimed at Group managers and will be rolled out to managers on a larger scale in 2017 through a leadership program specially designed by ENGIE University.

#### Development for business lines and segments

The business lines and segments have set up an HR initiative for the challenges of skills development. The Group Human Resources Department (HRD) helps the management of each business line and segment and its HR coordinator to set up practical initiatives, such as organizing key-manager appraisals, creating development actions, mapping skills, and deploying Group policies and tools.

#### Leaders for Tomorrow (LFT)

The aim of the LFT program is to develop the potential of Group employees and is a means of attracting, retaining and training future managers of the Group. Of 33,700 managers, 2,234 have been singled out as Leaders for Tomorrow. Every year, 80% of new managers come from this program.

### 3.2.1.5 HR cross-functionality and innovation to boost the Group’s performance

The Group’s success depends on the establishment of new, more cross-functional and open modes of working and leadership at each stage of management. For instance, the “ENGIE 50” program, introduced in 2016, is a new way to motivate and involve the top management. Telecommuting and dynamic workspaces are being tested in a number of Group entities, including its HR Department. The HR function plays a key role in disseminating this new culture and promoting leadership among managers or in key Group communities, such as:

- the YPN (Young Professionals Network), an international network with more than 900 members, created by young employees, and contributing to the Group’s strategic planning through a *créativ’Lab*;
- Digital Reverse Mentoring, where senior managers receive personalized support from employee volunteers on new uses of digital technology. In 2016, 110 mentor/mentee pairs benefited from this program;
- the data scientist community (200 members), the entrepreneur community (200 members), the manager community (30,000 employees) and the women’s Win network.

Members of these networks are present throughout the Group. These networks are coordinated by the HR function and help to make ENGIE an agile and efficient group.

In 2016, some 30 HR projects were submitted for the ENGIE Innovation Awards.

### 3.2.2 Attracting and hiring talent

In 2016, the Group laid the foundations for a new employer brand that reflects the Group's new positioning with the types of talent it wants to attract. A campaign entitled "You are the energy the world needs" was rolled out, mainly on the web and social media. It promotes the image of an international Group that is helping to create the efficient, renewable, low-carbon and digital energy world of tomorrow. The "Matching Energy" platform introduces the people who make up the Group.

In addition to this promotional campaign, the Group's HR Department has improved its hiring process by completely overhauling its employer brand on social media (Facebook, LinkedIn, Viadeo, Yammer, Glassdoor and other job boards), creating a new interface for advertising job offers online or via dedicated apps, and integrating original features into recruitment tools.

The Group HR department has also redefined its partnership strategy with young people and schools: streamlining the number of schools targeted, forging new partnerships related to renewable and digital energy (Epitech and École 42, for example), and reaching out to talented individuals with an entrepreneurial spirit who are connected to the world (*Confédération des Junior Entreprises* and *Cité Universitaire Internationale*, for example).

Networking events were also held in 2016 at which young people from a broad range of backgrounds (students, startups, young entrepreneurs, researchers, designers, etc.) had the chance to mix with Group employees to discuss topics related to the new energy world.

### 3.2.3 Social commitment: Building a company committed to corporate citizenship, diversity and solidarity<sup>(1)</sup>

For many years, the Group has implemented a corporate social responsibility (CSR) policy that is proactive, ambitious and innovative to combat discrimination and promote equal opportunity and treatment. ENGIE's CSR policy is structured around four key priorities: diversity, inclusion, solidarity and social bonds, and workplace wellbeing. Social innovation underpins all of these areas.

#### Diversity

ENGIE's diversity policy has been recognized by the Diversity label, obtained in May 2014 for all Group production and service activities in France. ENGIE will renew its commitments to diversity through France's national accreditation commission in early 2017. ENGIE is also a founding partner of the Management and Diversity Chair at Paris-Dauphine University and a founding member of the Equality Diversity Foundation under the aegis of the non-profit association *Fondation Agir Contre l'Exclusion* (FACE).

#### Professional and gender equality

Internally, wage equality between women and men is one of the key points to which the Group is committed, in addition to achieving the quantified goal of 25% women in its workforce by 2020. At the end of 2016, the proportion of women in the Group was 21.9%. Externally, to promote gender equality within the business lines, ENGIE strives to raise awareness among young people so that they become familiar with the Group's technical careers. To this end, it has partnered with programs such as "J'apprends l'énergie", "Ma caméra chez les Pros", "Elles Bougent", and "Girls' Day and Boys' Day" in Belgium and the Netherlands. ENGIE is also tapping into the SME ecosystem to help increase the number of women in so-called "male professions" and the number of men in so-called "female professions."

#### Young employees, seniors and intergenerational policy

Employability, particularly that of young people, is a key priority, with a target of 5% of the workforce in alternating work-study programs and a

conversion rate of 50% into technical jobs at the end of the training period. With 4,000 young workers involved in 2016, work-study programs are particularly favored by the Group, which wants to create a path to excellence that leads to employment via high-quality training. In 2016, ENGIE continued to pursue its insertion initiatives: the "Engagement Jeunes" intercompany job exchange platform dedicated to job-seeking technical apprentices, and the Erasmus Pro pilot project, a European exchange program for apprentices launched by France's Ministry of Foreign Affairs. This commitment to young people was rewarded when the Group obtained the AJE (*Association Jeunesse et Entreprises* – Youth and Business Association) label at the end of 2015. In 2016, ENGIE stepped up its action to promote the employability of young people in Europe by joining the Pact For Youth and the Alliance for YOUTH (the largest private pan-European movement made up of 200 companies). ENGIE is also a partner in the Octave Program (inter-company seminars) that focuses on the issues and mechanisms of intergenerational diversity in the context of a changing society.

Since 2015, the Group has supported the *Mines d'Albi* engineering school's Diversity and Equal Opportunities program of excellence, designed for engineers committed to promoting social inclusion.

Knowledge and skills transfer is also boosted by planning for pre-retirement periods, encouraging younger workers to take part in tutoring programs such as "Les maîtres de l'énergie" (Energy Experts), and mentoring and reverse mentoring programs, i.e. where employees receive personalized support from other employees who are either more senior or have more expertise in a specific area.

#### Religious diversity

One of the 23 legal criteria of the principle of non-discrimination is the adherence, or not, to a religion. ENGIE is committed to ensuring that no employee or applicant is treated unfavorably because of their religious beliefs. To support managers with this issue, in 2015 the Group prepared some points of reference on "religious diversity in the company." In 2016, it furthered this effort in partnership with the International Social Observatory.

(1) For a full description of the Group's Corporate Societal policy, see Section 3.4 "Societal information"



## Employees with disabilities

The Group pursues measures to encourage the hiring, career development, training and retention of people with disabilities. For several years, it has had a disabilities network which promotes discussion and skills-building initiatives in the field, and develops joint large-scale initiatives.

In 2016, the Group carried out awareness campaigns on invisible disabilities such as dyslexia, dyspraxia and dysphasia disorders, as well as mental illness. The Group is a partner of the Belgian Paralympic Committee and also sponsors the “*Drives de l’Insertion*” golf competition which brings together managers, employees and disabled golfers.

In October 2016, the Group signed the International Labor Organization’s “Global Business and Disability Network Charter”.

For all ENGIE companies in France, the overall employment rate of people with disabilities is 4.61%, while the direct employment rate is 4% and rising. In total, ENGIE companies in France employ more than 2,700 individuals with disabilities, up 33% in five years.

All ENGIE companies in France conduct specialized sourcing to identify people with disabilities who have skills and abilities the Group needs (*Handy recruteurs* campaigns). In 2016, procurement from the “sheltered and adapted employment sector” accounted for €7.9 million (before VAT), up 46% in five years.

## Inclusion, job-seeking support and social solidarity

The Group is committed to the social and professional inclusion of people in severe difficulty or in a situation of exclusion. Its actions include:

- sponsorships aimed at talented students from disadvantaged neighborhoods (scholarships awarded in France and Belgium, and young people in France mentored by a committed Group employee post-baccalaureate and beyond);
- assistance with job creation via ENGIE’s employment foundation, *Fondation Agir Pour l’Emploi* (FAPE), which operates under the auspices of the Fondation de France. The Foundation’s resources come from donations by Group employees and retirees, which are fully matched by their companies. Since its establishment in 2013, FAPE (in France and Belgium) has awarded more than €1 million in grants for 80 projects aimed at access to employment, job creation and inclusion of the most vulnerable individuals. FAPE continues to promote volunteering in the non-profit associations it supports (such as helping job seekers and micro-enterprises);

- in 2016 the Group developed and managed the *Parcours Emploi - Mobilité - Sport* (PEMS) program, which helps young people between the ages of 18 and 25 from disadvantaged city neighborhoods to obtain work-study contracts. The first edition (2016) was rolled out in the Paris region. For six months, the young people pursued a program organized around digital workshops, individual support, mentoring, an internship, army service and sports workshops. At the end of the program, 75% of the young people who completed it were awarded work-study contracts or had positive job or study prospects. A new edition in the Paris region is planned for 2017 and the program will be developed in other regions as well;
- the Group renewed its commitment to France’s Ministry of Urban Affairs, Youth and Sport by signing an addendum to the Businesses & Neighborhoods Charter on economic and social development in working-class neighborhoods.

## Quality of life in the workplace

With eight million people in France – 50% of them with jobs – providing assistance to someone dependent on them or disabled, caregiving has become a real issue for society, impacting businesses as a result of stress, fatigue or absenteeism of the caregiver. To address this problem, in 2016, ENGIE implemented a help-for-caregivers program aimed at Group employees in France. The service provides information, support, advice and assistance, centralizing all the answers needed by the caregiver in a single source.

## Involvement in the International Social Observatory

ENGIE supports the International Social Observatory (ISO) and the work of its international delegations in Europe, China, Brazil, Morocco, Chile and Africa. In 2016, overseas initiatives were stepped up with symposiums on corporate social responsibility notably in Brazil (presentation on vocational and professional integration of people with disabilities at the start of the Rio Paralympic Games), China (Sino-European forum on CSR as the leading lever of economic change), and Chile (seminar on productivity and territorial dialogue). Presentations also took place in Africa on the place of women and young people in the continent’s economic development.

In France, there were think-tanks on occupational health, the role of business in facing geopolitical and faith-based challenges, tomorrow’s managers, new forms of wage labor, human development, and sustainable performance.

## 3.2.4 Employee savings plans and shareholding

### 3.2.4.1 Group employee savings plans policy

These plans are available to employees of companies that are fully consolidated or whose share capital is majority-owned, directly or indirectly, by ENGIE S.A.

#### Savings plans

In France, since the end of 2009, ENGIE Group employees<sup>(1)</sup> have had access to a Group Savings Plan (a *Plan d'Épargne Groupe* – PEG), which includes employee shareholding funds as well as a large range of diversified savings options.

In other countries, measures have also been put in place to allow employees to save, under terms adapted to local laws.

#### Retirement savings plans

In France, since 2010, all Group employees may, at their own pace, build funds for retirement by paying into the ENGIE Group Collective Retirement Plan (*Plan d'Épargne pour la Retraite Collectif* – PERCO).

In other countries, products exist allowing employees to supplement their pensions by making voluntary contributions on favorable terms.

#### Solidarity funds

In France, the ENGIE "*Rassembleurs d'Énergies Flexible*" Fund has supplemented the range of Group Savings Plan and Retirement Savings Plan investment products since the beginning of 2012 and enables employees to take part in a social initiative in tune with their businesses.

### 3.2.4.2 Profit-sharing and incentive plans

Due to the existence of separate legal companies, a common collective profit-sharing and incentive plan is not possible for the Group.

At the ENGIE S.A. level, an incentive agreement was signed with all representative trade unions on June 24, 2014 for the 2014-2016 period. The amount paid out in 2016 for 2015 profit-sharing was €19.5 million. The employee profit-sharing agreement for ENGIE was signed on June 26, 2009. Application of the statutory profit-sharing formula for 2015 resulted in no payment being made to employees in 2016.

### 3.2.4.3 Employee shareholding

ENGIE continues to operate its employee shareholding policy in order to involve all employees in the Group's development and increase the employees' stake in the capital of ENGIE.

In 2016, several free share award plans were delivered for a total of 3.1 million shares. Employees have received approximately 24 million free shares since the first plan in 2007.

At the end of 2016, employees held 2.75% of the share capital (including 1.99% held through employer-sponsored mutual funds). Pursuant to Article L. 225-100-3 of the French Commercial Code, the Supervisory Boards of these employer-sponsored mutual funds exercise the voting rights attached to the securities registered among their assets and decide, if necessary, whether to contribute these securities to public tender or exchange offers.

The Supervisory Boards of the employee-sponsored mutual funds comprise shareholder representatives; half of them at most are company representatives designated under the procedures set out in the funds' rules. Although the Supervisory Board is composed in an equitable way, its chairman, who must be chosen from the shareholder representatives, holds the casting vote.

(1) Companies that are fully consolidated (apart from GRTgaz) and companies whose share capital is majority-owned, directly or indirectly, by ENGIE S.A.

## 3.2.5 Social relations

### 3.2.5.1 Employee representation in the Group

The representative bodies are places for consultation and collaboration between management and employee representatives.

#### The European Works Council (EWC)

With 42 full members representing the Group's 135,828 employees throughout Europe, the purpose of the EWC is to develop and strengthen European social dialogue, ensure balanced representation between the Group's countries and main business activities, and develop social dialogue within these activities. A secretariat with 13 members representing eight countries meets once every two months. However, in the first half of 2016, it met monthly on an exceptional basis.

In 2016, the EWC held five full-session meetings, the EWC secretariat held eight meetings, and working groups held five meetings.

#### French Group Works Council

This body, which represents more than 74,000 employees in France, has 30 full members. Two meetings were held in 2016.

### 3.2.5.2 Group collective bargaining agreements

On April 8, 2016, Gérard Mestrallet, Isabelle Kocher and three European trade federations – IndustriAll Europe, EPSU and FETBB – signed ENGIE's European Social Agreement, making forward planning and the employability of all individuals the core focus of the Group's human resources policy. Among other things, this European social agreement embodies the Group's goals in terms of training and mobility for all companies operating in EU countries.

In 2016, 11 meetings were held to discuss the monitoring of collective bargaining agreements in France, Europe and the World.

ENGIE also remains true to the commitments made under the global agreement on fundamental rights, social dialogue and sustainable development signed in 2010. The renewal of the diversity label planned for 2017 in France (first obtained in 2014) and the signing of the International Labor Organization's (ILO) Disability Charter in 2016 are two concrete examples of the Group's commitment to diversity.

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## 3.2.6 Health and safety policy

### 3.2.6.1 Performance

In line with several years of steady progress, performance in terms of frequency and severity of accidents to Group employees continued to improve in 2016:

- accidents at work:
  - frequency rate of 3.55, below the defined target (FR < 3.7 by end-2016) over a reporting scope that broadened as of January 1, 2016, compared to previous years to include all activities under ENGIE's operational management<sup>(1)</sup>, regardless of financial consolidation method. On a like-for-like basis, the figure was down by 56% compared to 2008 and by 3% compared to 2015;
  - severity rate of 0.18, stable compared to last year, even with a larger reporting scope;
- commuting accidents with a frequency index of 2.9 in 2016 versus 2.9 in 2015.

The number of fatal accidents at work (Group employees, temporary workers and subcontractors), over this same operational management reporting scope, was 13 in 2016, down from 17 in 2015. The action plan to eradicate fatal accidents was implemented and strengthened, particularly as regards projects and subcontractors.

In the field of occupational health, the number of new cases of occupational illness fell to 100 in 2016, down from 122 in 2015 and 150 in 2014.

### 3.2.6.2 Targets and progress

Targets set for the period 2016-2020 focus on eliminating fatal accidents, including identifying and dealing with potentially serious incidents, controlling industrial risks, reducing workplace accidents, reducing absenteeism for medical reasons, and developing a health and safety culture and commitment for employees, managers and subcontractors.

These areas of progress and their impact on the Group's occupational and industrial health and safety performance are monitored by the Board of Directors, the Ethics, Environment and Sustainable Development Committee, and the General Management Committee. The Group Health and Safety Agreement, signed in 2010, is monitored by a special committee which includes employee representatives.

Health and safety performance is reported via a quarterly email from the Chief Executive Officer to senior management. This information is also provided to all employees through the various health and safety communications (publications and intranet, for instance) and by various segments including Health and Safety and Human Resources. In 2016, the General Management Committee members conducted managerial safety visits to show the Group's commitment to safety and reinforce employees' safety practices through discussions with their managers.

<sup>(1)</sup> ENGIE has operational management of an activity when it controls or has the real ability to influence the conduct and implementation thereof and/or where ENGIE is considered to have the business know-how by the other partners, including in particular : all subsidiaries, joint ventures and associated companies held at more than 50%; assets or projects which ENGIE has real capacity to influence via the existing management, such as the entity/factory manager, the business development manager, the project manager, or the general manager; projects where ENGIE outsources the entity's operations and maintenance function to a third party (e.g., wind farms).

### The management mechanism

The key principles of the Group's health and safety policy are set out in Group agreements signed by Gérard Mestrallet, then the Chairman and Chief Executive Officer, and by all employee representatives (on February 23, 2010 for the European agreement on occupational health and safety, and on May 13, 2014 for the global agreement on occupational health and safety).

The Group's Health and Safety Regulations set out the minimum standards and requirements for all entities worldwide. These are supplemented by a set of "Life-Saving Rules," which are practical rules designed to prevent the main risks and applicable to everyone. The Health and Safety Regulations were updated after the Group was reorganized in early 2016. In a bid to provide victims with the assistance they need in an ever-more effective manner, the Group introduced a new Regulation called GR 13: Assistance to victims of a serious accident.

In line with the ERM process, the level of control of health and safety risks was evaluated by line managers and by the Group Health and Safety Department. The deployment of the Group's health and safety principles and requirements is verified by audits and consultations carried out by the Group Health and Safety Department and the Group Audit Department.

Some 30 audits were performed on the maturity of the health and safety management systems in 2016, with a particular focus on subcontractor management and on identifying and dealing with potentially serious accidents.

A dozen cross-functional audits were also carried out in 2016 on specific topics: natural gas distribution, industrial projects, the deployment of the European agreement of November 27, 2014 on improving the quality of life in the workplace, absenteeism due to illness, and the deployment of the crisis management policy.

Annual health and safety reviews are carried out with each BU to take stock of actions taken and results achieved, and to set goals for improvement and quantitative targets. These reviews are primarily designed to assess the entities' ability to identify and deal with potentially serious accidents, as well as to assess the effectiveness of the actions taken under the "zero fatal accidents" plan, with particular focus on the management of subcontractors.

Finally, at least 10% of the performance-related pay of line managers is based on their performance and commitment to improving occupational health and safety.

### Training

Training efforts continued in 2016: 30% of the total number of training hours delivered were devoted to quality, safety and the environment (QSE), and nearly 1,100 managers had Group training in health and safety leadership, set up by the Health and Safety Department in conjunction with ENGIE University.

A digital learning platform was set up for all employees to develop and share a common safety culture. This allowed managers who received leadership training in health and safety to deepen their knowledge.

A special half-day awareness module in Health and Safety Leadership was developed in 2016 for members of the BU management committees; roll-out began in 2016 and will cover all BUs from 2017 onward.

### Raising awareness and sharing practices

A range of measures are used to strengthen the health and safety culture of each Group employee and make them more involved in their own health and safety and that of others.

*Reflex*, the in-house health and safety magazine, discusses good practices and habits to be adopted in everyday life.

The Group launched its annual health and safety awareness campaign in April on World Day for Safety and Health at Work and also promoted it during European Health and Safety Week. In 2016, the campaign focused on the risk of falling from a great height. The Life-Saving Rules are promoted through poster campaigns, exhibitions and other regular activities. All employees also have access to a document library through the Group's health and safety intranet, which was completely overhauled in 2016, and through the Prevention site dedicated to the "zero fatal accidents" action plan.

The implementation of the Group's new organization led to the regular publication of a "Prevention Week" bulletin, which summarizes discussions held with the 24 BUs. The document is sent out to the entire health and safety community and spotlights any accidents, hazardous situations and, most importantly, potentially serious accidents reported by the BUs.

Finally, the Group promotes sharing practical solutions through networks such as specialist societies or professional communities of practice, or alternatively through the quarterly newsletter, Prevention News, and "sharing corners" at the annual gathering of the Group's health and safety professionals.

### 3.2.6.3 Dialogue with social partners

In 2016, dialogue with employee representatives and trade unions continued both at the Group level, with global and European bodies, and at the local and business-line level, and mainly covered Group health and safety agreements. Monitoring committees for the various collective agreements signed at Group level met in 2016 to review the implementation of these commitments.

In 2016, more than 100 Human Resources and Health and Safety employees plus workforce representatives attended a seminar aimed at sharing practices for auditing and improving the quality of life in the workplace. The agenda also included working together on the key action points and implementing the European agreement signed in November 2014.

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#### 3.2.7 Social data

The reorganization of the ENGIE Group on January 1, 2016 resulted in the elimination of five business lines that had existed until 2015.

For operational reasons, the new organization is based on 24 business units, NewCorp and GBS.

To give a broader view, the ENGIE Group's figures (financial and social) are now presented by the grouping of these 24 BUs into 10 segments (see Chapter 6.2 "Consolidated financial statements" - note 6).

The social data for 2014 and 2015 presented in the 2016 Registration Document are shown according to the new organization of 2016.

Grenelle 2 Law	GRI	Group*			North America			Latin America			
		2016	2015	2014	2016	2015	2014	2016	2015	2014	
<b>EMPLOYMENT</b>											
<b>Total workforce</b>	<b>1.A</b>	<b>LA1</b>	<b>153,090</b>	<b>154,935</b>	<b>152,882</b>	<b>3,635</b>	<b>3,402</b>	<b>3,371</b>	<b>6,413</b>	<b>6,570</b>	<b>5,168</b>
<b>Workforce by geographic region ■■</b>	<b>1.A</b>	<b>LA1</b>									
France	1.A	LA1	72,651	73,951	74,156						
Belgium	1.A	LA1	16,697	16,950	17,193						
Other European countries	1.A	LA1	43,946	44,517	45,291	61		1			
Total Europe	1.A	LA1	133,294	135,418	136,640	61	0	1	0	0	0
North America	1.A	LA1	4,350	4,150	4,073	3,574	3,402	3,370	740	723	697
South America	1.A	LA1	6,256	6,590	5,430				5,673	5,847	4,471
Asia - Middle East - Oceania	1.A	LA1	8,813	8,668	6,630						
Africa	1.A	LA1	377	109	109						
% reporting			100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Breakdown of workforce by SPC</b>	<b>1.A</b>	<b>LA1</b>									
Managers ■■	1.A	LA1	35,587	36,245	34,274	1,050	919	860	973	1,202	1,009
Non-managers ■■	1.A	LA1	117,503	118,690	118,608	2,585	2,483	2,511	5,440	5,368	4,159
% Managers	1.A		23.2%	23.4%	22.4%	28.9%	27.0%	25.5%	15.2%	18.3%	19.5%
% Non-managers	1.A		76.8%	76.6%	77.6%	71.1%	73.0%	74.5%	84.8%	81.7%	80.5%
% reporting			100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Breakdown of workforce by type of contract</b>	<b>1.A</b>	<b>LA1</b>									
Permanent ■■	1.A	LA1	93.4%	93.6%	93.7%	90.3%	96.0%	94.9%	94.3%	92.5%	95.5%
Other ■■	1.A	LA1	6.6%	6.4%	6.3%	9.7%	4.0%	5.1%	5.7%	7.5%	4.5%
% reporting			100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Age pyramid of permanent employees ■■</b>	<b>1.A</b>	<b>LA1</b>									
Under 25 years old	1.A	LA1	3.1%	3.3%	3.6%	4.1%	4.2%	3.3%	6.2%	6.4%	6.6%
25-29 yrs old	1.A	LA1	9.7%	10.1%	10.4%	11.7%	10.7%	10.8%	14.8%	14.3%	14.0%
30-34 yrs old	1.A	LA1	13.7%	13.8%	13.9%	14.0%	12.7%	13.5%	17.9%	16.9%	17.1%
35-39 yrs old	1.A	LA1	14.3%	14.0%	13.5%	14.9%	14.9%	14.4%	18.0%	19.6%	17.2%
40-44 yrs old	1.A	LA1	13.6%	13.8%	13.9%	13.8%	13.4%	14.4%	13.6%	12.4%	12.5%
45-49 yrs old	1.A	LA1	14.6%	14.6%	14.6%	12.2%	12.6%	12.4%	10.4%	10.8%	11.7%
50-54 yrs old	1.A	LA1	14.1%	14.1%	14.1%	11.0%	12.6%	12.3%	9.5%	9.3%	10.0%
55-59 yrs old	1.A	LA1	11.4%	11.2%	11.1%	10.6%	10.7%	11.0%	5.6%	6.0%	6.2%
60-64 yrs old	1.A	LA1	4.6%	4.4%	4.1%	5.8%	6.0%	5.9%	3.0%	3.2%	3.5%
65 and +	1.A	LA1	0.9%	0.8%	0.7%	2.0%	2.4%	2.1%	1.0%	1.2%	1.1%
% reporting			100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Female workforce ■■</b>	<b>1.F</b>	<b>LA13</b>	<b>33,529</b>	<b>33,529</b>	<b>33,044</b>	<b>1,192</b>	<b>1,153</b>	<b>1,191</b>	<b>1,032</b>	<b>977</b>	<b>864</b>
% reporting			100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Diversity and equal opportunity</b>											
<b>Proportion of women in workforce ■■</b>	<b>1.F</b>	<b>LA13</b>	<b>21.9%</b>	<b>21.6%</b>	<b>21.6%</b>	<b>32.8%</b>	<b>33.9%</b>	<b>35.3%</b>	<b>16.1%</b>	<b>14.9%</b>	<b>16.7%</b>
% reporting			100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Proportion of women in management ■■</b>	<b>1.F</b>	<b>LA13</b>	<b>22.8%</b>	<b>22.0%</b>	<b>21.9%</b>	<b>32.6%</b>	<b>30.3%</b>	<b>29.2%</b>	<b>17.6%</b>	<b>14.5%</b>	<b>19.6%</b>
% reporting			100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Proportion of apprentices in workforce</b>	<b>1.F</b>	<b>LA1</b>	<b>2.8%</b>	<b>2.6%</b>	<b>2.6%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.1%</b>	<b>0.4%</b>	<b>0.7%</b>
% reporting			100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

\* The ENGIE Group includes the 10 business lines.

■■ Reasonable assurance for financial year (FY) 2016.

## Social and environmental information, corporate social commitments

### 3.2 Social Information

	Africa/Asia			Benelux			France			Europe excl. France & Benelux		
	<b>6,166</b>	<b>5,957</b>	<b>4,541</b>	<b>20,915</b>	<b>23,035</b>	<b>19,325</b>	<b>53,814</b>	<b>54,483</b>	<b>55,004</b>	<b>31,554</b>	<b>31,258</b>	<b>32,886</b>
				95	116	101	50,968	51,962	52,199	35		
				13,287	13,948	11,162						
				7,497	8,965	8,037	542	498	657	31,519	31,258	32,886
	0	0	0	20,879	23,029	19,300	51,510	52,460	52,856	31,554	31,258	32,886
				36	6	25						
							22	22	125			
	6,166	5,957	4,541				1,940	1,925	1,944			
							342	76	79			
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	1,152	1,163	868	4,585	4,324	3,772	12,039	11,692	11,414	3,206	4,180	4,243
	5,014	4,794	3,673	16,330	18,711	15,553	41,775	42,791	43,590	28,348	27,078	28,643
	18.7%	19.5%	19.1%	21.9%	18.8%	19.5%	22.4%	21.5%	20.8%	10.2%	13.4%	12.9%
	81.3%	80.5%	80.9%	78.1%	81.2%	80.5%	77.6%	78.5%	79.2%	89.8%	86.6%	87.1%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	
	88.3%	89.0%	97.8%	97.0%	96.0%	96.1%	92.3%	92.5%	92.5%	92.8%	92.8%	91.8%
	11.7%	11.0%	2.2%	3.0%	4.0%	3.9%	7.7%	7.5%	7.5%	7.2%	7.2%	8.2%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	4.4%	4.0%	3.9%	3.2%	3.4%	3.3%	2.9%	3.3%	3.7%	3.0%	3.2%	3.5%
	14.2%	14.2%	14.7%	8.5%	9.0%	8.5%	10.8%	11.3%	11.9%	6.7%	7.1%	7.3%
	16.4%	15.5%	15.4%	13.0%	13.9%	13.0%	14.8%	15.1%	15.2%	9.2%	9.4%	10.0%
	15.3%	15.4%	15.6%	13.5%	12.3%	13.2%	14.9%	14.5%	13.8%	11.6%	11.9%	12.4%
	14.8%	16.6%	17.1%	12.3%	13.1%	13.1%	13.8%	13.9%	14.1%	13.4%	13.6%	13.7%
	12.9%	13.4%	13.9%	15.6%	15.7%	16.1%	14.7%	14.5%	14.8%	16.6%	16.5%	16.1%
	10.2%	10.1%	9.4%	15.0%	14.5%	14.2%	14.3%	14.1%	13.6%	15.3%	15.1%	14.6%
	7.4%	7.6%	7.1%	12.3%	11.9%	11.9%	11.1%	10.7%	10.5%	13.3%	12.8%	12.9%
	3.7%	2.7%	2.6%	6.3%	5.9%	6.5%	2.6%	2.5%	2.3%	8.2%	7.7%	7.1%
	0.9%	0.4%	0.3%	0.3%	0.2%	0.3%	0.2%	0.2%	0.2%	2.7%	2.6%	2.4%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	<b>921</b>	<b>828</b>	<b>584</b>	<b>2,905</b>	<b>3,055</b>	<b>2,639</b>	<b>9,205</b>	<b>9,212</b>	<b>9,202</b>	<b>10,075</b>	<b>9,944</b>	<b>10,107</b>
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	<b>14.9%</b>	<b>13.9%</b>	<b>12.9%</b>	<b>13.9%</b>	<b>13.3%</b>	<b>13.7%</b>	<b>17.1%</b>	<b>16.9%</b>	<b>16.7%</b>	<b>31.9%</b>	<b>31.8%</b>	<b>30.7%</b>
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	<b>18.7%</b>	<b>16.6%</b>	<b>15.3%</b>	<b>12.1%</b>	<b>10.6%</b>	<b>11.2%</b>	<b>21.2%</b>	<b>20.7%</b>	<b>20.0%</b>	<b>23.3%</b>	<b>18.1%</b>	<b>18.4%</b>
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	<b>2.4%</b>	<b>0.4%</b>	<b>0.1%</b>	<b>0.4%</b>	<b>0.5%</b>	<b>0.5%</b>	<b>4.6%</b>	<b>4.5%</b>	<b>4.5%</b>	<b>0.9%</b>	<b>0.9%</b>	<b>1.0%</b>
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

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	Grenelle 2		Group*			North America			Latin America		
	Law	GRI	2016	2015	2014	2016	2015	2014	2016	2015	2014
Proportion of disabled employees	1.F		2.1%	2.1%	2.0%	0.0%	0.6%	0.6%	1.2%	1.2%	1.3%
Employees under 25 as a % of permanent hires	1.F		17.6%	18.0%	19.1%	14.1%	16.1%	10.7%	14.9%	20.6%	14.1%
Employees over 50 as a % of permanent hires	1.F		12.6%	12.1%	10.3%	17.1%	17.7%	18.2%	7.2%	5.3%	7.1%
Staff and job movement											
No. of permanent hires (at constant scope)	1.A	LA2	12,058	10,974	9,347	680	572	242	1,284	705	198
No. of temporary hires (at constant scope)	1.A	LA2	9,190	7,713	8,090	356	154	177	1,309	297	259
Hiring rate (at constant scope)	1.A	LA2	14.0%	12.4%	11.9%	28.7%	21.0%	22.1%	40.1%	23.2%	11.1%
% reporting			100.00%	99.42%	100.00%	100.00%	100.00%	100.00%	100.00%	83.15%	100.00%
Permanent hiring rate (at constant scope)	1.A	LA2	56.7%	58.7%	53.6%	65.6%	78.8%	57.8%	49.5%	70.4%	43.3%
% reporting			100.00%	99.42%	100.00%	100.00%	100.00%	100.00%	100.00%	83.15%	100.00%
No. of lay-offs (at constant scope)	1.A		3,866	3,342	2,770	189	213	134	893	473	71
% reporting			100.00%	99.42%	100.00%	100.00%	100.00%	100.00%	100.00%	83.15%	100.00%
Turnover (at constant scope)	1.A	LA2	7.8%	7.1%	6.0%	19.3%	17.6%	15.4%	20.4%	18.3%	5.3%
% reporting			100.00%	99.42%	100.00%	100.00%	100.00%	100.00%	100.00%	83.15%	100.00%
Voluntary turnover (at constant scope)	1.A	LA2	4.4%	4.1%	3.3%	13.6%	11.4%	8.4%	6.2%	7.3%	3.4%
% reporting			100.00%	99.42%	100.00%	100.00%	100.00%	100.00%	100.00%	83.15%	100.00%
Career development											
Proportion of workforce trained ■■	1.E	LA10	65.6%	64.0%	68.1%	53.4%	68.6%	53.4%	75.3%	75.6%	60.0%
% reporting			97.88%	97.43%	90.07%	28.77%	19.97%	56.61%	100.00%	100.00%	83.60%
Proportion of women in trained workforce	1.E	LA10	16.8%	16.7%	17.0%	25.7%	14.8%	13.6%	14.5%	14.5%	17.0%
% reporting			97.88%	97.43%	90.07%	28.77%	19.97%	56.61%	100.00%	100.00%	83.60%
Proportion of managers and non-managers in trained workforce:											
Managers	1.E	LA10	22.8%	24.0%	22.7%	22.4%	13.9%	23.4%	15.2%	20.5%	19.0%
Non-managers	1.E	LA10	77.2%	76.0%	77.3%	77.6%	86.1%	76.6%	84.8%	79.5%	81.0%
% reporting			97.88%	97.43%	90.07%	28.77%	19.97%	56.61%	100.00%	100.00%	83.60%
Total no. of training hours	1.E	LA10	3,039,026	2,971,607	2,997,908	9,797	7,457	22,364	179,573	188,842	134,517
% reporting			97.88%	97.39%	89.98%	28.77%	19.97%	56.61%	100.00%	100.00%	100.00%
Hours of training by topic											
Business techniques			44.2%	44.3%	45.8%	12.3%	16.0%	30.7%	41.3%	38.3%	54.0%
Quality, safety and environment			30.2%	30.3%	28.5%	21.1%	31.9%	38.9%	29.9%	24.1%	21.5%
Languages			3.4%	4.1%	5.1%	2.8%	0.0%	0.1%	8.7%	7.2%	12.5%
Management and personnel development			13.8%	12.8%	11.3%	3.8%	8.6%	2.5%	9.1%	27.7%	8.1%
Other			8.5%	8.5%	9.2%	60.1%	43.5%	27.9%	10.9%	2.7%	3.8%
% reporting			97.88%	97.39%	89.98%	28.77%	19.97%	56.61%	100.00%	100.00%	100.00%
No. of training hours per person trained	1.E	LA10	31	31	32	17	16	22	37	38	52.10
% reporting			97.88%	96.76%	89.98%	28.77%	19.97%	56.61%	100.00%	100.00%	83.60%
No. of training hours per woman trained	1.F	LA10	28	27	29	13	20	21	39	34	39
% reporting			97.88%	97.39%	89.98%	28.97%	19.97%	56.61%	100.00%	100.00%	83.60%
Training expenses per hour of training (€)	1.E	LA10	33	36	35	31	37	60	22	23	18
% reporting			97.86%	96.76%	85.87%	27.83%	19.97%	56.61%	100.00%	100.00%	82.70%

\* The ENGIE Group includes the 10 business lines.

■■ Reasonable assurance for financial year (FY) 2016.



# Social and environmental information, corporate social commitments

## 3.2 Social Information

	Africa/Asia			Benelux			France			Europe excl. France & Benelux		
	2016	2015	2014	2016	2015	2014	2016	2015	2014	2016	2015	2014
	0.2%	0.2%	0.2%	0.3%	0.4%	0.2%	3.8%	3.6%	3.5%	0.9%	0.8%	0.9%
	25.3%	17.8%	18.6%	20.9%	20.8%	20.8%	19.6%	21.3%	23.2%	13.8%	13.2%	13.3%
	5.7%	8.6%	3.2%	9.4%	9.3%	7.0%	8.0%	8.0%	7.3%	21.8%	20.2%	18.1%
	435	827	403	1,536	1,183	1,187	3,167	2,944	3,449	3,502	2,921	2,328
	236	306	87	511	596	701	4,480	4,221	4,766	1,330	1,122	1,221
	13.3%	19.4%	11.3%	9.7%	9.1%	8.1%	14.2%	13.2%	15.0%	15.5%	12.9%	12.1%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	64.8%	73.0%	82.2%	75.0%	66.5%	62.9%	41.4%	41.1%	42.0%	72.5%	72.3%	65.6%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	46	43	37	449	441	568	911	791	837	902	1,042	860
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	9.5%	9.3%	8.3%	7.2%	6.5%	6.0%	5.7%	5.0%	4.9%	11.9%	11.9%	9.6%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	8.4%	8.4%	7.3%	3.7%	2.9%	2.6%	2.8%	2.4%	2.4%	8.4%	7.8%	5.6%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	77.4%	84.5%	90.8%	74.7%	72.3%	74.3%	71.6%	66.9%	67.5%	44.7%	41.2%	61.0%
	99.37%	97.87%	100.00%	100.00%	99.72%	99.88%	99.88%	99.21%	99.56%	100.00%	99.62%	60.76%
	14.2%	12.9%	11.8%	12.5%	12.5%	14.0%	14.1%	14.0%	14.0%	21.2%	20.0%	18.8%
	99.37%	97.87%	100.00%	100.00%	99.72%	99.88%	99.88%	99.21%	99.56%	100.00%	99.62%	60.76%
	18.9%	18.2%	18.3%	21.5%	19.9%	19.0%	21.5%	21.7%	20.3%	13.4%	17.3%	13.2%
	81.1%	81.8%	81.7%	78.5%	80.1%	81.0%	78.5%	78.3%	79.7%	86.6%	82.7%	86.8%
	99.37%	97.87%	100.00%	100.00%	99.72%	99.88%	99.88%	99.21%	99.56%	100.00%	99.62%	60.76%
	215,940	218,560	180,928	507,468	398,791	592,465	1,018,873	948,319	1,058,966	389,697	337,038	333,180
	99.37%	97.87%	99.88%	100.00%	99.72%	99.88%	99.88%	99.21%	99.56%	100.00%	99.88%	60.76%
	57.9%	51.1%	46.7%	63.2%	65.7%	68.9%	32.6%	33.6%	38.1%	43.7%	39.9%	33.3%
	29.4%	31.6%	35.4%	27.5%	19.9%	18.7%	40.3%	42.7%	40.2%	27.3%	30.0%	25.2%
	2.9%	4.1%	3.2%	0.7%	1.0%	1.4%	1.7%	2.1%	2.7%	7.2%	9.3%	13.4%
	5.5%	7.6%	9.2%	6.4%	6.2%	4.9%	13.0%	11.6%	10.3%	15.5%	13.7%	13.8%
	4.3%	5.5%	5.4%	2.3%	7.3%	6.2%	12.4%	10.0%	8.7%	6.3%	7.1%	14.5%
	99.37%	97.87%	99.88%	100.00%	99.72%	99.88%	99.88%	99.21%	99.56%	100.00%	99.88%	60.76%
	46	45	44	32	28	34	26	26	29	28	26	30
	99.37%	97.14%	100.00%	100.00%	99.72%	99.88%	99.88%	99.15%	99.56%	100.00%	98.69%	60.76%
	27	28	32	22	21	23	23	22	24	29	26	36
	99.37%	97.87%	100.00%	100.00%	99.72%	99.88%	99.88%	99.21%	99.56%	100.00%	99.88%	60.76%
	15	39	45	27	32	25	29	32	30	33	22	18
	99.37%	97.14%	100.00%	100.00%	99.72%	98.21%	99.88%	99.15%	89.70%	100.00%	98.69%	59.67%



	Grenelle 2		Group*			North America			Latin America		
	Law	GRI	2016	2015	2014	2016	2015	2014	2016	2015	2014
Training expenses per person trained (€)	1.E	LA10	1,000	1,093	1,124	542	575	1,331	822	869	922
% reporting			97.86%	96.76%	85.87%	27.83%	19.97%	56.61%	100.00%	100.00%	82.70%
<b>WORKING CONDITIONS</b>											
Days of absence per person	1.B	LA7	12	12	12	7	5	13	9	8	8
% reporting			99.06%	100.00%	99.94%	62.76%	100.00%	100.00%	100.00%	100.00%	100.00%
Overtime	1.B	LA7	3.2%	3.0%	2.7%	4.6%	5.0%	5.3%	8.1%	5.4%	4.3%
% reporting			99.95%	100.00%	99.94%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
<b>Health and safety data</b>											
No. of fatal accidents (employees)			4	4	2	0	1		0	0	
% reporting			100%	100%	100%	100%			100%		
Frequency rate			3.6	3.6	3.7	1.87	2.97	3.06	3.61	1.22	3.34
% reporting			100%			100%			100%		
Severity rate (French benchmark)			0.18	0.17	0.20	0.07	0.24	0.23	0.05	0.02	0.09
% reporting			100%			100%			100%		
Severity rate (ILO benchmark)			0.13	0.11	0.13	0.24	0.14	0.07	0.05	0.01	0.09
% reporting			100%			100%			100%		
Number of new cases of occupational illness			100	122	150	1	7		1	0	
% reporting			100%			100%			100%		
		Legal annual minimum wage in 2016 in €									
<b>Compensation</b>		<b>17,599</b>									
Average salary of manual workers, clerical staff and technicians compared with national minimum wage		18,383	2016	2015	2014	2016	2015	2014	2016	2015	2014
France		9,173	NS						NS		
Belgium		18,446									
Spain		16,116									
Netherlands		23,076									
United Kingdom		3,316				1.44					
Luxembourg		5,004									
Romania		4,379									
Poland		4,201									
Czech Republic		4,860									
Hungary		-									
Slovakia		8,205									
Portugal		17,280									
Greece		6,165									
Germany		-									
Turkey											
United States							4.55	4.68			
% reporting						1.86%	68.78%	74.73%			

\* The ENGIE Group includes the 10 business lines.

■ Reasonable assurance for financial year (FY) 2016.

# Social and environmental information, corporate social commitments

## 3.2 Social Information

Africa/Asia			Benelux			France			Europe excl. France & Benelux		
2016	2015	2014	2016	2015	2014	2016	2015	2014	2016	2015	2014
670	1,766	1,969	865	907	865	758	823	866	917	582	540
99.37%	97.14%	100.00%	100.00%	99.72%	98.21%	99.88%	99.15%	89.70%	100.00%	98.69%	59.67%
8	8	6	15	16	16	14	13	12	9	9	9
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	99.83%	100.00%	100.00%	100.00%
10.0%	10.5%	10.0%	2.6%	2.6%	2.4%	1.5%	1.5%	1.5%	4.9%	4.5%	4.0%
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	99.83%	100.00%	100.00%	100.00%
0	0			0	1	3	1	1	1	1	0
100%			100%			100%			100%		
1.61	0.78	0.81	3.15	3.51	3.40	5.78	5.75	6.04	3.21	3.09	4.01
100%			100%			100%			100%		
0.06	0.01	0.02	0.20	0.16	0.19	0.36	0.32	0.36	0.09	0.08	0.13
100%			100%			100%			100%		
0.03	0.01	0.02	0.16	0.16	0.15	0.24	0.21	0.21	0.08	0.07	0.11
100%			100%			100%			100%		
1	0		3	1		92	110		0	0	
100%			100%			100%					
2016	2015	2014	2016	2015	2014	2016	2015	2014	2016	2015	2014
			1.71	1.74	1.85	1.48	1.47	1.48	0.85		
			1.86	2.03	2.05				2.93	3.24	3.00
			1.94	1.85	1.87				1.53	1.34	1.14
			2.42	2.23	2.30				3.24	3.69	4.26
			1.74	1.77	1.72			3.61	2.24	2.36	2.90
									3.49	3.38	3.51
									2.97	3.13	2.64
									2.20	2.19	2.28
									2.67	2.67	2.89
									2.24	2.09	1.98
									2.52		
3.57	4.20	4.83									
7.64%	8.95%	12.02%	98.05%	97.15%	95.54%	92.02%	92.14%	92.28%	83.55%	60.17%	75.27%



	Infrastructures Europe				
	Grenelle 2 Law	GRI	2016	2015	2014
<b>Employment</b>					
<b>Total workforce ■■</b>	<b>1.A</b>	<b>LA1</b>	<b>16,942</b>	<b>17,062</b>	<b>16,860</b>
Workforce by geographic region ■■	1.A	LA1			
France	1.A	LA1	16,714	16,837	16,641
Belgium	1.A	LA1			
Other European countries	1.A	LA1	228	225	219
Total Europe	1.A	LA1	16,942	17,062	16,860
North America	1.A	LA1			
South America	1.A	LA1			
Asia - Middle East - Oceania	1.A	LA1			
Africa	1.A	LA1			
% reporting			100.00%	100.00%	100.00%
<b>Breakdown of workforce by SPC</b>	<b>1.A</b>	<b>LA1</b>			
Managers ■■	1.A	LA1	4,103	3,958	3,728
Non-managers ■■	1.A	LA1	12,839	13,104	13,132
% Managers	1.A		24.2%	23.2%	22.1%
% Non-managers	1.A		75.8%	76.8%	77.9%
% reporting			100.00%	100.00%	
<b>Breakdown of workforce by type of contract</b>	<b>1.A</b>	<b>LA1</b>			
Permanent □□	1.A	LA1	94.1%	94.4%	94.9%
Other □□	1.A	LA1	5.9%	5.6%	5.1%
% reporting			100.00%	100.00%	100.00%
<b>Age pyramid of permanent employees ■■</b>	<b>1.A</b>	<b>LA1</b>			
Under 25 years old	1.A	LA1	4.14%	4.4%	4.7%
25-29 yrs old	1.A	LA1	11.69%	12.0%	11.9%
30-34 yrs old	1.A	LA1	14.75%	13.6%	13.0%
35-39 yrs old	1.A	LA1	14.39%	13.5%	12.9%
40-44 yrs old	1.A	LA1	14.56%	14.4%	13.7%
45-49 yrs old	1.A	LA1	13.08%	12.8%	12.8%
50-54 yrs old	1.A	LA1	14.66%	16.3%	18.5%
55-59 yrs old	1.A	LA1	10.95%	11.5%	11.1%
60-64 yrs old	1.A	LA1	1.73%	1.7%	1.4%
65 and +	1.A	LA1	0.04%	0.0%	0.0%
% reporting			100.00%	100.00%	100.00%
<b>Female workforce ■■</b>	<b>1.F</b>	<b>LA13</b>	<b>4,236</b>	<b>4,169</b>	<b>3,975</b>
% reporting			100.00%	100.00%	100.00%
<b>Diversity and opportunity</b>					
<b>Proportion of women in workforce ■■</b>	<b>1.F</b>	<b>LA13</b>	<b>25.0%</b>	<b>24.4%</b>	<b>23.6%</b>
% reporting			100.00%	100.00%	100.00%
<b>Proportion of women in management ■■</b>	<b>1.F</b>	<b>LA13</b>	<b>30.4%</b>	<b>30.3%</b>	<b>29.6%</b>
% reporting			100.00%	100.00%	100.00%
<b>Proportion of apprentices in workforce</b>	<b>1.F</b>	<b>LA1</b>	<b>5.8%</b>	<b>5.5%</b>	<b>5.0%</b>
% reporting			100.00%	100.00%	100.00%

\* The ENGIE Group includes the 10 business lines.

■■ Reasonable assurance for financial year (FY) 2016.

## Social and environmental information, corporate social commitments

### 3.2 Social Information

	EMT & LNG			E&P			Other		
	2016	2015	2014	2016	2015	2014	2016	2015	2014
	<b>1,456</b>	<b>1,449</b>	<b>1,290</b>	<b>1,702</b>	<b>1,860</b>	<b>1,837</b>	<b>10,493</b>	<b>13,569</b>	<b>8,890</b>
	801	727	684	278	331	332	3,760	3,993	4,184
	439	465	473				2,971	5,323	2,772
	216	257	133	1,379	1,485	1,466	2,504	2,757	964
	1,456	1,449	1,290	1,657	1,816	1,798	9,235	12,073	7,920
							561	721	834
				10	11	9	697	775	136
				35	33	30			
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	1,257	1,231	1,087	608	657	644	6,614	7,471	6,097
	199	218	203	1,094	1,203	1,193	3,879	6,098	2,793
	86.3%	85.0%	84.3%	35.7%	35.3%	35.1%	63.0%	55.1%	68.6%
	13.7%	15.0%	15.7%	64.3%	64.7%	64.9%	37.0%	44.9%	31.4%
	100.00%	100.00%		100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	98.3%	98.1%	99.1%	97.2%	96.2%	95.3%	94.9%	95.9%	95.9%
	1.7%	1.9%	0.9%	2.8%	3.8%	4.7%	5.1%	4.1%	4.1%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	0.5%	0.4%	0.4%	0.4%	0.8%	0.8%	0.9%	1.4%	1.5%
	8.4%	11.9%	12.0%	5.4%	6.2%	5.3%	7.6%	8.3%	9.5%
	26.2%	27.7%	28.1%	10.6%	12.6%	12.8%	15.9%	16.8%	17.2%
	27.3%	26.0%	24.2%	15.1%	14.4%	14.8%	15.4%	13.8%	14.5%
	16.1%	16.2%	17.2%	14.4%	15.4%	15.2%	13.8%	12.8%	14.4%
	9.9%	8.2%	7.9%	14.9%	13.5%	13.1%	14.1%	13.8%	13.5%
	7.4%	5.8%	6.1%	13.9%	12.9%	13.2%	13.8%	14.3%	13.2%
	3.4%	3.2%	3.5%	15.0%	14.9%	15.8%	12.3%	12.9%	10.8%
	0.8%	63.0%	0.6%	9.9%	8.6%	8.7%	5.4%	5.2%	4.5%
	0.0%	0.0%	0.0%	0.6%	0.6%	0.3%	0.9%	0.7%	0.8%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	514	512	449	394	457	461	3,055	3,638	3,156
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	35.3%	35.3%	34.8%	23.2%	24.6%	25.1%	29.1%	26.8%	35.5%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	30.8%	31.0%	30.6%	22.5%	23.7%	23.9%	26.5%	26.0%	29.6%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
	0.5%	0.8%	0.8%	1.4%	1.3%	1.5%	2.0%	1.6%	2.4%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%

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## Infrastructures Europe

	Grenelle 2 Law	GRI	2016	2015	2014
<b>Proportion of disabled employees</b>	<b>1.F</b>		<b>3.5%</b>	<b>3.3%</b>	<b>3.3%</b>
Employees under 25 as a % of permanent hires	1.F		29.8%	23.2%	29.9%
Employees over 50 as a % of permanent hires	1.F		2.9%	7.6%	4.5%
<b>Staff and job movement</b>					
<b>No. of permanent hires (at constant scope)</b>	<b>1.A</b>	<b>LA2</b>	<b>799</b>	<b>920</b>	<b>713</b>
<b>No. of temporary hires (at constant scope)</b>	<b>1.A</b>	<b>LA2</b>	<b>600</b>	<b>635</b>	<b>573</b>
Hiring rate (at constant scope)	1.A	LA2	8.2%	9.3%	7.6%
% reporting			100.00%	100.00%	100.00%
Permanent hiring rate (at constant scope)	1.A	LA2	57.1%	59.2%	55.4%
% reporting			100.00%	100.00%	100.00%
<b>No. of lay-offs (at constant scope)</b>	<b>1.A</b>		<b>19</b>	<b>4</b>	<b>4</b>
% reporting			100.00%	100.00%	100.00%
<b>Turnover (at constant scope)</b>	<b>1.A</b>	<b>LA2</b>	<b>0.7%</b>	<b>2.0%</b>	<b>1.9%</b>
% reporting			100.00%	100.00%	100.00%
<b>Voluntary turnover (at constant scope)</b>	<b>1.A</b>	<b>LA2</b>	<b>0.6%</b>	<b>1.9%</b>	<b>1.8%</b>
% reporting			100.00%	100.00%	100.00%
<b>Career development</b>					
<b>Proportion of workforce trained ■■</b>	<b>1.E</b>	<b>LA10</b>	<b>72.9%</b>	<b>70.5%</b>	<b>69.7%</b>
% reporting			100.00%	100.00%	100.00%
<b>Proportion of women in trained workforce</b>	<b>1.E</b>	<b>LA10</b>	<b>21.2%</b>	<b>19.9%</b>	<b>19.8%</b>
% reporting			100.00%	100.00%	100.00%
<b>Proportion of managers and non-managers in trained workforce:</b>	<b>1.E</b>	<b>LA10</b>			
Managers	1.E	LA10	21.8%	19.8%	19.9%
Non-managers	1.E	LA10	78.2%	80.2%	80.1%
% reporting			100.00%	100.00%	100.00%
<b>Total no. of training hours</b>	<b>1.E</b>	<b>LA10</b>	<b>496,411</b>	<b>445,408</b>	<b>454,504</b>
% reporting			100.00%	100.00%	100.00%
<b>Hours of training by topic</b>	<b>1.E</b>	<b>LA10</b>			
Business techniques			46.5%	46.4%	47.1%
Quality, safety and environment			16.2%	22.8%	20.0%
Languages			1.6%	1.7%	2.7%
Management and personnel development			27.6%	18.7%	20.8%
Other			8.2%	10.4%	9.4%
% reporting			100.00%	100.00%	100.00%
<b>No. of training hours per person trained</b>	<b>1.E</b>	<b>LA10</b>	<b>40</b>	<b>38</b>	<b>39</b>
% reporting			100.00%	100.00%	100.00%
<b>No. of training hours per woman trained</b>	<b>1.F</b>	<b>LA10</b>	<b>42</b>	<b>36</b>	<b>38</b>
% reporting			100.00%	100.00%	100.00%
<b>Training expenses per hour of training (€)</b>	<b>1.E</b>	<b>LA10</b>	<b>57</b>	<b>65</b>	<b>60</b>
% reporting			100.00%	100.00%	100.00%

\* The ENGIE Group includes the 10 business lines.

■■ Reasonable assurance for financial year (FY) 2016.

## Social and environmental information, corporate social commitments

### 3.2 Social Information

EMT & LNG			E&P			Other		
2016	2015	2014	2016	2015	2014	2016	2015	2014
0.5%	0.4%	0.3%	1.8%	1.8%	1.8%	1.2%	1.1%	1.2%
9.9%	1.3%	6.3%	0.0%	5.1%	5.4%	10.9%	15.9%	12.1%
7.0%	2.5%	1.6%	14.3%	11.0%	10.7%	16.7%	13.3%	13.2%
71	79	64	14	137	149	570	686	614
22	19	12	17	27	43	329	336	251
6.3%	6.8%	6.1%	1.8%	8.8%	10.7%	8.4%	8.3%	10.3%
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
76.3%	80.6%	84.2%	45.2%	83.5%	77.6%	63.4%	67.1%	71.0%
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
6	3	8	12	4	10	439	328	241
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
3.7%	3.9%	3.3%	4.3%	2.5%	3.1%	8.1%	5.4%	6.3%
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
2.7%	2.9%	2.7%	1.1%	1.7%	2.5%	3.4%	2.3%	3.1%
100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%
53.0%	57.9%	73.2%	57.9%	70.5%	70.9%	58.4%	70.0%	60.4%
100.00%	98.09%	100.00%	100.00%	100.00%	100.00%	95.16%	96.58%	94.50%
38.9%	39.0%	43.0%	16.8%	23.3%	24.7%	26.9%	25.1%	37.5%
100.00%	98.09%	100.00%	100.00%	100.00%	100.00%	95.16%	96.58%	94.50%
84.3%	81.5%	85.3%	24.0%	34.5%	36.8%	59.5%	52.5%	71.2%
15.7%	18.5%	14.7%	76.0%	65.5%	63.2%	40.5%	47.5%	28.8%
100.00%	98.09%	100.00%	100.00%	100.00%	100.00%	95.16%	96.58%	94.50%
18,252	20,629	19,789	33,129	51,863	62,942	169,886	354,701	138,254
100.00%	98.09%	100.00%	100.00%	100.00%	100.00%	95.16%	95.58%	92.99%
35.5%	30.0%	25.6%	23.3%	41.6%	36.5%	43.4%	50.9%	32.3%
6.5%	3.5%	5.1%	59.0%	25.2%	33.1%	23.4%	23.4%	15.3%
19.8%	23.4%	35.5%	5.6%	10.1%	9.0%	10.5%	7.4%	16.2%
32.8%	35.6%	25.9%	3.0%	11.1%	13.3%	12.6%	9.7%	14.2%
5.4%	7.5%	7.8%	9.1%	12.1%	8.0%	10.1%	8.6%	22.0%
100.00%	98.09%	100.00%	100.00%	100.00%	100.00%	95.16%	95.58%	92.99%
23	25	22	32	40	49	28	38	28
100.00%	98.09%	100.00%	100.00%	80.72%	100.00%	95.16%	94.25%	92.99%
26	26	22	28	38	42	24	27	25
100.00%	98.09%	100.00%	100.00%	100.00%	100.00%	95.16%	95.58%	92.99%
51	85	55	34	53	58	30	26	49
100.00%	98.09%	100.00%	100.00%	80.72%	100.00%	95.16%	94.25%	92.99%

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<b>Infrastructures Europe</b>					
	<b>Grenelle 2 Law</b>	<b>GRI</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>
<b>Training expenses per person trained (€)</b>	<b>1.E</b>	<b>LA10</b>	<b>2,287</b>	<b>2,433</b>	<b>2,319</b>
% reporting			100.00%	100.00%	100.00%
<b>Working conditions</b>					
<b>Days of absence per person</b>	<b>1.B</b>	<b>LA7</b>	<b>16</b>	<b>16</b>	<b>17</b>
% reporting			100.00%	100.00%	100.00%
<b>Overtime</b>	<b>1.B</b>	<b>LA7</b>	<b>2.4%</b>	<b>2.5%</b>	<b>2.4%</b>
% reporting			100.00%	100.00%	100.00%
<b>Health and safety data</b>					
<b>No. of fatal accidents (employees)</b>			<b>0</b>	<b>1</b>	<b>0</b>
% reporting			100%		
<b>Frequency rate</b>			<b>1.79</b>	<b>2.46</b>	<b>3.05</b>
% reporting			100%		
<b>Severity rate (French benchmark)</b>			<b>0.07</b>	<b>0.10</b>	<b>0.07</b>
% reporting			100%		
<b>Severity rate (ILO benchmark)</b>			<b>0.07</b>	<b>0.05</b>	<b>0.11</b>
% reporting			100%		
<b>Number of new cases of occupational illness</b>			<b>1</b>	<b>3</b>	
% reporting			100%		
			Legal annual minimum wage in 2016 in €		
<b>Compensation</b>		<b>17,599</b>			
<b>Average salary of manual workers, clerical staff and technicians compared with national minimum wage</b>		<b>18,383</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>
France		9,173	1.63	1.60	1.62
Belgium		18,446			
Spain		16,116			
Netherlands		23,076			
United Kingdom		3,316	2.93	3.17	2.36
Luxembourg		5,004			
Romania		4,379			
Poland		4,201			
Czech Republic		4,860			
Hungary		-			
Slovakia		8,205			
Portugal		17,280			
Greece		6,165			
Germany		-			
Turkey					
United States					
% reporting			100.00%	100.00%	100.00%

\* The ENGIE Group includes the 10 business lines.

■ Reasonable assurance for financial year (FY) 2016.



## Social and environmental information, corporate social commitments

### 3.2 Social Information

	EMT & LNG			E&P			Other		
	2016	2015	2014	2016	2015	2014	2016	2015	2014
	1,187	2,129	1,186	1,083	2,100	2,845	852	997	1,358
	100.00%	98.09%	100.00%	100.00%	80.72%	100.00%	95.16%	94.25%	92.99%
	10	11	10	12	12	12	11	12	10
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	99.32%	99.00%	100.00%
	0.4%	0.6%	0.2%	1.6%	1.8%	1.9%	0.6%	1.2%	0.7%
	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	99.32%	100.00%	100.00%
	0	0	0	0	0	0	0	0	0
	100%			100%			100%		
	0.00	0.89	0.52	0.35	0.67	0.43	1.15	1.05	1.32
	100%			100%			100%		
	0.00	0.01	0.00	0.00	0.07	0.01	0.02	0.02	0.02
	100%			100%			100%		
	0.00	0.01	0.00	0.00	0.05	0.04	0.02	0.02	0.04
	100%			100%			100%		
	0	0			0		1	1	
							100%		
	2016	2015	2014	2016	2015	2014	2016	2015	2014
	0.85	1.49	0.76				1.25	1.40	1.43
							3.68	3.92	3.17
							4.92	4.68	4.56
				4.42	4.60	4.61	1.74	2.58	
							1.55	3.73	
							4.07	2.02	1.59
							1.91	2.15	2.71
							3.39		
				3.37			0.24		
	100.00%	100.00%	100.00%	81.43%	80.34%	47.11%	84.08%	28.85%	69.37%

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### 3.2.7.1 Note on methodology of social indicators

#### 1 Tool

The social indicators are derived from Group social reporting (GSR). They are set out in a shared Group database (which may be viewed on request).

The collection, processing and reporting of data entered by the local legal entities, subsidiaries of the ENGIE Group, is carried out in the Magnitude financial consolidation application, in accordance with the IFRS financial scope.

The indicators published in this report relate to fully consolidated companies, whose capital and management are under the control of ENGIE.

The social indicators are fully consolidated, regardless of the percentage of the company's capital owned.

#### 2 Scope of reporting

A reporting percentage is attached to each indicator, according to the workforce covered. Some missing or inconsistent data are omitted from the report.

#### 3 Consolidation methods

The indicators for this report are consolidated using clearly defined procedures and criteria.

Data on the organization's scope, employee turnover, working conditions, training and safety were consolidated by aggregation.

#### 4 Internal control

The social data are successively consolidated and verified by each operational entity and by each BU, before reaching the Group HRD level.

#### 5 Grenelle 2 Law

Social information pursuant to Article R. 225-105 of the French Commercial Code can be found in Chapters 3.1 and 3.2, and a correspondence table showing the sections of this registration document is provided in Appendix B. The table of indicators also refers to the information required by the implementation decree.

#### 6 Additional information on some indicators

##### a) Employment

The Group data comprise figures from the 25 BUs that make up the new organization, grouped into 10 operating segments.

Administrative employees are recognized under "senior technicians and supervisors".

Note that Belgium does not declare any "manual workers, clerical staff and technicians", according to practices in the energy segment

(Electrabel), as contractually, unskilled or low-skilled workers have employee status. This might cause some underestimation of this category.

The French concept of cadres (managerial staff) is sometimes difficult to understand in other countries. This can lead to a slight underestimation of the number of managerial staff because some entities may take only their senior management into account.

##### b) Staff changes

All indicators in this section are calculated on a constant scope basis, i.e. the fully consolidated reporting entities included in the scope of consolidation at 12/31/Y-1 and at 12/31/Y.

The lay-offs indicator does not include contractual terminations.

##### c) Diversity and equal opportunity

The declared percentage of people with disabilities provides the best possible information on the inclusion of people with disabilities. We do not consider it relevant to provide a reporting percentage for this indicator, since some entities are unable to gather information due to local regulatory restrictions.

##### d) Career development

The training indicators provided in this document do not take e-learning into account.

When all data cannot be provided within the timelines, the most recent are provided as well as a forecast of the missing data for year-end.

##### e) Organization of working time

The working hours of personnel within the Group companies are organized within the legal framework for working time, which varies from country to country.

Days of absence per person are calculated according to the Group convention of eight hours of work per day.

##### f) Compensation

Group policy is to offer everyone compensation that is personalized, fair and competitive on the market, and which reflects the performance and level of responsibility of each person.

The compensation indicator is the ratio of the gross average salary in the "manual workers, clerical staff and technicians" category as a proportion of the national legal minimum wage. This ratio enables assessment of the relative average national salaries of full-time manual workers, clerical staff and technicians.

The average gross salary is obtained by dividing the annual gross salary by the average monthly full-time equivalent (FTE) workforce.

The restitution rate mainly depends on the existence and availability of a legal minimum wage. Overall, it is close to 80%. Note that this ratio is not calculated for Belgium, which has not declared any "manual workers, clerical staff and technicians." Legal minimum wage data for 2016 are provided by Eurostat.

Changes in payroll costs are also provided in Chapter 6.4.4.

### 3.2.7.2 Note on methodology of health and safety indicators

#### Scope

The analyses in this document cover the entities and activities that are under ENGIE's operational management, regardless of financial consolidation method.

The health and safety scope was broadened on January 1, 2016 to all activities that are under the Group's operational management.

#### Methods for checking and consolidating indicators

After being collected, the quantitative health and safety data in this report were checked and consolidated according to clearly defined procedures and criteria.

Consolidated data for the GrDF BU, which for some activities operates jointly with Enedis, only takes into account the "natural gas" portion of hours worked.

## 3.3 Environmental information

ENGIE faces the main environmental challenges: climate change, the quality and availability of natural resources (air, water, soil and energy) and the protection of biodiversity and ecosystems. Although its activities sometimes have an impact on ecosystems and natural resources, the Group seeks to measure and reduce this within a process of environmental management of its activities.

ENGIE's challenges and ambitions in this area are reflected in the Group's environmental policy (page 16 of the Group's environmental and societal responsibility policy, available on the ENGIE website) and in the performance indicators deployed across all its activities. A team in charge of analysis and coordination is specifically dedicated to

environmental responsibility and reports to the Director of Environment. It has environmental coordinators in each BU who lead their own networks of coordinators, organize actions, supplement corporate expertise with their knowledge of operations, and implement environmental reporting.

The Environmental and Societal Responsibility Department produces an annual report which it sends to the Executive Committee and presents to the Board of Directors' Ethics, Environment and Sustainable Development Committee. This report is supplemented by BUs' own reports and letters of environmental compliance, as well as the results of environmental audits ordered by the Executive Committee.

3

### 3.3.1 Legal and regulatory framework

The Group actively monitors regulatory developments (set out in Chapter 2, "Risk Factors"), stating its positions while they are being prepared and applying the new rules as soon as they are published. In particular, the Group has been calling for the harmonization of international regulations and greater integration between the various environmental and energy policies. In the run-up to COP21, the Group strongly pledged to support an ambitious international climate agreement to limit the global temperature rise to 2°C. It also pledged to

support the more widespread application of regulations on carbon pricing, which would be a price signal for investment in low-carbon technologies and an incentive to reduce greenhouse gas emissions. To this end, the Group plays an active role in the CPLC (Carbon Pricing Leadership Coalition). Gérard Mestrallet also co-chaired a carbon-pricing task force mandated by the French government, which made several recommendations applicable to France, Europe and the world.

### 3.3.2 The environmental management system<sup>(1)</sup>

At the end of 2016, the entities that had implemented an Environmental Management Systems (EMS) accounted for 81% of relevant Group revenue<sup>(2)</sup> in terms of environmental impact. The decision to make

certified an EMS by a third party is assessed with regard to economic conditions and interest.

#### PERCENTAGE OF RELEVANT REVENUE COVERED

Indicator title	Scope covered in 2016 (% relevant revenue)	ENGIE 2016	ENGIE 2015
By an EMAS certification ■■	99.55%	5.3%	9.3%
By an ISO 14001 certification (non-EMAS) ■■	99.72%	57.7%	57.2%
By other external EMS certifications	97.86%	3.1%	3.1%
<b>TOTAL EXTERNAL CERTIFICATIONS</b>		<b>66%</b>	<b>69.5%</b>
By an internal certification (but not by a certified EMS)	98.12%	15%	14.7%
<b>TOTAL INTERNAL AND EXTERNAL EMS</b>		<b>81%</b>	<b>84.2%</b>

■■ Verified by the Auditors with "reasonable" assurance for 2016.

When the implementation of a certified or registered management system is not economically justified, entities are encouraged to define an internal management system ensuring concern for the environment in carrying out their activities. As a result, some Group entities have

defined their own management system standard. When an internal or external EMS is implemented, employees take part in awareness and training sessions relating to the environmental issues they encounter at their sites so that they adopt the EMS and make it their own.

### 3.3.3 Environmental responsibility, performance control and measurement systems

To monitor the implementation of its environmental policy, to control environmental risks and to encourage the communication of its environmental performance to stakeholders, ENGIE has developed a specific reporting system that goes beyond the requirements of the French law, based on work conducted within international bodies such as the Global Reporting Initiative (GRI) and the World Business Council for Sustainable Development (WBCSD).

Environmental reporting is closely tied to operational performance reporting, thus becoming a management tool. The Group's General Management transmits this goal of making environmental concerns an integral part of management responsibilities.

A system of letters for environmental compliance ensures operational management involvement.

#### Methodological elements of the 2016 environmental reporting

ENGIE conducts its environmental reporting using a dedicated tool that allows data to be reported following a defined methodology. This tool, called CERIS, is an environmental reporting IT solution used to manage the network of environmental correspondents and coordinators; to handle the management and documentation of the scope of environmental reporting; to manage data entry, monitoring and consolidation of indicators; and to provide the documentation necessary for producing and collecting data (reporting procedures and instructions).

CERIS is deployed in each of the BUs and thus covers the entire ENGIE organization.

The legal entities included in the reporting scope are those whose operations are relevant in terms of environmental impact and that are consolidated fully or proportionately under the rules of financial consolidation (IFRS). Legal entities solely engaged in energy trading, financial activities or engineering are excluded. The selected entities report on the performance and impacts of the industrial facilities over which they have technical operational control, including facilities operated on behalf of third parties. Legal entities consolidated at equity are excluded.

(1) Section 3.5 "Report of the Statutory Auditor designated as an independent third-party entity on the review of environmental, social and societal information published in the management report included in the registration document" and Section 3.6 "Statutory Auditors' reasonable assurance report on selected social, environmental and governance information".

(2) Relevant revenue excludes revenue generated by activities not considered pertinent in terms of environmental impact (services, trading, and sales activities, etc.).

Thus, in accordance with the rules of financial consolidation, 100% of the impact data collected is consolidated when the entities are fully consolidated. For entities proportionately consolidated, the environmental impact data are consolidated in proportion to the Group's consolidation rate provided that it has 100% technical operational control or that as a minimum this is shared with other shareholders.

The scope is determined on June 30 of the fiscal year. For disposals after that date, the entity is expected to complete the environmental questionnaire with the data available on the last day of the month prior to the disposal. Acquisitions made after June 30 are not taken into account, unless the BU has requested an exception, and subject to the data being available.

To calculate environmental management indicators such as the "share of relevant revenue covered by an environmental certification, an environmental crisis management plan, etc.", the relevant revenue is estimated for each legal entity. To obtain the relevant revenue, operations regarded as "not relevant in terms of environmental impact" (e.g. trading, finance and engineering) are stripped out of the consolidated revenue figure of each legal entity.

The procedures of environmental data reporting encompass general procedures defined as standard guidelines to be implemented at the appropriate levels of the reporting process. Procedures and guidelines are rolled out Group-wide via a network of duly mandated environmental contacts and coordinators. These procedures and guidelines at Group and BU level describe in detail the environmental data collection, control, consolidation, validation and transmission phases at different levels of the organization, as well as the rules for defining the scope of consolidation. They include technical documents that provide methodological guidelines for the calculation of some specific indicators. Depending on its activities, each entity is assigned a profile that determines the indicators to answer. The list of the entities included in the scope of environmental reporting is approved by each BU.

The definitions of the indicators used to measure the environmental performance of Group businesses have been revised based on comments made by the Statutory Auditors. They also take into account the comments by line managers represented in dedicated work groups. All the documentation is available from the Group upon request (Environmental and Societal Responsibility Division).

The following points should be noted with regard to the data published in this report:

1. the reliability of the scope of environmental reporting is a priority for ENGIE, which is evolving in an international context of business disposals and acquisitions. Before every reporting campaign, the financial scope for consolidation is compared against the information fed back by the BU's environmental managers in order to check which industrial entities contributing to CERIS report to which financial entities;
2. for fiscal year 2016, the campaign was closed a month early to take into account the possible impact of the reorganization into BUs on January 1, 2016. This ensured that all expected data could be delivered and validated in a timely manner. As a consequence, the estimated part of the data can reach up to three months in some

indicators. However, entities with a material effect on reporting could deliver data over 12 months or over 11 months in real terms;

3. ENGIE has been a signatory to the CEO Water Mandate since 2007, thus indicating its commitment to preserving water resources. To improve the Group's water management, the indicators relating to water have been adjusted and brought into line with the GRI (Global Reporting Initiative) indicators in 2011. This will allow ENGIE to respond more fully to external questionnaires such as ROBECOSAM, CDP Water Disclosure, CEO Water Mandate, etc. These indicators fall into four categories: Withdrawal, Discharge, Consumption and Recycling/Reuse. Since 2015, the materiality of the water indicators published has been reassessed and the Statutory Auditors now audit the inputs, outputs and consumption of fresh and non-fresh water;
4. as it is concerned about what becomes of the waste generated by its activities, the Group has indicators on the production and recovery of the waste generated by its activities. These are based on definitions of waste and recovery established by local regulations. To avoid erroneous data about stocks, only the tonnages taken away and weighed on site are reported as disposed of. The tonnages that must be reported are wet or dry, depending on the way they are disposed of: if the waste disposed of was wet, the reported tonnages are wet and the converse for dry waste. As an exception, if the waste is definitively stored on site, the associated dry tonnages must also be reported as disposed of. In the latter case, the waste is never recovered. For example, this situation applies to the Hazelwood and Loy Yang B plants in Australia. Waste generated by the construction or dismantling of industrial facilities, by the repowering or upgrading of facilities, and by soil rehabilitation, are not covered by the indicators for waste generated by activities ;
5. CO<sub>2</sub> emissions from the combustion of fossil fuels were calculated based on the most recent emission factors published by the IPCC (IPCC Guidelines for National GHG Inventories, Vol. 2 Energy – 2006). The global warming potential (GWP) compares the warming capacity of the various greenhouse gases to CO<sub>2</sub>. The GWP used to convert the Group's greenhouse gas (GHG) emissions to CO<sub>2</sub> equivalent are the latest GWP published by the IPCC (5<sup>th</sup> Assessment Report – 2014), considered on a 100-year scale;
6. the Biodiversity indicators used to monitor changes in the Group's objective (see Section 3.3.4.8) are based on the notions of "priority site" and "targeted action plan". A priority site is one that presents a potential risk for biodiversity due to the nature of its activities. It is located in or near a protected area, and has no artificial separation such as a motorway, an industrial zone, a city, etc. between it and the protected area. Subject to appropriate justification, a site that does not meet these objective criteria still has the option to declare itself a priority site. Since 2015, studies conducted by consulting firms on sites that were shown to have no impact on biodiversity have been taken into account. As a result, some priority sites were reclassified as non-priority sites. In addition, non-productive sites and temporary sites such as worksites are excluded from the reporting perimeter. The targeted action plan includes all voluntary and regulatory measures implemented to restore, preserve or encourage biodiversity locally;

7. specific GHG emissions from energy generation in kg CO<sub>2</sub> eq/MWh are calculated for the BUs where this is a main activity: Europe Generation, North America, Latin America, Brazil, Asia Pacific, "Middle East, South and Central Asia, and Turkey", Benelux, "North, South and Eastern Europe", United Kingdom, BtoB, France Networks, and France Renewables;
8. data related to LNG vessels' activity, including impacts and consumption, have been incorporated as operating sites and are therefore reported as such. The vessels included in the calculations are those in which ENGIE has majority ownership, or those operated by a subsidiary in which ENGIE has a majority stake, as well as long-term chartered vessels (> 1 year). This gives a list of 13 ships: Grace Cosmos, BW GDF SUEZ Everett, BW GDF SUEZ Boston, Matthew, Provalys, GDF SUEZ Global Energy, Gaselys, BW GDF SUEZ Paris, BW GDF SUEZ Brussels, GDF SUEZ Neptune (SRV), GDF SUEZ Point Fortin, Grace Acacia, and Grace Barberia. Any ISO 14001 certification of vessels is also taken into account;
9. for the sake of consistency, the factor for converting thermal energy produced (GWh<sub>th</sub>) into electric power (GWh<sub>e</sub>) is set at 0.44 for all Group businesses and at 0.25 for incinerators;
10. significant environmental impacts resulting from subcontractors during services performed at one of the Group's facilities must be included in the Group's impacts except when a specific contractual clause provides that a subcontractor is liable for impacts generated at the site while providing the service. Data provided by subcontractors is not subject to systematic internal verification before being included in Group data and is the responsibility of the subcontractors alone. Regulations and legal obligations related to the environment may differ from one country to another, and certain data may thus be sometimes more difficult to gather.

### 3.3.4 Group actions

#### 3.3.4.1 Climate change

##### Direct emissions

Information presented in this section and in section 2.2.3 "Climate Impact" reflects the financial risks associated with the effects of climate change and the measures taken by the company to mitigate them by implementing a low carbon strategy in all the components of its activity as required by Article L. 225-37 of the Commercial Code.

By developing a low carbon energy mix and through its energy efficiency activities, the Group has put energy transition and the fight against climate change at the heart of its strategic focus. ENGIE has set itself the target of a 20% reduction in its specific CO<sub>2</sub> equivalent emissions between 2012 and 2020. The emission rate at the end of 2016 was 393 g CO<sub>2</sub> eq/kWh, a sharp decrease over 2015. ENGIE decided in the fall of 2015 not to launch any new coal developments. The Group continues to be committed to developing regulations on carbon pricing, renewable energy, and solutions for energy efficiency. ENGIE actively participates in the work done by civil society on climate change, providing operating expertise – including to Group customers – through

a range of commercial offerings, including participation in the carbon market, technical solutions, support for and/or implementation of strategies and action plans to reduce greenhouse gas (GHG) emissions. In addition, the Group responds annually to the CDP questionnaire (formerly the Carbon Disclosure Project).

As part of this strategy of transitioning to low-carbon activities, ENGIE announced in 2016 that it had begun to sell and definitively shut down its coal assets: 0.7 GW were sold in the United States and 0.3 GW in India, 1 GW was shut down in the UK, 0.7 GW in the Netherlands, 1.4 GW in Poland and 1.5 GW in Australia (the Hazelwood plant). Natural gas energy production facilities representing 8 GW of capacity were also sold in the United States. At December 31, 2016, 50% of the program of fossil-fuel disinvestment had already been completed.

As a result of these operations, the proportion of coal in ENGIE's power generation mix will be halved, falling from 18% to 7%, and the Group's CO<sub>2</sub> emissions will be reduced by 46 million tons in absolute terms.

In 2016, the Group's GHG emissions (Scope 1 excluding tertiary emissions) decreased by more than 9.5%, to 120 million tons of CO<sub>2</sub> equivalent.<sup>(1)</sup>

Indicator title	Scope covered in 2016		ENGIE 2016	ENGIE 2015
	(% relevant revenue)			
Total direct GHG emissions – Scope 1 ■■	98.26%		120,150,104 t CO <sub>2</sub> eq.	132,757,296 t CO <sub>2</sub> eq.
GHG emissions per business unit – energy generation			393 kg CO <sub>2</sub> eq./MWheq	445.5 kg CO <sub>2</sub> eq./MWheq
GHG emissions per business unit – gas exploration, production			4.2 kg CO <sub>2</sub> eq./MWheq	4.5 kg CO <sub>2</sub> eq./MWheq
GHG emissions per business unit – gas storage			0.9 kg CO <sub>2</sub> eq./MWheq	0.9 kg CO <sub>2</sub> eq./MWheq
GHG emissions per activity unit – gas transportation (excluding via LNG tanker)			1.7 kg CO <sub>2</sub> eq./MWheq	1.3 kg CO <sub>2</sub> eq./MWheq
GHG emissions per business unit – LNG terminals			2.6 kg CO <sub>2</sub> eq./MWheq	2.0 kg CO <sub>2</sub> eq./MWheq
GHG emissions per business unit – gas distribution			2.0 kg CO <sub>2</sub> eq./MWheq	2.2 kg CO <sub>2</sub> eq./MWheq
GHG emissions per activity unit – gas transportation by boat			14.1 kg CO <sub>2</sub> eq./MWheq	12.2 kg CO <sub>2</sub> eq./MWheq

■■ Verified by the Auditors with "reasonable" assurance for 2016.

(1) The scope used for environmental reporting is specific (it includes facilities where ENGIE has technical operational control) and thus differs from the scope used when assessing the power generation fleet in 1.3.1.4 "Key figures".

Adaptation to climate change is key to anticipating its negative effects and thus making ENGIE's facilities and activities more resistant to natural hazards (the increasing incidence of extreme events such as floods and droughts, and other more gradual manifestations such as rising sea levels and rising temperatures). The risks generated by climate change are multiple: physical risks, risks of disruption to value chains, reputational risks, regulatory risks, etc. ENGIE is implementing practical measures to guard against this set of risks, including a plan to construct a wall to tackle the exceptional flood risk at the Tihange site in Belgium, and a vegetation project to prevent soil erosion in the event of storms in Mexico. The Group has also established methods to help its various sites to draw up adaptation action plans. Two workshops were held in 2016 (Elengy, hydroelectric power stations). The use of tools, such as Aqueduct software, helps the Group to identify local-scale risks and enables it to identify adaptation strategies tailored to the problems and features of each site. Adapting to climate change may have multiple beneficial effects for ENGIE: anticipating risks enables it to manage its assets better, cut costs and expand its market to new products and services.

#### Indirect emissions

Article 173, para. 4 of Law 2015-992 of August 17, 2015 on the energy transition for green growth amends Article L. 225-102-1, para. 5 of the French Commercial Code as follows: "It shall also include information on how society takes into account the social and environmental consequences of its activity, including the impact on climate change of its activity and the use of the goods and services it produces, and its societal commitments in favor of sustainable development, the circular economy, the fight against food wastage, the fight against discrimination and the promotion of diversity. A decree of the Council of State shall establish two lists setting forth the information referred to in this paragraph and the manner in which it is to be presented, so as to enable a comparison of the data, depending on whether the company is admitted to trading on a regulated market".

The Group's approach to GHG emissions accounting and reporting is based on the GHG Protocol Corporate Standards (for companies) and the ISO 14064 standard (supplemented by ISO 14069). These standards constitute an internationally recognized reference framework. For purposes of consistency, the so-called "Scope 3" emissions listed below exclude those of the water and waste management businesses of SUEZ.

ENGIE has analyzed the various categories of emissions in order to identify and quantify the most pertinent categories. The following categories have been identified and quantified to date.

Indicator title	ENGIE 2016
Indirect emissions related to energy ("Scope 2")	
Indirect emissions related to power consumption <sup>(1)</sup>	2,776,748 t CO <sub>2</sub> eq.
Indirect emissions related to the consumption of steam, heating or cooling <sup>(1)</sup>	1,078,385 t CO <sub>2</sub> eq.
Other indirect GHG emissions ("Scope 3")	
Energy-related activities not included in direct emissions and energy indirect emissions (fuel extraction production, transport, distribution)	16,507,068 t CO <sub>2</sub> eq.
Investments (GHG emissions from power plants consolidated under the equity method)	32,046,546 t CO <sub>2</sub> eq.
Use stage of the product (fuel sales to third parties)	142,530,042 t CO <sub>2</sub> eq.

In addition to the above items, ENGIE has also launched an assessment of the following items.

#### Other indirect GHG emissions ("Scope 3")

Purchased products

Capital equipment

Downstream transport and distribution

(1) The electricity and thermal energy consumption used to calculate this data is subject to verification by the statutory auditors with "reasonable" assurance for the financial year 2016 (see 3.3.4.3)



### 3.3.4.2 Renewable energy

The strengthening of the Group's capacity in renewable energy has continued, for both electricity and heat generation, and in the case of biogas for transportation. In addition to this commitment, ENGIE has placed a very innovative green power offering on the French market at no additional cost to the consumer. The Group is thus providing a

solution to the challenge of changing behaviors in the face of frequently higher cost of green products.

In 2016, renewable energy accounted for roughly 16.8 GW of installed electric equivalent, representing 21.5% of the capacity directly operated by the Group.

Indicator title	Scope covered in 2016 (% relevant revenue)	ENGIE 2016	ENGIE 2015
		Renewable – Net installed power (electric and thermal) ■■	99.98%
Share of renewable resources in installed capacity	99.98%	21.5%	20.2%
Renewable – Electricity and heat produced ■■■	99.97%	74,082 GWheq	70,391 GWheq
Energy produced – share of large hydropower		78.0%	80.5%
Energy produced – share of small hydropower		1.3%	1.7%
Energy produced – share of wind		7.6%	5.4%
Energy produced – share of geothermal		0.1%	0.092%
Energy produced – share of solar		0.6%	0.433%
Energy produced – share of biomass and biogas		12.4%	12.0%

■■ Verified by the Auditors with "reasonable" assurance for 2016.

These capacities correspond to the scope of the environmental reporting specified in section 3.3.3 (excluding equity-accounted and non-controlled facilities).

### 3.3.4.3 Energy efficiency

For electricity-generating facilities, energy performance is directly connected to the site's efficiency which influences its profitability. Measures taken to improve the generation fleet, and which are compliant with environmental regulations and the constraints of the

electricity market, have helped optimize energy efficiency and hence consumption of raw materials. For example, the replacement of older turbines or boilers with recent models has an immediate positive impact on a facility's energy efficiency.

Indicator title	Scope covered in 2016 (% relevant revenue)	ENGIE 2016	ENGIE 2015
		Primary energy consumption – total (excluding own consumption) ■■	99.78%
Share of coal/lignite		38.4%	42.0%
Share of natural gas		50.6%	49.4%
Share of fuel oil (heavy and light)		1.1%	1.1%
Share of biomass and biogas		7.2%	5.1%
Share of other fuels		2.5%	2.2%
Proportion of fuel in transport		0.3%	0.3%
Electricity and thermal energy consumption (excluding own consumption) ■■	99.49%	9,901 GWheq	11,759 GWheq
Energy efficiency of fossil fuel plants (including biomass) ■■	99.90%	41.7%	41.6%

■■ Verified by the Auditors with "reasonable" assurance for 2016.



### 3.3.4.4 Nuclear energy

Maintaining a very high level of safety at the seven nuclear reactors operated by ENGIE is a key priority for the Group. ENGIE also attaches great importance to limiting the environmental impact of these facilities (e.g. waste).

Provisions for the downstream portion of the nuclear fuel cycle (operations relating to fuel after its use in a nuclear reactor) and for the costs of decommissioning nuclear power plants after they are shut down, are shown in Note 18 to Section 6.2 "Consolidated financial statements".

Indicator title	Scope covered in 2016 (% relevant revenue)	ENGIE 2016	ENGIE 2015
Radioactive gas emissions			
Rare gases	100%	58.84 TBq	54.51 TBq
Iodines	100%	0.04 GBq	0.06 GBq
Aerosols	100%	0.40 GBq	0.34 GBq
Radioactive nuclear waste (weak and average activity)	100%	204 m <sup>3</sup>	164 m <sup>3</sup>
Radioactive liquid wastes			
Beta and Gamma emitters	100%	17.66 GBq	12.83 GBq
Tritium	100%	82.88 TBq	19.60 TBq

The risk factors relating to nuclear power are presented in Section 2.4.3 "Nuclear power plants in Belgium".

### 3.3.4.5 Water

As a committed player in water management, ENGIE is taking part in the current debate over corporate risk disclosure and water stewardship, alongside organizations such as the *World Business Council for Sustainable Development* and the *CEO Water Mandate* of the UN Global Compact. These initiatives have led to a homogenization of the definitions and to the implementation of *water stewardship*. The Group has two water-related objectives for 2020: one involves the implementation of concerted local action plans for sites in extreme and high water stress areas, and the other involves reducing freshwater abstraction. Each year, as part of the optimization of its energy production, ENGIE assesses the risk of water stress for the industrial sites of the Group using the *Aqueduct* tool (*World Resource Institute*). In

addition, as of 2013, the Group has calculated the water footprint in the life cycle analysis of 1 kWh of electricity, and in 2016 that of 1 kWh of gas. Actions are being taken to ensure that sites located in areas of extreme water stress define local action plans in consultation with stakeholders. All of the Group's initiatives have resulted in a 30% reduction in freshwater withdrawals from its electricity generation business since 2012. Thanks to its commitment to water resources management, ENGIE has been awarded with the A- rating by the *CDP Water Disclosure*.

The indicators reported are for water use related to industrial processes and to cooling and heating purposes

Indicator title	Scope covered in 2016 (% relevant revenue)	ENGIE 2016	ENGIE 2015
Fresh water			
Total withdrawal	99.64%	5,110 Mm <sup>3</sup>	5,572 Mm <sup>3</sup>
Total discharge	99.56%	4,971 Mm <sup>3</sup>	5,432 Mm <sup>3</sup>
Non-fresh water			
Total withdrawal	99.62%	8,829 Mm <sup>3</sup>	8,231 Mm <sup>3</sup>
Total discharge	99.52%	8,812 Mm <sup>3</sup>	8,232 Mm <sup>3</sup>
Total consumption	99.58%	156.2 Mm <sup>3</sup>	138.8 Mm <sup>3</sup>

(1) The 2015 data were updated with revised data in 2016 after an improvement in the calculation method applied in the CPCU entity. This method may be further improved in the coming years, as it involves an overestimation of freshwater consumption at this entity.

## 3.3.4.6 Waste

Indicator title	Scope covered in 2016 (% relevant revenue)	ENGIE 2016	ENGIE 2015
Total quantity of non-hazardous waste and by-products discharged (including sludge)	99.63%	4,682,305 t	5,724,707 t
Fly ash, reformed	100%	2,715,145 t	3,256,838 t
Ash, bottom ash	100%	1,403,843 t	1,691,403 t
Desulfurization by-products	100%	352,129 t	410,887 t
Sludge	99.67%	21,321 t	52,762 t
Driftwood	99.97%	6,321 t	7,115 t
Drilling waste	100%	617 t	9,328 t
Total quantity of non-hazardous waste and by-products recovered (including sludge)	98.84%	4,088,134 t	5,109,566 t
Total quantity of hazardous waste and by-products discharged (including sludge and excluding radioactive waste) ■■	99.62%	529,180 t	411,150 t
Total quantity of hazardous waste and by-products recovered (including sludge and excluding radioactive waste) ■■	98.62%	53,263 t	54,664 t

■■ Verified by the Auditors with "reasonable" assurance for 2016.

Accordingly, in January 2014, ENGIE took the recommendations of an internal audit on waste management and incorporated them into its environmental policy. Its chief aim was to reduce the quantities of waste it produces and to increase its rate of waste recovery.

These efforts have led to a recovery rate of 87.3% for non-hazardous waste and 10% for hazardous waste in 2016. The Group's industrial sites actively seek local waste recovery solutions, even though some of these channels remain dependent on market opportunities governed by the laws of supply and demand.

Food waste and associated waste only relate to group catering for employees. In this area, ENGIE selects subcontractors that include measures against food waste in their specifications.

## 3.3.4.7 Atmospheric pollutants

ENGIE uses a wide range of techniques to further reduce its emissions: reduction at the source using a tailored energy package; optimization of combustion and treatment of fumes; filters or water injection to reduce particle emissions; installation of low-NOx burners or urea injection (secondary treatment) to control nitrogen oxides; and choosing fuels with very low sulfur content to reduce sulfur dioxide emissions.

Indicator title	Scope covered in 2016 (% relevant revenue)	ENGIE 2016	ENGIE 2015
NOx emissions	99.47%	136,895 t	143,253 t
SO <sub>2</sub> emissions	99.49%	192,213 t	237,031 t
Particulate matter emissions	98.96%	11,353 t	12,919 t

### 3.3.4.8 Management of biodiversity

In order to contribute to the fight against the global erosion of biodiversity and to remedy its impact under the “prevent, reduce, offset” process, the Group has been committed since 2010 to integrating biodiversity into its strategy and activities. Restoring natural habitats, reducing the impact of wind turbines on wildlife, installing fish ladders at dams, ensuring that gas-grid easements contribute to ecological continuity, and applying differentiated landscaping to green spaces. In pursuit of its commitment to biodiversity, the Group relies on the skills and expertise of its two partners: the French committee of the IUCN (International Union for Conservation of Nature) and France Nature Environnement.

As part of a voluntary initiative, which was recognized at the end of 2012 by the French government’s National Strategy for Biodiversity, the Group pledged to provide each of its priority sites in Europe with a targeted action plan<sup>(1)</sup> designed to address the biodiversity protection issues identified at the site and/or by local stakeholders, based on the site’s activity. At the end of 2015, 98.3% of the priority sites (176 out of 179) had prepared such action plans; we are therefore comfortably approaching the 100% target set by ENGIE.

On the strength of these results, ENGIE launched a new approach in 2016 to separate the regulatory action plans from the voluntary action plans launched on priority sites worldwide, and filed a new application to extend its contribution to the National Biodiversity Strategy.

### 3.3.4.9 Active prevention of environmental risks

The management of industrial, health and environmental risks has two components: risk prevention and crisis management.

<i>Indicator title</i>	<b>2016 data</b>	<b>2015 data</b>
Environmental risk prevention plan	82.66%	84.5%
	Relevant revenue	Relevant revenue
Environmental crises management plan	85.5%	85.6%
	Relevant revenue	Relevant revenue

There were 24 claims and two awards for environmental or public health damages. However, the total compensation was negligible (€4,500). The Group actively monitors these data and implements actions to reduce them further. ENGIE has financial provisions of €20.6 million for risks

associated with environment-related disputes. In 2016, environmental expenses (capital expenditure and recurring operating expenses related to environmental protection) came to nearly €700 million.

<i>Indicator title</i>	<b>Scope covered in 2016 (% relevant revenue)</b>	<b>2016 data</b>	<b>2015 data</b>
Environment-related complaints	98.85%	24	173
Environment-related fines	98.85%	2	4
Amount of compensation (thousands of euros)	98.73%	4.5	1.5
Environmental expenses (thousands of euros)	95.13%	699,835	634,722

(1) A targeted action plan must combine and detail all the measures taken to preserve or restore biodiversity locally (see the note methodology in Section 3.3.3 for more details).

### 3.3.4.10 Nuisance

Any industrial activity is a source of noise. In order to reduce its impact, Group entities conduct regular soundproofing work (acoustic cladding, noise barriers, containment, and so on). For more recent projects, reducing this potential form of nuisance is directly integrated into the design.

For its renewable energy projects, particularly onshore wind and solar, ENGIE conducts impact studies and offers support measures to prevent, reduce or offset any noise or visual impact. Examples of such actions include defining and implementing turbine restrictions (stoppage or reduced power at key times and/or under certain wind conditions), conducting specific actions with builders to reduce the sound power of machines, seeking better harmonization with the landscape during the design and, after construction, initiating planting and vegetation schemes on sites or for neighbors if there is an obvious visual impact. By way of illustration, in France, ENGIE has partnered with the “Respect” project launched as part of the offshore wind project in the city of Tréport and on the islands of Yeu and Noirmoutier. The aim is to improve understanding of the biological impact related to the noise footprint of projects and reduce them by developing appropriate technology.

### 3.3.4.11 Land use

Protection of soil and groundwater is an integral part of the Group’s environmental policy. The environmental consequences of soil pollution can be significant, as can be the costs of subsequent remedial measures. It is therefore important to prevent this risk and to hedge it with financial provisions. These amounted to €2,176 million in 2016 and concerned site rehabilitation, the dismantling of non-nuclear facilities, and scheduled product elimination. In this area, ENGIE complies with the regulations in each of the countries in which the Group operates.

For example, a soil pollution survey was carried out at several power plant sites in Belgium. Risks were assessed in conjunction with the appropriate environmental authorities and a remediation program was implemented.

ENGIE owns a number of former gasworks. These sites may be affected by oil, heavy metals and other volatile substances that can adversely affect health. As a result, they must be repaired before reuse. In 1996, a ten-year plan was agreed via a memorandum between Gaz de France and the French government to rehabilitate these sites, which have been compatible with their use from a health perspective since 2007. When these former sites are sold, ENGIE is committed to ensuring that the buyer’s project is compatible with the environmental and industrial liabilities of the site and that the risk to the environment and residents is effectively managed. At all its sites, the Group monitors the soil and underground water, in accordance with its operating permits, in order to prevent pollution.

Moreover, in order to more firmly anchor its presence in the regions, ENGIE has established a structured system of dialogue with its

stakeholders, pursuant to the main international standards (AA1000, ISO 26000, the Global Compact principles, and OECD guidelines). This system is based on regular meetings with NGOs and non-profit associations, and on the development of long-term partnerships in connection with ENGIE’s activities. The dialogue is defined at Group level and then rolled out to each BU according to specific local requirements in terms of issues, activities and regulations. As part of these new non-financial objectives, ENGIE aims to cover 100% of its industrial activities with an appropriate mechanism of dialogue and consultation by 2020. This approach enables ENGIE to limit the risks of land-use conflicts in particular, as well as conflicts over other natural resources.

Gas pipelines account for the largest amount of land use by ENGIE. As the gas lines are buried, they do not break up natural habitats, but may nevertheless generate land-use conflicts. GRTgaz has therefore established amicable easement agreements in France with all the owners of the land crossed, following consultation periods (the signing rate for amicable agreements is regularly > 90% for projects). These agreements define land usage restrictions for the owners (prohibition on building in pipeline locations and planting vegetation higher than 2.70 m) in exchange for compensation. More specific work is being done with the agricultural industry to preserve land use for farmers as part of their professional activity. For example:

- the national protocol launched in 1996 with the APCA (French Chambers of Agriculture) and the FNSEA (French agricultural union) (rolled out within the framework of each project), which sets out GRTgaz’s commitments in relation to the definition of routes that respect agricultural activities, the restoration of land to its original condition after works, and conditions for the compensation of owners and farmers of the agricultural land crossed by the works;
- the measures taken at the worksites to enable the rapid resumption of agricultural activity (e.g. sorting of land, monitoring by an agricultural soil scientist delegated by the Chambers of Agriculture, and planking to protect the soil);
- the partnership agreement signed in 2016 with the APCA and the FNSEA, in addition to the national protocol, which has increased the interest represented by the presence of our works (biomethane, biodiversity) and enabled engagement, in a cross-cutting and long-term way, in discussions about shared challenges such as the impact of ecological compensation on agricultural activity.

For the development of new wind and photovoltaic renewable energy production sites, the choice of the site is paramount. The arable nature of the land is an essential element taken into account quite early in the project to avoid any subsequent conflict. In France, calls for tenders for photovoltaic power plants are made under the aegis of the Commission for Energy Regulation. Proposing an installation on arable land is possible insofar as an inventory is carried out before and after the project by an independent agricultural expert. This allows for fair compensation to be paid to farmers for the use of these lands.

## 3.4 Societal information

The responsible growth model developed by ENGIE is based on professional dialogue with all stakeholders to encourage co-construction and shared value creation.

### 3.4.1 Socio-economic development in local communities

For ENGIE, adapting its offerings to meeting its customers' requirements and learning about them make innovation and partnerships a central part of its local activities. These aims mean that dialogue is the main foundation of the Group's approach, emphasizing the importance of a professional attitude on the part of ENGIE's teams, who have a good knowledge of stakeholders and a proactive, regular dialogue with them.

Internationally, in agreement with local authorities, the Group is committed in the same way, as part of a professional and participatory approach, to developing social programs linked to its industrial projects and resulting from consultation.

ENGIE supports small and medium-sized enterprises (SME) and start-ups through various programs implemented in local communities. The Group also supports social enterprise through the ENGIE Rassembleurs d'Énergies (formerly GDF Suez Rassembleurs d'Énergies) initiative, which aims to bring together and strengthen the Group's actions to encourage access to energy and basic services in the countries where it currently operates or plans to operate in the future. The ENGIE Rassembleurs d'Énergies initiative is based on three pillars: donations, technical assistance and investment.

By the end of 2016, five years after it was created, the ENGIE Rassembleurs d'Énergies had invested in 18 companies active on four continents - Europe, Africa, Asia, and Latin America - and in more than

15 countries. These companies cover a broad range of technologies that respond to the problem of energy access and the reduction of energy poverty: energy efficiency in social housing in Europe, access to electricity through individual or collective solar systems, and access to clean cooking solutions in emerging countries. The companies in the portfolio currently provide power to more than 1.2 million recipients, and employ more than 1,300 people worldwide.

In April 2016, ENGIE increased the fund's endowment from €10 million to €50 million. ENGIE Rassembleurs d'Énergies has thus invested €16 million, including €8 million in 2016 alone. This included two reinvestments in India and East Africa and two new investments in Mauritania and Uganda.

To encourage the exchange of best internal practices, the Group has established a community of practices with regard to local societal responsibility, which brings together the Group's leading practitioners. Its aim is to create a toolbox containing all the methods that might be used throughout a project, from design to assessment, and to make this available throughout the entire Group.

In addition, as part of an ENGIE University, a cross-functional working group is studying the issue of strengthening the "License to Operate" in the area of stakeholders' engagement.

3

### 3.4.2 Stakeholders dialogue and partnerships

ENGIE maintains a continuous, proactive dialogue with all the stakeholders associated with its industrial activities. As part of its policy of reducing its carbon activities, the Group has decided to shut down several coal-fired power plants, some of which were effective in 2016. These major operations were carried out in the context of discussions with local regional players and civil authorities, in accordance with the policy of dialogue with the Group's stakeholders.

On the basis of existing practice, the Groupe started the support of its operating entities within the deepening and structuring of their practice from the setting up of a discussion strategy to their operating implementation. The goal is to optimize efficiency and increase the value creation by improving/integrate the commitment with the stakeholders all along the business cycle.

Ensuring the company's sustainability and creating shared value, this culture where listening and dialogue are paramount is extended thanks to sustainable partnerships tackling social and environmental issues.

Internationally, ENGIE is a member of the United Nations Global Compact in the "Global Compact Advanced" category.

In 2015, the Group embarked on a partnership with the ONE (Ocean, Nature and Environment) Foundation, to support its renewable marine energy projects. In 2016, ENGIE renewed its partnerships with GRET (*Groupe de Recherche et d'Échanges Technologiques*, or Technology and Research Exchange Group) and with Emmaüs France, as part of its contribution to energy access and its commitment to reducing energy poverty.

### 3.4.3 Community philanthropy, solidarity and combating energy poverty

In all geographical regions where ENGIE operates, initiatives promoting community philanthropy, solidarity and combating energy poverty are implemented by the ENGIE Corporate Foundation or Group entities, in connection with local authorities, local associations, internal NGOs or the Group's corporate functional departments.

ENGIE, in particular through its Foundation, has launched several initiatives promoting solidarity and combating energy poverty.

In France, in 2016, ENGIE helped more than 924,000 customers who receive the *Tarif Spécial de Solidarité* (special solidarity rate) for natural gas, and more than 201,000 customers who receive the *Tarif de Première Nécessité* (basic needs rate) for electricity. ENGIE also continued to support the *Fonds de Solidarité pour le logement* (Solidarity Housing Fund) in 2016, providing €6 million in line with the Public Service Agreement. In 2016, nearly 80,000 ENGIE customers were benefiting from these departmental council subsidies.

Since 2011, the Group has been acting alongside the public authorities as a partner in the national "Live Better" program. Under the agreement signed in December 2014, ENGIE extended its commitment to the

program, and will pay out €53 million in the period 2014-2017 to renovate 185,000 homes.

ENGIE has created a network of mediation partners with over 200 customer assistance centers throughout the country as of end-2016. Mediators at these associations, who are trained by ENGIE, talk to customers facing payment difficulties, help them to understand their bills, give them advice on their energy spending, and can help them to set up structured payment plans or direct them towards social services to apply for assistance.

ENGIE Energy Solidarity partners are in touch with local communities, departments and associations. Some 120 ENGIE solidarity advisers are also dedicated to processing requests from social workers. In 2016, these advisers responded to 144,000 requests from social services.

The ISIGAZ (Information Sécurité Intérieure Gaz) program, implemented by GRDF, which informs and raises awareness among disadvantaged customers about their domestic natural gas facilities and energy savings, in 2016 covered more than 17,500 homes in around 20 French towns. Since the launch of ISIGAZ in 2006, 311,000 families in around 100 towns have received this advice.

### 3.4.4 Purchases, subcontracting and suppliers

Suppliers and subcontractors represent key stakeholders in the Group's value chain.

The Group's Purchasing organization has defined its objectives based on its 2018 ambition, in the following areas:

- to be a contributor to the Group's operational performance;
- to uphold the Group's values in respect of its suppliers;
- to be a contributor to the Group's CSR approach;
- to drive career development.

The Purchasing Policy sets out the Group's commitments and requirements in its relationships with its suppliers, and particularly:

- the search for competitive bids and sustainable and innovative solutions;
- the requirement for suppliers to make health and safety commitments;
- a commitment on the part of suppliers to ethical business relationships.

The Purchasing Policy is an internal document that defines Group-wide principles for the management of external expenditure and stipulates rules for how the purchasing organization operates within its activities. It aims to reinforce the separation of tasks between buyers and purchasing advisers, while strengthening their cooperation when selecting the best offerings.

These documents form the framework and support the missions of the Purchasing function, which are to:

- ensure that external supplies meet the requirements for quality and economic performance;
- uphold commitments and maintain balanced relations with suppliers;

- select and qualify suppliers using multiple criteria, including societal, environmental, ethics, human rights, health and safety. These principles are also set forth in the function's three operational processes (1. Managing the supplier panel, 2. Managing categories of purchases and 3. Purchasing/Procurement);
- effectively manage information sharing using optimized tools and processes, and in particular the consolidation of purchasing data in the Pyramid information center. This has been reinforced by a policy for purchasing information systems;
- professionalize staff and develop the expertise of the employees in the Procurement network. As part of the ongoing Procurement Passport training program launched in 2014 (which aims to teach participants about the Group's challenges and strategy, and to help them to better understand how the Purchasing organization is contributing to the Group's transformation), a new training cycle on ethics in supplier relationships began in 2015. The aim of the cycle is to train all buyers in the purchasing organization by end-2017. This training module is also offered to anyone outside the purchasing organization who is engaged in supplier relationships, and is based on the Group Reference Document entitled "Code of Conduct for Supplier Relationships";
- implement purchasing portfolio management by category in order to develop the cross-functional nature of strategies within the Group; This approach is structured around 16 Global categories which are coordinated at Group level, 72 Coordinated categories, which are managed between several BUs, and 14 Local categories, which are coordinated within the BUs themselves;
- ensure that all agreements with suppliers are the subject of a written document (that includes a mandatory ethical, environmental and social responsibility clause) negotiated in advance and signed between the parties by the approved buyer, pursuant to the authorizations in force.

## 3.5 Report by one of the Statutory Auditors, appointed as independent third party, on the consolidated human resources, environmental and social information included in the management report.

*This is a free English translation of the Statutory Auditors' report issued in French and is provided solely for the convenience of English-speaking readers. This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.*

### For the year ended 31<sup>st</sup> December 2016

To the Shareholders,

In our capacity as Statutory Auditors of ENGIE, (the "Company"), appointed as independent third party and certified by COFRAC under number(s) 3-1048<sup>(1)</sup>, we hereby report to you on the consolidated human resources, environmental and social information for the year ended December 31<sup>st</sup>, 2016 included in the management report (hereinafter named "CSR Information"), pursuant to article L.225-102-1 of the French Commercial Code (*Code de commerce*).

### Company's responsibility

The Board of Directors is responsible for preparing a company's management report including the CSR Information required by article R.225-105-1 of the French Commercial Code in accordance with the guidelines used by the Company (hereinafter the "Guidelines"), summarised in the management report and available on request at the company's headquarters from the Strategy and Sustainable Development Department (Environment and Climate Department), the Group Human Resources Department and the Health, Safety and Management Systems Department.

### Independence and quality control

Our independence is defined by regulatory texts, the French Code of ethics (*Code de déontologie*) of our profession and the requirements of article L.822-11 of the French Commercial Code. In addition, we have implemented a system of quality control including documented policies and procedures regarding compliance with the ethical requirements, French professional standards and applicable legal and regulatory requirements.

### Statutory Auditor's responsibility

On the basis of our work, our responsibility is to:

- attest that the required CSR Information is included in the management report or, in the event of non-disclosure of a part or all of the CSR Information, that an explanation is provided in accordance with the third paragraph of article R.225-105 of the French Commercial Code (Attestation regarding the completeness of CSR Information);
- express a limited assurance conclusion that the CSR Information taken as a whole is, in all material respects, fairly presented in accordance with the Guidelines (Conclusion on the fairness of CSR Information).

(1) whose scope is available at [www.cofrac.fr](http://www.cofrac.fr)

(2) ISAE 3000 – Assurance engagements other than audits or reviews of historical financial information

Our work involved eleven persons and was conducted between October 2016 and February for an estimated duration of twenty weeks. We were assisted in our work by our sustainability experts.

We performed our work in accordance with the order dated 13 May 2013 defining the conditions under which the independent third party performs its engagement and the professional guidance issued by the French Institute of statutory auditors (Compagnie nationale des commissaires aux comptes) relating to this engagement and with ISAE 3000<sup>(2)</sup> concerning our conclusion on the fairness of CSR Information.

### 1. Attestation regarding the completeness of CSR Information

#### Nature and scope of our work

On the basis of interviews with the individuals in charge of the relevant departments, we obtained an understanding of the Company's sustainability strategy regarding human resources and environmental impacts of its activities and its social commitments and, where applicable, any actions or programmes arising from them.

We compared the CSR Information presented in the management report with the list provided in article R.225-105-1 of the French Commercial Code.

For any consolidated information that is not disclosed, we verified that explanations were provided in accordance with article R.225-105, paragraph 3 of the French Commercial Code.

We verified that the CSR Information covers the scope of consolidation, i.e., the Company, its subsidiaries as defined by article L.233-1 and the controlled entities as defined by article L.233-3 of the French Commercial Code within the limitations set out in the methodological note, presented in the management report.

#### Conclusion

Based on the work performed and given the limitations mentioned above, we attest that the required CSR Information has been disclosed in the management report.

## 2. Conclusion on the fairness of CSR Information

### Nature and scope of our work

We conducted around fifty interviews with the persons responsible for preparing the CSR Information in the departments in charge of collecting the information and, where appropriate, responsible for internal control and risk management procedures, in order to:

- assess the suitability of the Guidelines in terms of their relevance, completeness, reliability, neutrality and understandability, and taking into account industry best practices where appropriate ;
- verify the implementation of data-collection, compilation, processing and control process to reach completeness and consistency of the CSR Information and obtain an understanding of the internal control and risk management procedures used to prepare the CSR Information.

We determined the nature and scope of our tests and procedures based on the nature and importance of the CSR Information with respect to the characteristics of the Company, the human resources and environmental challenges of its activities, its sustainability strategy and industry best practices.

Regarding the CSR Information that we considered to be the most important<sup>(3)</sup>:

- at the parent entity and of Business Units , we referred to documentary sources and conducted interviews to corroborate the qualitative information (organisation, policies, actions), performed analytical procedures on the quantitative information and verified, using sampling techniques, the calculations and the consolidation of the data. We also verified that the information was consistent and in agreement with the other information in the management report;
- at the level of a representative sample of entities/divisions/sites selected by us<sup>(4)</sup> on the basis of their activity, their contribution to the consolidated indicators, their location and a risk analysis, we conducted interviews to verify that procedures are properly applied and we performed tests of details, using sampling techniques, in order to verify the calculations and reconcile the data with the supporting documents. The selected sample represents on average 27% of the headcount and between 19% and 77% of quantitative environmental data.

For the remaining consolidated CSR Information, we assessed its consistency based on our understanding of the company.

We also assessed the relevance of explanations provided for any information that was not disclosed, either in whole or in part.

<sup>(3)</sup> **Quantitative Social, health and safety information:** Total workforce, Total workforce - Workforce by geographic region, Total workforce - Breakdown of workforce by SPC- Managerial staff and non-managers, Age pyramid of permanent employees, Number of female employees, Proportion of females in total workforce, Proportion of females in management positions, Proportion of trainees in the workforce, Proportion of disabled employees, Proportion of employees under 25 in hiring in permanent contracts, Proportion of employees over 50 in hiring in permanent contracts, Number of hiring of permanent employees, Number of hiring of employees with fixed-term contracts, Hiring rate, Hiring rate in permanent contract, Number of dismissals, Turnover (total departures), Voluntary turnover, Proportion of workforce trained – gender and SPC, Total number of training hours, Total number of training hours by topics, Total number of training hours by employee, Days of absence per employees, Number of fatal accidents (employees), Frequency rate, Severity rate (based on the French guidelines), Severity rate (based on the ILO guidelines), Number of new cases of occupational diseases, Average salary of WET with regards the local minimum wage per country.

**Qualitative Social, health and safety information:** Equality and diversity, Health and safety policy management.

**Qualitative Societal information:** Dialogue with stakeholders and partnerships, Ethics and compliance, Ethical clause, environmental and social responsibility in supplier agreements.

**Quantitative Environmental information:** Percentage of relevant revenue covered by an EMAS certification, Percentage of relevant revenue covered by an ISO14001 (non-EMAS) certification, Renewable – Net installed capacity (electric and thermal), Renewable – Electricity and heat produced, Primary energy consumption – total (excluding own consumption), Electricity and thermal energy consumption (auto-consumption excluded), Energy efficiency of fossil fuel plants (including biomass), Total direct GHG emissions - scope 1, NOx emissions, SO2 emissions, Particulate matter emissions, Total input – Fresh water, Total output – Fresh water, Total input – Non-Fresh water, Total output – Non-Fresh water, Total Consumption - Fresh & non fresh water, Total quantity of non-hazardous waste and by-products evacuated (including sludge), Total quantity of non-hazardous waste & by products evacuated & recovered (including sludge), Total quantity of hazardous waste & by products evacuated (including sludge and excluding radioactive waste), Total quantity of hazardous waste & by products evacuated & recovered (including sludge and excluding radioactive waste).

**Quantitative Environmental information:** Analysis of the different categories of indirect greenhouse gas emissions, management of sites and risks on nuclear power plants in Belgium, reduction of noise and visual nuisance.

<sup>(4)</sup> **Environmental information:** Hazelwood Power Partnership, Loy Yang B consolidated, GHECO1, Glow Energy CFB3, Glow ENERGY Phase 1&2, Glow ENERGY Phase 4, Glow ENERGY Phase 5, Glow ENERGY Phase4-Phase5-CFB3-SPP23 Water, Glow SPP 2+3 CHP, GLOW SPP1 Ccompany LTD, Glow SPP11-Plant1E1, Glow SPP11-Plant1E2, Glow SPP11-Plant1GT, Glow SPP11-Plant2GT, Tihange, Jorge Lacerda, Estreito, Machadinho, Salto Osório, Terminal Montoir de Bretagne, Zolling GmbH, KW Zolling Conventional, Brussels Energy (Schaarbeek), Knippegroen, Zandvliet Power, Coö, Combigolfe, GDF SUEZ Cartagena Energia, Rotterdam, Maxima Centrale, Lienj Piemonte Energia, Saltend Cogeneration Company Limited, Chilca, ILO 1, ILO 2, Yuncán, Colorado Energy Nations Comp. (Golden), Colorado Energy Nations Comp. (Metro)

**Social, health and safety information:** Axima Concept, Ineo SA, Cofely Fabricom Industrie Sud, Cofely Fabricom SA, Ecova, Engie Mexico, Eecl, Ima Industrial Ltda, Glow Energy Public Co. Ltd, GRDF.



We believe that the sampling methods and sample sizes we have used, based on our professional judgement, are sufficient to provide a basis for our limited assurance conclusion; a higher level of assurance would have required us to carry out more extensive procedures. Due to the use of sampling techniques and other limitations inherent to information and internal control systems, the risk of not detecting a material misstatement in the CSR information cannot be totally eliminated.

#### Conclusion

Based on the work performed, no material misstatement has come to our attention that causes us to believe that the CSR Information, taken as a whole, is not presented fairly in accordance with the Guidelines.

Neuilly-sur-Seine, March 10<sup>th</sup> 2017

One of the Statutory Auditors

Deloitte & Associés

Véronique Laurent

Partner

## 3.6 Statutory auditors' reasonable assurance report on selected social, environmental and governance information

*This is a free translation into English of the original report issued in the French language and is provided solely for the convenience of English speaking readers*

Pursuant to your request and in our capacity as Statutory Auditors of ENGIE SA, we performed a review in the aim of providing reasonable assurance on the environmental and social indicators selected by ENGIE SA and identified by the symbols □□ in sections 3.2 and 3.3 of the Reference Document for fiscal year 2016 (the "Data"<sup>(1)</sup>).

### Responsibility of the Company

The Data has been prepared under the responsibility of ENGIE SA executive management, in accordance with the criteria used by the company (hereinafter the "Reporting Criteria") for social and environmental reporting data, a summary of which appears in the Registration Document in the section « "Methodological elements of the 2016 environmental reporting" and "Methodological memo on the social indicators", available upon request at the Company's headquarters from the Group Environmental and Social Responsibility Department, the Group Health and Safety Department and the Group Human Resources Department.

### Independence and quality control

Our independence is defined by regulatory texts, the profession's Code of Ethics as well as the provisions set forth in Article L.822-11 of the French Commercial Code (*Code de commerce*). Furthermore, we have set up a quality control system that includes the documented policies and procedures designed to ensure compliance with ethical rules, professional standards and the applicable legal texts and regulations.

### Responsibility of the Statutory Auditors

Based on our work, our responsibility is to express reasonable assurance on the fact that the Data has been prepared, in all material aspects, in accordance with the Reporting Criteria. The conclusions expressed here below cover only this Data and not all of the information set forth in sections 3.2 and 3.3 of the Reference Document.

We have performed the procedures described below in accordance with the professional guidance issued by the national auditing body (Compagnie nationale des commissaires aux comptes) relating to this operation and ISAE 3000<sup>(2)</sup>.

- We have assessed the appropriateness of the Reporting Criteria with respect to its relevance, completeness, reliability, neutrality and clarity, by taking into consideration, when relevant, the sector's best practices;
- We have verified the set-up of a process to collect, compile, process, and check the completeness and consistency of the Data;
- We have interviewed the relevant staff from the Group Environmental and Social Responsibility Department, the Group Health and Safety Department and the Group Human Resources Department at the headquarters and Business Units (hereinafter "BUs") in order to analyze the deployment and application of the Reporting Criteria.

(1) *Social, health and safety information: Total workforce, Total workforce - Workforce by geographic region, Total workforce - Breakdown by SPC, Total workforce - Breakdown by type of contract, Age pyramid of permanent employees, Female workforce, Proportion of women in workforce, Proportion of women in management, Proportion of workforce trained, Frequency rate.*

*Environmental information: Percentage of relevant revenue covered by an EMAS certification, Percentage of relevant revenue covered by an ISO14001 certification (non EMAS), Primary energy consumption – total (excluding own consumption), Electricity and thermal energy consumption (excluding own consumption), Energy efficiency of fossil fuel plants (including biomass), Renewable – Net installed power (electric and thermal), Renewable – Electricity and heat produced, Total quantity of hazardous waste and by-products discharged (including sludge and excluding radioactive waste), Total quantity of hazardous waste and by-products recovered (including sludge and excluding radioactive waste), Total direct GHG emissions - scope 1.*

(2) *ISAE 3000 – Assurance engagements other than audits or reviews of historical financial information.*

## Social and environmental information, corporate social commitments

### 3.6 Statutory auditors' reasonable assurance report on selected social, environmental and governance information

- We have set up analytical procedures on the Data and verified, using sampling techniques, the calculations as well as the consolidation of Data.
- We have tested the Data for a representative sample of entities that we selected<sup>(3)</sup> based on their activity, their contribution to the consolidated Data, their location and a risk analysis. We have conducted interviews to verify the proper application of procedures and conducted substantive tests, using sampling techniques, to verify the calculations performed and reconcile data with supporting evidence. The selected sample represented 49% of the workforce and between 36% and 59% of the environmental information.

We believe that the sampling methods and sizes of the samples we have used in exercising our professional judgment enable us to express a reasonable assurance. Due to the use of sampling techniques and the other limits inherent to the operations of any information and internal control system, the risk that a material anomaly be identified in the Data cannot be totally eliminated.

We believe that these procedures enable us to express reasonable assurance on the Data.

#### Conclusion

In our opinion, the information selected by the Group and identified by the sign ■■ in sections 3.2 and 3.3 of the Reference Document have been prepared, in all material aspects, in accordance with the Reporting Criteria.

Neuilly-sur-Seine and Paris-La Défense, March 10, 2017

The Statutory Auditors

**Deloitte & Associés**

Véronique Laurent

Partner

**Ernst & Young et Autres**

Pascal Macioce

Partner

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(3) **Social, health and safety information:** Asia Pacific BU: Glow Energy Public Co. Ltd ; Latin America BU: ENGIE Mexico, EeCL, IMA Industrial LTDA ; North America BU: Ecova ; North, South and Eastern Europe BU: COFELY Deutschland GmbH, COFELY Espana, COFELY Italia Spa ; UK BU: ENGIE Buildings Ltd, ENGIE FM Limited, ENGIE Services Limited, COFELY District Energy Ltd ; Benelux BU: COFELY Fabricom SA, COFELY Fabricom Industrie Sud ; France BtoB BU: COFELY IDF Energie Services, COFELY Nord Est, COFELY Centre Ouest, Axima Concept, Ineo SA ; France BtoC BU: ENGIE Home Services, DMPA DMPR ; France Renewable Energy BU: CNR ; Natural gas distribution BU: GrDF ; Headquarters: GDF Siège.

**Environmental information:** Asia Pacific BU : Hazelwood Power Partnership, Loy Yang B consolidated, GHECO1, Glow Energy; Brazil BU: Jorge Lacerda, Estreito, Machadinho, Salto Osório ; Latin America BU: Chilca, ILO 1 & 2, Yuncán ; North America BU: Colorado Energy Nations Comp. (Golden & Metro); Middle East, South and Central Asia, and Turkey BU: Baymina Enerji A.S., UCH Power (Private) Limited I et II ; North, South and Eastern Europe BU: COFELY Italia (< 200 MWth), COFELY EC Slupsk ; UK BU: COFELY UK (< 500 MWth), Dinorwig ; BU Génération Europe : Biomasseheizkraftwerk Zolling GmbH, KW Zolling Conventional, Brussels Energy (Schaarbeek), Combigo, GDF SUEZ Cartagena Energia (AESENERGIA), Rotterdam, Knippegroen, Lieni Piemonte Energia, Maxima Centrale (ex-FLEVO), Saltend Cogeneration Company Limited, Zandvliet Power, Co ; BU Benelux: Tihange; BU France BtoB: COFELY Services Centre Ouest (s4) (< 100 MWth) ; BU France Réseaux : Direction Métropoles ; France Renewable Energy BU: CNR, Compagnie du vent ; Liquefied Natural Gas terminals BU: Terminal Montoir de Bretagne ; Exploration and Production International BU: ENGIE E&P Nederland BV..



## Social and environmental information, corporate social commitments

3.6 Statutory auditors' reasonable assurance report on selected social, environmental and governance information

# 04

## Corporate governance

4

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## 4.1 Report by the Chairman of the Board of Directors on corporate governance and internal control and risk management procedures

This Report, which was prepared by the Chairman of the Board of Directors pursuant to Article L. 225-37 of the French Commercial Code, includes information regarding the composition of the Board of Directors and application of the principle of balanced representation of women and men within it, the conditions under which its work was prepared and organized, the internal control and risk management procedures implemented by the Company, and any limitations imposed by the Board of Directors on the powers of the General Management. The Report outlines the statutory provisions applied to the calculation of compensation and benefits of any kind granted to the corporate officers.

The financial risks associated with the effects of climate change and the measures taken by ENGIE to reduce them by implementing a low-carbon strategy in all areas of its business are presented in Section 2.2.3 “Impact of climate” and Section 3.3.4.1 “Climate change”.

The principles and rules established for determining compensation and benefits of any kind are presented in Section 4.6 “Compensation and benefits paid to members of corporate governance bodies”.

The Report was presented to the Audit Committee and the Appointments and Compensation Committee. It was then approved by the Board of Directors at its meeting of March 1, 2017 <sup>(1)</sup>.

### 4.1.1 Board of Directors: Composition – Terms of office – Information – Independence

#### 4.1.1.1 Composition of the Board of Directors

Pursuant to Article 13 of the Company by-laws and the provisions of Articles L. 225-17, L. 225-23 and L. 225-27 of the French Commercial Code, the Board of Directors of ENGIE is composed of a maximum of 22 members, including three Directors who represent the Group’s employees and one Director who represents employee shareholders.

The duration of the Directors’ terms of office is four years, as described in Section 7.1.2 “Corporate governance bodies”.

The Board of Directors took note, following the ministerial order of February 4, 2016, of the appointment of Lucie Muniesa as Director representing the French State, replacing Astrid Milsan.

The terms of office of Gérard Mestrallet, Isabelle Kocher, Jean-Louis Beffa and Lord Simon of Highbury expired at the Shareholders’ Meeting of May 3, 2016. Gérard Mestrallet and Isabelle Kocher were re-elected. Jean-Louis Beffa and Lord Simon of Highbury did not seek renewal of their term as Director.

The Shareholders’ Meeting of May 3, 2016 also elected Fabrice Brégier and Lord Ricketts of Shortlands as Directors (replacing Jean-Louis Beffa and Lord Simon of Highbury).

In addition, Olivier Marquer replaced Anne-Marie Mourer (who retired) as the Director representing employees on June 1, 2016.

Lastly, the Board of Directors took note of the resignation, on June 30, 2016, of Bruno Bézard and, on the recommendation of the French State, co-opted Patrice Durand at the meeting of the Board of Directors of December 14, 2016, to replace him.

At the date of this report, the Company is managed by a Board of Directors composed of 19 members, including:

- ten Directors elected by the Shareholders’ Meeting pursuant to the provisions of the French Commercial Code relating to public limited companies;
- three Directors elected by the Shareholders’ Meeting on the recommendation of the French State pursuant to Article 6 of Decree No. 2014-98 of August 20, 2014, in view of the French State’s interest in ENGIE’s share capital;
- one Director co-opted on the recommendation of the French State, pursuant to Article 6 of the same decree, in view of the French State’s interest in ENGIE’s share capital. This appointment will be submitted for ratification at the next Ordinary Shareholders’ Meeting;
- one Director representing the French State appointed by ministerial order pursuant to Article 4 of the same decree;
- three Directors representing employees, pursuant to Articles L. 225-27 *et seq.* of the French Commercial Code; and
- one Director representing employee shareholders, pursuant to Article L. 225-23 of the French Commercial Code elected by the General Shareholder’s Meeting.

The Board of Directors includes eight Independent Directors (see Sections 4.1.1.2 “Directors in office” and 4.1.1.7 “Independence of Directors in office – Conflicts of interest”), making the percentage of Independent Directors 53% (NB: pursuant to the Afep-Medef Code, the number of Directors representing employees and employee shareholders is not taken into account in calculating the percentage of Independent Directors).

(1) The changes in the composition of the Board of Directors submitted to the Shareholders’ Meeting on May 12, 2017 are listed in Section 4.2.

## 4.1 Report by the Chairman of the Board of Directors on corporate governance

The Board of Directors includes 10 female Directors out of a total of 19 members. Act 2011-103 of January 27, 2011 establishes a principle of balanced gender representation on Boards of Directors. In assessing the ratio of women to men on Boards of Directors, the law stipulates that Directors who are employee representatives – who are not elected by the Shareholders' Meeting – are not taken into account. As the Board

of Directors of ENGIE includes three Directors representing employees, the assessment is based on 16 Directors, 10 of whom are women (a ratio of 63%).

ENGIE also seeks to increase the diversity and international experience of its Board of Directors. Of its 19 Directors, four, or 21%, are not French.

## 4.1.1.2 Directors in office

## DIRECTORS ELECTED BY THE SHAREHOLDERS' MEETING

	Nationality	Date of first appointment	Date of last appointment	End of current term	Address
Gérard Mestrallet (67 years old) Chairman of the Board	French	07/16/2008	05/03/2016	2020	ENGIE 1 place Samuel de Champlain 92400 Courbevoie France
Isabelle Kocher (50 years old) Chief Executive Officer	French	11/12/2014	05/03/2016	2020	ENGIE 1 place Samuel de Champlain 92400 Courbevoie France
Ann-Kristin Achleitner <sup>(1)</sup> (50 years old)	German	09/19/2012	04/28/2015	2019	27 Residenzstrasse 80333 Munich Germany
Edmond Alphandéry <sup>(1)</sup> (73 years old)	French	07/16/2008	04/28/2015	2019	Nomura Bank 7 place d'Iéna 75016 Paris France
Fabrice Brégier <sup>(1)</sup> (55 years old)	French	05/03/2016	-	2020	Airbus SA 1 rond-point Maurice Bellonte 31707 Blagnac Cedex France
Aldo Cardoso <sup>(1)</sup> (60 years old)	French	11/20/2004	04/28/2015	2019	ENGIE 1 place Samuel de Champlain 92400 Courbevoie France
Barbara Kux <sup>(1)</sup> (62 years old)	Swiss	04/28/2015	-	2019	4 Gustav-Gull-Platz 8004 Zurich Switzerland
Françoise Malrieu <sup>(1)</sup> (70 years old)	French	05/02/2011	04/28/2015	2019	19 avenue Léopold II 75016 Paris France
Marie-José Nadeau <sup>(1)</sup> (63 years old)	Canadian	04/28/2015	-	2019	1515 Dr. Penfield, suite 1001 Montreal (Quebec) H3G 2R8 Canada
Lord Ricketts of Shortlands <sup>(1)</sup> (64 years old)	British	05/03/2016 <sup>(2)</sup>	-	2020	15 Queensmead Road Bromley, Kent BR2 0ER United Kingdom

(1) Independent Director (see Section 4.1.1.7 "Independence of Directors in office – Conflicts of interest").

(2) With effect from August 1, 2016.

### DIRECTORS ELECTED BY THE SHAREHOLDERS' MEETING ON THE RECOMMENDATION OF THE FRENCH STATE

	Nationality	Date of first appointment	Date of last appointment	End of current term	Address
<b>Directors from the public sector</b>					
Stéphane Pallez (57 years old)	French	04/19/2012	04/28/2015	2019	Française des Jeux 126 rue Gallieni 92643 Boulogne-Billancourt Cedex France
<b>Directors from the private sector</b>					
Patrice Durand (63 years old)	French	12/14/2016 <sup>(1)</sup>	-	2019	22 avenue Théophile Gautier 75016 Paris France
Catherine Guillouard (52 years old)	French	04/28/2015	-	2019	Rexel 13 boulevard du Fort de Vaux 75017 Paris France
Mari-Noëlle Jégo-Laveissière (48 years old)	French	04/28/2015	-	2019	Orange Gardens 44 avenue de la République 92320 Châtillon France

### DIRECTOR REPRESENTING THE FRENCH STATE, APPOINTED BY MINISTERIAL ORDER

	Nationality	Date of first appointment	Date of last appointment	End of current term	Address
Lucie Muniesa (42 years old)	French	02/04/2016	-	2019	Ministry of Finance and Economy French State Shareholding Agency Bâtiment Colbert – Télédock 228 139, rue de Bercy 75572 Paris Cedex 12 France

### DIRECTORS ELECTED TO REPRESENT EMPLOYEES

	Nationality	Date of first appointment	Date of last appointment	End of current term	Address
Alain Beullier (52 years old)	French	01/21/2009	2014	2018	Elengy LNG terminal BP 35 44550 Montoir-de-Bretagne France
Philippe Lepage (52 years old)	French	04/28/2014	-	2018	Elengy Zone Portuaire – BP 35 44550 Montoir-de-Bretagne France
Olivier Marquer (42 years old)	French	06/01/2016 <sup>(2)</sup>	-	2018	ENGIE 1 place Samuel de Champlain 92400 Courbevoie France

(1) Date of co-option on the recommendation of the French State; his/her appointment will be submitted for ratification at the next Ordinary Shareholders' Meeting.

(2) Date on which he replaced Anne-Marie Mourer for the remainder of her term.

### DIRECTOR ELECTED BY THE SHAREHOLDERS' MEETING TO REPRESENT EMPLOYEE SHAREHOLDERS

	Nationality	Date of first appointment	Date of last appointment	End of current term	Address
Caroline Simon (48 years old)	French	04/23/2013	-	2017	Inéo Défense Établissement de Sophia-Antipolis 90, Traverse des Messugues 06560 Valbonne - France



### 4.1.1.3 Information about Directors in office

#### Directors elected by the Shareholders' Meeting

##### Gérard Mestrallet, born April 1, 1949

Gérard Mestrallet is a graduate of the French engineering school, École Polytechnique, and of the École Nationale d'Administration. Having held various positions at the Treasury Department and on the staff of the Minister of Economy and Finance (Jacques Delors), Gérard Mestrallet joined Compagnie Financière de SUEZ in 1984 as a Special Advisor. In 1986 he was appointed Senior Executive Vice-President in charge of industrial affairs. In 1991 he was named Executive Director and Chairman of the Management Committee of Société Générale de Belgique. In 1995, he became Chairman and Chief Executive Officer of

Compagnie de SUEZ. Gérard Mestrallet was appointed Chairman and Chief Executive Officer of GDF SUEZ (now ENGIE) when SUEZ merged with Gaz de France on July 22, 2008. He became Chairman of the Board of Directors of ENGIE in May 2016. He is also Chairman of Paris Europlace, Honorary Chairman of the International Council of the Mayor of Chongqing, a member of the International Councils of the Mayor of Shanghai and Beijing, and a Director of Tongji University (Shanghai). He also holds an honorary doctorate from the University of Cranfield (UK).

Directorships and offices held at the Company	Directorships and offices held in any company in 2016	Other directorships and offices held in the last five years
Chairman and Chief Executive Officer (until May 3, 2016) Chairman of the Board of Directors (since May 3, 2016)	Chairman of the Board of Directors of ENGIE E.S. (until May 2, 2016) <sup>(2)</sup> , of SUEZ <sup>(1)</sup> (France), Electrabel (until April 26, 2016) <sup>(2)</sup> and ENGIE Energy Management (until March 18, 2016) <sup>(2)</sup> (Belgium) Director of Société Générale <sup>(1)</sup> (France) and of International Power Ltd (until May 1, 2016) <sup>(2)</sup> (United Kingdom) Member of the Supervisory Board of Siemens AG <sup>(1)</sup> (Germany)	Chairman and Chief Executive Officer of ENGIE <sup>(1)</sup> (until May 3, 2016) (France) Vice-Chairman of the Board of Directors of Aguas de Barcelona (Spain) and Electrabel <sup>(2)</sup> (Belgium) Director of Saint-Gobain <sup>(1)</sup> (France) and Pargesa Holding <sup>(1)</sup> (Switzerland) Chairman of GDF SUEZ Rassembleurs d'Énergies SAS <sup>(2)</sup> (France)

(1) Listed company.

(2) ENGIE Group.

##### Isabelle Kocher, born December 9, 1966

Isabelle Kocher is a graduate of the École Normale Supérieure. She is also a Corps des Mines Engineer and a qualified lecturer in Physics. From 1997 to 1999, she was Budget Officer for telecommunications and defense at the French Ministry for the Economy. From 1999 to 2002, she served as Industrial Affairs Advisor to Prime Minister Lionel Jospin. In 2002, she joined the Suez Group, which later became ENGIE, where for 12 years she held various functional and operational positions: from 2002 to 2005, in the Strategy and Development Department; from

2005 to 2007, as Director of Performance and Organization; and from 2007 to 2011, as Deputy CEO and later Chief Executive Officer of Lyonnaise des Eaux. From 2011 to 2014, she was Executive Vice-President, Chief Financial Officer of the Group. On November 12, 2014, she became Director, Deputy CEO and Chief Operating Officer of the Group. She was appointed Chief Executive Officer of ENGIE on May 3, 2016.

Directorships and offices held at the Company	Directorships and offices held in any company in 2016	Other directorships and offices held in the last five years
Director Deputy CEO (until May 3, 2016) Chief Executive Officer (since May 3, 2016)	Chairman of Electrabel <sup>(2)</sup> (Belgium) Vice-Chairman of Electrabel (until April 26, 2016) <sup>(2)</sup> (Belgium) Director of Axa <sup>(1)</sup> , ENGIE E.S. <sup>(2)</sup> , SUEZ <sup>(1)</sup> (France) and International Power (UK) <sup>(2)</sup>	Director of Arkema France <sup>(1)</sup>

(1) Listed company.

(2) ENGIE Group.

### Ann-Kristin Achleitner, born March 16, 1966

A doctor of business administration, a doctor of law and authorized to direct research at the University of St. Gallen (HSG – Switzerland), Ann-Kristin Achleitner successively held the office of consultant for MS Management Service AG in St. Gallen (1991-1992) and Assistant Professor of finance and external audit at the University of St. Gallen (1992-1994). Since 1994 she has been a teacher of business administration (finance and accounting) at the University of St. Gallen. In 1994, she became a consultant at McKinsey & Company Inc. in

Frankfurt (Germany), and in 1995 she took up the banking and finance chair and the office of Chairman of the Board at the Institut für Finanzmanagement, the European Business School at the International University Schloss Reichartshausen in Oestrich-Winkel (Germany). Since 2001, she has held the corporate finance chair at the Technical University of Munich, where she became Scientific Co-Director of the Enterprise and Finance Research Center in 2003. In 2009, she was also Associate Professor of corporate finance at the University of St. Gallen.

#### Directorships and offices held at the Company

Director  
Chairman of the Ethics, Environment and Sustainable Development Committee (since May 3, 2016)

#### Directorships and offices held in any company in 2016

Member of the Government Commission on the German Corporate Governance Code  
Member of the Supervisory Board of Linde AG<sup>(1)</sup>, Metro AG<sup>(1)</sup> and MunichRe<sup>(1)</sup> (Germany)  
Member of the Board of Directors of Johannes B. Ortner-Stiftung (Germany)  
Economic Council of the Embassy of France in Berlin (Germany)

#### Other directorships and offices held in the last five years

Member of the Board of the Private Capital Industry Agenda, World Economic Forum (WEF)  
Member of the Scientific Advisory Board, Knowledge Centre of the European Venture Philanthropy Association (EVPA)  
Member of the Board of Helmholtz-Validierungsfonds and of Helmholtz-Gemeinschaft Deutscher Forschungszentren and of Fraunhofer Gesellschaft  
Member of the Advisory Committee of the Social Entrepreneurship Akademie (SEA)  
Member of the Finance Committee for Social Enterprises within KfW-Bankengruppe on behalf of the German Federal Ministry of Family Affairs, Senior Citizens, Women and Youth (BMFSFJ)

(1) Listed company.

### Edmond Alphandéry, born September 2, 1943

A graduate of the Institut d'Études Politiques de Paris and a qualified lecturer in economics, he is a Professor Emeritus at the University of Paris II. He served as Mayor of Longué-Jumelles and member of the Maine-et-Loire departmental council until 2008 and was Minister of the Economy from March 1993 to May 1995. He chaired the Supervisory

Board of CNP from 1988 to 1993 and was the Chairman of Électricité de France from 1995 to 1998. From July 1998 to July 2012, he again served as Chairman of CNP Assurances. He was also Chairman of the CEPS (Center for European Policy Studies) from January 2014 to July 2016.

#### Directorships and offices held at the Company

Director  
Chairman of the Strategy, Investment and Technology Committee  
Member of the Audit Committee

#### Directorships and offices held in any company in 2016

Chairman of the CEPS (Center for European Policy Studies) (until July 6, 2016) (Belgium)  
Senior Advisor of Nomura Securities (France)  
Member of the Advisory Board of A.T. Kearney France  
Member of the Board of Directors of the Stichting Continuïteit ST Foundation (Netherlands)  
Member of the Advisory Committee of Omnès Capital (France)  
Member of the Advisory Board of Quadrille (France)

#### Other directorships and offices held in the last five years

Chairman of Centre des Professions Financières  
Chairman of the Board of Directors of CNP Assurances<sup>(1)</sup>  
Chairman of CNP International  
Director of Neovacs (France), Caixa Seguros (Brazil) and CNP Vita (Italy)  
Non-voting director of Crédit Agricole CIB (France)

(1) Listed company.

## 4.1 Report by the Chairman of the Board of Directors on corporate governance

**Fabrice Brégier, born July 16, 1961**

A graduate of the École Polytechnique and the École des Mines, Fabrice Brégier began his career at the DRIRE Alsace (Ministry of Industry and Trade), before being appointed Sub-Director of Economic, International and Financial Affairs with the Ministry of Agriculture (Directorate-General for Food) in 1989. After serving as an Advisor to several French Ministers, Mr. Brégier joined Matra Défense in 1993 where he was successively Chairman of Franco-German joint ventures and Director of stand-off activities at Matra BAe Dynamics. In 1998, he became CEO of

Matra BAe Dynamics. In 2001, he was appointed CEO of MBDA, the leading European missile systems company. Early in 2003, Fabrice Brégier joined the Eurocopter Group, becoming Chairman and CEO in April, and was appointed Head of EADS' Eurocopter Division in 2005. He was appointed Airbus Chief Operating Officer (COO) in 2006, and member of the EADS Executive Committee. Fabrice Brégier was appointed President and CEO of Airbus in 2012.

**Directorships and offices held at the Company**

Director  
Member of the Appointments, Compensation and Governance Committee

**Directorships and offices held in any company in 2016**

President and CEO of Airbus<sup>(1)</sup>

**Other directorships and offices held in the last five years**

Deputy CEO and COO of Airbus<sup>(1)</sup>

(1) Listed company.

**Aldo Cardoso, born March 7, 1956**

A graduate of the École Supérieure de Commerce de Paris, Aldo Cardoso holds a Master's Degree in Business Law and is a Certified Public Accountant. From 1979 to 2003, he held several successive positions at Arthur Andersen, including Consultant, Partner (1989), President France (1994), member of the Board of Directors of Andersen

Worldwide (1998), Chairman of the Board of Directors (non-executive) of Andersen Worldwide (2000) and Chief Executive Officer of Andersen Worldwide (2002-2003). Since 2003, he has served as Director of French and foreign companies.

**Directorships and offices held at the Company**

Director  
Chairman of the Audit Committee  
Member of the Strategy, Investment and Technology Committee

**Directorships and offices held in any company in 2016**

Director of Bureau Veritas<sup>(1)</sup>, Imerys<sup>(1)</sup> and Worldline<sup>(1)</sup> (France)  
Non-voting Director of AXA Investment Managers (France)

**Other directorships and offices held in the last five years**

Director of Accor<sup>(1)</sup>, Gecina<sup>(1)</sup>, Rhodia<sup>(1)</sup>, GE Corporate Finance Bank SAS (France) and Mobistar<sup>(1)</sup> (Belgium)

(1) Listed company.

**Barbara Kux, born February 26, 1954**

Barbara Kux holds an MBA, with honors, from INSEAD Business School in Fontainebleau. In 1984, she joined McKinsey & Company as a management consultant, handling global assignments in strategy and business transformation for major international clients. Between 1989 and 1999, she was head of business development in emerging markets for ABB, and later for Nestlé. She served as a director of Ford Motor Europe from 1999 to 2003. In 2003, Barbara Kux joined the Management Board of the Philips Group, taking charge of the group's

sustainable development initiatives in 2005. From 2008 to 2013 she was a member of the Management Board of Siemens AG, serving as Head of Supply Chain Management and Chief Sustainability Officer.

Since 2013, she has been a director of various international world-class companies. She is also a member of the INSEAD Advisory Board. In 2016, she was appointed by the European Commission as a member of the Expert Group - High-level Panel of the European Decarbonisation Pathways Initiative.

**Directorships and offices held at the Company**

Director  
Member of the Ethics, Environment and Sustainable Development Committee

**Directorships and offices held in any company in 2016**

Director of Firmenich SA (Switzerland), Pargesa Holding SA<sup>(1)</sup> (Switzerland), Umicore<sup>(1)</sup> (Belgium) and Total SA<sup>(1)</sup> (France)  
Member of the Supervisory Board of Henkel AG & Co KGaA<sup>(1)</sup> (Germany)

**Other directorships and offices held in the last five years**

Member of the Managing Board of Siemens AG<sup>(1)</sup> (Germany)

(1) Listed company.

### Françoise Malrieu, born February 7, 1946

A graduate of HEC School of Management, Françoise Malrieu began her career in 1968 at BNP as a financial analyst. In 1979, she became Assistant to the Director of the Financial Analysis Department, before becoming Director of this department in 1983. She joined Lazard Frères et Cie in 1987 as Director of Financial Affairs. She was later appointed Manager in 1993, and then Managing Partner. In 2001, she joined Deutsche Bank France as Managing Director. She was appointed Chief Executive Officer of Société Financière de Grenelle in 2004. From 2006

to 2009, she was Senior Advisor at Aforge Finance, an independent consultancy active in mergers, acquisitions and restructuring. At the end of 2008, she helped to create the Société de Financement de l'Économie Française, where she was appointed Chairman of the Board of Directors and of the Audit Committee in 2009. She also serves in a variety of roles in the non-profit sector and is notably a director of Ares, Chairman of Arescoop and a Director of the Institut Français des Administrateurs (IFA).

#### Directorships and offices held at the Company

Director  
Chairman of the Appointments, Compensation and Governance Committee (since May 3, 2016)  
Member of the Ethics, Environment and Sustainable Development Committee  
Member of the Audit Committee

#### Directorships and offices held in any company in 2016

Director of La Poste (France)  
Member of the Supervisory Board of Bayard Presse SA (France)  
Member of the Supervisory Board of Oberthur Technologies

#### Other directorships and offices held in the last five years

Chairman of the Board of Directors of the Société de Financement de l'Économie Française (SFEF) (France)  
Deputy Controller on the Taskforce to Control the Compensation of Financial Market Professionals  
Director of Aéroports de Paris<sup>(1)</sup> (France)

(1) Listed company.

### Marie-José Nadeau, born May 28, 1953

Marie-José Nadeau holds a Bachelor of Law degree and a Master's degree in Public Law from the University of Ottawa. She interned at the Canadian Supreme Court, and is a member of the Quebec Bar. After practicing law in the federal government, she joined the Quebec government in 1986, occupying various key positions in the Ministries of Environment and Energy. In 1993 she joined Hydro-Québec where, for 22 years, she served as Secretary General and Executive

Vice-President, Corporate Affairs. She retired at the beginning of January 2015 and devotes her time to non-executive activities. She was Chair of the World Energy Council until the end of 2016. She is also Vice-Chairman of the Council and a member of the Executive Committee of the Montreal Symphony Orchestra, and a Director of Metro Inc., the Canadian retailer. She is regularly invited to speak at a range of international forums specializing in the energy sector.

#### Directorships and offices held at the Company

Director  
Member of the Audit Committee  
Member of the Strategy, Investment and Technology Committee (since May 3, 2016)

#### Directorships and offices held in any company in 2016

Chair of the World Energy Council (United Kingdom)  
Director of Métro Inc.<sup>(1)</sup>  
Director, Vice-Chairman of the Board of Directors and a member of the Executive Committee of the Montreal Symphony Orchestra (Canada)  
Director on the Advisory Council of the Electric Power Research Institute (Canada)

#### Other directorships and offices held in the last five years

Secretary General and Executive Vice President, Corporate Affairs at Hydro-Québec (Canada)  
Director of the World Energy Council (United Kingdom)  
Director and Vice President of the Council of Concordia University (Canada)  
Director of Churchill Falls and Labrador Corporation Limited (Canada)

(1) Listed company.

## 4.1 Report by the Chairman of the Board of Directors on corporate governance

**Lord Ricketts of Shortlands, born September 30, 1952**

Sir Peter Ricketts is a graduate of Oxford University, with a Master of Arts (MA) in English Literature from Pembroke College, Honorary DLC from the University of Kent and Honorary LLD from the University of Bath. Sir Peter began his career in 1974 at the Foreign and Commonwealth Office (FCO). In 1975, he was assigned as a Political Attaché in Singapore, and then served as the UK's Permanent Representative to NATO in Brussels, before joining the FCO. At the FCO, he served as the Assistant Private Secretary to former Foreign Secretary Sir Geoffrey Howe in 1983, First Secretary at the British Embassy in Washington (United States) in 1985, Division Chief in Hong

Kong in 1990, Advisor for European and Economic Affairs at the British Embassy in France in 1995, and Deputy Director of Policy in 1997. In 2000 he was appointed Chairman of the Joint Intelligence Committee, then in 2001 he was named Policy Director of the FCO. From 2003 to 2006 he was Permanent Representative of the United Kingdom to NATO. In 2006, he became Secretary General of the FCO, and in 2010 he was named National Security Advisor of the United Kingdom. Finally, from 2012 to January 2016, he was the United Kingdom's Ambassador to France and Monaco.

<b>Directorships and offices held at the Company</b>	<b>Directorships and offices held in any company in 2016</b>	<b>Other directorships and offices held in the last five years</b>
Director Member of the Appointments, Compensation and Governance Committee (since August 1, 2016)	None	None

**Directors elected by the Shareholders' Meeting on the recommendation of the French State****Directors from the public sector****Stéphane Pallez, born August 23, 1959**

A graduate of Institut d'Études Politiques de Paris and of École Nationale d'Administration, Stéphane Pallez began her career at the French Treasury from 1984 to 2004, where she successively held the posts of civil servant (1984-1988), supplementary administrator representing France at the World Bank in Washington (1988-1990), Head of the "International Monetary Affairs and G7" Department (1990), Technical Advisor to the office of the Ministry of Economy and Finance (1991-1993), Head of the "Banking regulation and national banks" office (1993-1995), Sub-Director "Insurance" (1995-1998), Sub-Director in

charge of State shareholdings, head of the transport, energy, high technology, banking and insurance sectors (1998-2000) and Head of the European and International Affairs Department at the Treasury (2000-2004). In 2004, she became Deputy Chief Financial Officer of France Telecom-Orange, before becoming Chairman and Chief Executive Officer of the Caisse Centrale de Réassurance on April 28, 2011. She has been Chairman and CEO of Française des Jeux since November 2014.

<b>Directorships and offices held at the Company</b>	<b>Directorships and offices held in any company in 2016</b>	<b>Other directorships and offices held in the last five years</b>
Director	Chairman and CEO of Française des Jeux (France) Director of CNP Assurances <sup>(1)</sup> and Positive Planet (France) Member of the Supervisory Board of Eurazeo <sup>(1)</sup> (France)	Chairman and Chief Executive Officer of the Caisse Centrale de Réassurance (CCR)

(1) Listed company.

### Directors from the private sector

#### Patrice Durand, born May 11, 1953

A graduate of the Ecole polytechnique and of the Ecole Nationale d'Administration, Patrice Durand began his career in 1978 as Sub-Prefect, Director of the office of the Prefect of Eure-et-Loir and then the Haute-Normandie region in 1979. From 1981 to 1994, he served successively as head of mission in the Directorate-General of Administration at the Ministry of the Interior, Deputy Secretary-General and Secretary-General of the Paris Club; Head of the Office of Energy, Transport, and Mines and Secretary of the Economic and Social Development Fund, Head of Capital Goods and Other Investments and Deputy Director of Treasury Management. In 1994, he became Deputy CEO, then Deputy CEO in charge of economic and financial affairs at Air

France. From 1999 onwards, he was a member of the Executive Committee, in charge, among other things, of the finances of the Central Risk Management, General Inspection, Legal Affairs, Asset Management, IT and Processing departments, before becoming Deputy CEO of the Crédit Lyonnais Group in 2002. In 2003, he was also appointed Director of Operations and Logistics and member of the Executive Committee of Crédit Agricole SA. In 2005, he joined Thales as Deputy CEO in charge of finance and administration. From 2012 to 2015, he was Deputy CEO in charge of finance and operations at the Ingenico Group. Since 2016, he has served as a director of French and foreign companies.

Directorships and offices held at the Company	Directorships and offices held in any company in 2016	Other directorships and offices held in the last five years
Director Member of the Strategy, Investment and Technology Committee (since March 1, 2017)	Director of Ingenico Holdings Asia (Hong Kong) and Fujian Landi Commercial Equipment Co. Ltd (China) Member of the Supervisory Board of GCS Holding BV (Netherlands), Global Collect Services BV (Netherlands)	Advisor to the Chairman of Thales <sup>(1)</sup> (France) Chairman of Telespazio (Italy) and Sogead (France) Director of DCNS (France), Thales Alenia Space (France), Sogepa (France), Ingenico do Brasil Ltda (Brazil), Ingenico Holdings Asia II Limited (Hong Kong), Ingenico Mexico, SA de C.V (Mexico), Ingenico Corp., Ingenico Inc. (Latin America) and Ingenico Inc. (United States). Alternate Director of Fixed & Mobile Pte. Ltd (Singapore) Non-voting director of Nanjing ZTE-Ingenico Network Technology CO. Ltd (China) Chief Finance and Operations Officer Ingenico (France) <sup>(1)</sup>

(1) Listed company.

#### Catherine Guillouard, born January 23, 1965

A graduate of Institut d'Études Politiques de Paris and of École Nationale d'Administration, Catherine Guillouard also holds a post-Master's specialization (DESS) in European Union Law. She started her career in 1993 at the Treasury Department of the French Finance Ministry, where she served as Deputy Director of the CFA Zone in Africa, and then in the Banking Affairs Department. She then held various positions at Air France, including as Deputy Vice-President of Corporate

Control, Vice President of Flight Operations, Vice-President of Human Resources and Change Management, and, from 2005 to September 2007, as Senior Vice-President of Finance. In September 2007, she became Chief Financial Officer and Executive Committee member of Eutelsat. In April 2013, she became Director of Finance, Control and Legal Affairs at Rexel, and then Deputy CEO in May 2014.

Directorships and offices held at the Company	Directorships and offices held in any company in 2016	Other directorships and offices held in the last five years
Director Member of the Strategy, Investment and Technology Committee	Deputy CEO of Rexel <sup>(1)</sup> (France) Director of Airbus <sup>(1)</sup> (France)	Director of Technicolor <sup>(1)</sup> and Aéroports de Paris <sup>(1)</sup> (France) Director of DCNS (France), Thales Alenia Space (France), Sogepa (France), Ingenico do Brasil Ltda (Brazil), Ingenico Holdings Asia II Limited (Hong Kong), Ingenico Mexico, SA de C.V (Mexico) and Ingenico Corp.

(1) Listed company.

## 4.1 Report by the Chairman of the Board of Directors on corporate governance

**Mari-Noëlle Jégo-Laveissière, born March 13, 1968**

A graduate of the École Normale Supérieure in Paris, Mari-Noëlle Jégo-Laveissière is also an engineer of the Corps des Mines. She began her career in 1996 in the Distribution Network Department of France Télécom's Paris Regional Department. She then held various management positions within the Orange Group from July 1, 2013,

including in Marketing, Research and Development, and International Networks and Business. Since March 2014, Mari-Noëlle Jégo-Laveissière has held the position of Senior Executive of Innovation, Marketing and Technologies and member of the Executive Committee within the Orange Group.

**Directorships and offices held at the Company**

Director  
Member of the Ethics, Environment and Sustainable Development Committee

**Directorships and offices held in any company in 2016**

Senior Executive of Innovation, Marketing and Technologies and member of the Executive Committee of the Orange Group<sup>(1)</sup> (France)  
Director of the Agence Nationale des Fréquences (France), Valéo<sup>(1)</sup> (France) and Orange Romania (Romania), Nordnet, Soft@Home and Viaccess (France)

**Other directorships and offices held in the last five years**

Director of International and Backbone Network Factory for the Orange Group and Director of R&D for the Orange Group  
Director of Next.com, France Telecom R&D UK Ltd, France Telecom R&D Beijing Company Limited, France Telecom Japan Company Ltd, OrangeDistribution and INRIA  
Non-voting member of the Supervisory Board of Cloudwatt  
Member of the Supervisory Committee at Orange Marine and INNOVACOM Gestion

(1) Listed company.

**Director representing the French State, appointed by ministerial order****Lucie Muniesa, born February 22, 1975**

Lucie Muniesa is a graduate of the École nationale de la statistique et de l'administration économique (ENSAE School of Economics and Statistics) and began her career at INSEE (French Institute for Statistics and Economic Studies), before being appointed Deputy Manager of the Office of Mergers and Aid in the French Department of Competition, Consumption and Repression of Fraud in 2002. In 2004, she joined the Agence des participations de l'Etat (APE – French public shareholding agency) as Deputy Manager of the “Energy, Chemicals and other Investments” and “La Poste – France Telecom” offices, before being

appointed General Secretary of APE in 2007. In 2010, Lucie Muniesa joined Radio France as Financial Director and subsequently Deputy Director in charge of Finance, Procurement, Legal Affairs and Own Resources Development. In 2014, she was appointed Director and Deputy General Secretary of the French Ministry of Culture and Communication. In February 2016, Lucie Muniesa was appointed Deputy Manager General of APE. In February 2016 Lucie Muniesa was appointed Deputy Manager General of the APE.

**Directorships and offices held at the Company**

Director  
Member of the Audit Committee (since February 24, 2016)  
Member of the Strategy, Investment and Technology Committee (since February 24, 2016)  
Member of the Appointments, Compensation and Governance Committee (since February 24, 2016)

**Directorships and offices held in any company in 2016**

Director representing the French State at Safran<sup>(1)</sup>, Orange<sup>(1)</sup> and CDR (Consortium de Réalisation) (France)  
Director of Dexia<sup>(1)</sup> (Belgium)

**Other directorships and offices held in the last five years**

Director representing the French State of Palais de Tokyo, Française des Jeux, and the Park and Great Hall of the Villettes public corporation  
Member representing the Ministry of Culture on the Board of Directors of the French National School of Fine Arts  
Alternate member representing the Ministry of Culture on the Board of Directors of the French National Center for Song, Variety and Jazz, the Paris National Opera and the Cité de la Musique - Paris Philharmonic public corporation  
Alternate qualified person on the Board of Directors of the French Mint in Paris

(1) Listed company.

### Directors elected to represent employees

#### Alain Beullier, born March 26, 1964

Alain Beullier joined EDF GDF in 1984, holding various positions in the Customer Service and Sales Advisory departments in several EDF GDF services centers in the Paris region. Currently an employee of Elengy, responsible for monitoring environmental regulation, Alain Beullier was

named Director representing the “Other Employees” category by employee vote on December 18, 2008. Alain Beullier holds a corporate director’s certificate issued by Sciences Po Executive Education and the Institut Français des Administrateurs, class of 2016.

Directorships and offices held at the Company	Directorships and offices held in any company in 2016	Other directorships and offices held in the last five years
<p>Director</p> <p>Sponsored by the Chemical Energy Federation – CFDT trade union</p> <p>Member of the Appointments, Compensation and Governance Committee (since June 1, 2016)</p> <p>Member of the Ethics, Environment and Sustainable Development Committee (until May 31, 2016)</p>	None	None

#### Philippe Lepage, born June 17, 1964

Recruited in 1982, Philippe Lepage was High-voltage Maintenance Technician from October 1982 to July 2002, and Chemical Production Supervisor from July 2002 to January 2009. Since January 2009, he has

been Assistant Shift Supervisor at the LNG terminal at Montoir-de-Bretagne. Philippe Lepage was named Director representing the “Other Employees” category by employee vote on March 14, 2014.

Directorships and offices held at the Company	Directorships and offices held in any company in 2016	Other directorships and offices held in the last five years
<p>Director</p> <p>Sponsored by the National Federation of Employee Unions in the Electricity, Nuclear and Gas Industries – CGT trade union</p> <p>Member of the Strategy, Investment and Technology Committee</p>	<p>Director representing employees and member of the Investment Committee at Elengy (France)<sup>(2)</sup></p>	None

(2) ENGIE Group.



## 4.1 Report by the Chairman of the Board of Directors on corporate governance

**Olivier Marquer, born June 28, 1974**

With a degree in engineering and a Master's in gas engineering, Olivier Marquer joined the French Gas Research department in 2000 as project manager. From 2004 to 2016, he held various sales and marketing roles

in the Key Accounts segment. In early 2016, he was appointed head of the gas and electricity pricing department for the Giant business within GEM

<b>Directorships and offices held at the Company</b>	<b>Directorships and offices held in any company in 2016</b>	<b>Other directorships and offices held in the last five years</b>
Director Sponsored by the Federation of the Gas and Electricity Industries – CFE-CGC trade union Member of the Ethics, Environment and Sustainable Development Committee (since June 1, 2016)	None	None

## Director elected by the Shareholders' Meeting to represent employee shareholders

**Caroline Simon, born November 3, 1968**

Caroline Simon trained in industrial purchasing and began her career at Thomson-CSF in 1991 as a buyer of electrical and electronic components, general expenses, upstream purchasing and investment negotiation. She joined the Group in 1997 and currently holds a

purchasing position at INEO Défense in the area of cabling and mechanical subcontracting. Caroline Simon holds a corporate director's certificate issued by Sciences Po Executive Education and the Institut Français des Administrateurs, class of 2016.

<b>Directorships and offices held at the Company</b>	<b>Directorships and offices held in any company in 2016</b>	<b>Other directorships and offices held in the last five years</b>
Director Sponsored by the Federation Construction Bois – CFDT trade union Member of the Audit Committee	Chairman of the Supervisory Board of LINK France fund	Member of the Supervisory Board of the SPRING France and LINK France funds

### 4.1.1.4 Assessment of the operating procedures of the Board of Directors and its committees

The assessment of the operating procedures of the Board of Directors and its committees in 2016 was led by the Appointments and Compensation Committee<sup>(1)</sup> with the assistance of an outside consultant.

Compared with previous years, two new features were introduced, namely the measurement of the actual contribution of each director to the work of the Board and its committees, and the listing of directors' key areas of expertise.

A draft questionnaire was approved by the Appointments and Compensation Committee. This questionnaire included both closed questions for statistical tracking of responses, and open questions allowing directors to clarify their responses, make observations and propose changes. After the questionnaire was sent out, each director had a personal interview with an outside consultant.

The questions related primarily to strategy and performance, knowledge of the Group's businesses, relationships with management, risk management and control, logistics, the strategy seminar, and committee operating procedures.

A report on the interviews was given to the Appointments and Compensation Committee on February 28, 2017, and to the Board of Directors on March 1, 2017.

After operating under the new split governance structure for almost a year, the directors expressed their satisfaction with it. Those involved in the new governance structure all found their own role and are helping it to function effectively. They have the confidence and support of the Board of Directors. The Board Chairman took full measure of his role and responsibilities. With regard to the new Chief Executive Officer, the directors were unanimous in finding that she embodied the role perfectly; in a challenging environment she has developed a bold, ambitious strategy that is also firm and determined, and she has the full backing of her teams.

The strategic seminar in its new format was well received. Directors now have fewer questions about strategy and more suggestions. The quality of the assessments of individual contributions showed the extent of the Board's maturity. It was also noted that progress was being made with more detailed projects. The Chairman is effective in overseeing the pace and duration of meetings, and the time set aside for discussion. This met with the approval of all directors. The Chairman also makes sure there is a good dynamic at Board meetings and allows full, direct debate in a spirit of mutual exchange. The committees are working well.

Progress has been made in the logistics and digitalization of files, thanks to the ongoing efforts of the General Secretariat.

Among the areas for improvement and recommendations is the wish for directors to further review human resources challenges. On March 1, 2017, the Board therefore voted to supplement the duties of the Ethics, Environment and Sustainable Development Committee with the task of reviewing human resources policies. Directors also wanted to have regular updates on the transformation plan and developments in the new management structure, and more information and discussion on the Group's competitiveness and competition strategy. Lastly, they requested even more systematic preparation of executive summaries for complex projects.

The Board of Directors noted the recommendations made and is sharing and following up on them. With regarding to measuring directors' individual contributions to the work of the Board and its committees, individual feedback will be given to each director by the Board Chairman.

Lastly, on the recommendation of the Appointments and Compensation Committee, the Board of Directors decided that directors' individual attentiveness toward the work of the Board and its committees would be mentioned in the 2017 Registration Document published in 2018.

For the rest, the results of the self-assessment of all the skills on the Board can be found in Section 4.1.1.5 below.

*(1) called the Appointments, Compensation and Governance Committee as of March 1, 2017.*

4.1 Report by the Chairman of the Board of Directors on corporate governance

4.1.1.5 Diversity of expertise within the Board

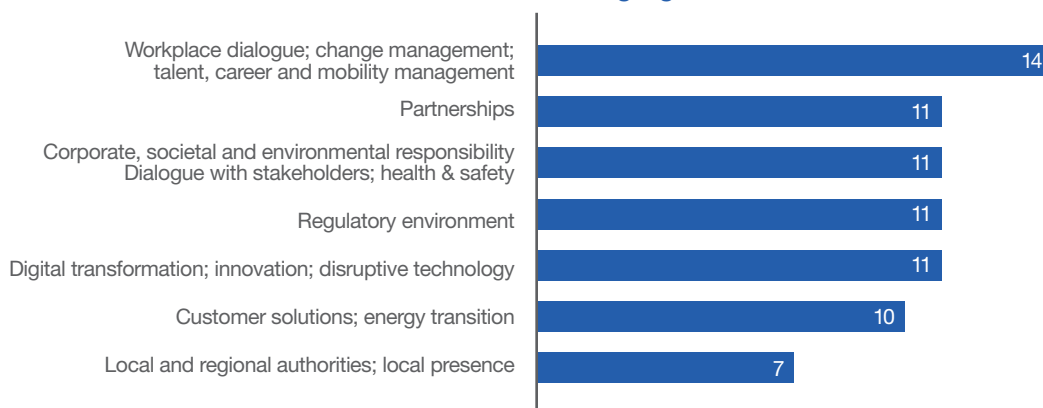
The Board of Directors decided to compile and publish a list of the skills of all its members to ensure it has a proper grasp of the various factors that need to be taken into consideration. This would then provide it with a holistic view of the areas to be addressed. A chart was produced based on the Board's annual assessment process, which was carried out in early 2017 under the supervision of the

Appointments and Compensation Committee with the assistance of an outside consultant. A list was made of the general as well as the more targeted skill sets that match the strategic goals approved by the Board. The resulting chart (below) shows the broad-ranging yet balanced distribution of skills needed on the Board and brought by its 19 members.

General skills



Skills in line with strategic goals



### 4.1.1.6 Number of ENGIE shares and stock options held by Directors in office

	Number of shares	Number of stock options
Gérard Mestrallet	94,842 <sup>(1)</sup>	0
Isabelle Kocher	7,116 <sup>(2)</sup>	6,196
Ann-Kristin Achleitner	50	N/A
Edmond Alphanéry	2,923	N/A
Alain Beullier	51	N/A
Fabrice Brégier	50	N/A
Aldo Cardoso	1,038	N/A
Patrice Durand	750 <sup>(3)</sup>	N/A
Catherine Guillouard	0 <sup>(3)</sup>	N/A
Mari-Noëlle Jégo-Laveissière	0 <sup>(3)</sup>	N/A
Barbara Kux	50	N/A
Philippe Lepage	287	N/A
Françoise Malrieu	1,419	N/A
Olivier Marquer	50	N/A
Lucie Muniesa	0 <sup>(3)</sup>	N/A
Marie-José Nadeau	50	N/A
Stéphane Pallez	200 <sup>(3)</sup>	N/A
Lord Ricketts of Shortlands	250	N/A
Caroline Simon	30 <sup>(3)</sup>	N/A

(1) Includes vested performance shares that appear in 4.6.7.4 below and shares held upon simple exercise of options that appear in 4.6.10 below.

(2) Includes vested performance shares that appear in 4.6.7.5 below and shares held upon simple exercise of options that appear in 4.6.10 below.

(3) The statutory requirement to hold at least 50 shares in the company does not apply to Directors elected by the Shareholders' Meeting on the recommendation of the French State, the Director representing the French State or the Director representing employee shareholders.

### 4.1.1.7 Independence of Directors in office – Conflicts of interest

#### Independence

Article 1.1.2 of the Internal Regulations requires the Board to review the independence and status of each of its members, based on criteria determined by the Board. This review must be conducted annually, prior to the Shareholders' Meeting held to approve the financial statements for the previous fiscal year. The process of assessing the independence of each Director was reviewed by the Appointments and Compensation Committee during its meetings of February 3 and February 28, 2017, and again on March 1, 2017 by the Board of Directors.

The Board of Directors of ENGIE examined the circumstances of each of the Directors on a case-by-case basis in relation to the Afep-Medef Code, to which it refers.

In addition to the two corporate officers, it is specified that the following Directors, who were appointed as a result of statutory obligations, cannot be deemed independent:

- Lucie Muniesa, Director representing the French State, appointed pursuant to Article 4 of the aforementioned Decree No. 2014-948 of August 20, 2014, as well as Patrice Durand, Catherine Guillouard, Mari-Noëlle Jégo-Laveissière and Stéphane Pallez, elected by the Shareholders' Meeting on the recommendation of the French State pursuant to Article 6 of the same decree;
- Alain Beullier, Philippe Lepage, and Olivier Marquer, Directors representing employees, pursuant to Articles L. 225-27 et seq. of the French Commercial Code, and Caroline Simon, Director representing employee shareholders, pursuant to Article L. 225-23 of the French Commercial Code.

Eight Directors are deemed to be independent (see Section 4.1.1.2 "Directors in office"), making the percentage of Independent Directors 53% (NB: pursuant to the Afep-Medef Code, the number of Directors

representing employees and employee shareholders is not taken into account in calculating the percentage of Independent Directors).

The Board of Directors focused specifically on the business relations between the Group and Imerys and Bureau Veritas (of which Aldo Cardoso is an Independent Director), to establish whether these were of a kind or significance likely to affect Aldo Cardoso's independent judgment. The Board of Directors ascertained that these business activities were related to ordinary operations and were far from significant enough for ENGIE and for Imerys and Bureau Veritas, in terms of purchasing and sales volumes, to create a conflict of interest likely to affect Aldo Cardoso's independent status. The Board decided that, to preserve Aldo Cardoso's objectivity, if any project related in any way to Imerys or Bureau Veritas should come up for discussion in his presence, he would not be able to participate in the relative resolutions by the Board and/or the respective committee. Aldo Cardoso agreed to comply with these rules of conduct, pursuant to Article 5 of the Directors' Charter.

Aldo Cardoso was appointed to the board of Gaz de France on November 20, 2004 and reached 12 years of service on November 20, 2016. He was appointed for the last time in 2015 in compliance with the AFEP-MEDEF Code prevailing at that date when he had 10.5 years of service and his term of office would expire in 2019.

The revised version of the AFEP-MEDEF Code of November 2016 changed the way in which the 12-year length-of-service rule is applied: in the former version of the Code, the length of service giving rise to the loss of independent status was only calculated at the time the director was reappointed, whereas henceforth, independent status is lost immediately upon the 12-year anniversary date. This rule change will come into effect at the end of the Shareholders' Meeting of May 12, 2017.

## 4.1 Report by the Chairman of the Board of Directors on corporate governance

Aldo Cardoso has spent most of his career working as a financial specialist, advisor, consultant or independent director, and has had no relationship of subordination or dependence in terms of his directorships or with stakeholders.

Since the merger of Gaz de France and Suez, three people have served as chief financial officer successively, confirming, if required, the absence of any special relationship between the finance department and Aldo Cardoso in the context of his role as Chairman of the Audit Committee.

Lastly, the Board of Directors has noted from his involvement on the Board that Aldo Cardoso demonstrates considerable freedom of judgment and independent thinking.

For this reason, the Board of Directors has considered, pursuant to the recommendation of the Appointments and Compensation Committee, that Aldo Cardoso could serve his full term as independent director and Chairman of the Audit Committee until 2019, which would be the most appropriate solution in terms of ENGIE's corporate interest.

### Conflicts of interest

The Chairman draws the attention of the Board to any conflicts of interest that he has identified, or of which he has been made aware, relating, if applicable, to the Chief Executive Officer or the members of the Board of Directors. He reviews any potential conflicts of interest and agreements disclosed pursuant to Article 1.12 of the Internal Regulations.

To ENGIE's knowledge, there are no potential conflicts of interest between the Directors' duties with regard to ENGIE and their private interests and/or other duties.

There are no family ties between the Directors and ENGIE's other main senior managers.

To ENGIE's knowledge, during the past five years, none of the Directors or senior managers of ENGIE has been convicted of fraud, served as manager in a bankruptcy, receivership or liquidation situation, been subject to indictment and/or official public sanction issued by a statutory or regulatory authority, or been prevented by a court from serving as a member of the management body or supervisory board of an issuer, nor from participating in the management or oversight of the business of an issuer.

In addition to the provisions of the French Commercial Code which govern regulated agreements, the Directors' Charter (see Section 4.1.3.2 – "Organization and operating procedures of the Board of Directors") stipulates that each Director must make every effort to avoid any conflict that may exist between his/her moral and material interests and those of the Company, must inform the Board of any conflict of interest in which he/she may be directly or indirectly involved and, where he/she cannot avoid the conflict of interest, must abstain from discussions and voting on any decision concerning such matters.

Furthermore, no loans or guarantees have been granted to, or on behalf of, members of the Company's boards or management.

## 4.1.2 Government Commissioner

The role of Government Commissioner is described in Section 7.1.2 "Corporate governance bodies."

This position is held by Laurent Michel, appointed by ministerial order dated November 13, 2014. Florence Tordjman was appointed Substitute Government Commissioner by the same order.

## 4.1.3 Board of Directors: Powers – Operating procedures – Activities

### 4.1.3.1 Powers of the Board of Directors

Pursuant to legal and regulatory provisions and Article 15.1 of the Company bylaws, the Board of Directors determines the Company's business strategy and oversees its implementation. Subject to the powers expressly granted to the Shareholders' Meetings and within the limit of the Company's corporate purpose, the Board deals with all matters concerning the smooth running of the Company and, through its decisions, manages the Company's business. The Board of Directors performs any checks and verifications it considers appropriate.

In addition to issues that fall under the authority of the Board pursuant to applicable laws and regulations, the Chief Executive Officer must obtain, pursuant to the Internal Regulations (Article 2.2), prior authorization from the Board for the following decisions:

- acquiring or divesting any of the Company's direct or indirect interests in any company formed, or to be formed, taking an interest in the

formation of any company, joint venture, consortium or body or subscribing to any issue of shares, share equivalents or bonds in which the Company's or the Group's financial exposure exceeds €500 million for the transaction in question;

- becoming involved in any asset contribution or exchange transaction, with or without a cash balance, relative to goods, securities, stocks or bonds for an amount exceeding €500 million;
- resolving disputes by way of any agreement, settlement or arbitration decision for an amount exceeding €200 million;
- entering into any long-term energy purchasing plan on behalf of the Group that involves quantities, per transaction, in excess of:
  - 30 billion kWh of gas per year, including the terms of transmission;
  - 20 billion kWh of electricity per year, including the terms of transmission;

- entering into any significant transaction beyond the scope of the Company's stated strategy;
- entering into any real estate acquisition or disposal transaction for an amount exceeding €200 million;
- entering into any of the following transactions for an amount exceeding €1.5 billion:
  - granting or contracting any loans, borrowings, credit or cash advances by the Company, or authorizing any Group subsidiary or financing medium for this purpose;
  - acquiring or assigning any receivables, by any method.

Each year, the Board of Directors authorizes the Chief Executive Officer to issue guarantees and other securities for an amount that it determines.

In addition, the Chief Executive Officer must obtain the prior opinion of the Board to enter into significant agreements with the French government relating to the objectives and terms and conditions of implementation of public service assignments entrusted to the Company or its subsidiaries, within the limits set by law.

Lastly, the Board reviews the budget and the Group's industrial strategy, financial strategy and the Company's policy on professional and pay equality, at least once a year.

### 4.1.3.2 Organization and operating procedures of the Board of Directors

The operating procedures of the Board of Directors are defined by Article 14 of the bylaws. The means of organizing its work are presented in Article 1 of the Board of Directors' Internal Regulations, which specifies the ways and means by which the Board can operate efficiently on behalf of the Company and its shareholders, as well as the responsibilities incumbent on each Director.

The Board of Directors meets as often as the Company's interests require and, in accordance with its Internal Regulations, at least six times a year, including at least once each quarter. Board of Directors' meetings may be held via any means of videoconference or telecommunication that allows Directors to be identified and ensures their effective participation in accordance with the conditions and procedures set out in the Internal Regulations.

Board meetings are also attended by the Government Commissioner and the representative of the Central Works Council, Mohamed Boutarfa, each with one advisory vote, as well as the Executive Vice-President, Chief Financial Officer, the Executive Vice-President General Secretary, and the Secretary of the Board of Directors.

Article 1.3.1 of the Internal Regulations stipulates that the Chairman organizes and directs the work of the Board, and reports on this to the Shareholders' Meeting. He chairs the Board's meetings, oversees deliberations and ensures compliance with the Internal Regulations. He/she may at any time suspend the meeting. The Chairman upholds the quality of dialogue and ensures that the Board's decisions are made on a collective basis. The Chairman makes sure that the Board spends enough time on discussions and allots time to each of the items on the agenda in proportion to the importance that each issue represents for the Company. The Directors ensure, collectively, that the time allotted to each of them to express their views is evenly balanced. The Chairman pays particular attention to ensuring that the issues raised according to the agenda receive an appropriate response.

If the Chairman is absent, he/she is replaced by one of the Vice-Chairmen or, failing this, by the Chief Executive Officer if he or she

is a Director, or, failing this, by another Director chosen by the Board at the beginning of the meeting.

The Chairman ensures that the Board and its Committees function properly, assisting them and submitting questions to them for opinions, and ensures that the principles of good governance are applied. He/she also ensures that Directors have the information they need to carry out their duties, sufficiently in advance and in a clear and appropriate form.

The Board may assign information or consultation missions to the Chairman on specific subjects within the Board's purview.

The Chairman ensures that the Shareholders' Meetings that he/she chairs are properly organized, answers shareholders' questions and, more generally, ensures that good relations are maintained with shareholders.

The Chairman works in coordination with the CEO, who has sole responsibility for Group administration and operational management.

As well as exercising the powers conferred on him/her by law, he/she may be consulted by the CEO on any matter relating to the conduct of the business.

The Chairman may represent the Group at high level with national and international bodies and institutions in the interest of the Group. This takes place in close collaboration with the CEO.

The Chairman does his/her best in all circumstances to promote the Group's values and image.

The Chairman is kept regularly informed by the CEO about significant events in the life of the Group, particularly with regard to strategy, organization, investment and disinvestment. At the CEO's invitation, the Chairman may attend internal meetings with the Company's managers and teams to provide his/her point of view on strategic issues.

The Chairman keeps the members of the Board informed, as necessary, between two meetings.

The Chairman prepares the report to the Shareholders' Meeting pursuant to Article L. 225-37 of the French Commercial Code and receives any information necessary for this purpose.

Only the Chairman is authorized to speak and act on the Board's behalf.

The Chairman draws the attention of the Board to any conflicts of interest that he/she has identified, or of which he/she has been made aware, relating, if applicable, to the corporate officers or the members of the Board of Directors. He/she reviews any potential conflicts of interest and agreements disclosed pursuant to Article 1.12 below.

The Chairman helps to organize the periodic self-assessment by the Board conducted by the Appointments, Compensation and Governance Committee, as well as discussions on governance matters relating to the Board's operating procedures.

In consultation with the CEO, if necessary, the Chairman provides assistance by responding to the requests of shareholders not represented on the Board, and makes time to meet with them and listen to their comments and suggestions.

Once a year, the Board of Directors carries out a self-assessment under the guidance of the Appointments, Compensation and Governance Committee.

Once a year, without the presence of the CEO and those Directors who have an employment contract with a Group company, the Chairman convenes a meeting of directors to assess the CEO's performance. The Chairman informs the members of the Board about the convocation of these meetings. However, the Chairman may invite Employee Directors to take part in all or part of these meetings.

## 4.1 Report by the Chairman of the Board of Directors on corporate governance

The Secretary of the Board of Directors provides administrative services to the Board and records the minutes of its meetings. Patrick van der Beken is the current Board Secretary.

Under Article 13.6 of the bylaws, all Directors must own at least fifty (50) shares in the Company, unless an exemption has been granted under the applicable law or regulations. This requirement does not apply to Directors elected by the Shareholders' Meeting on the recommendation of the French State, to the Director representing the French State, or to the Director representing employee shareholders (a table showing the number of shares and stock options personally owned by the corporate officers is provided in Section 4.1.1.4).

The Internal Regulations were amended on May 3 and July 28, 2016, and again on March 1, 2017.

The amendments related first of all to the separation of roles to reflect the exact breakdown of tasks of the Chairman and Chief Executive Officer.

In addition, the name and duties of the Appointments and Compensation Committee, which became the "Appointments, Compensation and Governance Committee" on March 1, 2017, were reviewed to reflect the work plan approved by the Committee and presented to the Board. The duties of the Ethics, Environment and Sustainable Development Committee were updated. The composition of the Strategy, Investment and Technology Committee was reviewed.

Lastly, amendments were made in 2016 and 2017 to bring the Internal Regulations into compliance with the legislative and statutory changes pertaining to an audit committee and statutory auditors, market abuse, training of employee directors, and the latest version of the AFEP-MEDEF Code, as revised in November 2016.

The appendices to the Internal Regulations include the Directors' Charter and the Code of Conduct, which set out the rights and duties of each Director.

The Directors' Charter sets out the rules relating to Directors' terms of office, compliance with the company's interests, the laws and bylaws, independence criteria, duty of expression, conflicts of interest, professionalism, involvement and effectiveness.

Directors undertake to devote the necessary time and attention to their duties. They keep themselves informed about the activities and the specifics of the Company, its issues and values, including by talking with key managers. They must assiduously and diligently attend Board meetings.

The individual attendance rates of the Directors for meetings of the Board and its Committees in 2017 will be made public in the 2017 Registration Document.

The Code of Conduct sets out the rules governing trading in the Company's securities and the offense of insider trading applicable to Directors, corporate officers and all employees. It expresses the Company's desire to ensure prudent management of its securities, and to comply and ensure others' compliance with current regulations governing securities transactions carried out by corporate officers and employees.

In addition to the foregoing, the Regulations for Employee Directors, approved by the Board of Directors at its meeting of December 9, 2009, lay down conditions under which Directors representing employees are to exercise their duties.

The main provisions of the Company's bylaws and the Board's Internal Regulations are outlined in Section 7.1 "Specific statutory provisions and bylaws".

#### 4.1.3.3 Activities of the Board of Directors

The Board of Directors of ENGIE met 11 times in 2016, with an average attendance rate of 86%.

At these meetings, the Board of Directors of ENGIE reviewed and resolved upon the following matters: the Group's business performance and strategy, preparation of the 2015 financial statements, financial information for the first and third quarters of 2016, the separation of the duties of Chairman and CEO, the composition of the Board and its Committees, the appointment of the Chairman of the Board of Directors and the CEO, preparation of the 2016 interim financial statements, management planning documents, the 2016 interim dividend, the independence of Directors, evaluation of the Board's performance, convening the Annual Shareholders' Meeting, the nuclear situation in Belgium, the review and mapping of Group risks, the health and safety report, professional and pay equality policy, renewal of the authorization to issue bonds and the authorization relating to sureties, guarantees and pledges, allocation of performance shares, the budget and medium-term business plan, and the appraisal and compensation of the corporate officers.

The Board of Directors also held a strategy seminar on the following subjects: the context, strategic vision and progress of the transformation plan and the challenges and proposed commitments, with a focus on the three key themes associated with the gas value chain, nuclear projects, and technological and digital innovation.

### 4.1.4 Standing committees of the Board of Directors

Article 15.2 of the bylaws provides that to assist in its deliberations, the Board of Directors may create internal standing committees whose work will provide a basis for its decisions. Pursuant to Article 15.2 of the bylaws and Article 3 of the Board's Internal Regulations, these Committees are tasked with studying matters of concern to the Company that the Board or the Chairman has submitted for their opinion. They are also charged with preparing the Board's work and decisions on such matters and projects and reporting their conclusions to the Board in the form of reports, proposals, opinions, information or recommendations. The Committees perform their duties under the responsibility of the Board of Directors. No Committee may, on its own initiative, address any issue that falls outside the scope of its mission.

Committees have no decision-making power. On the Chairman's recommendation, and having heard the opinion of the Appointments, Compensation and Governance Committee, the Board of Directors appoints the members and Chairman of each Committee, based on the skills, experience and availability of each Director.

In order to carry out their work, the Committees may interview members of Company and Group divisions and/or commission technical studies on matters within their competence at the Company's expense, provided that they have informed the Chairman of the Board about this, and that they report on it to the Board. If the Committees use the services of external consultants, they must ensure that the advice concerned is objective.

The Board of Directors is assisted by four Committees: the Audit Committee, the Strategy, Investment and Technology Committee, the Appointments, Compensation and Governance Committee and the Ethics, Environment and Sustainable Development Committee. The General Secretariat provides secretarial services to the Board Committees.

### The Audit Committee

The Audit Committee has six members: Aldo Cardoso (Chairman), Edmond Alphan  ry, Fran  oise Malrieu, Lucie Muniesa, Marie-Jos   Nadeau and Caroline Simon.

### Operating procedures

Article 3.1 of the Board of Directors' Internal Regulations sets out the rules and operating procedures of the Audit Committee, pursuant to the applicable regulations and to the Afep-Medef Corporate Governance Code for listed companies.

The Audit Committee's responsibilities include the following:

- to monitor the process of preparing financial information and, if necessary, to make recommendations to ensure its integrity;
- to examine in advance, and provide an opinion on, the draft annual and interim financial statements; examination of the financial statements must be accompanied by a presentation by the Statutory Auditors and by the Chief Financial Officer;
- to interview, whenever it deems this to be necessary, the Statutory Auditors, General Management, Financial Management, Internal Audit and any other management personnel; if appropriate, these interviews may take place without the presence of members of General Management;
- to examine major financial press releases before they are released;
- to guide the selection procedure for the Statutory Auditors, and submit a recommendation to the Board on the appointment or reappointment of the Statutory Auditors pursuant to the applicable legislation, and to issue a recommendation to the Board if one or more Statutory Auditors are reappointed;
- to monitor the Statutory Auditors' performance of their assignments and to take account of the observations and conclusions of the Haut Conseil du Commissariat aux Comptes (the French auditors supervisory board) after the audits are conducted;
- to ensure that the Statutory Auditors comply with the conditions of independence and take the necessary measures pursuant to the applicable legislation;
- to approve the provision by the Statutory Auditors of services other than the auditing of the financial statements that are not on the list of prohibited services, and to oversee the application of rules for the capping of fees relating to these services;
- to review each year with the Statutory Auditors the auditing fees paid by the Company and its Group to the networks to which the Statutory Auditors belong, their auditing plans and results of audits, as well as subsequent recommendations and follow-up;
- to monitor the Group's internal control and auditing systems and procedures, with regard to procedures for preparing and processing accounting and financial data, without prejudice to its independence;
- to examine, with the internal audit managers, the plans and actions taken in the area of internal audit, the conclusions of these planned measures and actions and the subsequent recommendations and follow-up, without the presence of members of General Management, if appropriate;

- to monitor the Group's risk management systems and procedures, with regard to procedures for preparing and processing accounting and financial data, without prejudice to its independence;
- to regularly obtain updates on the Group's financial position, cash position and significant commitments and risks.

The Committee reports regularly to the Board on the performance of its duties. It also reports on the results of the audit assignment, how it contributed to the completeness of the financial information and the role it played in this process. It immediately notifies the Board of any problems encountered.

The Audit Committee met eight times in 2016, with an average attendance rate of 98%. The Statutory Auditors attended all of these meetings.

### Activities

In 2016, the Audit Committee specifically addressed the following: 2016 year-end estimates and forecasts and preparation of consolidated and parent company financial statements at December 31, 2015, financial information from the first and third quarters of 2016, interim and annual closing options and assumptions, preparation of the interim consolidated and parent company financial statements at June 30, 2016, the interim dividend for 2016, impairment tests, renewal of authorizations to issue bonds and guarantees, quarterly internal audit reports, the audit mission plan for 2016 and the independence of internal audit, the review of the Group's internal audit and the Chairman's report on corporate governance and internal control and risk management procedures, review of the financial resolutions presented to the Shareholders' Meeting, the update to the pre-approval procedure for the Statutory Auditors' non-auditing assignments, prior approval of the work entrusted to the Statutory Auditors outside their auditing assignments and follow-up of these assignments, and the independence of the Statutory Auditors and their schedule of work for 2016.

The Committee also addressed the following: reviewing and mapping of risks, the blueprint for the IT infrastructure and related action plans, the report on extractive industries, changes in regulations relating to auditing and market abuse, the update of the Board's Internal Regulations, the market-credit-cash risk, the insurance system implemented in Brazil, the transparency of foreign operations, the GEM BU and its various businesses, the 2016 cash flow plan, risks relating to information systems and the digital world, industrial and nuclear safety and security, and feedback on roadshows.

### Strategy, Investment and Technology Committee

The Strategy, Investment and Technology Committee has seven members: Edmond Alphan  ry (Chairman), Aldo Cardoso, Patrice Durand (since March 1, 2017), Catherine Guillaouard, Philippe Lepage, Lucie Muniesa and Marie-Jos   Nadeau.

### Operating procedures

Article 3.2 of the Internal Regulations sets out the rules and operating procedures for the Strategy, Investment and Technology Committee.

The delegation threshold for the Chief Executive Officer for investments and disinvestments is €500 million. The Committee must be notified of transactions of between €350 million and €500 million.

This Committee is charged with providing the Board of Directors with its opinion on the Company's main strategic aims, particularly with regard to strategy and the public service contract, all projects relative to external and internal growth, disposals, strategic agreements, alliances and partnerships that are submitted to the Board. The Committee also addresses strategic decisions relating to technological developments, as



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well as matters concerning the construction and upgrading of industrial facilities and annual and multi-year works programs, purchasing policy and significant real estate projects.

The Strategy, Investment and Technology Committee met nine times in 2016, with an average attendance rate of 74%.

### Activities

In 2016, the Committee discussed the following subjects: changes in European gas demand, the Group's strategy in Africa, the exploration-production situation, digital ambitions, implementation of the transformation plan (including Lean 2018), competitive intelligence on new activities, issues associated with the LNG BU, development of the Group's activities in the Australian gas chain, review of developments in solar power, and preparation of the Board's annual strategy seminar.

The Committee also reviewed a series of investment and divestment projects requiring approval by the Board of Directors.

Three joint meetings of the Strategy, Investment and Technology Committee and the Audit Committee reviewed work on the budget and the medium-term business plan.

### The Appointments, Compensation and Governance Committee

The Appointments, Compensation and Governance Committee has five members: Françoise Malrieu (Chairman), Alain Beullier, Fabrice Brégier, Lucie Muniesa and Lord Ricketts of Shortlands.

### Operating procedures

Article 3.3 of the Internal Regulations of ENGIE's Board of Directors sets out the rules and operating procedures for the Appointments, Compensation and Governance Committee. The Committee's role is to review and make recommendations to the Board of Directors on all nominations for the position of Director that have to be submitted to the Shareholders' Meeting for approval, as well as for the position of Committee member or Chairman. It makes recommendations to the Board with regard to the replacement of the Company's Chairman and its Chief Executive Officer, leads the process regarding the annual evaluation of the Board's work, liaises with the Chairman in assessing the proper operation of governance bodies, reviews the planned succession of the Company's senior executives in an advisory capacity, and stays informed about senior management plans regarding the appointment and compensation of Executive Committee members. It also reviews and makes recommendations to the Board of Directors on the compensation, pension and welfare plans, benefits in kind and various pecuniary rights, including, if applicable, performance share allocations, awarded to the Chairman and to the Chief Executive Officer, as well as to any members of the Board that hold employment contracts with the Company. It reviews all nominations of the Chairman and the Chief Executive Officer for any corporate office in a listed company other than the Group, in order to inform the Board's opinion on this candidature.

The Chairman and the Chief Executive Officer attend meetings of the Appointments, Compensation and Governance Committee, unless the meetings address matters that concern them.

It gives an opinion on maintaining the benefit of bonus share allocations for members of the Executive Committee when these are normally lost by their holders when they leave the Group.

The Appointments, Compensation and Governance Committee met eight times in 2016, with an average attendance rate of 89%.

### Activities

In 2016, the Appointments, Compensation and Governance Committee examined, among other things, the independence and qualification of the Directors, the composition of the Board Committees, performance target achievement rates for corporate officers in 2015 and, more generally, the compensation of corporate officers, the change in governance to a separation of the roles of Chairman of the Board and the Chief Executive Officer, the change to the age limit, pursuant to the bylaws, for performing the role of Chairman of the Board of Directors, changes to the Board's Internal Regulations, changes to the compensation of the Chairman of the Board and the Chief Executive Officer, the arrangements for the retirement of the Chief Executive officer, matters relating to succession plans, the compensation policy for senior managers, the adoption of a Performance Share Plan for 2016, and the consequences of the Sapin II Act. The Committee also led the process for assessing the Board's work in 2016 (previously passed on to the Ethics, Environment and Sustainable Development Committee).

### Ethics, Environment and Sustainable Development Committee

The Ethics, Environment and Sustainable Development Committee has five members: Ann-Kristin Achleitner (Chairman), Mari-Noëlle Jégo-Laveissière, Barbara Kux, Françoise Malrieu and Olivier Marquer.

### Operating procedures

Article 3.4 of the Internal Regulations of the Board of Directors defines the rules and operating procedures for the Ethics, Environment and Sustainable Development Committee. It ensures the Group has the right level of commitment with regard to ethics, non-financial compliance, and corporate, societal and environmental responsibility.

The Committee met five times in 2016, with an average attendance rate of 76%.

### Activities

In the area of ethics, as is the case every year, the Committee was presented with the ethical incidents report and the Group's ethics report. It also reviewed reputational risk, the ethical due diligence policy for investment, the deployment of the human rights guidelines, and the new Ethics Charter. Lastly, Jean-Baptiste Carpentier, Commissioner for Strategic Information and Economic Security, came to speak to the Committee.

The Committee addressed matters including personal data protection, the policy on conflicts of interest, and the consequences of the Sapin II ACT.

In the area of environmental and societal responsibility, the integrated report was submitted to the Committee. The Committee focused on the various non-financial ratings, the policy for the relationship with the ratings agencies, and non-financial communications reporting. The Committee also reviewed the 2°C scenario and COP22.

On the topic of employer social responsibility, the Committee reviewed risks related to HR issues, the professional and pay equality policy, the health and safety report, fatal accidents and the 2016-2020 health and safety action plan.

### 4.1.5 Principles and rules for determining the compensation and benefits of corporate officers

Compensation and benefits of any kind awarded to corporate officers are determined by the Board of Directors on the proposal of the Appointments, Compensation and Governance Committee, taking into account practices with comparable companies in France and in Europe

as well as the level of achievement of quantitative and qualitative targets set for each.

The principles and rules for determining such compensation and benefits are presented in Section 4.6 “Compensation and benefits paid to members of corporate governance bodies”.

### 4.1.6 Corporate Governance Code

ENGIE maintains its commitment to implementing corporate governance guidelines and for this purpose refers to the Afep-Medef Corporate Governance Code for listed companies.

The following table sets out the Company’s explanations for the non-application of some recommendations of the Afep-Medef Code.

Article of Afep-Medef Code	Explanation
Article 21 (termination of the employment contract in the event of appointment to corporate office)	Isabelle Kocher’s employment contract has been suspended since January 1, 2015. When an employee becomes a corporate officer, the Afep-Medef Code recommends termination of the employment contract that connects this person to the Company. This recommendation applies to Chief Executive Officers, but not to Deputy CEOs. Having appointed Isabelle Kocher Chief Executive Officer at its meeting of May 3, 2016, the Board of Directors determined that it was appropriate to keep her employment contract suspended. The Board decided that the rights held by Isabelle Kocher under the supplementary collective retirement plans for executives until December 31, 2014, i.e., for the period before her employment contract was suspended, would remain frozen and preserved, which would entail keeping her employment contract suspended. ENGIE’s internal promotion policy permits corporate officer positions to be assigned to experienced executives who have in-depth knowledge of the industry and the markets in which ENGIE operates, and have successfully completed the various stages of their career at the Group, and for whom the loss of rights associated with their employment contract and length of service would constitute an impediment and would be counterproductive.

## 4.1.7 Internal control and risk management procedures implemented by the Company

The internal control and risk management procedures described below have been adapted to align with the new organization presented in Section 1.1.3 "Organization."

### 4.1.7.1 Internal control organization

#### 4.1.7.1.1 Internal control objectives

ENGIE's internal control objectives – underpinned by the Internal Control Management and Efficiency (INCOME) program, approved by the Executive Committee and submitted to the Audit Committee – are to provide reasonable assurance of the control of operations with regard to the following objectives:

- compliance with applicable laws and regulations;
- reliability of accounting and financial information;
- effectiveness and efficiency of operations.

ENGIE's aim is to have effective internal control systems in place at every level of responsibility, based on:

- an environment conducive to the implementation of an effective control system;
- responsibility of all players at every level of the organization for the implementation of internal control;
- consideration, at the control design stage, of the balance between the level of assurance required and the cost of implementation;
- using control results to improve operational performance.

#### 4.1.7.1.2 Internal control standards

ENGIE has chosen an organization and procedures for internal control based on the model promoted by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). This organization and these procedures are consistent with the principles described by the AMF in its reference framework and take into account its application guide. Those documents were published in January 2007 and updated with respect to risk management in July 2010. This organization and these procedures also take account of the recommendations of the report on the Audit Committee published by the AMF on June 14, 2010 as well as AMF Recommendation 2013-17, which was updated on January 13, 2015.

#### 4.1.7.1.3 General internal control guidelines

ENGIE's general internal control guidelines (INCOME program) address:

- the development and follow-up of an effective and sound coordination and monitoring program, for which management is responsible, differentiated based on the needs of each management level, which can be adapted to different organizations and risks;
- a formal commitment by management at different organizational levels to implement an internal control system for their area of responsibility as well as improvement initiatives;
- the rollout of an internal control network to support management.

#### 4.1.7.1.4 Scope of application of the INCOME program

ENGIE updates the scope of deployment of the INCOME internal control program every year (179 entities in 2016), through an approach based on financial data and a risk-based approach implemented with the support of the NewCorp divisions.

These rules to establish the scope were adapted in early 2014 to determine the most appropriate internal control reporting methods for the risks and challenges identified. The internal control frameworks of the INCOME program and a specific questionnaire are made available to other entities (outside the INCOME scope) as best practices. These cover sensitive areas such as the segregation of duties and the protection of assets.

#### 4.1.7.1.5 Internal control players

In addition to the information previously provided on the role of the corporate governance bodies (see Section 4 "Corporate governance"), the following should be noted:

- the Chairman ensures the proper functioning of internal control within the Group;
- an annual review of internal control is submitted to the Executive Committee and the Audit Committee;
- the BUs and NewCorp implement the INCOME program. They define their own control procedures in accordance with Group standards and policies and in a manner adapted to their specific activities. This allows them to supervise the internal control system's application to the activities within their specific area of responsibility and to confirm its effectiveness in meeting their needs.

#### Internal Control Division

The Internal Control Division organizes the monitoring of the internal control program, in partnership with NewCorp's *métiers* and divisions, mainly to help manage the Group's most significant risks.

A Management Observatory for Internal Control was created to improve management's involvement in the preparation of key decisions relating to internal control, such as the policy implemented and changes to the frameworks, and to increase understanding of management expectations in respect of internal control. This body, chaired by a member of the Executive Committee, examines changes to the internal control program proposed by the Head of Internal Control. The changes are then submitted by the Head of Internal Control to the Executive Committee for decision. The Observatory met once in 2016.

The Internal Control Division also oversees continuous improvements to the internal control system (see Section 4.1.7.3.3 "Continuous improvement").

The Internal Control Division oversees a network of coordinators responsible for running internal control to support the managers of the entities, providing methodology and instructions and organizing information and training sessions, and reporting the performance during the year and improvement initiatives identified to their management. The Internal Control Division also provides support to NewCorp as it monitors the implementation of Group decisions.

### Internal Audit and Risk Management Division

The Internal Audit and Risk Management Division is made up of two divisions: the Internal Audit Division and the Risk Management Division.

Although the Internal Control Division joined the Finance Division mid-year, the dialogue that had begun on overall risk management, internal control and internal audit continues as before.

For example, Internal Audit and Internal Control developed a training program on fraud which was attended by more than 200 people at 10 separate sessions in 2016. This training course is now included in the Group's training catalog.

#### Risk Management Division

See Section 2.1 "Risk management process."

#### Internal Audit Division

Group Internal Audit is an independent and objective function that gives ENGIE a reasonable assurance about the level of control over its operations, recommends ways of improvement, contributes to value creation.

In 2016, the division was organized in clusters of BUs to adapt to the Group's transformation, while ensuring the implementation and the control of the compliance with the international business standards defined by the Institute of Internal Auditors. Group Internal Audit is an independently organized activity based on fundamental principles that guarantee its effectiveness, namely:

- independence from management, which is key to the credibility of an audit opinion;
- closeness to the BUs, so that internal audit operations are appropriate for local conditions.

Internal Audit presented an audit plan for 2016 that was developed in close cooperation with managers at all company levels and in synergy with Internal Control and Risk Management. Its approach involved:

- determining, analyzing and validating the key audit issues and affiliated entities;
- consolidating and presenting them to the Group's General Management bodies for the purposes of enhancing and validating objectives and key issues;
- obtaining approval from the Audit Committee.

The audit teams are multi-skilled, allowing them to work on a broad spectrum of activities and leverage synergies with the *métiers* and the Group's overall approach.

Audits performed by the team were therefore oriented toward ENGIE's major challenges. Priority issues were given special attention, namely:

- the management of large construction projects;
- the control system for the activities of the Global Energy Management BU and its trading subsidiary;
- the securing of industrial control systems;
- the broader context of the Group's transformation and organization;
- ethics.

The audit conclusions were discussed with the management of the entities concerned which committed to courses of action. Internal Audit is working with operational management to make sure those actions are carried out.

The summary of findings and key corrective actions is presented to the entities' managers, the Group Executive Committee and the Audit Committee.

### 4.1.7.2 Internal control system

#### 4.1.7.2.1 Control environment

The control environment of the entities is assessed annually, using questionnaires structured according to the components of the COSO and appropriate for the area of business under assessment. This approach is supplemented by the implementation of specific controls for delegations of authority, compliance with ethics principles and information systems management. It also includes an annual review of controls designed to prevent and detect fraud.

#### 4.1.7.2.2 Identifying and assessing risks

In addition to the risk management process previously described (see Section 2.1 "Risk management process"), dialogue is established between the Risk Management and Internal Control functional lines.

Synergies between the risk management and internal control approaches are a natural result of this context. They can be illustrated using the following examples:

- establishment of the scope of the INCOME internal control program according to the risks identified (see Section 4.1.7.1.4 "Scope of application of the INCOME program");
- execution of INCOME program internal controls, helping to better control risks related to important issues, such as industrial risks;
- sharing of feedback on each of the approaches implemented.

#### 4.1.7.2.3 Control activities

The INCOME program covers around 50 core, support and global processes that are used depending on the entity's risks and reported at Group level.

The pertinence of these controls and potential adjustments are examined according to feedback, organizational changes and new decisions issued by the General Management and the functional divisions.

#### 4.1.7.2.4 Information and communication

Group-level organizational decisions, the internal control frameworks, instructions, training tools, methodology guides for internal control, and, since 2016, monthly internal control results per BU can be viewed and downloaded via the Group intranet.

#### 4.1.7.2.5 Coordination and monitoring of internal control

The internal control system comes under the jurisdiction of a decision signed by the Chairman. It is managed as follows:

- monthly monitoring of the internal control program (self-assessments, audits);

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- presentation of an annual summary report to the entities' management teams in order to give Group managers concise information about the degree of internal control maturity of their entity;
- establishing roadmaps for the key improvement initiatives to be implemented by the operating entities and the main functional divisions;
- coordinating the Internal Control functional line with the other functional lines taking forward an approach that will contribute to improving the functioning of activities.

The Internal Control functional line is coordinated through regular meetings with the BUs. These meetings are supplemented, when necessary, by the creation of working groups and the deployment of education and training actions.

#### 4.1.7.3 Implementation of internal control

##### 4.1.7.3.1 Compliance with laws and regulations

The General Secretariat (the Legal Division, the Corporate Bodies and Group Governance Division and the Ethics and Compliance Division) helps to create a secure legal framework for the Group's operations and the decisions of its management. These teams are responsible for providing General Management, the BUs and NewCorp with the necessary support, each in their area of expertise and responsibility. Such support is mainly provided through (i) operational contributions to contractual negotiations, litigation and arbitration, reviews and protective actions concerning the Group's and its directors' liability, in the areas of embargo, of personal data protection, of company law, financial and stock market regulation and intellectual property rights, (ii) the actions of centers of expertise in competition law, regulations and financial law, (iii) legal analyses carried out and opinions issued for the commitment committees, (iv) regular monitoring and annual review of legal risks and, more generally, (v) managing the legal functional line for which the Legal Division is responsible.

Compliance with laws and regulations remains the responsibility of each BU, *métier* or support or operational function within its respective purview. Implementation of internal control objectives with regard to compliance with laws and regulations is performed at each level of management throughout the Group. For example, certain cross-disciplinary compliance objectives are managed by the relevant NewCorp support and operational functions:

- the Ethics and Compliance Division is responsible for drafting ENGIE's ethics and compliance rules, as well as ensuring that such rules are actually applied in accordance with the laws and regulations in force;
- the Finance Division ensures ENGIE's compliance in matters of accounting, finance and taxation. It is in charge of regulatory financial reporting;
- the Group Human Resources Division is in charge of compliance with current labor legislation and regulations and carries out the regulatory employment reporting;
- the Group Societal and Environmental Responsibility Division is responsible for compliance with environmental laws and regulations

throughout ENGIE. It assesses the environmental maturity of the Group's various businesses and is in charge of regulatory environmental reporting.

##### 4.1.7.3.2 Reliability of accounting and financial information

###### The control environment

The structure of the financial function is based on:

- operational financial directors who liaise with the BUs;
- the NewCorp divisions: Accounting; Finance Planning and Analysis; Corporate Finance, Treasury and Insurance; Tax; Investments and Acquisitions; Internal Control; and Investor Relations;
- the Financial Divisions of each BU. These oversee their reporting entities; the latter are responsible for the production and content of their financial statements and their internal control.

Responsibility for the preparation and the control of accounting and financial information is defined at each level of the Group's organization (NewCorp, BUs and reporting entities).

This internal control system is consistent with the AMF reference framework. It covers not only the processes for preparing financial information, but also all upstream operational processes contributing to the production of this information.

The main applicable procedures for the preparation of the parent company and consolidated financial statements are based on two tools:

- the manual of Group accounting policies issued by the Group Accounting Division. It is updated on a regular basis according to changes in international standards;
- closing instructions sent out prior to each consolidation phase. These cover the assumptions made when preparing the year-end accounts (exchange rates, discount rates and tax rates, for example), the scope of consolidation, the timetable for submitting data, the specific points requiring attention for closing, and the main changes in accounting regulations and standards. The instructions also include a definition of the performance indicators used by the Group.

###### Identifying and assessing risks

The main risks are monitored and managed as follows:

- the results obtained through the various approaches implemented (analysis of specific risks in the reporting and communication process using feedback) are used to create action and communication plans for the functional lines in question;
- budgetary processes and medium-term plan (MTP), performance monitoring, regular meetings at which the finance functions are mostly stakeholders, and meetings of the Executive Committee enable to monitor and manage the main risks identified;
- specific risks associated with processes for preparing and communicating financial information are also reviewed and are monitored at closing.

### Control activities

#### Preparation of monthly financial reports and consolidated financial statements

At the NewCorp level, the Group Accounting Division and the Group Finance Planning and Analysis Division, which both report to the Finance Division, coordinate their activities at weekly meetings attended by their key managers.

The Group Accounting Division drives the process of producing the consolidated financial statements, supported by the consolidation teams and the management control departments of NewCorp and the BUs.

Each of these entities carries out controls in its own area of responsibility to ensure that Group accounting standards and policies have been circulated and correctly applied. This principle of subsidiarity allows second-tier controls to be applied to the information prepared:

- controls at the BU level on the information passed on to this level by the reporting entities;
- controls at the NewCorp level on the information passed on to this level by the BUs.

Within the Group Accounting Division, three centers of expertise (Accounting IT, Consolidation Process, and Accounting Standards) optimize the way in which complex technical issues are handled and resolved. These centers, resulting from pooling expertise throughout the Group, ensure that both the analyses performed and the resulting positions adopted are of a consistently high standard.

The role of the Group Finance Planning and Analysis Division is explained in the paragraph “Setting objectives and coordination” below.

#### Key players in control

All reporting levels in the Group carry out activities that contribute to the preparation of accounting and financial information. These activities must comply with the internal control guidelines developed at the NewCorp level by the Internal Control Division under the aegis of the INCOME program. The players concerned are the following:

- the Finance Division of each reporting entity, which formally validates the accounting and financial reporting package;
- the Finance Division of each BU, which implements procedures with all operating subsidiaries, including a decentralized management control (see below the paragraph “Setting objectives and coordination”);
- the Group Accounting Division, which is in charge of financial reporting, preparing the parent company financial statements (of ENGIE and the financial vehicles managed by NewCorp), the consolidated financial statements, and liaising with the accounting departments of the AMF.

The Group implements a formalized system which commits operational and financial managers, with regard to the accuracy and fairness of the financial information passed on by the reporting entities to the BUs, then to NewCorp, as well as with regard to the internal control systems, which contribute to the reliability of this information throughout the information chain mentioned in the above paragraph, “The control environment.”

### Information and communication

#### Accounting and financial information systems

All the consolidated reporting entities use the SAP software package “Business Objects Financial Consolidation” (SAP B.F.C., formerly

Magnitude) for the Group financial consolidated statements and Management reporting.

The application is managed jointly by:

- the Accounting IT Center of Expertise, which handles administrative tasks and system configuration and provides operating assistance to users;
- the Information Systems Division, which is in charge of specific underlying infrastructures.

Other information systems used in the preparation of accounting and financial information are managed as appropriate on a decentralized basis by the BUs’ and subsidiaries’ IT departments.

#### Preparing and validating the Annual Report

The General Secretariat is in charge of preparing the Registration Document filed with the AMF, which includes the annual report and involves the following:

- defining the procedures for submitting and validating the information that will appear in the Registration Document;
- overseeing the work of the Registration Document Steering Committee;
- liaising with the AMF and applying its regulations.

The Finance Division is responsible for the “Financial information” section, which includes the consolidated financial statements, the parent company financial statements and the report on the financial position.

#### Preparing and approving press releases

The Communications Division applies the policies set by the “Communication with the press” procedure. These rules specifically indicate:

- the coordination of activities among the NewCorp and BU communications teams;
- the implementation of the process for providing information and/or validating press releases;
- a monitoring system and appropriate rules of crisis communication.

#### Relations with analysts and investors

The Finance Division also uses the current “Missions and operating principles of financial communication” procedure, which sets out management principles for the Group’s financial communication and clearly defines its activities in areas concerning analyst and investor relations and market intelligence.

Within the Finance Division, the Investor Relations Division steers and coordinates the market presentation process, including the quarterly, interim and annual financial data, as well as information about major transactions.

#### Setting objectives and coordination

The General Management updates and communicates the Group’s overall objectives and the allocation of resources to the BUs. The Group Finance Planning and Analysis Division, which reports to the Finance Division, prepares instruction memos for each of the BUs. These memos specify the macroeconomic assumptions to be applied, including assumptions on commodities prices set by the Strategy Division, the financial and non-financial indicators, the schedule, and the segmentation of the scope of activity. Each BU is responsible for sending these instructions to its subsidiaries and reporting entities within its scope after tailoring them to the specific characteristics of its business activity.

### 4.1 Report by the Chairman of the Board of Directors on corporate governance

Management control is performed in a decentralized manner to reflect the specific characteristics of each business activity. In particular, it must take into account the instructions circulated periodically by the Group Finance Planning and Analysis Division, the implementation instructions for the SAP B.F.C. software application, and the manual of Group accounting policies.

For each BU, a BU Committee validates the objectives set for the following year and the corresponding budget, as well as the outlook beyond the current year derived from the budget process and the medium-term plan to be used as the basis for the impairment testing of goodwills and long-term assets. This Committee meeting, prepared by the finance functional line under the responsibility of the Group Finance Planning and Analysis Division, brings together representatives from the General Management, the NewCorp divisions, and the operational and finance divisions of each BU. The Group's consolidated budget and medium-term plan are presented to the Audit Committee and the Strategy, Investment and Technology Committee before being submitted to the Board of Directors.

At subsequent BU Committee meetings, actual figures are compared to the budget and any adjustments to annual forecasts are validated by the Group's General Management.

Improving the process for preparing and processing financial information is the responsibility of each BU financial director and each NewCorp director. Feedback is given to verify that the production processes for accounting and financial information are functioning properly. When necessary, internal audits in the reporting entities and at the various organizational levels can also verify process quality.

#### 4.1.7.3.3 Continuous improvement

Implementation of internal control in the Group is part of our aim to continuously improve, streamline and optimize the control system, based on the following principles:

- risk analysis;
- drawing up and enhancing internal control frameworks, working closely with the NewCorp divisions to support Group policies;
- engaging in dialogue with the various business activities;
- adapting controls according to changes in risks;
- overseeing and training the coordinators in the entities with, for example, the awareness campaign on fraud risk conducted in 2016 and mentioned in Section 4.1.7.1.5.

### 4.1.8 Provisions in the bylaws regarding the participation of shareholders at Shareholders' Meetings

The Company bylaws stipulate that all shareholders are entitled to attend Shareholders' Meetings on condition that their shares are fully paid up. Each share entitles the holder to one vote and representation at Shareholders' Meetings, in accordance with current law and the bylaws. Ownership of one share entails automatic acceptance of these bylaws and of all decisions of the Shareholders' Meetings of the Company. Unless otherwise provided for by law, each shareholder has as many voting rights and may cast as many votes at meetings as he or she holds shares, which are fully paid up. Since April 2, 2016, in accordance with Article L. 225-123 of the French Commercial Code, all registered and fully paid-up shares registered in the name of the same beneficiary for at least two years have been automatically entitled to a double voting right (see Section 5.1.1.3 "Voting rights").

The terms for the participation of shareholders at Shareholders' Meetings are detailed in Section 7.1.5 "Shareholders' Meetings".

Provisions relating to procedures for shareholders' attendance at Shareholders' Meetings and shareholders' voting rights are set out in Section 7.1.3 "Rights, privileges and restrictions attached to shares" and in the bylaws (Articles 10, 11, 12 and 20).

The information stipulated by Article L. 225-100-3 of the French Commercial Code is published in Sections 3.2 "Social information", 4.6 "Compensation and benefits paid to members of corporate governance bodies", 5.1 "Information on the share capital", 5.2 "Shareholding" and 7.1 "Specific statutory provisions and bylaws".

## 4.2 Shareholders' Meeting of May 12, 2017 – Composition of the Board of Directors

The Board of Directors has decided to convene a Combined Ordinary and Extraordinary Shareholders' Meeting, which will take place on May 12, 2017. The agenda will focus on the appointment of two Directors and, more precisely, the ratification of one Director's office and the appointment of one Director.

On the recommendation of the Appointments and Compensation Committee, Patrice Durand was appointed to the Board on a temporary basis at the meeting of the Board of Directors of December 14, 2016, replacing Bruno Bézard for the latter's remaining term of office, i.e., until after the Ordinary Shareholders' Meeting called in 2019 to approve the financial statements for the year ending December 31, 2018.

The term of office of Caroline Simon, Director representing employee shareholders, will expire at the next Shareholders' Meeting. The supervisory boards of the company mutual investment funds (FCPE), Link France and Link International, appointed Christophe Aubert and Ton Willems as candidates for the position of Director. The candidate that receives the most votes will be appointed Director representing employee shareholders for a period of four years, to expire at the end of

the Ordinary Shareholders' Meeting that will be called in 2021 to approve the financial statements for the year ending December 31, 2020.

After the vote on these resolutions, the Board of Directors would have 19 members, including eight Independent Directors, nine women and four non-French citizens:

- Eight Independent Directors, representing 53% of the Board (percentage pursuant to the Afep-Medef Code, the number of directors representing employees and employee shareholders is not taken into account in calculating the percentage of Independent Directors);
- Nine women, representing 56% of the Board (pursuant to the law and the Afep-Medef Code, the number of Directors representing employees – who are not elected by the Shareholders' Meeting – is not taken into account in calculating the proportion of women and men);
- Four non-French Directors, representing 21% of the Board.



## 4.3 Statutory Auditors' report, prepared in accordance with article L. 225-235 of the French Commercial Code, on the report prepared by the Chairman of the Board of Directors of ENGIE

To the Shareholders,

In our capacity as statutory auditors of ENGIE and in accordance with article L. 225-235 of the French commercial code (*Code de commerce*), we hereby report on the report prepared by the chairman of your company in accordance with article L. 225-37 of the French commercial code for the year ended December 31, 2016.

It is the chairman's responsibility to prepare and submit for the board of directors' approval a report on the internal control and risk management procedures implemented by the company and to provide the other information required by article L. 225-37 of the French commercial code (*Code de commerce*) relating to matters such as corporate governance.

Our role is to:

- report on any matters as to the information contained in the chairman's report in respect of the internal control and risk management procedures relating to the preparation and processing of the accounting and financial information, and
- confirm that the report also includes the other information required by article L. 225-37 of the French commercial code (*Code de commerce*). It should be noted that our role is not to verify the fairness of this other information.

We conducted our work in accordance with professional standards applicable in France.

**Information on the internal control and risk management procedures relating to the preparation and processing of the accounting and financial information**

The professional standards require that we perform the necessary procedures to assess the fairness of the information provided in the chairman's report in respect of the internal control and risk management procedures relating to the preparation and processing of the accounting and financial information. These procedures consist mainly in:

- obtaining an understanding of the internal control and risk management procedures relating to the preparation and processing of the accounting and financial information on which the information presented in the chairman's report is based and of the existing documentation;
- obtaining an understanding of the work involved in the preparation of this information and of the existing documentation;
- determining if any material weaknesses in the internal control procedures relating to the preparation and processing of the accounting and financial information that we would have noted in the course of our work are properly disclosed in the chairman's report.

On the basis of our work, we have no matters to report on the information relating to the company's internal control and risk management procedures relating to the preparation and processing of the accounting and financial information contained in the report prepared by the chairman of the board of directors with article L. 225-37 of the French commercial code (*Code de commerce*).

### Other information

We confirm that the report prepared by the chairman of the board of directors also contains the other information required by article L. 225-37 of the French commercial code (*Code de commerce*).

Neuilly-sur-Seine and Paris-La Défense, March 10, 2017

The statutory auditors

**DELOITTE & ASSOCIES**

Véronique Laurent

**ERNST & YOUNG et Autres**

Pascal Macioce

## 4.4 General Management

On May 3, 2016, on the recommendation of the Appointments and Compensation Committee, the Board of Directors decided to separate the duties of Chairman of the Board of Directors and Chief Executive Officer. It then appointed Gérard Mestrallet as Chairman of the Board and Isabelle Kocher as Chief Executive Officer.

Since that date, Isabelle Kocher has been responsible for general management of the Company. Invested with the broadest powers to act in all circumstances on behalf of the Company, Isabelle Kocher exercises her powers within the limits of the corporate purpose and subject to the powers that the law expressly attributes to Shareholders' Meetings and the Board of Directors. According to the internal rules, the respective powers and duties of the Chairman of the Board and the Chief Executive Officer are determined by the Board of Directors and the Internal Regulations of the Board (see Section 4.1.3.1 "Powers of the Board of Directors").

Two executive bodies - the Executive Committee and the Operational Management Committee - are responsible for formulating ENGIE's strategy and monitoring its implementation.

The Executive Committee, which is in charge of Group management, comprises the Executive Vice-Presidents under the management of the Chief Executive Officer. It formulates strategic decisions according to the guidelines defined by the Board of Directors. It develops ENGIE's long-term outlook and ensures that the short-term objectives are achieved. It makes all major decisions particularly concerning investment, reviews performance, and monitors the pace of the Group transformation. It meets, in principle, every week.

The composition of the Executive Committee is based on the principle of bringing together the functional and operational responsibilities shared between its various members, with a cross-disciplinary approach that breaks down silos and establishes collective responsibility.

The Operational Management Committee (ENGIE 50), which is in charge of operational activities, brings together the Deputy CEOs, the CEOs of the 24 BUs, the directors of the five Métiers and the directors of the main functional divisions. It is chaired by the Chief Executive Officer. The Operational Management Committee implements ENGIE's strategic decisions; it is also in charge of taking the Group's transformation closer to the regions. It meets, in principle, every month.

At the date of this document, the Executive Committee has the following 12 members, representing five nationalities:

**the Chief Executive Officer:** Isabelle Kocher

**the Executive Vice-Presidents:**

Paulo Almirante, in charge of Group Environmental and Societal Responsibility *and the oversight of the following BUs: Europe Generation; Brazil; Northern, Southern and Eastern Europe; the Middle East, South and Central Asia; and Turkey*

Franck Bruel, *in charge of the oversight of the France BtoB BU*

Ana Busto, in charge of Brand and Communications

Pierre Chareyre, Chairman of the Energy Market Risks Committee and in charge of *the oversight of the Global Energy Management, LNG, Exploration & Production International, and Latin America BUs*

Pierre Deheunynck, in charge of Group Human Resources, Group Safety and Real Estate and the oversight of the Group's "Global Business Services" shared service center

Judith Hartmann, in charge of Finance and *the oversight of the UK and North America BUs*

Didier Holleaux, in charge of Strategic Sourcing & Procurement, Industrial Projects and Nuclear Development, *and oversight of the Elengy, GRDF, GRTgaz, Storengy, Asia Pacific, China, and GTT BUs*

Shankar Krishnamoorthy, in charge of the Group Métiers, the Group Strategy Division, *Business Development Oversight and oversight of the Tractebel BU*

Yves Le Gélard, in charge of Group Digital and Information Systems

Thierry Lepercq, in charge of Research & Technology and Innovation

Pierre Mongin, Group General Secretary, also in charge of the coordination of Nuclear Safety *and the supervision of the Africa, Benelux, France Networks, France Renewable Energy and France BtoC BUs*

## 4.5 Statutory Auditors' special report on regulated agreements and commitments

### 4.5.1 Statutory Auditors' special report on regulated agreements and commitment

*This is a free translation into English of the Statutory Auditors' special report on regulated agreements and commitments with third parties that is issued in the French language and is provided solely for the convenience of English speaking readers. This report on regulated agreements and commitments should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France. It should be understood that the agreements reported on are only those provided by the French Commercial Code and that the report does not apply to those related party transactions described in IAS 24 or other equivalent accounting standards.*

To the Shareholders,

In our capacity as statutory auditors of your Company, we hereby report to you on its regulated agreements and commitments.

We are required to inform you, on the basis of the information provided to us, of the terms and conditions of those agreements and commitments indicated to us, or that we may have identified in the

performance of our engagement, as well as the reasons why they benefit the Company. We are not required to comment as to whether they are beneficial or appropriate or to ascertain the existence of any such agreements and commitments. It is your responsibility, in accordance with Article R. 225-31 of the French Commercial Code (*Code de commerce*), to evaluate the benefits resulting from these agreements and commitments prior to their approval.

We are also required, where applicable, to inform you, in accordance with Article R. 225-31 of the French Commercial Code (*Code de commerce*), concerning the implementation during the year ended December 31, 2016 of the agreements and commitments previously approved by the Shareholders' Meeting. We performed the procedures we deemed necessary in accordance with professional guidance issued by the French National Institute of Statutory Auditors (*Compagnie nationale des commissaires aux comptes*) relating to this type of engagement. These procedures consisted in verifying the consistency of the information provided to us with the relevant source documents.

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#### A. Agreements and commitments submitted for approval to the Shareholders' Meeting

##### A.1 Agreements and commitments authorized during the year ended December 31, 2016

Pursuant to Article L. 225-40 of the French Commercial Code, the following agreements and commitments, which were previously authorized by your Board of Directors, have been brought to our attention.

##### **With Ms. Kocher, Director and Chief Executive Officer of ENGIE as from May 3, 2016**

At its meeting of May 3, 2016, the Board of Directors, having appointed Ms. Kocher to the position of Chief Executive Officer, voted unanimously, with the exception of Ms. Kocher who abstained from voting, to renew the decisions it had taken at its meeting of March 10, 2016 with regard to supplementary collective pension, benefit and healthcare plans when Ms. Kocher was Chief Operating Officer.

##### **A.1.1 Nature, purpose, conditions, and reasons: Maintenance of the supplementary collective defined-benefit pension plans for executive officers for the period prior to the suspension of Ms. Kocher's employment contract**

The benefits accrued by Ms. Kocher in respect of executive officers' supplementary collective defined-benefit pension plans for the period prior to the suspension of her employment contract on December 31, 2014, amounting to €145,456 before tax and social security deductions, will remain frozen and preserved, subject to the condition of continuous service in the Group upon retirement, which will involve keeping her employment contract suspended.

Your Board justified this agreement as follows: ENGIE's internal promotion policy assigns corporate officer positions to experienced executives with in-depth knowledge of the industry and markets in which ENGIE operates and who have had successful career paths within the Group. For these executives, the loss of rights associated with their employment contract and length of service would be a hindrance and counterproductive.

##### **A.1.2 Nature, purpose, conditions, and reasons: Maintenance of the supplementary collective defined-contribution pension plan and collective benefit and healthcare plans**

###### — Maintenance of the supplementary defined-contribution pension plan

At its meeting of May 3, 2016, the Board of Directors, having appointed Ms. Kocher to the position of Chief Executive Officer, voted to maintain the system set up for Ms. Kocher when she was Chief Operating Officer, namely a supplementary defined-contribution pension plan whereby the Company no longer guarantees the level of retirement benefit but makes an annual matching contribution, composed 50% of contributions paid to a third party as part of a defined-contribution pension plan (Article 82), and 50% of a sum paid in cash, in light of the immediate tax consequences of implementing this new mechanism. The matching contribution corresponds to a ratio of 25% of the sum of the fixed compensation and the actual variable compensation accrued for the given year. It also depends on the Company's performance since the calculation base already includes the variable portion linked to the Group's results.

Accordingly, at its meeting of March 1, 2017, the Board of Directors decided to pay a matching contribution of €406,762 for the 2016 fiscal year.

Your Board justified this agreement as follows: this mechanism, without prejudice to her entitlements accrued under the collective plans corresponding to her employment prior to the suspension of her employment contract, which have been frozen and preserved, will give Ms. Kocher a dedicated pension plan based on her current and future compensation, reflecting the significance of her position as chief executive officer. It is intended that this policy will be applied to all executive officers who are promoted to Chief Executive Officer at the head of the Group when their employment contract is suspended.

- Maintenance of collective pension, benefit and healthcare plans

At its meeting of May 3, 2016, the Board of Directors voted to maintain the collective pension, benefit and healthcare plans from which Ms. Kocher benefited before her employment contract was suspended.

### B. Agreements and commitments previously approved by the Shareholders' Meeting

#### B.1. Agreements and commitments approved during the year ended December 31, 2016

We have also been informed that the following agreements and commitments, previously approved by the Shareholders' Meeting of May 3, 2016, were performed during the year, as presented in the Statutory Auditors' special report dated March 22, 2016.

##### B.1.1. With Ms. Kocher, Director and Chief Operating Officer of ENGIE until May 3, 2016

###### Nature, purpose and conditions: Maintenance of supplementary collective defined-benefit pension plans

At its meeting of March 16, 2015, the Board of Directors decided, by a majority of directors taking part in the vote, to maintain, as from January 1, 2015, the executive officers' supplementary collective defined-benefit pension plans from which Ms. Kocher benefited in her capacity as Chief Operating Officer before her employment contract was suspended; Ms. Kocher's pension rights were found to be consistent with the new law for economic growth, activity and equal opportunities (the Macron Law), which was passed by the French National Assembly on August 6, 2015. The Company had thus applied this law ahead of its full passage by the legislature.

On March 10, 2016, the Board of Directors acknowledged Ms. Kocher's waiver of this benefit and voted to nullify the Board decision of March 16, 2015 to maintain, beyond January 1, 2015, the supplementary collective pension plans from which Ms. Kocher benefited before her employment contract was suspended. The Board also decided that Ms. Kocher's rights under these supplementary pension plans would be frozen and preserved as of December 31, 2014.

As indicated in Part A of this report, at its meeting of May 3, 2016, the Board of Directors, having appointed Ms. Kocher to the position of Chief Executive Officer, voted to maintain these supplementary collective pension plans for the period prior to the suspension of her employment contract.

###### Nature, purpose and conditions: The benefit of a new supplementary defined-contribution plan

At its meeting of March 10, 2016, the Board of Directors voted to set up a new supplementary pension system called a "defined-contribution" plan, the main features of which are discussed in Part A of this report.

Accordingly, the Board of Directors decided to pay in 2016 a matching contribution of €366,091 for the 2015 fiscal year.

As indicated in Part A of this report, the Board of Directors, at its meeting of May 3, 2016, having appointed Ms. Kocher to the position of Chief Executive Officer, voted to maintain this mechanism.

##### B.1.2. With SUEZ, formerly Suez Environnement Company (participating interest of 32.57%)

###### Persons concerned

Mr. Mestrallet, Chairman of the Board of Directors of ENGIE and Chairman of the Board of Directors of SUEZ, and Ms. Kocher, Chief Executive Officer of ENGIE and Director of SUEZ.

Your Board justified this agreement as follows: the proposed measures will allow the Group to compensate its Chief Executive Officer under terms that are in line with market conditions.

###### Nature, purpose and terms and conditions: Contribution of the entire share capital of Suez IP, which owns all intellectual property rights related to the SUEZ brand.

At its meeting of December 16, 2015, the Board of Directors, with the exception of Mr. Mestrallet and Ms. Kocher, who abstained, gave its unanimous prior approval for a contribution agreement entailing the transfer to Suez Environnement Company, since renamed SUEZ, of the entire share capital of Suez IP, which owns all intellectual property rights related to the SUEZ brand.

The main terms and conditions of this transaction, which are set out in the contribution agreement, are as follows:

- i. the contribution by ENGIE to Suez Environnement Company of all shares it holds in Suez IP, representing 100% of the share capital of the latter;
- ii. valuation of the entire Suez IP share capital contribution at €30 million;
- iii. consideration for this contribution by the issuance of 1,757,778 new common shares of Suez Environnement Company, representing approximately 0.3% of its share capital and voting rights.

Upon its approval, this transaction terminated the trademark license agreement signed in 2008 with Suez Environnement Company, as amended by a rider signed on October 1, 2013, which provided in particular for the right to use the "SUEZ" brand in its company name, and in other specific brands.

#### B.2. Agreements and commitments approved in prior years

##### B.2.1. whose remained in force during the year ended December 31, 2016

In accordance with Article R. 225-30 of the French Commercial Code, we have been informed that the following agreements and commitments, previously approved by Shareholders' Meetings of prior years, have remained in force during the year ended December 31, 2016.

##### B.2.1.1. With Ms. Kocher, Director and Chief Operating Officer of ENGIE until May 3, 2016

###### Nature, purpose and conditions: Collective benefit and healthcare plans

At its meeting of March 16, 2015, the Board of Directors voted unanimously, with the exception of Ms. Kocher, who did not take part in the discussions or the vote, to maintain, as from January 1, 2015, the collective benefit and healthcare plans from which Ms. Kocher benefited in her capacity as Chief Operating Officer before her employment contract was suspended.

As indicated in Part A of this report, the Board of Directors, at its meeting of May 3, 2016, having appointed Ms. Kocher to the position of Chief Executive Officer, voted to maintain these plans.

## 4.5 Statutory Auditors' special report on regulated agreements and commitments

**B2.1.2. With SUEZ, formerly Suez Environnement Company (participating interest of 32.57%)****Persons concerned**

Mr. Mestrallet, Chairman of the Board of Directors of ENGIE and Chairman of the Board of Directors of SUEZ, and Ms. Kocher, Chief Executive Officer of ENGIE and Director of SUEZ.

**Nature, purpose and conditions: Guidelines and industrial and commercial cooperation agreement and agreement relating to the settlement of disputes in Argentina**

A cooperation and shared services agreement was entered into between SUEZ and Suez Environnement Company. Pursuant to this agreement, SUEZ and Suez Environnement Company agreed to continue their cooperation, mainly in the areas of strategy, accounting, internal control, audit and risk management, finance, tax policy, IT services and communications, it being specified that all of the rights and obligations of SUEZ arising under the agreement were transferred to ENGIE, which resulted from the Gaz de France-SUEZ merger. The end of the shareholders' agreement also resulted in the termination of this agreement on the same date.

In view of the non-renewal of the shareholders' agreement and in order to extend the industrial, commercial and service cooperation agreement, ENGIE and Suez Environnement Company announced on January 23, 2013 that they had signed an agreement establishing "Guidelines and industrial and commercial cooperation policies between ENGIE and Suez Environnement Company."

This agreement, which was signed on January 17, 2013, is known as the "Guidelines" and relates to five areas: reciprocal preference in purchasing/sales, development of synergies between industrial activities, development of joint commercial offerings, partnership in the sustainable development policy, and commercial coordination of marketing, innovation and R&D.

At its meeting of December 5, 2012, the Board of Directors unanimously approved the signing of the draft guidelines and industrial and commercial cooperation policies presented to it. The agreement expired on July 22, 2016 but ENGIE and SUEZ continue to work together in industrial and commercial areas.

In connection with the spinoff-distribution of Suez's Environnement Division, SUEZ and Suez Environnement Company had entered into a 20-year agreement with respect to the economic transfer, in favor of Suez Environnement Company, of the rights and obligations related to the shareholding interests held by SUEZ in the Argentine companies Aguas Argentinas and Aguas Provinciales de Santa Fé, relating thereto or arising therefrom (the "Argentine Rights").

This agreement was previously authorized by the SUEZ Board of Directors at its meeting of June 4, 2008, and signed on June 5, 2008.

In 2016, SUEZ invoiced €1.7 million in attorney and advisory fees to ENGIE.

**B.2.2. not performed during the year ended December 31, 2016**

In addition, we have been notified that the following commitments and agreements, previously approved by Shareholders' Meetings of prior years, which were not performed during the yearended December 31, 2016.

**B.2.2.1. With companies in the ENGIE Group and members of the ENGIE Alliance Economic Interest Group (EIG)****Person concerned**

Mr. Mestrallet, Chairman of the Board of Directors of ENGIE and Chairman of the Board of Directors of ENGIE Energie Services.

**Nature, purpose and terms and conditions: Membership of the ENGIE Alliance EIG**

At its meeting of July 4, 2001, the Board of Directors of SUEZ, which merged with Gaz de France to form ENGIE, authorized the creation of a special-purpose financing vehicle, the Engie Alliance EIG, and authorized SUEZ to become a member of this EIG.

It also approved the guarantee granted by SUEZ for the benefit of the other members of the EIG that are subsidiaries of SUEZ. Consequently, ENGIE, in its capacity as parent company of the Group, will be the ultimate guarantor for any debt incurred by the members and exceeding their proportionate share.

This agreement had no impact on fiscal year 2016.

**B.2.2.2. With companies in the ENGIE Group that are not members of the ENGIE Alliance EIG****Person concerned**

Mr. Mestrallet, Chairman of the Board of Directors of ENGIE and Chairman of the Board of Directors of Electrabell.

**Nature, purpose and conditions: Extension of the activities of the ENGIE Alliance EIG**

At its meeting of March 9, 2005, the SUEZ Board of Directors expressly authorized the extension of the activities of the ENGIE Alliance EIG to the most significant SUEZ subsidiaries that are not members of the ENGIE Alliance EIG, in order to facilitate their financing.

As parent company of the Group, ENGIE is the ultimate guarantor with respect to these subsidiaries for any debt incurred that exceeds the proportionate share of the member company acting as guarantor.

This agreement had no impact on fiscal year 2016.

The Statutory Auditors

Neuilly-sur-Seine and Paris-La Défense, March 16, 2017

The Statutory Auditors

DELOITTE & ASSOCIES

Véronique Laurent

ERNST & YOUNG et Autres

Pascal Macioce

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### 4.5.2 Transactions with related parties

See Note 24 to the consolidated financial statements.

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### 4.5.3 Service contracts binding members of corporate governance bodies

To ENGIE's knowledge, there is no service contract binding members of the Company's management bodies or any of its subsidiaries that provides for benefits to be granted under such a contract.

## 4.6 Compensation and benefits paid to members of corporate governance bodies

This chapter was prepared in coordination with the Appointments and Compensation Committee.

### 4.6.1 Compensation of executive corporate officers

Compensation of corporate officers is determined by the Board of Directors based on the Appointments and Compensation Committee's proposals. It is the subject of a presentation and an advisory vote ("Say on Pay") at the Annual Shareholders' Meeting in accordance with the recommendations of the AFEP-MEDEF Code.

The compensation policy is regularly reviewed by the Appointments and Compensation Committee, and relies in particular on specific studies by an external specialist firm in this field.

In its recommendations to the Board of Directors, the Appointments and Compensation Committee seeks to propose a compensation policy in line with the practices of comparable major international groups for similar positions, based on a benchmark established by a specialized external firm that includes companies listed on the CAC40, Eurostoxx 50 (excluding companies in the financial sector) and Eurostoxx Utilities indices.

Stringent quantitative and qualitative performance criteria are set both for the variable portion of compensation and for long-term incentive plans, helping to maintain a link between the Group's performance and the compensation of its directors in the short-, medium- and long-term.

In accordance with the recommendations of the revised AFEP-MEDEF Code on compensation policy, to which the Company adheres, the compensation of the two executive corporate officers comprises:

- a fixed portion (see 4.6.1.1); this fixed amount remains unchanged unless the Board of Directors, upon recommendation of the Appointments and Compensation Committee, decides otherwise;
- a variable portion, balanced relative to total compensation, the purpose of which is to reflect the executive's personal contribution to the Group's development and results (see 4.6.1.2);
- a deferred variable portion in the form of Performance Units (see 4.6.1.3), subject to performance conditions.

The compensation policy applicable as from January 1, 2017 is discussed in Section 4.6.1.9.

#### 4.6.1.1 Fixed compensation

##### Fixed compensation for the period from January 1 to May 3, 2016

The fixed compensation of Gérard Mestrallet, Chairman and Chief Executive Officer until May 3, 2016, remained unchanged since 2009, namely €1,400,000 for a full year, equating to €477,957 for the period from January 1 to May 3, 2016.

The suspended employment contract of Gérard Mestrallet was terminated on his initiative upon his reappointment as Chairman and CEO on April 23, 2012. He requested the liquidation of his retirement benefit plan and, at his request, the total of his retirement benefit plan under the general retirement plan with Caisse Nationale d'Assurance Vieillesse (CNAV) and the mandatory supplementary plans with ARRCO

and AGIRC is deducted from the amount paid by ENGIE in such a way that the total fixed compensation paid in 2016 by ENGIE to Gérard Mestrallet for the period in question was €446,875, plus the mandatory retirement amount of €31,082, making a total of €480,054 including benefits in kind of €2,097.

The fixed compensation of Isabelle Kocher, Chief Operating Officer until May 3, 2016, was €900,000 for a full year, which equates to €307,258 for the period from January 1 to May 3, 2016, to which was added a benefit in kind of €2,052 for the period in question.

##### Fixed compensation for the period from May 3 to December 31, 2016

Gérard Mestrallet, Chairman of the Board of Directors as from May 3, 2016, received no compensation in respect of his office for the period in question.

The fixed compensation of Isabelle Kocher, Chief Executive Officer as from May 3, 2016, was set at €1,000,000 for a full year, which equates to €658,602 for the period from May 3 to December 31, 2016, to which was added a benefit in kind of €3,960 for the period in question.

##### Fixed compensation in 2017

Please refer to Section 4.6.1.9.

#### 4.6.1.2 Variable compensation

##### Variable compensation in 2015

The structure of the variable compensation paid in 2016 for the 2015 fiscal year was broken down into two components: a quantitative component (60%) and a qualitative component (40%).

For the quantitative component, the criteria used were Net recurring income, Group share per share (50%), and free cash flow, ROCE, and net debt (each counting for one-sixth of the overall total) (50%). The quantitative targets for 2015 were included in the Group's projected budget as presented to the Board of Directors on February 25, 2015.

For the qualitative component, the criteria used were as follows:

- for Gérard Mestrallet: implementation of the Group strategy, including actions to drive forward a European energy policy; continued execution of new corporate social and environmental responsibility initiatives for the Group, specifically in the context of the COP21 and the setting of new targets for 2016-2020; development of R&D and "Innovation & New Business" policies; contribution to the success of Isabelle Kocher as Chief Operating Officer; adequacy of the future organization – which will be presented to the Board of Directors – to the Group's strategy, among other things by making it more team-oriented and collaborative;
- for Isabelle Kocher: the quality of execution of Chief Operating Officer functions: authority over the business lines, acceleration of the

Group's transformation and its adaptation to the energy revolution; adequacy of the future organization – which will be presented to the Board of Directors – to the Group's strategy, among other things by making it more team-oriented and collaborative.

For 2015, Gérard Mestrallet's target bonus was set at 130% of his fixed compensation and capped at 150%. Isabelle Kocher's target bonus was set at 122% of her fixed compensation and capped at 141%.

Based on the foregoing, at its meeting of February 24, 2016, the Board of Directors, on the recommendation of the Appointments and Compensation Committee, set the variable compensation for 2015 at €1,579,687<sup>(1)</sup> for Gérard Mestrallet, and at €981,156<sup>(2)</sup> for Isabelle Kocher.

However, in light of the difficult economic situation of the energy sector, the two executive corporate officers decided to waive a portion of their variable compensation for 2015. As a result, the amount of variable compensation to be paid for the 2015 fiscal year came to €235,687 for Gérard Mestrallet (after waiving €1,344,000) and €562,656 for Isabelle Kocher (after waiving €418,500).

### Variable compensation in 2016 for the period from January 1 to May 3, 2016

The Board of Directors, at its meetings of December 16, 2015 and February 24, 2016, decided that the variable compensation of Gérard Mestrallet and Isabelle Kocher, for the period from January 1, 2016 to May 3, 2016, would be subject to the same criteria as in 2015 *mutatis mutandis*, and acknowledged that the waiver criteria that prevailed in 2015 would remain unchanged, and would be prorated over this period. Accordingly, the quantitative compensation criteria, their weighting and percentages of the target bonus and maximum variable compensation were carried over and prorated.

Variable compensation for the period in question is structured into two components: a quantitative component (60%) and a qualitative component (40%).

For the quantitative component, the criteria used were Net recurring income, Group share per share (50%), and free cash flow, ROCE, and net debt (each counting for one-sixth of the overall total) (50%). The quantitative targets for 2016 were included in the Group's projected budget as presented to the Board of Directors on February 24, 2016.

For the qualitative component, the criteria used were as follows:

- for Gérard Mestrallet: implementation of the Group strategy, including actions to drive forward a European energy policy; continued execution of new corporate social and environmental responsibility initiatives for the Group and implementation of the new targets for 2016-2020; development of R&D and "Innovation & New Business" policies; contribution to the success of Isabelle Kocher as Chief Operating Officer; implementation of the new organizational structure, in effect since January 1, 2016 in accordance with the Group's strategy, with a particular focus on making it more team-oriented and collaborative;
- for Isabelle Kocher: quality of execution of her Chief Operating Officer functions; implementation of the new organizational structure, in effect since January 1, 2016 in accordance with the Group's strategy, with particular focus on making it more team-oriented and collaborative.

For the period in question, Gérard Mestrallet's target bonus was set at 130% of his fixed compensation and capped at 150%. Isabelle Kocher's target bonus was set at 122% of her fixed compensation and capped at 141%.

At its meeting of March 1, 2017, the Board of Directors, on the recommendation of the Appointments and Compensation Committee:

- noted that the success rate of the *quantitative* criteria was 94.71%<sup>(3)</sup>
- set the success rate of the *qualitative* criteria at 98% for Gérard Mestrallet and 97.50% for Isabelle Kocher.

Based on the respective weightings of the quantitative (60%) and qualitative (40%) criteria, the *overall success rate* for Gérard Mestrallet was determined to be 96.03%, and for Isabelle Kocher, 95.83%.

On a full-year basis, the variable components for 2016 therefore amounted to €1,747,746 for Gérard Mestrallet and €1,054,130 for Isabelle Kocher.

Prorated, the amounts due for the period from January 1, 2016 to May 3, 2016 inclusive were €592,133 for Gérard Mestrallet and €357,137 for Isabelle Kocher.

After Gérard Mestrallet's waiver of €455,344 and Isabelle Kocher's waiver of €141,787, the variable compensation amounts due for the period from January 1, 2016 to May 3, 2016 inclusive were €136,789 for Gérard Mestrallet and €215,350 for Isabelle Kocher.

(1) For the quantitative component (representing 60% of the variable compensation), the results achieved were: Net recurring income, Group share per share (1/2): 83.33%; ROCE (1/6): 59.02%; Free cash flow (1/6): 116.60%; Net debt (1/6): 106.33%. In total, the variable portion for quantitative elements amounted to 88.66% of the 60%. For the qualitative portion (representing 40% of the variable compensation), the Board of Directors decided that Gérard Mestrallet had met his criteria at a rate of 84%.

(2) The quantitative criteria and results achieved are identical to those presented above for Gérard Mestrallet. For the qualitative portion (representing 40% of the variable compensation), the Board of Directors decided that Isabelle Kocher had met her criteria at a rate of 90%.

(3) For the quantitative component (representing 60% of the variable compensation), the results achieved were: Net recurring income, Group share per share (1/2): 90%; ROCE (1/6): 101.01%; Free cash flow (1/6): 120%; Net debt (1/6): 76.66%.



## 4.6 Compensation and benefits paid to members of corporate governance bodies

## Variable compensation in 2016 for the period from May 3 to December 31, 2016

Gérard Mestrallet, Chairman of the Board of Directors as from May 3, 2016, received no compensation in respect of his office for the period in question.

For the variable compensation of Isabelle Kocher, Chief Executive Officer, for the period in question, the Board of Directors approved a target bonus (on an annual basis, to be prorated) of €700,000, corresponding to 70% of the base compensation, capped at €840,000, which is 120% of the target bonus. The structure of this variable compensation is broken down into two components: a quantitative component (60%) and a qualitative component (40%).

For the quantitative component, the criteria used were identical to those prevailing in the first part of the year, namely net recurring income, Group share per share (50%), and free cash flow, ROCE, and net debt (each counting for one-sixth of the overall total) (50%). The quantitative targets for 2016 were included in the Group's projected budget as presented to the Board of Directors on February 24, 2016.

For the qualitative component, the criteria used were as follows:

- **internal reorganization.** Following the elimination on January 1 of the business lines and creation of 24 BUs, and a study on streamlining the subsidiaries, as from May 4 and with the new governance, drive forward the transition so as to create the best conditions for achieving the Group's targets in 2016 and, more generally, overall efficiency through the Lean program. Isabelle Kocher will pay particular attention to the cohesiveness of the entire company by focusing on internal communications with management and employees;
- **strategic repositioning in the context of the energy transition.** Implement the three-year action plan approved by the Board, in particular disposals and investments under the profitability conditions defined by the Group; limit the impact of activities that are over-exposed to market prices; develop regulated and contracted activities; speed up the reorientation of under-performing activities; affirm the role of solar in the Group's new energy mix;
- **innovation and digitalization.** With regard to finding new, innovative activities, ensure key programs are set up to prepare for tomorrow's businesses, accompanied by a policy for incubating and acquiring innovative startups in the Group's businesses; develop and deploy digital solutions;
- **Corporate, societal and environmental responsibility.** Deploy initiatives that allow the Group to develop in line with its new non-financial targets for 2016-2020. As part of a continuous improvement process, pay special attention to non-financial ratings, the Group's reputation, and the implementation of non-financial initiatives by ensuring the full buy-in of all BUs.

At its meeting of March 1, 2017, the Board of Directors, on the recommendation of the Appointments and Compensation Committee:

- noted that the success rate of the *quantitative* criteria was 94.71%<sup>(1)</sup>;
- set the success rate of the *qualitative* criteria at 98.75% for Isabelle Kocher.

Based on the respective weightings of the quantitative (60%) and qualitative (40%) criteria, the *overall success rate* for Isabelle Kocher was determined to be 96.33%.

On a full-year basis, the variable components for 2016 would therefore be €674,282 for Isabelle Kocher.

Prorated, the variable portion due for the period from May 4 to December 31, 2016 (i.e. 242 days out of 366) was €445,837.

## Variable compensation in 2017

Please refer to Section 4.6.1.9.

## 4.6.1.3 Long-term incentive compensation (Performance Units)

The Appointments and Compensation Committee, following the recommendations of the AFEP-MEDEF Code which seeks to increase the long-term engagement of corporate leaders, recommended to the Board of Directors that the executive corporate officers receive compensation involving a long-term incentive, provided that it is reasonable and subject to strict performance conditions, as well as comparable to that of other beneficiaries. On December 6, 2011, the Board of Directors decided that the long-term incentive may not exceed 40% of the total compensation of the corporate officers.

The Appointments and Compensation Committee proposed a long-term incentive plan to the Board of Directors for 2016 in the form of Performance Units (PUs) with the same characteristics as the plans for 2013, 2014 and 2015.

## Performance Units for the period from January 1 to May 3, 2016

As recommended by the Appointments and Compensation Committee, on February 24, 2016, the Board of Directors voted to award 50,000 Performance Units (i.e. one-third of 150,000) to Gérard Mestrallet. It also awarded 33,333 Performance Units (i.e. one-third of 100,000) to Isabelle Kocher, an amount that was reduced to 20,373 PUs after she waived 12,960 PUs.

These PUs are subject to the following conditions and criteria:

- Performance Units are fully vested after three years (March 2020), after which the beneficiary may freely exercise them, with fractional shares permitted.

(1) For the quantitative component (representing 60% of the variable compensation), the results achieved were: net recurring income, Group share per share (1/2): 90%; ROCE (1/6): 101.61%; Free cash flow (1/6): 120%; Net debt (1/6): 76.66%.

- Final vesting depends on a threefold performance condition, with each criterion weighing one-third of the total<sup>(1)</sup>:
 

To smooth the possible effects of volatility (gain or loss), the TSR (stock market performance, reinvested dividend) will be calculated by taking the average of the ENGIE TSR and that of the Panel companies over two months, ending at least a month before the expected delivery date of the relevant performance shares.
- Upon exercise, Performance Units are valued based on the first weighted average daily price published after the request is submitted. This method reduces the effects of volatility inherent in a closing or opening price.
- Obligation to reinvest in ENGIE shares 2/3 of the net amount paid until the shareholding target (equal to two years' fixed compensation for executive corporate officers) has been met.
- The lock-up periods associated with performance shares shall apply.
- In the event of departure from the Group, the same conditions as those applied to other performance share plans shall apply. This creates a regime identical to that of other beneficiaries of long-term incentives in the Group:
  - maintenance of rights in the event of death, retirement<sup>(2)</sup>, or disability (2nd or 3rd category under Article L. 341-4 of the French Social Security Code),
  - in case of death:
    - the performance conditions would be deemed fully satisfied,
    - the estate would have a period of six months from the date of death to exercise the Performance Units.
- In case of termination of office or employment contract for any other reason, the rights will lapse, unless otherwise decided by the Board of Directors.

Performance Units awarded for the period from January 1 to May 3, 2016 were valued at €7.73 per unit.

### Performance Units for the period from May 3 to December 31, 2016

On the recommendation of the Appointments and Compensation Committee, on May 3, 2016 the Board of Directors voted to award 120,000 Performance Units to Isabelle Kocher for the period from May 3 to December 31, 2016 on a full-year basis, ie 79,344 Performance Units for the period in question, subject to the same conditions and criteria that applied to those awarded for the first part of the year.

### Performance Units for 2017

Gérard Mestrallet did not receive any Performance Units for 2017.

As recommended by the Appointments and Compensation Committee, on March 1, 2017 the Board voted to award 120,000 Performance Units to Isabelle Kocher for 2017.

These Performance Units are subject to the following conditions and criteria:

- The award is effective on March 1, 2017 and the Performance Units will be fully vested on March 15, 2021, after which Isabelle Kocher has three years to exercise them, with fractional shares permitted.
- Final vesting depends on a threefold performance condition, with each criterion weighing one-third of the total<sup>(3)</sup>:

To smooth the possible effects of volatility (gain or loss), the TSR (stock market performance, reinvested dividend) will be calculated by taking the average of the ENGIE TSR and that of the Panel companies over two months, ending at least a month before the expected delivery date of the relevant performance shares.

(1) The overall success rate will be calculated as the arithmetic mean of the three levels of individual success. Performance conditions are as follows:

(a) internal condition related to the Net recurring income, Group share for fiscal 2018 and 2019 compared to the budgeted Net recurring income, Group share in the medium-term business plan (MTBP) reviewed by the Board of Directors (pro forma):

- Net recurring income, Group share 2018+2019 < 90% target Net recurring income, Group share 2018+2019: success rate of 0%
- Net recurring income, Group share 2018+2019 = 90% target Net recurring income, Group share 2018+2019: success rate of 33%
- Net recurring income, Group share 2018+2019 > 90% target Net recurring income, Group share 2018+2019: success rate progressive and linear from 33%
- Net recurring income, Group share 2018+2019 ≥ target Net recurring income, Group share 2018+2019: success rate of 100%

(b) Internal condition related to ROCE for 2018 and 2019 vs the target ROCE set in the medium term business plan (MTBP) reviewed by the Board of Directors (pro forma):

- ROCE 2018+2019 < 90% target ROCE 2018+2019: success rate of 0%,
- ROCE 2018+2019 = 90% target ROCE 2018+2019: success rate of 33%,
- ROCE 2018+2019 > 90% target ROCE 2018+2019 and < target ROCE 2018+2019: success rate progressive and linear from 33%,
- ROCE 2018+2019 ≥ target ROCE 2018+2019: success rate of 100%.

(c) An external condition related to the TSR (stock market performance, reinvested dividend) of ENGIE stock compared with the TSR of a reference panel consisting of EDF, E.ON, RWE, ENEL, Iberdrola and Gas Natural (hereafter the "Panel"), with each company weighted equally:

- ENGIE TSR ≤ 90% of Panel TSR: success rate of 0%,
- ENGIE TSR = 100% of Panel TSR: success rate of 70%,
- ENGIE TSR ≥ 103% of Panel TSR: success rate of 100%.

For interim results (from 90% to 100% and from 100% to 103%): progressive and linear success rate

(2) Including an end of office due to the age limit set by the Company's bylaws.

(3) (a) internal condition related to the Net recurring income, Group share for fiscal 2019 and 2020 compared to the budgeted Net recurring income, Group share in the medium-term business plan (MTBP) that will be presented to the Board of Directors in early 2018 (pro forma):

- Net recurring income, Group share 2019+2020 ≤ 80% target Net recurring income, Group share 2019+2020: success rate of 0%,
- Net recurring income, Group share 2019+2020 ≥ target Net recurring income, Group share 2019+2020: success rate of 100%,
- progressive and linear success rate between the two limits.

(b) Internal condition related to ROCE for 2019 and 2020 vs. the target ROCE set in the medium-term business plan (MTBP) which will be presented to the Board of Directors in early 2018 (pro forma):

- ROCE 2019+2020 < 80% target ROCE 2019+2020: success rate of 0%,
- ROCE 2019+2020 ≥ target ROCE 2019+2020: success rate of 100%,
- progressive and linear success rate between the two limits;

(c) An external condition related to the TSR of ENGIE stock compared with the TSR of a reference panel consisting of EDF, E.ON, RWE, ENEL, Iberdrola and Gas Natural (hereafter the "Panel"):

- ENGIE TSR = 80% of Panel TSR: success rate of 0%,
- ENGIE TSR ≥ 100% of Panel TSR: success rate of 100%,
- progressive and linear success rate between the two limits.

## 4.6 Compensation and benefits paid to members of corporate governance bodies

Innogy and Uniper were not included in the previous year's panel but were added to take account of the restructuring carried out by the German players. Each company in the reference panel receives an identical weighting, it being specified that E.ON and Uniper, on the one hand, and RWE and Innogy on the other, count as a single company (50% each) for weighting purposes.

- Upon exercise, Performance Units are valued based on the first weighted average daily price published after the request is submitted. This method reduces the effects of volatility inherent in a closing or opening price.
- Obligation to reinvest in ENGIE shares 2/3 of the income from the exercise of the Performance Units net of tax and social security withholding until the shareholding target (equal to two years' fixed compensation for executive corporate officers) has been met;
- The lock-up periods associated with performance shares shall apply.
- In the event of departure from the Group, the same conditions as those applied to other performance share plans shall apply. This would create a regime identical to that of other beneficiaries of long-term incentives in the Group:
  - maintenance of rights in the event of death, retirement, disability (2nd or 3rd category under Article L. 341-4 of the French Social Security Code),
  - in the event of death:
    - the performance conditions would be deemed fully satisfied,
    - the estate would have a period of six months from the date of death to exercise the Performance Units, after which the Performance Units shall become null and void.
- In case of termination of office or employment contract for any other reason, the rights will lapse, unless otherwise decided by the Board of Directors.

## 4.6.1.4 Retirement plans

Gérard Mestrallet is not covered by an individual retirement benefit plan. In addition to mandatory retirement plans, he benefits from supplementary collective defined-benefit (Article 39) and defined-contribution (Article 83) pension plans given to former employees of the former SUEZ group, which he joined in 1984. Gérard Mestrallet was reappointed as Chairman and Chief Executive Officer on April 23, 2012. As a result, in accordance with the AFEP-MEDEF Code of Corporate Governance, he voluntarily terminated his employment contract, which had been suspended since his appointment as an executive corporate officer. He requested the liquidation of his pension rights under the general retirement plan with CNAV, the supplementary mandatory plans with ARRCO and AGIRC, and the supplementary collective pension plans which are described in detail in the Company's Registration Documents and were approved by the Shareholders' Meeting under the "Say on Pay" rules. Furthermore, these collective plans are described in the following paragraphs. For the duration of his service as Chairman and Chief Executive Officer, Gérard Mestrallet had waived the right to collect any annuity payments resulting from supplementary collective pension plans. No additional rights were vested during the period. The annuity that Gérard Mestrallet will receive from the collective pension plans after May 4, 2016, the date on which he stepped down from his duties as Chief Executive Officer, amounts to €831,641 per year before tax and social security deductions, which represents 28% of his compensation in 2012 (the reference year for calculating his pension benefits).

In addition to mandatory pension plans, until December 31, 2014, Isabelle Kocher benefited from the supplementary collective pension plans of the former SUEZ group (which she joined in 2002), consisting of a defined-contribution plan and a defined-benefit plan.

The defined-contribution plan (Article 83) is based on gross annual compensation and the following contribution rates: 5% bracket A (equivalent to the annual social security ceiling), 8% bracket B (between one and four times the annual social security ceiling), 8% bracket C (between four and eight times the annual social security ceiling).

The defined-benefit plan (Article 39) is governed by Article L. 137-11 of the French Social Security Code. It is run by ENGIE Management Company, a wholly owned French subsidiary of ENGIE. The beneficiaries of this plan are the executives and corporate officers of ENGIE Management Company who are registered with the French social security system and meet the following three conditions: (i) they received gross compensation above the ceiling for bracket B contributions to the AGIRC executive supplementary pension plan, i.e. over four times the annual social security ceiling, (ii) they were working for a Group company when they retired, and (iii) they were entitled to at least one basic pension plan. The calculation basis for the annuity amount is the gross compensation received during the year in question, capped at 50 times the social security ceiling. The amount of compensation is that used as the basis for social security contributions as defined in Article L. 242-1, paragraph 1 of the French Social Security Code.

This plan provides for the payment of an annuity equal to the sum of the annual pension components calculated on 2% of the portion of gross annual compensation between four and eight times the social security ceiling (designated bracket C) and 4% of the portion of gross annual compensation between eight and fifty times the social security ceiling (designated bracket D), minus the above defined-contribution plan calculated on bracket C of the compensation. For a career of a minimum of 10 years in the plan, the total annuity cannot be less than 20% of bracket C of average compensation for the last five years plus 30% of bracket D for the same compensation, nor more than 30% of bracket C plus 40% of bracket D. If the career is less than 10 years, the corresponding rights are calculated on a prorata basis of actual time worked.

The rights under the defined-benefit plan are "not guaranteed" since they depend on the employee working in the Group at the time his or her pension is claimed in accordance with a mandatory plan for pension insurance.

ENGIE Management Company is responsible for financing this plan and pays premiums to a third-party insurance company which it has contracted to manage the pensions, calculate the actuarial provisions for the annuities, and manage the payments. The corresponding social security costs borne by the Company amount to 24%.

In accordance with the decisions of the Board of Directors on March 10, 2016, Isabelle Kocher's rights to the supplementary collective defined-contribution and defined-benefit pension plans were frozen on suspension of her employment contract, i.e. December 31, 2014.

The rights accumulated from 2002 to 2014 under the collective defined-benefit plan would result, subject to the condition of continuous service in the Group, in an annual annuity, estimated at year-end 2015, at the end of her career aged 65, of €145,456, before tax and social security deductions.

At its meeting on March 10, 2016, the Board of Directors also decided to set up a new supplementary pension plan for Isabelle Kocher whereby the company no longer guarantees the amount of pension but pays an annual contribution, half of which comprises contributions paid to a third-party organization under an optional defined-contribution retirement plan (Article 82) and half is a cash sum, given the immediate taxation on payments made into this new mechanism. The matching contribution corresponds to 25% of the sum of the fixed compensation and the actual variable compensation for the given year. It also depends on the Company's performance, since the calculation base already includes the variable portion linked to the Group's results. In setting the conditions of this mechanism, the Board of Directors wished to ensure that Ms. Kocher would not suffer a loss compared to her existing position nor gain an additional benefit. Accordingly, the Board of Directors decided to pay a contribution of €366,091 for the 2015 fiscal year. This contribution is subject to uncapped employer social contributions in accordance with prevailing regulations. The contribution for the period from January 1 to May 3, 2016 was €130,652.

Without prejudice to her rights accrued under the collective plans corresponding to her employment prior to the suspension of her employment contract, which have been frozen and preserved, this system will give Isabelle Kocher a dedicated pension plan, reflecting the significance of her position as chief executive officer. It is intended that this policy will be applied to all executive officers who are promoted to chief executive officer at the head of the Group when their employment contract is suspended.

At its meeting of May 3, 2016, the Board of Directors voted to carry forward the decisions made at its meeting of March 10, 2016 regarding Isabelle Kocher when she was Chief Operating Officer. Consequently, the benefits accrued by Ms. Kocher in respect of the supplementary collective pension plans for corporate offers for the period prior to the suspension of her employment contract on December 31, 2014 will remain frozen and preserved, which implies keeping her employment contract suspended. The arrangement for the matching pension plan contribution and conditions related thereto were also confirmed. The matching contribution for the period from May 3 to December 31, 2016 amounted to €276,110.

### 4.6.1.5 Employment contract, special retirement plans, severance pay and non-compete clause

	Employment contract	Supplementary pension plan	Compensation or benefits due or likely to be due on termination or change of function	Compensation due under a non-compete clause
Gérard Mestrallet <i>Chairman and Chief Executive Officer until May 3, 2016, then Chairman of the Board of Directors</i>	No	See 4.6.1.4	No	No
Isabelle Kocher <i>Chief Operating Officer until May 3, 2016, then Chief Executive Officer</i>	Yes (suspended)	See 4.6.1.4	See below	No

Isabelle Kocher's employment contract has been suspended since January 1, 2015. This suspended employment contract does not provide specifically for non-compete or severance compensation. As part of the Company's human resources policies, all employees of ENGIE Management Company receive severance compensation when their employment contract is terminated. Compensation due under said policies amounts to 3/5 of the monthly salary per year of service in the company or Group and is capped at 18 months' salary. "Monthly salary"

is understood to mean one-twelfth of the fixed compensation of the current year plus the last paid variable component. Isabelle Kocher's length of service at the time of her appointment as Chief Executive Officer on May 3, 2016 was 13 years and seven months. Note that there is no system of hiring bonuses or golden parachutes in place for executive corporate officers at ENGIE and that no consideration is provided in respect of non-compete clauses.

## 4.6.1.6 Summary of compensation of each executive corporate officer

<i>(in euros)</i>	2016		2015	
	Amount due in 2016	Amount paid in 2016	Amount due in 2015	Amount paid in 2015
Gérard Mestrallet Chairman and Chief Executive Officer (until May 3, 2016)				
Fixed compensation	477,957	477,957	1,400,000	1,400,000
Variable compensation	136,789	235,687	235,687	379,830
Matching contribution to retirement plan	0	0	0	0
Special compensation	0	0	0	0
Directors' fees	0	0	0	0
Benefits in kind	2,097	2,097	4,533	4,533
<b>TOTAL</b>	<b>616,843</b>	<b>715,741</b>	<b>1,640,220</b>	<b>1,784,363</b>

Gérard Mestrallet, Chairman of the Board of Directors as from May 3, 2016, received no compensation in respect of his office for the period in question. His retirement benefits are discussed in Section 4.6.1.4.

<i>(in euros)</i>	2016		2015	
	Amount due in 2016	Amount paid in 2016	Amount due in 2015	Amount paid in 2015
Isabelle Kocher Chief Operating Officer (until May 3, 2016)				
Fixed compensation	307,258	307,258	900,000	900,000
Variable compensation	215,350	562,656	562,656	690,000
Matching contribution to retirement plan	130,652	366,091	366,091	0
Special compensation	0	0	0	0
Directors' fees	0	0	0	0
Benefits in kind	2,052	2,052	1,708	1,708
<b>TOTAL</b>	<b>655,312</b>	<b>1,238,057</b>	<b>1,830,455</b>	<b>1,591,708</b>

<i>(in euros)</i>	2016		2015	
	Amount due in 2016	Amount paid in 2016	Amount due in 2015	Amount paid in 2015
Isabelle Kocher Chief Executive Officer (since May 3, 2016)				
Fixed compensation	658,602	658,602	0	0
Variable compensation	445,837		0	0
Matching contribution to retirement plan	276,110		0	0
Special compensation	0	0	0	0
Directors' fees	0	0	0	0
Benefits in kind	3,960	3,960	0	0
<b>TOTAL</b>	<b>1,384,509</b>	<b>662,562</b>	<b>0</b>	<b>0</b>

<i>(in euros)</i>	2016		2015	
	Amount due in 2016	Amount paid in 2016	Amount due in 2015	Amount paid in 2015
Isabelle Kocher FY 2016 Chief Operating Officer then Chief Executive Officer				
Fixed compensation	965,860	965,860	900,000	900,000
Variable compensation	661,187	562,656	562,656	690,000
Matching contribution to retirement plan	406,762	366,091	366,091	0
Special compensation	0	0	0	0
Directors' fees	0	0	0	0
Benefits in kind	6,012	6,012	1,708	1,708
<b>TOTAL</b>	<b>2,039,821</b>	<b>1,900,619</b>	<b>1,830,455</b>	<b>1,591,708</b>

### 4.6.1.7 Summary of compensation for each executive corporate officer

<i>(in euros)</i>	2016	2015
G�rard Mestrallet Chairman and Chief Executive Officer (until May 3, 2016)		
Compensation due for the fiscal year (detailed in the preceding table)	616,843	1,640,220
Valuation of options granted for the fiscal year	0	0
Valuation of Performance Shares granted for the fiscal year	0	0
Valuation of Performance Units granted during the fiscal year	386,500	1,453,500
<b>TOTAL</b>	<b>1,003,343</b>	<b>3,093,720</b>

G rard Mestrallet, Chairman of the Board of Directors as from May 3, 2016, received no compensation in respect of his office for the period in question.

<i>(in euros)</i>	2016	2015
Isabelle Kocher Chief Operating Officer (until May 3, 2016)		
Compensation due for the period in question (detailed in the preceding table)	655,312	1,830,455
Valuation of options granted for the period in question	0	0
Valuation of Performance Shares granted for the period in question	0	0
Valuation of Performance Units granted for the period in question	157,483	592,262
<b>TOTAL</b>	<b>812,795</b>	<b>2,422,717</b>

<i>(in euros)</i>	2016	2015
Isabelle Kocher Chief Executive Officer (since May 3, 2016)		
Compensation due for the period in question (detailed in the preceding table)	1,384,509	0
Valuation of options granted for the period in question	0	0
Valuation of Performance Shares granted for the period in question	0	0
Valuation of Performance Units granted for the period in question	613,329	0
<b>TOTAL</b>	<b>1,997,838</b>	<b>0</b>

## 4.6 Compensation and benefits paid to members of corporate governance bodies

<i>(in euros)</i>	2016	2015
Isabelle Kocher FY 2016 Chief Operating Officer then Chief Executive Officer		
Compensation due for the fiscal year (detailed in the preceding table)	2,039,821	1,830,455
Valuation of options granted for the fiscal year	0	0
Valuation of Performance Shares granted for the fiscal year	0	0
Valuation of Performance Units granted during the fiscal year	770,812	592,262
<b>TOTAL</b>	<b>2,810,633</b>	<b>2,422,717</b>

The valuation of Performance Units, based on a model provided by an external specialist firm, is based on an approach used for all of its client companies to obtain comparable valuations. It uses the parameters and assumptions consistent with the principles of IFRS, but takes into account all possible performance conditions (external and internal), not limited to "market" performance conditions as in IFRS 2. This valuation also takes into account the share price, the annual expected dividend yield, historical share price volatility, the risk-free interest rate, a three-year maturity, a three-year vesting period and an estimated life of

four and a half years. The valuation used was €11.15 for the 2014 award, €9.69 for the 2015 award, and €7.73 for the 2016 award.

This valuation is theoretical, to the extent that the final vesting of Performance Units (three years after the grant date) depends on the achievement of strict and demanding performance conditions. Thus, 87,000 Performance Shares granted to Gérard Mestrallet for 2010 were at the time of grant valued at €1,706,070; in reality, only 12,711 Performance Shares were vested by Gérard Mestrallet in March 2014, for a value of €240,937.

#### 4.6.1.8 Compensation components due or awarded for 2016 to each executive corporate officer of the Company, subject to the consultative vote of shareholders

In accordance with the recommendations of Article 26.1 of the AFEP-MEDEF Code to which the Company refers pursuant to Article L. 225-37 of the French Commercial Code, the following elements of compensation due or awarded for the fiscal year ended to each executive corporate officer of the Company are subject to the shareholders' consultative vote:

- the fixed portion;
- the annual variable portion, the amount of which is determined according to performance criteria;
- special compensation;
- stock options, performance shares and multi-year variable compensation plans, the components of which are determined according to performance criteria;
- compensation associated with the commencement or termination of duties;
- supplementary retirement plan; and

- benefits in kind.

Accordingly, it will be proposed at the Annual Shareholders' Meeting of May 12, 2017 to express an opinion on the following elements of the compensation due or awarded for 2016 to:

- Gérard Mestrallet, Chairman and Chief Executive Officer from January 1 to May 3, 2016;
- Isabelle Kocher, Chief Operating Officer from January 1 to May 3, 2016;
- Isabelle Kocher, Chief Executive Officer from May 3 to December 31, 2016.

It should be noted that Gérard Mestrallet, Chairman of the Board of Directors as from May 3, 2016, received no compensation in respect of his office for the period from May 3 to December 31, 2016.

#### COMPENSATION COMPONENTS DUE OR AWARDED FOR THE PERIOD JANUARY 1 TO MAY 3, 2016 TO GÉRARD MESTRALLET, CHAIRMAN AND CHIEF EXECUTIVE OFFICER

Type of compensation	Amount	Details
Fixed compensation	€477,957	<p>The fixed compensation of Gérard Mestrallet, Chairman and Chief Executive Officer until May 3, 2016, remained unchanged since 2009, namely €1,400,000 for a full year, equating to €477,957 for the period from January 1 to May 3, 2016.</p> <p>The suspended employment contract of Gérard Mestrallet was terminated on his initiative upon his reappointment as Chairman and CEO on April 23, 2012. He requested the liquidation of his retirement benefit plan and, at his request, the total of his retirement benefit plan under the general retirement plan with Caisse Nationale d'Assurance Vieillesse (CNAV) and the mandatory supplementary plans with ARRCO and AGIRC is deducted from the amount paid by ENGIE in such a way that the total fixed compensation paid in 2016 by ENGIE to Gérard Mestrallet for the period in question was €446,875, plus the mandatory retirement amount (€31,082), making a total of €477,957.</p>

Type of compensation	Amount	Details
Variable compensation	€136,789	<p>The structure of variable compensation of Gérard Mestrallet for the period in question to be paid in 2017 is broken down into two components: a quantitative component (60%) and a qualitative component (40%). For the quantitative component, the criteria used are based 50% on net recurring income, Group Share, per share and 50% free cash flow, ROCE and net debt (each for one-sixth). The quantitative targets for 2016 were included in the Group's projected budget as presented to the Board of Directors on February 24, 2016. For the qualitative portion, the conditions are as follows: implementation of the Group strategy, including actions to drive forward a European energy policy; continued execution of new corporate social and environmental responsibility initiatives for the Group and implementation of the new targets for 2016-2020; development of R&amp;D and "Innovation &amp; New Business" policies; contribution to the success of Isabelle Kocher as Chief Operating Officer; implementation of the new organizational structure, in effect since January 1, 2016 in accordance with the Group's strategy, with a particular focus on making it more team-oriented and collaborative.</p> <p>In 2016, Gérard Mestrallet's target bonus was set at 130% of his fixed compensation and capped at 150%.</p> <p>At its meeting of March 1, 2017, the Board of Directors, on the recommendation of the Appointments and Compensation Committee:</p> <ul style="list-style-type: none"> <li>noted that the success rate of the <i>quantitative</i> criteria was 94.71%<sup>(1)</sup>;</li> <li>set the success rate of the <i>qualitative</i> criteria at 98%.</li> </ul> <p>Based on the respective weightings of the quantitative (60%) and qualitative (40%) criteria, the <i>overall success rate</i> was determined to be 96.03.</p> <p>On a full-year basis, the variable portion for 2016 would therefore amount to €1,747,746. Prorated, the variable portion due for the period from January 1 to May 3, 2016 inclusive would amount to €592,133.</p> <p>After Gérard Mestrallet's waiver of €455,344, the variable portion due for the period from January 1 to May 3, 2016 inclusive amount to €136,789.</p>
Matching contribution to retirement plan	None	Gérard Mestrallet receives no matching contributions to his pension plans.
Multi-year variable compensation	None	Gérard Mestrallet receives no variable multi-year compensation.
Directors' fees	None	Gérard Mestrallet receives no Directors' fees.
Special compensation	None	Gérard Mestrallet receives no special compensation.
Allocation of stock options, performance shares and any other long-term compensation	Valuation <sup>(2)</sup> : €386,500	<p>On February 24, 2016 the Board of Directors awarded 50,000 Performance Units (1/3 of 150,000) to Gérard Mestrallet for the period January 1 to May 3, 2016.</p> <p>Performance Units will be fully vested in March 2020, after which the beneficiary has three years to exercise them, with fractional shares permitted.</p> <p>Final vesting depends on a threefold performance condition, with each criterion weighing one-third of the total:</p> <ul style="list-style-type: none"> <li>net recurring income, Group share for fiscal 2018 and 2019, compared to the target budgeted net recurring income, Group share reviewed by the Board (pro forma);</li> <li>ROCE for fiscal 2018 and 2019, compared to the target ROCE reviewed by the Board (pro forma);</li> <li>TSR of ENGIE stock compared with the TSR of a reference panel of companies consisting of EDF, E.ON, RWE, ENEL, Iberdrola and Gas Natural.</li> </ul> <p>Success rates (from 0% to 100%) will be calculated for each condition and an overall rate established through an arithmetic mean of the three conditions.</p> <p>On December 6, 2011, the Board of Directors decided that the value of this element of compensation should not exceed 40% of the total compensation.</p>
Compensation associated with the commencement or termination of duties	None	Gérard Mestrallet receives no compensation associated with the commencement or termination of duties.

(1) For the quantitative component (representing 60% of the variable compensation), the results achieved were: net recurring income, Group share per share (1/2): 90%; ROCE (1/6): 101.61%; Free cash flow (1/6): 120%; Net debt (1/6): 76.66%.

(2) See note about this theoretical valuation in Section 4.6.1.7.



## 4.6 Compensation and benefits paid to members of corporate governance bodies

Type of compensation	Amount	Details
Supplementary pension plan	No payment	<p>Gérard Mestrallet is not covered by an individual retirement benefit plan. In addition to mandatory pension plans, he benefits from supplementary collective defined-benefit (Article 39) and defined-contribution (Article 83) pension plans given to former employees of the ex-SUEZ group, which he joined in 1984. Gérard Mestrallet was reappointed as Chairman and Chief Executive Officer on April 23, 2012. As a result, in accordance with the AFEP-MEDEF Code of Corporate Governance, he voluntarily terminated his employment contract, which had been suspended since his appointment as an executive corporate officer. Gérard Mestrallet requested the liquidation of his pension rights under the general retirement plan with CNAV, the supplementary mandatory plans with ARRCO and AGIRC, and the supplementary collective pension plans which are described in detail in the Company's Registration Documents and were approved by the Shareholders' Meeting under the "Say on Pay" rules. For the duration of his service as Chairman and Chief Executive Officer, Gérard Mestrallet had waived the right to collect any annuity payments resulting from supplementary collective pension plans. No rights were vested during the period.</p> <p>The annuity that Gérard Mestrallet receives from the collective pension plans after May 3, 2016, the date on which he stepped down from his duties as Chief Executive Officer, amounts to €831,641 per year before tax and social security deductions, which represents 28% of his compensation in 2012 (the reference year for calculating his pension benefits).</p>
Benefits in kind	€2,097	Gérard Mestrallet benefits from the use of a company vehicle.

#### COMPENSATION COMPONENTS DUE OR AWARDED FOR THE PERIOD JANUARY 1 TO MAY 3, 2016 TO ISABELLE KOCHER, DEPUTY CHIEF EXECUTIVE OFFICER AND CHIEF OPERATING OFFICER

Compensation components	Amount	Details
Fixed compensation	€307,258	Isabelle Kocher's fixed compensation was set at €900,000 for a full year, which equates to €307,258 for the period from January 1 to May 3, 2016.
Variable compensation	€215,350	<p>The structure of Isabelle Kocher's variable compensation for the period in question to be paid in 2017 is broken down into two components: a quantitative component (60%) and a qualitative component (40%). For the quantitative component, the criteria used are based 50% on net recurring income, Group Share, per share and 50% free cash flow, ROCE and net debt (each for one-sixth). The quantitative targets for 2016 were included in the Group's projected budget as presented to the Board of Directors on February 24, 2016. For the qualitative component, the criteria used are: quality of execution of her Chief Operating Officer functions; implementation of the new organizational structure, in effect since January 1, 2016 in accordance with the Group's strategy, with particular focus on making it more team-oriented and collaborative.</p> <p>For period in question, Isabelle Kocher's target bonus was set at 122% of her fixed compensation and capped at 141%.</p> <p>At its meeting of March 1, 2017, the Board of Directors, on the recommendation of the Appointments and Compensation Committee:</p> <ul style="list-style-type: none"> <li>noted that the success rate of the quantitative criteria was 94.71%<sup>(1)</sup>,</li> <li>established the success rate of the qualitative criteria at 97.50%.</li> </ul> <p>Based on the respective weightings of the quantitative (60%) and qualitative (40%) criteria, the overall success rate was determined to be 95.83%.</p> <p>On a full-year basis, the variable portion for 2016 would therefore amount to €1,054,130. Prorated, the amount due for the period from January 1 to May 3, 2016 inclusive amounts to €357,137.</p> <p>After Isabelle Kocher's waiver of €141,787, the variable portion due to Isabelle Kocher for the period from January 1 to May 3, 2016 inclusive amounts to €215,350.</p>

(1) For the quantitative component (representing 60% of the variable compensation), the results achieved were: net recurring income, Group share per share (1/2): 90%; ROCE (1/6): 101.61%; Free cash flow (1/6): 120%; Net debt (1/6): 76.66%.

Compensation components	Amount	Details
Matching contribution to retirement plan	€130,652	Following Isabelle Kocher's agreement to waive her rights to the collective supplementary retirement plans from January 1, 2015, the date on which her employment contract was suspended, the Board of Directors decided at its meeting of March 10, 2016 to establish a new supplementary retirement plan for Isabelle Kocher in which the company no longer guarantees the amount of pension but pays an annual matching contribution, half of which comprises contributions paid to a third-party organization under an optional defined-contribution retirement plan (Article 82) and half is a cash sum, given the immediate taxation on commencement of this new mechanism. The matching contribution corresponds to a ratio of 25% of the sum of the fixed compensation and the actual variable compensation accrued for the given year. It also depends on the Company's performance, since the calculation base already includes the variable portion linked to the Group's results. In setting the conditions of this mechanism, the Board of Directors wished to ensure that Isabelle Kocher would not suffer a loss compared to her existing position nor gain an additional benefit. Accordingly, the Board of Directors decided to pay a matching contribution of €130,652 for the period in question.
Multi-year variable compensation	None	Isabelle Kocher receives no variable multi-year compensation.
Directors' fees	None	Isabelle Kocher receives no Directors' fees.
Special compensation	None	Isabelle Kocher receives no special compensation.
Allocation of stock options, performance shares and any other long-term compensation	Valuation <sup>(1)</sup> : €157,483	<p>On February 24, 2016, the Board of Directors voted to award 33,333 Performance Units (i.e., one-third of 100,000) to Isabelle Kocher for the period from January 1 to May 3, 2016, an amount that was reduced to 20,373 PUs after Isabelle Kocher waived 12,960 PUs.</p> <p>Performance Units will be fully vested in March 2020, after which the beneficiary has three years to exercise them, with fractional shares permitted.</p> <p>Final vesting depends on a threefold performance condition, with each criterion weighing one-third of the total:</p> <ul style="list-style-type: none"> <li>• Net recurring income, Group share for fiscal 2018 and 2019, compared to the target budgeted net recurring income, Group share reviewed by the Board (pro forma);</li> <li>• ROCE for fiscal 2018 and 2019, compared to the target ROCE reviewed by the Board (pro forma);</li> <li>• TSR of ENGIE stock compared with the TSR of a reference panel of companies consisting of EDF, E.ON, RWE, ENEL, Iberdrola and Gas Natural.</li> </ul> <p>Success rates (from 0% to 100%) will be calculated for each condition and an overall rate established through an arithmetic mean of the three conditions.</p> <p>On December 6, 2011, the Board of Directors decided that the value of this element of compensation should not exceed 40% of the total compensation.</p>
Compensation associated with the commencement or termination of duties	None	Isabelle Kocher's employment contract has been suspended since January 1, 2015. The recommendation of Article 22 of the AFEP-MEDEF Code to terminate the employment contract of an employee who becomes a corporate officer does not apply to deputy chief executive officers. The suspended employment contract of Isabelle Kocher does not provide for specific compensation under a non-compete or golden parachute clause. As part of the Company's human resources policies, all employees of ENGIE Management Company receive severance compensation when their employment contract is terminated. Compensation due under said policies amounts to 3/5 of the monthly salary per year of service in the company or Group and is capped at 18 months' salary. "Monthly salary" is understood to mean one-twelfth of the annual fixed compensation of the current year plus the last paid variable component. Note that there is no system of hiring bonuses or golden parachutes in place for executive corporate officers at ENGIE and that no consideration is provided in respect of non-compete clauses.

(1) See note about this theoretical valuation in Section 4.6.1.7.

## 4.6 Compensation and benefits paid to members of corporate governance bodies

Compensation components	Amount	Details
Supplementary pension plan	None	<p>In addition to mandatory pension plans, until December 31, 2014, Isabelle Kocher benefited from the supplementary collective pension plans of the former SUEZ group (which she joined in 2002), consisting of a defined-contribution plan and a defined-benefit plan.</p> <p>The defined-contribution plan (Article 83) is based on gross annual compensation and the following contribution rates: 5% bracket A (equivalent to the annual social security ceiling), 8% bracket B (between one and four times the social security ceiling), 8% bracket C (between four and eight times the social security ceiling).</p> <p>The defined-benefit plan (Article 39) is governed by Article L. 137-11 of the French Social Security Code. It is run by ENGIE Management Company, a wholly owned French subsidiary of ENGIE. The beneficiaries of this plan are the executives and corporate officers of ENGIE Management Company who are registered with the French social security system and meet the following three conditions: (i) they received gross compensation above the ceiling for bracket B contributions to the AGIRC executive supplementary pension plan, i.e. over four times the annual social security ceiling, (ii) they were working for a Group company when they retired, and (iii) they were entitled to at least one basic pension plan. The calculation basis for the annuity amount is the gross compensation received during the year in question, capped at 50 times the social security ceiling. The amount of compensation is that used as the basis for social security contributions as defined in Article L. 242-1 paragraph 1 of the French Social Security Code.</p> <p>This plan provides for the payment of an annuity equal to the sum of the annual pension components calculated on 2% of the portion of gross annual compensation between four and eight times the social security ceiling (designated bracket C) and 4% of the portion of gross annual compensation between eight and fifty times the social security ceiling (designated bracket D), minus the above defined-contribution plan calculated on bracket C of the compensation. For a career of a minimum of 10 years in the plan, the total annuity cannot be less than 20% of bracket C of average compensation for the last five years plus 30% of bracket D for the same compensation, nor more than 30% of bracket C plus 40% of bracket D. If the career is less than 10 years, the corresponding rights are calculated on a prorata basis of actual time worked.</p> <p>The rights under the defined-benefit plan are “not guaranteed” since they depend on the employee working in the Group at the time his or her pension is claimed in accordance with a mandatory plan for pension insurance.</p> <p>ENGIE Management Company is responsible for financing these plans and pays premiums to a third-party insurance company which it has contracted to manage the pensions, calculate the actuarial provisions for the annuities, and manage the payments. The corresponding social security costs borne by the Company amount to 24%.</p> <p>In accordance with the decisions of the Board of Directors on March 10, 2016, Isabelle Kocher’s rights to the supplementary collective defined-contribution and defined-benefit pension plans were frozen on suspension of her employment contract, i.e. December 31, 2014.</p> <p>The rights accumulated from 2002 to 2014 under the collective defined-benefit plan would result, subject to the condition of continuous service in the Group, in an annual annuity, estimated at year-end 2015, at the end of her career aged 65, of €145,456, before tax and social security deductions.</p>
Benefits in kind	€2,052	Isabelle Kocher benefits from the use of a company vehicle.

### COMPENSATION COMPONENTS DUE OR AWARDED FOR THE PERIOD FROM MAY 3, 2016 TO DECEMBER 31, 2016 TO ISABELLE KOCHER, CHIEF EXECUTIVE OFFICER

Compensation components	Amount	Details
Fixed compensation	€658,602	Isabelle Kocher's fixed compensation was set at €1,000,000 for a full year, which equates to €658,602 for the period from May 3 to December 31, 2016.
Variable compensation	€445,837	<p>The structure of Isabelle Kocher's variable compensation for the period in question to be paid in 2017 is broken down into two components: a quantitative component (60%) and a qualitative component (40%). For the quantitative component, the criteria used are based 50% on net recurring income, Group Share, per share and 50% free cash flow, ROCE and net debt (each for one-sixth). The quantitative targets for 2016 were included in the Group's projected budget as presented to the Board of Directors on February 24, 2016.</p> <p>For the qualitative component, the criteria used were:</p> <p><i>Internal reorganization:</i> Following the elimination on January 1 of the business lines and creation of 24 BUs, and discussion regarding optimizing the subsidiaries, focus as from May 4 under the new governance on pursuing the transition so as to contribute in the most effective way possible to achieving the Group's targets in 2016 and, more generally, to overall efficiency through the Lean program. Isabelle Kocher will be particularly attentive to the cohesiveness of the entire company by laying great stress on internal communications aimed at management and non-executive staff alike.</p> <p><i>Strategic repositioning in the context of the energy transition.</i> Implement the three-year action plan approved by the Board, especially disposals and investments under the profitability conditions defined by the Group; limit the impact of activities that are over-exposed to market prices; develop regulated and contracted activities; speed up the change in focus of activities in economic difficulty; boost the role of solar in the Group's new energy mix.</p> <p><i>Innovation and digitalization.</i> With regard to finding new, innovative activities, ensure key programs are set up to prepare for tomorrow's businesses, complemented by a policy for incubating and acquiring innovative startups in the Group's business lines; develop and deploy digital solutions.</p> <p><i>Corporate, societal and environmental responsibility.</i> Implement initiatives that allow the Group to develop in line with its new non-financial targets for 2016-2020. As part of a process of ongoing improvement, pay special attention to non-financial ratings, the Group's reputation, and the implementation of non-financial initiatives by ensuring the full buy-in of all BUs.</p> <p>For the period in question, Isabelle Kocher's target bonus amounts to €700,000 for a full year, corresponding to 70% of base compensation, capped at €840,000, which is 120% of the target bonus.</p> <p>At its meeting of March 1, 2017, the Board of Directors, on the recommendation of the Appointments and Compensation Committee:</p> <ul style="list-style-type: none"> <li>noted that the success rate of the <i>quantitative</i> criteria was 94.71%<sup>(1)</sup>;</li> <li>set the success rate of the <i>qualitative</i> criteria at 98.75% for Isabelle Kocher.</li> </ul> <p>Based on the respective weightings of the quantitative (60%) and qualitative (40%) criteria, the <i>overall success rate</i> for Isabelle Kocher was determined to be 96.33%<sup>(1)</sup>.</p> <p>On a full-year basis, the variable components for 2016 would therefore be €674,282 for Isabelle Kocher.</p> <p>Prorated, the variable component due for the period from May 4 to December 31, 2016 (i.e. 242 days out of 366) was €445,837.</p>

(1) For the quantitative component (representing 60% of the variable compensation), the results achieved were: net recurring income, Group share per share (1/2): 90%; ROCE (1/6): 101.61%; Free cash flow: (1/6) 120%; Net debt (1/6): 76.66%.

## 4.6 Compensation and benefits paid to members of corporate governance bodies

Compensation components	Amount	Details
Matching contribution to retirement plan	€276,110	At its meeting of May 3, 2016, the Board of Directors voted to maintain the matching contribution arrangement from which Isabelle Kocher benefited when she was Chief Operating Officer. Under this supplementary pension plan system, the Company does not guarantee the amount of pension but pays an annual matching contribution, half of which comprises contributions paid to a third-party organization under an optional defined-contribution retirement plan (Article 82) and half is a cash sum, given the immediate taxation on commencement of this new mechanism. The matching contribution corresponds to a ratio of 25% of the sum of the fixed compensation and the actual variable compensation accrued for the period in question. It also depends on the Company's performance, since the calculation base already includes the variable portion linked to the Group's results. The matching contribution for the period in question amounted to €276,110.
Multi-year variable compensation	None	Isabelle Kocher receives no variable multi-year compensation.
Directors' fees	None	Isabelle Kocher receives no Directors' fees.
Special compensation	None	Isabelle Kocher receives no special compensation.
Allocation of stock options, performance shares and any other long-term compensation	Valuation <sup>(1)</sup> : €613,329	At its meeting of May 3, 2016, the Board of Directors voted to award 120,000 Performance Units to Isabelle Kocher for the period from May 3 to December 31, 2016 on a full-year basis, or 79,344 Performance Units for the period in question, subject to the same conditions and criteria that applied to those awarded for the first part of the year.  On December 6, 2011, the Board of Directors decided that the value of this element of compensation should not exceed 40% of the total compensation.
Compensation associated with the commencement or termination of duties	None	Isabelle Kocher's employment contract has been suspended since January 1, 2015. The AFEP-MEDEF Code recommends that when an employee becomes an executive corporate officer, their employment contract with the company should be terminated. While this recommendation does not apply to chief operating officers, it does apply to chief executive officers. When Isabelle Kocher was appointed Chief Executive Officer after serving as Chief Operating Officer, the Board of Directors nevertheless deemed it appropriate to maintain the suspension of her employment contract. The Board decided that the rights accrued by Isabelle Kocher in respect of the supplementary collective pension plans for executive officers up until December 31, 2014, which is the period prior to the suspension of her employment contract, would remain frozen and preserved, which implied keeping her employment contract suspended. ENGIE's internal promotion policy assigns corporate officer positions to experienced executives with in-depth knowledge of the industry and markets in which ENGIE operates and who have had successful career paths within the Group. For these executives, the loss of rights associated with their employment contract and length of service would be a hindrance and counterproductive.  The suspended employment contract of Isabelle Kocher does not provide for specific consideration under a non-compete or golden parachute clause. As part of the Company's human resources policies, all employees of ENGIE Management Company receive severance compensation when their employment contract is terminated. Compensation due under said policies amounts to 3/5 of the monthly salary per year of service in the company or Group and is capped at 18 months' salary. "Monthly salary" is understood to mean one-twelfth of the annual fixed compensation of the current year plus the last paid variable component. Isabelle Kocher's length of service at the time of her appointment as Chief Executive Officer on May 3, 2016 was 13 years and seven months. Note that there is no system of hiring bonuses or golden parachutes in place for executive corporate officers at ENGIE and that no consideration is provided in respect of non-compete clauses.

(1) See note about this theoretical valuation in Section 4.6.1.7.

Compensation components	Amount	Details
Supplementary pension plan	None	<p>In addition to mandatory pension plans, until December 31, 2014, Isabelle Kocher benefited from the supplementary collective pension plans of the former SUEZ Group (which she joined in 2002), consisting of a defined-contribution plan and a defined-benefit plan.</p> <p>The defined-contribution plan (Article 83) is based on gross annual compensation and the following contribution rates: 5% bracket A (equivalent to the annual social security ceiling), 8% bracket B (between one and four times the social security ceiling), 8% bracket C (between four and eight times the social security ceiling).</p> <p>The defined-benefit plan (Article 39) is governed by Article L. 137-11 of the French Social Security Code. It is run by ENGIE Management Company, a wholly owned French subsidiary of ENGIE. The beneficiaries of this plan are the executives and corporate officers of ENGIE Management Company who are registered with the French social security system and meet the following three conditions: (i) they received gross compensation above the ceiling for bracket B contributions to the AGIRC executive supplementary pension plan, i.e. over four times the annual social security ceiling, (ii) they were working for a Group company when they retired, and (iii) they were entitled to at least one basic pension plan. The calculation basis for the annuity amount is the gross compensation received during the year in question, capped at 50 times the social security ceiling. The amount of compensation is that used as the basis for social security contributions as defined in Article L. 242-1 paragraph 1 of the French Social Security Code.</p> <p>This plan provides for the payment of an annuity equal to the sum of the annual pension components calculated on 2% of the portion of gross annual compensation between four and eight times the social security ceiling (designated bracket C) and 4% of the portion of gross annual compensation between eight and fifty times the social security ceiling (designated bracket D), minus the above defined-contribution plan calculated on bracket C of the compensation. For a career of a minimum of 10 years in the plan, the total annuity cannot be less than 20% of bracket C of average compensation for the last five years plus 30% of bracket D for the same compensation, nor more than 30% of bracket C plus 40% of bracket D. If the career is less than 10 years, the corresponding rights are calculated on a prorata basis of actual time worked.</p> <p>The rights under the defined-benefit plan are “not guaranteed” since they depend on the employee working in the Group at the time his or her pension is claimed in accordance with a mandatory plan for pension insurance.</p> <p>ENGIE Management Company is responsible for financing these plans and pays premiums to a third-party insurance company which it has contracted to manage the pensions, calculate the actuarial provisions for the annuities, and manage the payments. The corresponding social security costs borne by the Company amount to 24%.</p> <p>In accordance with the decisions of the Board of Directors on March 10 and May 3, 2016, Isabelle Kocher’s entitlement to the supplementary collective defined-contribution and defined-benefit pension plans were frozen on suspension of her employment contract, i.e. December 31, 2014.</p> <p>The rights accumulated from 2002 to 2014 under the collective defined-benefit plan would result, subject to the condition of continuous service in the Group, in an annual annuity, estimated at year-end 2015, at the end of her career aged 65, of €145,456, before tax and social security deductions.</p>
Benefits in kind	€3,960	Isabelle Kocher benefits from the use of a company vehicle.

#### 4.6.1.9 Board of Directors' report prepared pursuant to Article L. 225-37-2 of the French Commercial Code, relating to the principles and criteria for determining, structuring and awarding the fixed, variable and non-recurring components of total compensation and benefits in kind attributable to the executive corporate officers commensurate with their office

As recommended by the Appointments and Compensation Committee, the Board of Directors, at its meeting of March 1, 2017, approved the following compensation policy for the Chief Executive Officer. This policy applies as from January 1, 2017 and is consistent with the policy that was in effect in 2016 and with the recommendations of the AFEP-MEDEF Code to which the Company refers, pursuant to Article L. 225-37 of the French Commercial Code. It will be submitted for shareholder approval at the Ordinary Shareholders' Meeting to be held on May 12, 2017 in accordance with Article L. 225-37-2 of the French Commercial Code. Said Article was introduced under the law dated December 9, 2016 regarding transparency, the fight against corruption and the modernization of the economy, known as the "Sapin II law."

The policy, which will be regularly reviewed by the Appointments, Compensation and Governance Committee, relies in particular on specific studies by an external specialist firm in this field.

In its recommendations to the Board of Directors, the Appointments, Compensation and Governance Committee seeks to propose a compensation policy in line with the practices of comparable major international groups for similar positions, based on a benchmark established by a specialized external firm that includes companies listed on the CAC 40, Eurostoxx 50 and Eurostoxx Utilities indices, excluding companies in the financial sector.

Specific, stringent quantifiable and qualitative performance criteria are set both for the variable portion of compensation and for long-term incentive plans, helping to maintain a link between the Group's performance and the compensation of the Chief Executive Officer in the short-, medium- and long-term.

The Chief Executive Officer's compensation includes a fixed component, a variable annual component and a long-term incentive component.

The fixed component is reviewed annually. It does not change unless the Board of Directors, on the recommendation of the Appointments, Compensation and Governance Committee, votes otherwise, in particular with regard to the market context, any changes in ENGIE's profile, and movements in Group employee compensation.

The annual variable component is designed to reflect the executive's personal contribution to the Group's development and results. It is balanced in relation to the fixed component and determined as a percentage of fixed compensation. It also includes criteria aligned with the assessment, conducted annually, of the Chief Executive Officer's performance and with the Company's strategy. Sixty percent of its criteria are quantifiable, to reward economic performance, and 40% are qualitative. The qualitative criteria include at least one corporate, societal and environmental responsibility target. The quantifiable and qualitative targets contain have sub-weightings.

The long-term incentive component takes the form of Performance Units that are subject to performance conditions comparable to those of performance-based share plans for which Company executive corporate officers are not eligible. The performance conditions are quantifiable only and include at least one external condition relating to the relative change in total shareholder return (stock market performance, reinvested dividend) and an internal condition relating to value creation. This long-term incentive component is designed to encourage executives to make a long-term commitment as well as to increase their loyalty and align their interests with the Company's corporate interests and the interests of shareholders. This particular component may not account for more than 40% of the executive's total compensation at the initial

award. When Performance Units are exercised, the Chief Executive Officer is required to reinvest a portion of income for the year in Company shares until said Officer's share portfolio is equal to two years' fixed compensation.

The payment of the variable and special compensation components for 2017 are contingent on the approval of shareholders at their 2018 Ordinary Meeting. This applies to the annual variable compensation and the annual matching contribution to retirement plan of the Chief Executive Officer relating to the 2017 fiscal year, the payment of which shall only occur following the positive vote at the aforementioned General Meeting.

Lastly, the Chief Executive Officer shall continue to benefit from a supplementary pension plan system in which the Company does not guarantee the amount of pension but pays an annual matching contribution, half of which comprises contributions paid to a third-party organization under an optional defined-contribution retirement plan (Article 82) and half is a cash sum, given the immediate taxation on commencement of this mechanism. The contribution will correspond to a ratio of 25% of the sum of the fixed compensation and the actual variable compensation accrued for the given year. It will also depend on the Company's performance, since the calculation base already includes the variable portion linked to the Group's results. The Chief Executive Officer shall also continue to be eligible for collective pension and health care plan protection for executive officers in order to be compensated under terms that are in line with market conditions.

The Chief Executive Officer is a member of the Board of Directors but does not receive any directors' fees in this regard.

Pursuant to these principles, the Chief Executive Officer's fixed compensation in 2017 remains unchanged at €1,000,000.

The target bonus that will be paid in 2018 for fiscal 2017 also remains unchanged at €700,000 corresponding to 70% of fixed compensation, capped at €840,000, which is 120% of the target bonus. Variable compensation in 2017 is broken down into two components: a quantitative component (60%) and a qualitative component (40%). For the quantifiable component, the criteria used are net recurring income, Group Share per share (50%) and free cash flow, ROCE and net debt (each counting for one-sixth of the overall total) (50%). The quantifiable targets for 2017 were included in the Group's projected budget as presented to the Board of Directors on March 1, 2017. At its meeting of March 1, 2017, the Board also approved and weighted the qualitative targets for 2017. Since these may contain sensitive information regarding the Group's strategy, they will not be made public until 2018.

Lastly, the Board of Directors approved a long-term incentive component in the form of 120,000 Performance Units to be awarded in respect of fiscal 2017. Performance Units will be fully vested on March 15, 2021, after which the Chief Executive Officer has three years to exercise them, with fractional shares permitted. The vesting of these Performance Units in 2021 will depend on the achievement of a threefold performance condition, each criterion weighing one third of the total: an internal condition related to net recurring income, Group share for 2019 and 2020, an internal condition related to ROCE for 2019 and 2020, and an external condition related to the TSR of ENGIE stock compared with the TSR of a reference panel. The internal conditions are matched against targets set in the medium-term business plan.

The reference panel comprises EDF, E.ON, Uniper, RWE, Innogy, ENEL, Iberdrola and Gas Natural. Innogy and Uniper were additions compared

to the 2016 panel to take account of the restructuring carried out by the German players. Each company in the reference panel receives an identical weighting, it being specified that E.ON and Uniper, on the one hand, and RWE and Innogy on the other, count as a single company (50% each) for weighting purposes.

The scoring of performance conditions for the Performance Units will be as follows: for a result equal to or less than 80% of target, the success rate will be equal to zero. For a result equal to or greater than 100% of target, the success rate will be equal to 100%. The increase between the two limits will be linear.

The Chief Executive Officer will furthermore continue to benefit from a supplementary defined-contribution pension plan under the terms mentioned above, as well as from collective pension and health care plan protection for executive officers.

It should also be noted that Isabelle Kocher's employment contract has been suspended since January 1, 2015. The AFEP-MEDEF Code recommends that when an employee becomes an executive corporate officer, their employment contract with the company should be terminated. While this recommendation does not apply to chief operating officers, it does apply to chief executive officers. When Isabelle Kocher was appointed Chief Executive Officer after serving as Chief Operating Officer, the Board of Directors nevertheless deemed it appropriate to maintain the suspension of her employment contract. The Board decided that the rights accrued by Isabelle Kocher in respect of the supplementary collective pension plans for executive officers up until December 31, 2014, which is the period prior to the suspension of her employment contract, would remain frozen and preserved, which implied keeping her employment contract suspended. ENGIE's internal promotion policy assigns corporate officer positions to experienced executives with in-depth knowledge of the industry and markets in

which ENGIE operates and who have had successful career paths within the Group. For these executives, the loss of rights associated with their employment contract and length of service would be a hindrance and counterproductive.

The suspended employment contract of Isabelle Kocher does not provide for specific consideration under a no-compete or golden parachute clause. As part of the Company's human resources policies, all employees of ENGIE Management Company receive severance compensation when their employment contract is terminated. Compensation due under said policies amounts to 3/5 of the monthly salary per year of service in the company or Group and is capped at 18 months' salary. "Monthly salary" is understood to mean one-twelfth of the annual fixed compensation of the current year plus the last paid variable component. Isabelle Kocher's length of service at the time of her appointment as Chief Executive Officer on May 3, 2016 was 13 years and seven months.

Note that there is no system of hiring bonuses or golden parachutes in place for executive corporate officers at ENGIE.

Lastly, Isabelle Kocher benefits from the use of a company vehicle.

With regard to the Chairman of the Board of Directors, at its meeting of February 28, 2017 the Appointments and Compensation Committee recommended compensation of €350,000 in respect of Gérard Mestrallet's role as Chairman of the Board in 2017.

However, Gérard Mestrallet advised that he did not wish to be compensated for his role as Chairman of the Board of Directors and will therefore serve in this capacity at no charge.

Consequently, the Board of Directors expressed its wish, at its meeting of March 1, 2017, that the Company pay €350,000 per year to the ENGIE Corporate Foundation.

### 4.6.2 Compensation of executives who are not corporate officers (Management Committee and Executive Committee members)

Compensation of non-executive corporate officers (members of the Management Committee until May 3, 2016 and members of the Executive Committee) is composed of a fixed portion and a variable portion.

Changes in the fixed portion of compensation are linked to changes in specific situations, expansion or significant change in responsibilities and

to repositioning made necessary in view of internal equity or a clear discrepancy vis-à-vis the external market.

The main purpose of the variable portion is to reward the contributions of executives to the Group's results.

The variable portion paid in 2017 for fiscal 2016 was calculated based on economic criteria (Net recurring income, Group share per share, free cash flow and operating expenses) (50%), and qualitative criteria (50%).

#### SUMMARY TABLE OF GROSS COMPENSATION, INCLUDING BENEFITS IN KIND, FOR EXECUTIVES WHO ARE NOT CORPORATE OFFICERS (MANAGEMENT COMMITTEE AND EXECUTIVE COMMITTEE MEMBERS)<sup>(1)</sup>

(in euros)	2016	2015
Fixed	4,973,691	8,101,391
Variable	4,798,609	8,062,252
<b>TOTAL</b>	<b>9,772,300</b>	<b>16,163,643</b>
Number of members	11	19

(1) Until May, 2016 there was both a Management Committee and an Executive Committee. On May 4, 2016, the Management Committee was suppressed and the Executive Committee was reformed to include the new management team. Compensation is calculated excluding severance pay and taking into account the presence during 2016.



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### 4.6.3 Retirement provision

The total amount of pension obligations for members of the Executive Committee was €11.1 million at December 31, 2016. Note that this is an estimated amount, as these obligations are, in principle, not made at an individual level.

The Group has a policy of funding pension obligations via planned assets without these being specifically dedicated to the pension obligations of a specific population.

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### 4.6.4 Compensation of executives who are not corporate officers and non-voting directors

#### 4.6.4.1 Directors and non-voting Directors appointed by the Shareholders' Meeting

Upon motion of the Board of Directors, the Shareholders' Meeting sets the total annual amount of directors' fees to be distributed by the Board among its members.

On the recommendation of the Appointments and Compensation Committee, the Board of Directors, at its meeting of December 11, 2013, established the rules for distributing the total annual amount of

directors' fees set by the Gaz de France Shareholders' Meeting of July 16, 2008 at €1.4 million, in line with an individual distribution system of directors' fees, combining a fixed portion with a predominant variable portion based on the attendance of Directors at Board and Committee meetings, in accordance with the recommendation in Article 20.1 of the AFEF-MEDEF Code. The same system applies to non-voting Directors' fees, which are deducted from the budget for directors' fees.

The distribution rules are indicated below. (Note that the executive corporate officers receive no Directors' fees for their participation in meetings of the Board of Directors).

### DISTRIBUTION OF DIRECTORS' FEES TO NON-EXECUTIVE DIRECTORS AND NON-VOTING DIRECTORS APPOINTED BY THE SHAREHOLDERS' MEETING

<b>Director</b>	
• Fixed fee	€15,000 per year
• Variable fee, dependent on attendance	€50,000 if 100% attendance
<b>Audit Committee</b>	
<i>Chairman:</i>	
• Fixed fee	€15,000 per year
• Variable fee, dependent on attendance	€40,000 if 100% attendance
<i>Committee member:</i>	
• Fixed fee	€5,000 per year
• Variable fee, dependent on attendance	€20,000 if 100% attendance
<b>Strategy, Investment and Technology Committee</b>	
<i>Chairman:</i>	
• Fixed fee	€10,000 per year
• Variable fee, dependent on attendance	€25,000 if 100% attendance
<i>Committee member:</i>	
• Fixed fee	€5,000 per year
• Variable fee, dependent on attendance	€15,000 if 100% attendance
<b>Ethics, Environment and Sustainable Development Committee</b>	
<i>Chairman:</i>	
• Fixed fee	€5,000 per year
• Variable fee, dependent on attendance	€20,000 if 100% attendance
<i>Committee member:</i>	
• Fixed fee	€5,000 per year
• Variable fee, dependent on attendance	€15,000 if 100% attendance
<b>Appointments, Compensation and Governance Committee</b>	
<i>Chairman:</i>	
• Fixed fee	€5,000 per year
• Variable fee, dependent on attendance	€20,000 if 100% attendance
<i>Committee member:</i>	
• Fixed fee	€5,000 per year
• Variable fee, dependent on attendance	€15,000 if 100% attendance
<b>Non-voting Director</b>	
• Fixed fee	€20,000 per year
• Variable fee, dependent on attendance	€2,571 per meeting, limited to seven meetings The maximum individual variable amount is capped at €17,997 per year

On the basis of the above, the executives who are not corporate officers received compensation shown in the below table for fiscal 2016. (Note that unless otherwise indicated, no other compensation was paid to

these officers by the Company or by its subsidiaries for the said fiscal year.)

**TOTAL COMPENSATION PAID TO NON-EXECUTIVE DIRECTORS AND NON-VOTING DIRECTORS APPOINTED BY THE SHAREHOLDERS' MEETING**

<i>In euros</i>	<b>Fiscal 2016<sup>(1)</sup></b>	<b>Fiscal 2015<sup>(1)</sup></b>
Albert Frère	–	9,167 <sup>(2)(9)(11)</sup>
Ann-Kristin Achleitner	74,833 <sup>(2)</sup>	93,334 <sup>(2)</sup>
Edmond Alphandéry	125,000 <sup>(3)</sup>	130,700 <sup>(3)</sup>
Jean-Louis Beffa	37,499 <sup>(3)(4)</sup>	90,000 <sup>(3)</sup>
Fabrice Brégier	37,666 <sup>(3)(5)</sup>	–
Aldo Cardoso	140,000 <sup>(2)</sup>	134,200 <sup>(2)</sup>
Patrice Durand	375 <sup>(3)(6)</sup>	–
Catherine Guillouard	16,230 <sup>(3)(8)</sup>	13,000 <sup>(3)(10)</sup>
Mari-Noëlle Jégo-Laveissière	18,750 <sup>(3)(8)</sup>	17,875 <sup>(3)(10)</sup>
Barbara Kux	77,500 <sup>(2)</sup>	49,408 <sup>(2)(10)</sup>
Françoise Malrieu	134,584 <sup>(3)</sup>	131,000 <sup>(3)</sup>
Marie-José Nadeau	103,333 <sup>(2)</sup>	62,750 <sup>(2)(10)</sup>
Lord Ricketts of Shortlands	35,416 <sup>(2)(7)</sup>	–
Lord Simon of Highbury	30,479 <sup>(2)(4)</sup>	99,450 <sup>(2)</sup>
Gérard Lamarche, Non-voting Director	–	6,667 <sup>(9)(11)</sup>
<b>TOTAL</b>	<b>831,665</b>	<b>837,551</b>

(1) Directors' fees due for a given fiscal year are paid during the fiscal year concerned.

(2) Before deduction of withholding tax levied on directors' fees paid to Directors residing outside France.

(3) Before deduction of withholding tax relating to tax and social contributions.

(4) Director until May 3, 2016.

(5) Director elected by the General Shareholders' Meeting of May 3, 2016.

(6) Director co-opted from the private sector on December 14, 2016 on the proposal of the French State.

(7) Director elected by the Shareholders' Meeting of May 3, 2016, with effect from August 1, 2016.

(8) Director elected from the private sector by the Shareholders' Meeting on the proposal of the French State.

(9) Director or non-voting Director until April 28, 2015.

(10) Director as of April 28, 2015.

(11) Payments made to Groupe Bruxelles Lambert.

#### 4.6.4.2 Director representing the French State and the Directors elected by the Shareholders' Meeting on the proposal of the French State

The Director representing the French State and the two Directors from the public sector appointed by the Shareholders' Meeting on the proposal of the French State, Astrid Milsan (until February 4, 2016), Lucie Muniesa (as from February 4, 2016), Bruno Bézard (until June 30, 2016) and Stéphane Pallez respectively, have not personally received any compensation (directors' fees or other) from the Company or from companies controlled thereby in consideration for their service as directors. The two Directors from the private sector, appointed by the Shareholders' Meeting on the proposal of the French State, namely Catherine Guillouard and Mari-Noëlle Jégo-Laveissière, as well as Patrice Durand, co-opted on the proposal of the French State on December 14, 2016, received 30% of the directors' fees corresponding to their office, pursuant to the Order of December 28, 2014 taken in application of Article 6 of Decree No. 2014-948 of August 20, 2014 relating to corporate governance and capital transactions (see table above).

Note that, in respect of the foregoing, the balance of the directors' fees corresponding to these offices (€262,670) was paid directly to the Public Treasury in compliance with regulations.

#### 4.6.4.3 Directors representing employees and employee shareholders

Directors representing employees and employee shareholders on the ENGIE Board of Directors received no compensation (directors' fees or other) from the Company or from companies controlled by the Company in consideration of their service as Directors.

These directors are: Alain Beullier, Philippe Lepage, Olivier Marquer (since June 1, 2016), Anne-Marie Mourer (until June 1, 2016) and Caroline Simon.

### 4.6.5 Information on stock options and the award of bonus shares or performance shares

#### 4.6.5.1 Availability of performance shares and shares resulting from the exercise of stock options

French Act No. 2006-1770 of December 30, 2006 for the development of profit-sharing and employee shareholding and covering various economic and social provisions (the "Balladur Act"), transposed in Article L. 225-197-1 of the French Commercial Code, imposes restrictions on the free availability of performance shares granted to executive corporate officers and shares resulting from the exercise of options under share allocation plans implemented on or after January 1, 2007.

In accordance with these provisions, a system was established specifying the obligation to hold as registered shares a certain percentage (set by the Board of Directors) of vested Performance Shares and shares resulting from exercised options. The objective is that after a certain point, the executive corporate officers and, more generally, Executive Committee members would hold a portfolio of ENGIE shares corresponding to a fraction of their compensation.

At its meeting of March 1, 2017, the Board of Directors decided, on the recommendation of the Appointments and Compensation Committee, to update the existing system as follows:

- fixed target: build a share portfolio equivalent to two years' fixed compensation for executive corporate officers, and to one and a half years for other members of the Executive Committee. This objective is set in terms of the number of shares for each person concerned, and is calculated based on the fixed annual compensation prevailing at January 1 of the year in question and on the average share price over the previous year;
- until the target is met: continue to hold two-thirds of the vested performance shares and reinvest two-thirds of the net capital gains resulting from the exercise/sale of options, or continue to hold the corresponding number of shares arising solely from the exercise of options.

The Board of Directors adapted this mechanism to Performance Units benefiting the executive corporate officers (see 4.6.1.3 above) by requiring them to reinvest in ENGIE shares two-thirds of the income from the exercise of the PUs net of tax and social security withholding until the shareholding target (equal to two years' fixed compensation) referred to above is met.

#### 4.6.5.2 Programmed management of stock options

At its meeting of November 12, 2008, the ENGIE Board of Directors decided to continue the programmed management of stock options granted to the executives of the former SUEZ SA. This mechanism largely anticipates the AMF's recommendations of November 3, 2010 regarding the prevention of insider trading by management. The principle of such programmed management is that the interested parties

give an irrevocable power of attorney to a financial institution to exercise the ENGIE stock options, in their name and on their behalf, at the dates and under the conditions previously established by annual instruction, and to sell the corresponding shares on the market, with or without determining a reserve unit price. This annual instruction will include the number and quarterly allocation of transactions to be executed, plan by plan, over the next 12 months. Within each quarterly period, the financial proxy acts freely at the dates and for the volumes that it judges appropriate within the framework and the limits of the annual instruction, to exercise options and sell shares. The annual instruction is sent to the financial proxy every year within 15 days following the date of publication of the annual financial statements and on condition that the interested parties are not in possession of inside information at that date. Once this instruction has been given, it is irrevocable, and the interested party undertakes not to exercise the options other than through the delegated power of attorney. The ban on exercising options and selling shares during the black-out periods preceding the publication of the annual and half-yearly financial statements and quarterly information is maintained.

The Board of Directors of ENGIE also decided that this system is mandatory for the executive corporate officers and for the members of the Executive Committee.

#### 4.6.5.3 Stock option plans and bonus share or Performance Share plans implemented during fiscal year 2016

##### Authorization of the Shareholders' Meeting of April 28, 2015

The twenty-second resolution of the ENGIE Ordinary and Extraordinary Shareholders' Meeting of April 28, 2015 authorized the Board of Directors to award bonus shares to employees and/or corporate officers of the Company and/or of companies belonging to the Group (with the exception of corporate officers of the Company) up to the limit of 0.5% of the share capital on the date of the decision to allocate shares. Also note that the Shareholders' Meeting was not asked to grant an authorization for stock options.

##### Performance Share Plan for 2015 (Board meeting of February 24, 2016)

Under the authorization given by the Shareholders' Meeting of April 28, 2015, the Board of Directors, at its meeting of February 24, 2016, decided to implement a Performance Share Plan for certain employees in the Trading business, in accordance with the order of November 3, 2009 and with European Directives CRD3 and CRD4 regarding the compensation of financial market professionals, and with the order of December 13, 2010. The main features of this plan and other plans granted for 2015 are listed on pages 144 et seq. of the 2015 Registration Document filed with the AMF on March 23, 2016.

### Authorization of the Shareholders' Meeting of May 3, 2016

The thirtieth resolution of the ENGIE Ordinary and Extraordinary Shareholders' Meeting of May 3, 2016 authorized the Board of Directors to award bonus shares to employees and/or corporate officers of companies belonging to the Group (with the exception of corporate officers of the Company) up to the limit of 0.5% of the share capital on the date of the decision to allocate shares<sup>(1)</sup>. Also note that the Shareholders' Meeting was not asked to grant an authorization for stock options.

(1) A combined ceiling of 0.5%, the same as in the twenty-ninth resolution, applying both to free share allocations to all of the Group's employees, and an allocation (equivalent to a matching contribution) to employees taking part in a Group international employee shareholding plan.

### Performance Share plans for 2016 (Board meetings of December 14, 2016 and March 1, 2017)

Under the authorization granted by the Shareholders' Meeting of May 3, 2016, the Board of Directors, at its meeting of December 14, 2016, decided to implement Performance Share Plans for certain employees of ENGIE and its subsidiaries (excluding executive corporate officers of ENGIE). As part of the Group's transformation, the Board of Directors decided both to increase the number of beneficiaries and significantly raise the number of shares granted in order to secure the buy-in of key Group players in the success of this transformation. The plan is based on existing shares with no dilutive effect for shareholders. The main features of this plan, which involves 5,334,860 shares for 7,359 people, are as follows:

Vesting period	December 14, 2016 to March 14, 2020 (2021 for some executive officers)
Continuous service condition <sup>(1)</sup>	Up to March 14, 2020 (2021 for some executive officers)
Vesting date	March 15, 2020 (2021 for some executive officers)
Holding period <sup>(2)</sup>	No holding period except for senior executives in France and Belgium for whom the holding period runs from March 15, 2020 to March 14, 2021 (no holding if vesting occurs in 2021)
Transferability date	On or after March 15, 2020, and for senior executives, on or after March 15, 2021
Performance conditions <sup>(3)</sup> :	<ul style="list-style-type: none"> <li>• One-third based on the net recurring income, Group share for 2018 and 2019 compared to the budgeted net recurring income, Group share for the same years (pro forma); and</li> <li>• One-third based on ROCE for 2018 and 2019 compared to the budgeted ROCE for the same years (pro forma); and</li> <li>• One-third based on ENGIE's TSR compared with the TSR of a panel of companies composed of EDF, Enel, ENI, Gas Natural, Iberdrola and RWE for the period December 2019 to January 2020 versus November to December 2016.</li> </ul>

(1) Current employment contract with a Group company at these dates (except in cases of retirement, death, disability or exceptional decision).

(2) Mandatory holding period for acquired shares (except in the case of death or disability).

(3) Performance conditions:

(a) internal condition related to Net recurring income, Group share for 2018 and 2019 vs. the budgeted Net recurring income, Group share for the same years (pro forma):

- Net recurring income, Group share 2018+2019 < 90% budgeted Net recurring income, Group share 2018+2019: success rate = 0%,
- Net recurring income, Group share 2018+2019 = 90% budgeted Net recurring income, Group share 2018+2019: success rate = 33%,
- Net recurring income, Group share 2018+2019 > 90% of budgeted Net recurring income, Group share 2018+2019 and < budgeted Net recurring income, Group share 2018+2019: progressive and linear success rate from 33%,
- Net recurring income, Group share 2018+2019 ≥ budgeted net recurring income, Group share 2018+2019: success rate = 100%;

(b) internal condition related to ROCE for 2018 and 2019 vs. the budgeted ROCE for the same years (pro forma):

- ROCE 2018+2019 < 90% budgeted ROCE 2018+2019: success rate = 0%,
- ROCE 2018+2019 = 90% budgeted ROCE 2018+2019: success rate = 33%,
- ROCE 2018+2019 > 90% of budgeted ROCE 2018+2019 and < budgeted ROCE 2018+2019: progressive and linear success rate from 33%,
- ROCE 2018+2019 ≥ budgeted ROCE 2018+2019: success rate = 100%;

(c) External condition related to the TSR of ENGIE stock compared with the TSR of companies on the panel (proforma):

- ENGIE TSR ≤ 90% of panel companies' TSR: success rate of 0%,
- ENGIE TSR = 100% of panel companies' TSR: success rate of 70%,
- ENGIE TSR ≥ 103% of panel companies' TSR: success rate of 100%.

For interim results (from 90% to 100% and from 100% to 103%): progressive and linear success rate.

To smooth the possible effects of volatility (gain or loss), TSR will be calculated by taking the average of ENGIE's TSR and the TSR of the panel companies over two months, namely December 2019 to January 2020, versus November to December 2016.

The sum of the success rate of (a), (b) and (c) is divided by three to obtain an overall success rate.

In addition, under the authorization given by the Shareholders' Meeting of May 3, 2016, the Board of Directors, at its meeting of March 1, 2017 decided to implement a Performance Share Plan for certain employees in the Trading business, in accordance with the order of November 3, 2009 and with European Directives CRD3 and CRD4 regarding the compensation of financial market professionals, and with the order of December 13, 2010.

The allocation concerned 66 people within the Trading business, for a total of 149,178 ENGIE Performance Shares; its features are similar to those of the plan of February 24, 2016 (continuous service and performance conditions). The Board of Directors set the following schedule and general conditions for the plan:

Vesting period	03/01/2017 to 03/14/2019 for around half the shares 03/01/2017 to 03/14/2020 for the remaining shares
Continuous service condition <sup>(1)</sup>	03/14/2019 for around half the shares 03/14/2020 for the remaining shares
Vesting date	03/15/2019 for around half the shares 03/15/2020 for the remaining shares
Holding period <sup>(2)</sup>	No holding period
Transferability date	From 03/15/2019 for around half the shares From 03/15/2020 for the remaining shares
Performance conditions	<ul style="list-style-type: none"> <li>• Based on the Trading business's profit before tax for fiscal year 2018 for around half the shares</li> <li>• Based on the Trading business's profit before tax for fiscal year 2019 for the remaining shares</li> </ul>

(1) Current employment contract with a Group company at these dates (except in cases of retirement, death, disability or exceptional decision).

(2) Mandatory holding period for acquired shares (except in the case of death or disability).

## 4.6.6 Stock options granted to, and exercised by, each executive corporate officer – Summary of current plans

### 4.6.6.1 ENGIE stock options granted to executive corporate officers by ENGIE and all ENGIE Group companies in fiscal year 2016

None.

### 4.6.6.2 ENGIE stock options exercised by the executive corporate officers of ENGIE in fiscal year 2016

None, including the Suez stock options held by Isabelle Kocher (see 4.6.6.6).

### 4.6.6.3 Summary of current ENGIE stock option plans

	Plan of 11/12/2008	Plan of 11/10/2009
Date of authorizing General Shareholders' Meeting	07/16/2008	05/04/2009
Start date for exercise of options <sup>(1)</sup>	11/12/2012	11/10/2013
Expiration date	11/11/2016	11/09/2017
Total number of shares purchasable at 12/31/2016	5,969,064	4,808,015
Total number of shares purchasable by executive corporate officers:		
• Gérard Mestrallet	0 <sup>(2)</sup>	0 <sup>(2)</sup>
• Isabelle Kocher	12,800	6,196
Exercise conditions	<sup>(3)</sup>	<sup>(6)</sup>
Purchase price (in euros)	32.74	29.44
Number of options exercised <sup>(4)</sup>	0	0
Number of options canceled <sup>(5)</sup>	5,969,064	32,586
Balance at 12/31/2016	0	4,775,429

(1) Stock options may also be exercised early in the event of retirement or death.

(2) Gérard Mestrallet waived his stock options for fiscal years 2008 and 2009.

(3) For the other members of the Executive Committee, 45% of the options are subject to "simple" conditions and 10% to "enhanced" conditions. For other Group executive officers, 50% of the options are subject to "simple" conditions. The enhanced condition was not met in November 2012 and all the options subject to this condition were canceled. Application of the "simple" condition projected a target price of €18.68; as this target price was achieved at market closing on September 24, 2013, the options subject to this condition could be exercised.

(4) Exercised from January 1 to December 31, 2016.

(5) Canceled from January 1 to December 31, 2016.

(6) For other Group executive officers, 50% of the options are subject to "simple" conditions. These conditions were tested in November 2013 to establish a target price of €20.13. This target price was achieved at market closing on May 22, 2014; the options subject to this condition could be exercised.

### 4.6.6.4 Summary of current ENGIE stock option plans

None

### 4.6.6.5 Summary of stock options held by Gérard Mestrallet at December 31, 2016

None.

### 4.6.6.6 Summary of stock options held by Isabelle Kocher at December 31, 2016

Plan	11/10/2009	12/17/2009 <sup>(2)</sup>
Exercise starting date	11/10/2013	12/17/2013
Expiration date	11/09/2017	12/16/2017
Exercise price in euros	29.44	15.49
Balance of options at 12/31/2016:		
• Continuous service condition only	3,098	11,700
• Performance condition	3,098 <sup>(1)</sup>	0 <sup>(3)</sup>

(1) Options were subject to a performance condition, which was met in May 2014.

(2) SUEZ plan, when Isabelle Kocher was CEO of Lyonnaise des Eaux.

(3) 27,298 SUEZ options subject to a performance condition were canceled in December 2013.

Note that the executive corporate officers have made a formal undertaking not to make use of hedging instruments in respect of options or Performance Shares.



## 4.6.7 Performance Shares awarded to and available for sale by each executive corporate officer – Summary of current plans

### 4.6.7.1 ENGIE Performance Shares allocated to each ENGIE executive corporate officer by ENGIE and all other companies of the ENGIE Group in 2016

Gérard Mestrallet	None
Chairman and Chief Executive Officer until May 3, 2016 then Chairman of the Board of Director	
Isabelle Kocher	None
Chief Operating Officer until May 3, 2016 then Chief Executive Officer	

### 4.6.7.2 ENGIE Performance Shares that became available for sale by each executive corporate officer of ENGIE in fiscal year 2016

	Plan	Vesting date	Date of availability	Number of shares becoming available <sup>(1)</sup>
Gérard Mestrallet	01/13/2011	03/15/2014	03/15/2016	12,711
Isabelle Kocher	12/16/2016 <sup>(2)</sup>	12/16/2014	12/16/2016	2,100

(1) These shares are subject to the conditions set forth in Section 4.6.5.1

(2) SUEZ Plan

### 4.6.7.3 Summary of current ENGIE Performance Share plans

For year:	2012		2013	
	2012 Plan	Traders' Plan 02/27/2013	2013 Plan	Traders' Plan 02/26/2014
Date of authorizing General Shareholders' Meeting	04/23/2012	04/23/2012	04/23/2013	04/23/2013
Date of authorizing Shareholders' Meeting	12/05/2012	02/27/2013	12/11/2013	02/26/2014
Share price in euros <sup>(1)</sup>	8.1	9.2	7.6	13.3
Start of vesting period <sup>(2)</sup>	12/05/2012	02/27/2013	12/11/2013	02/26/2014
End of vesting period	03/14/2016 <sup>(3)</sup>	03/14/2015 <sup>(5)</sup> 03/14/2016 <sup>(5)</sup> 03/14/2017 <sup>(6)</sup>	03/14/2017 <sup>(8)</sup>	03/14/2016 <sup>(5)</sup> 03/14/2017 <sup>(5)</sup>
Start of holding period	03/15/2016 <sup>(3)</sup>	03/15/2015 <sup>(5)</sup> 03/15/2016 <sup>(5)</sup>	03/15/2017 <sup>(8)</sup>	03/15/2016 <sup>(5)</sup> 03/15/2017 <sup>(5)</sup>
End of holding period	03/15/2018 <sup>(3)</sup>	03/15/2017 <sup>(5)</sup> 03/15/2018 <sup>(5)</sup>	03/15/2019 <sup>(8)</sup>	03/15/2018 <sup>(5)</sup> 03/15/2019 <sup>(5)</sup>
Related conditions	<sup>(4)</sup>	<sup>(7)</sup>	<sup>(9)</sup>	<sup>(10)</sup>
Shares vested as of 12/31/2015	3,424,500	48,294	2,726,550	88,730
Shares vested from 01/01/2016 to 12/31/2016	667,842	42,859	600	44,374
Shares canceled from 01/01/2016 to 12/31/2016	2,542,358	0	22,220	0
Balance at 12/31/2016	214,300	5,435	2,703,730	44,356

(1) Weighted average price, according to the method used for the consolidated financial statements.

(2) Early vesting possible in the event of death or permanent disability. Condition of presence at the vesting date.

(3) For France, Belgium and Spain, with holding period from 03/15/2016 to 03/14/2018 inclusive and transferable from 03/15/2018; for other countries, vesting on 03/14/2017 with no holding period.

(4) For 547 beneficiaries, dual condition: 50% based on 2014 and 2015 net recurring income, Group share and 50% based on the TSR of ENGIE stock compared with the TSR of the Eurostoxx Utilities Eurozone companies; for 6,437 beneficiaries, simple condition based on the TSR of ENGIE stock compared with the TSR of Eurostoxx Utilities Eurozone companies.

(5) For 50% of shares.

(6) For staff in Asia, all shares vest on 03/15/2017 and are immediately transferable.

(7) 50% based on 2014 ENGIE Global Markets (formerly GDF SUEZ Trading) EBITDA (met in full) and 50% based on 2015 ENGIE Global Markets EBITDA (met in full).

(8) For France, Belgium and Spain, with holding period from 03/15/2017 to 03/14/2019 inclusive and transferable from 03/15/2019; for other countries, vesting on 03/14/2018 with no holding period.

(9) For 519 beneficiaries, dual condition: 50% based on 2015 and 2016 net recurring income, Group share and 50% based on the TSR of ENGIE stock compared with the TSR of the Eurostoxx Utilities Eurozone companies – 42.61% of condition met; for 6,356 beneficiaries, simple condition based on the TSR of ENGIE stock compared with the TSR of Eurostoxx Utilities Eurozone companies. – 0% of condition met.

(10) 50% based on 2015 ENGIE Global Markets (formerly GDF SUEZ Trading) profit before tax (met in full) and 50% based on 2016 ENGIE Global Markets profit before tax (met in full).

## 4.6 Compensation and benefits paid to members of corporate governance bodies

	2014		2015		2016	
	2014 Plan	2014 Traders' Plan	2015 Plan	2015 Traders' Plan	2016 Plan	2016 Traders' Plan
	04/28/2014	04/28/2014	04/28/2015	04/28/2014	05/03/2016	05/03/2016
	12/10/2014	02/25/2015	12/16/2015	02/24/2016	12/14/2016	03/01/2017
	12.1	14.7	9.8	10.2	8.44	9.89
	12/10/2014	02/25/2015	12/16/2014	02/24/2016	12/14/2016	03/01/2017
	03/14/2018 <sup>(11)</sup>	03/14/2017 <sup>(6)</sup> 03/14/2018 <sup>(6)</sup>	03/14/2019 <sup>(14)</sup>	03/14/2018 <sup>(6)</sup> 03/14/2019 <sup>(6)</sup>	03/14/2020 <sup>(17)</sup>	03/14/2019 <sup>(9)</sup> 03/14/2020 <sup>(9)</sup>
	03/15/2018 <sup>(11)</sup>	03/15/2019 <sup>(6)</sup> 03/15/2020 <sup>(6)</sup>	03/15/2019 <sup>(14)</sup>	03/15/2020 <sup>(6)</sup> 03/15/2021 <sup>(6)</sup>	None <sup>(18)</sup>	None
	03/15/2020 <sup>(11)</sup>	03/15/2019 <sup>(6)</sup> 03/15/2020 <sup>(6)</sup>	03/15/2021 <sup>(14)</sup>	03/15/2020 <sup>(6)</sup> 03/15/2021 <sup>(6)</sup>	None <sup>(18)</sup>	None
	<sup>(12)</sup>	<sup>(13)</sup>	<sup>(15)</sup>	<sup>(16)</sup>	<sup>(19)</sup>	<sup>(20)</sup>
	3,320,105	140,706	3,349,695	None	None	None
	350	0	0	0	None	None
	11,150	6,914	72,540	0	None	None
	3,308,605	133,792	3,277,155	132,529	5,334,860	None

(11) For France, Belgium and Spain, with holding period from 03/15/2018 to 03/14/2020 inclusive and transferable from 03/15/2020; for other countries, vesting on 03/14/2019 with no holding period.

(12) For all beneficiaries, a dual condition: 50% based on net recurring income, Group share for 2016 and 2017 and 50% based on the TSR of ENGIE stock compared with the TSR of the Eurostoxx Utilities (Eurozone) companies.

(13) 50% based on 2016 ENGIE Global Markets (formerly GDF SUEZ Trading) profit before tax and 50% based on 2017 ENGIE Global Markets profit before tax.

(14) For France and Belgium, with holding period from 03/15/2019 to 03/14/2021 inclusive and transferable from 03/15/2021; for other countries, vesting on 03/14/2020 with no holding period.

(15) With the exception of beneficiaries in the context of innovation programs and the like, a dual condition for all: 50% based on net recurring income, Group share for 2017 and 2018 and 50% based on the TSR of ENGIE stock compared with the TSR of the Eurostoxx Utilities (Eurozone) companies.

(16) 50% based on 2017 ENGIE Global Markets (formerly GDF SUEZ Trading) profit before tax and 50% based on 2018 ENGIE Global Markets profit before tax.

(17) For all beneficiaries except senior executives outside France and Belgium where the vesting period ends on 03/14/2021 with no holding period.

(18) For Senior Executive officers in France and Belgium, a holding period from 03/15/2020 to 03/14/2021 inclusive applies.

(19) With the exception of beneficiaries in the context of innovation programs and the like, a threefold condition for all: one-third based on net recurring income, Group share for fiscal years 2018 and 2019, one-third based on ROCE for fiscal years 2018 and 2019, and one-third based on the TSR of ENGIE stock compared with the TSR of a panel composed of EDF, ENI, Enel, Gas Natural, Iberdrola and RWE.

(20) 50% based on 2018 ENGIE Global Markets (formerly GDF SUEZ Trading) profit before tax and 50% based on 2019 ENGIE Global Markets profit before tax.

### 4.6.7.4 Summary of Bonus and Performance Shares held by Gérard Mestrallet at December 31, 2016

Plan	ENGIE 02/13/2006	ENGIE 02/12/2007	ENGIE 07/16/2007	ENGIE 06/01/2008	ENGIE 11/12/2008	ENGIE 01/13/2011
Conditions	2007 ROCE	2008 ROCE	None <sup>(6)</sup>	None <sup>(6)</sup>	2010 EBITDA	2013 EBITDA (1/3) TSR (1/3) 2013 ROCE (1/3)
Vesting date <sup>(1)</sup>	03/15/2008	03/15/2009 <sup>(3)</sup>	07/16/2009	06/01/2010	03/15/2011 <sup>(3)</sup>	03/15/2014 <sup>(3)</sup>
Vesting shares	0	0	0	0	0	0
Vested shares	2,000 <sup>(2)</sup>	3,186 <sup>(4)</sup>	15	10	3,469 <sup>(5)</sup>	12,711 <sup>(5)</sup>
Transferability date	03/15/2010	03/15/2011	07/16/2011	06/01/2012	03/15/2013	03/15/2016

(1) Subject to dual condition of performance and continuous service.

(2) Following the distribution of 65% of SUEZ Environnement Company and the merger with Gaz de France, these 2,000 SUEZ shares were converted to:

- 1,890 ENGIE shares;
- 500 SUEZ Environnement Company shares; and
- 20 SUEZ ("fractional") shares, entitling the allocation of ENGIE shares (compensated in August 2010 in accordance with the SUEZ and Gaz de France merger prospectus).

(3) Vested shares are subject to a holding period under the Balladur rules (see 4.6.5.1).

(4) Condition met.

(5) Condition partially met.

(6) Worldwide plans for all employees.

### 4.6.7.5 Summary of Bonus and Performance Shares held by Isabelle Kocher at December 31, 2016

Plan	ENGIE 02/13/2006	ENGIE 02/12/2007	ENGIE 07/16/2007 <sup>(1)</sup>	ENGIE 11/14/2007	ENGIE 06/01/2008 <sup>(1)</sup>	ENGIE 11/12/2008	ENGIE 07/08/2009 <sup>(1)</sup>
Conditions	2007 ROCE	2008 ROCE	2008 ROCE	2009 EBITDA	2009 EBITDA	2010 EBITDA	None
Vesting date	03/15/2008 <sup>(2)</sup>	03/15/2009 <sup>(2)</sup>	07/16/2009 <sup>(2)</sup>	03/15/2010 <sup>(2)</sup>	06/01/2010 <sup>(2)</sup>	03/15/2011 <sup>(2)</sup>	07/08/2011
Vesting shares	0	0	0	0	0	0	0
Vested shares	1,428	2,124	15	1,493	10	786	20
Transferability date	03/15/2010	03/15/2011	07/16/2011	03/15/2012	06/01/2012	03/15/2013	07/08/2013

(1) Worldwide plans for all employees.

(2) Subject to dual condition of performance and continuous service.

Plan	ENGIE 11/10/2009	SUEZ 12/16/2010	ENGIE 06/22/2011 <sup>(1)</sup>	ENGIE 12/06/2011	ENGIE 12/05/2012	ENGIE 12/11/2013	ENGIE 12/10/2014
Conditions	2010 EBITDA	Net profit 2010-2014 and share performance	None	TSR and net recurring income, Group share	TSR and net recurring income, Group share	TSR and net recurring income, Group share	TSR and net recurring income, Group share
Vesting date	03/15/2012 <sup>(2)</sup>	12/16/2014 <sup>(2)</sup>	06/24/2013	None	03/15/2016 <sup>(3)</sup>	03/15/2017 <sup>(3)</sup>	03/15/2018 <sup>(3)</sup>
Vesting shares	0	0	0	0	0	17,000	35,000 <sup>(4)</sup>
Vested shares	770	2,100	10	0	10,625	0	0
Transferability date	03/15/2014	12/16/2016	06/24/2015	None	03/15/2018	03/15/2019	03/15/2020

(1) Worldwide plans for all employees.

(2) The dual performance condition was not met and 15,000 rights to vesting shares were canceled on March 14, 2015.

(3) Subject to dual condition of performance and continuous service.

(4) For her role as Chief Operating Officer in 2014.

Note that the executive corporate officers have made a formal undertaking not to make use of hedging instruments in respect of options or Performance Shares.

#### 4.6.8 Stock options granted to the ten non-executive employees who received and exercised the most options

4.6.8.1 Stock options granted by ENGIE and by all companies included in the ENGIE Stock Option scope in fiscal year 2016 to the ten employees of the issuer and its companies, who are not corporate officers and to whom the greatest number of stock options was allocated

None.

4.6.8.2 ENGIE stock options exercised in fiscal year 2016 by the ten non-executive employees of ENGIE with the greatest number of stock subscription or purchase options

None.

#### 4.6.9 Bonus and Performance Shares granted to the ten employees who are not corporate officers who received the most bonus and Performance Shares

PERFORMANCE SHARES GRANTED BY ENGIE AND BY ALL COMPANIES INCLUDED IN THE ENGIE PERFORMANCE SHARE SCOPE IN FISCAL YEAR 2016 TO THE TEN NON-EXECUTIVE EMPLOYEES OF THE ISSUER AND ITS COMPANIES, AND TO WHOM THE GREATEST NUMBER OF PERFORMANCE SHARES WERE GRANTED

Total number of shares awarded	Share price <sup>(1)</sup> (in euros)	Issuer	Plan
500,000	7.97	ENGIE	12/14/2016

(1) Weighted average price, according to the method used for the consolidated financial statements.

#### 4.6.10 Summary of transactions disclosed by executive management and corporate officers in the fiscal year 2016

	Date of transaction	Type of transaction	Quantity	Unit price (in euros)	Transaction price (in euros)
Thierry LEPERCQ	05/09/2016	Stock purchase	(1)	13.435	33,588

(1) Not provided.



## Corporate governance

4.6 Compensation and benefits paid to members of corporate governance bodies

# 05

## Information on the share capital and shareholding

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## 5.1 Information on the share capital and non-equity instruments

### 5.1.1 Share capital and voting rights

#### 5.1.1.1 Share capital

ENGIE shares are listed on Compartment A of Euronext Paris and Euronext Brussels under ISIN Code FR0010208488 and ticker symbol ENGI. ENGIE shares are included in the CAC 40 index, the main index published by NYSE Euronext Paris, and are eligible for the Deferred Settlement Service (SRD). ENGIE is also listed on the following indices:

BEL, 20, Euro STOXX 50, STOXX Europe 600, MSCI Europe, Euronext 100, FTSE Eurotop 100, Euro STOXX Utilities, STOXX Europe 600 Utilities, Euronext Vigeo (Europe 120, Eurozone 120, France 20), and DJSI (World, Europe).

As of December 31, 2016, ENGIE's share capital stood at €2,435,285,011 divided into 2,435,285,011 fully paid-up shares with a par value of €1 each.

#### 5.1.1.2 Pledges, guarantees and collateral

##### Pledges of assets

The percentage of shares pledged is not significant.

##### Other pledges

<i>In € million</i>	Total Value	2017	2018	2019	2020	2021	2022 to 2026	> 2026	Account Total	Corresponding%
Intangible assets	5	0	-	-	-	0	0	5	6,639	0.1%
Property, plant and equipment	3,727	298	55	51	53	758	562	1,950	57,739	6.5%
Equity investments	3,886	239	6	6	6	70	930	2,630	9,621	40.4%
Bank accounts	396	132	-	-	-	31	70	162	9,825	4.0%
Other assets	291	151	1	1	0	24	86	27	35,614	0.8%
<b>TOTAL</b>	<b>8,305</b>	<b>820</b>	<b>62</b>	<b>58</b>	<b>59</b>	<b>883</b>	<b>1,649</b>	<b>4,775</b>	<b>119,438</b>	<b>7.0%</b>

Note: The total amount of the pledge relating to equity instruments may relate to consolidated equity instruments with zero value in the consolidated balance sheet (elimination of these equity instruments upon consolidation).

#### 5.1.1.3 Voting rights

Each shareholder has as many voting rights and may cast as many votes at meetings as he or she holds shares which are fully paid up.

However, in accordance with Article L. 225-123 of the French Commercial Code, all registered and fully paid-up shares registered in the name of the same beneficiary for at least two years are automatically entitled to a double voting right.

On December 31, 2016, after adjusting for treasury stock, the Company held 2,397,762,173 shares representing 2,719,439,611 eligible voting rights.

Pursuant to the French Energy Code and Act No. 2014-384 of March 29, 2014, the French government is required to hold more than one-third of the Company's capital or voting rights, and its stake may only fall below this threshold if it returns to the required ownership threshold for capital or voting rights within two years.

In addition, pursuant to the Energy Code and Decree No. 2007-1790 of December 20, 2007, ENGIE's share capital includes a golden share. (For details, see Section 5.2.4 "Golden share".)

### 5.1.2 Potential capital and share equivalents

As of December 31, 2016, there were no share equivalents conferring direct or indirect access to ENGIE's share capital.



### 5.1.3 Authorizations relating to share capital and share equivalents and their utilization

The Company's shareholders delegated the following powers and authorizations in relation to financial matters to the Board of Directors:

#### AUTHORIZATIONS GRANTED BY THE COMBINED SHAREHOLDERS' MEETING OF MAY 3, 2016

Resolution	Type of authorization or delegation of authority	Validity and expiration	Maximum nominal amount per authorization	Amounts utilized	Remaining balance
6 <sup>th</sup>	Authorization to trade in the Company's shares	18 months (until November 2, 2017)	Maximum purchase price: €40. Maximum shareholding: 10% of the share capital. Aggregate amount of purchases: ≤ €9.7 billion	ENGIE held 1.54% of its share capital as of December 31, 2016	8.46% of the share capital
13 <sup>th</sup>	Issue, with preferential subscription rights, of ordinary shares and/or any marketable securities giving access to the capital of the Company and/or its subsidiaries, and/or issue of marketable securities giving entitlement to the allocation of debt securities (to be used only outside public tender offer periods)	26 months (until July 2, 2018)	€225 millions for shares <sup>(1)(2)</sup> +€5 billion for debt securities <sup>(1)</sup>	None	Full amount of the authorization
14 <sup>th</sup>	Issue, without preferential subscription rights, of ordinary shares and/or any marketable securities of the Company and/or its subsidiaries, and/or issue of marketable securities giving entitlement to the allocation of debt securities (to be used only outside public tender offer periods)	26 months (until July 2, 2018)	€225 millions for shares <sup>(1)(2)</sup> +€5 billion for debt securities <sup>(1)</sup>	None	Full amount of the authorization
15 <sup>th</sup>	Issue, without preferential subscription rights, of ordinary shares or other marketable securities giving access to the capital of the Company, as part of an offer referred to in Article L. 411-2 II of the French Monetary and Financial Code (to be used only outside public tender offer periods)	26 months (until July 2, 2018)	€225 millions for shares <sup>(1)(2)</sup> +€5 billion for debt securities <sup>(1)</sup>	None	Full amount of the authorization
16 <sup>th</sup>	Increase in the number of shares or other securities to be issued in the event of a securities issue with or without preferential subscription rights, in application of the 13 <sup>th</sup> , 14 <sup>th</sup> and 15 <sup>th</sup> resolutions, limited to 15% of the initial issue (to be used only outside public tender offer periods)	26 months (until July 2, 2018)	Up to 15% of the initial issue <sup>(1)(2)</sup>	None	Full amount of the authorization
17 <sup>th</sup>	Issue of ordinary shares and/or marketable securities in consideration for contributions of securities made, up to a limit of 10% of the share capital (to be used only outside public tender offer periods)	26 months (until July 2, 2018)	€225 millions for shares <sup>(1)(2)</sup> +€5 billion for debt securities <sup>(1)</sup>	None	Full amount of the authorization

Resolution	Type of authorization or delegation of authority	Validity and expiration	Maximum nominal amount per authorization	Amounts utilized	Remaining balance
18 <sup>th</sup>	Issue, with preferential subscription rights, of ordinary shares and/or marketable securities giving access to the capital of the Company and/or its subsidiaries, and/or issue of marketable securities giving entitlement to the allocation of debt securities (to be used only during public tender offer periods)	26 months (until July 2, 2018)	€225 millions for shares <sup>(1)(2)</sup> +€5 billion for debt securities <sup>(1)</sup>	None	Full amount of the authorization
19 <sup>th</sup>	Issue, without preferential subscription rights, of ordinary shares and/or any marketable securities giving access to the capital of the Company and/or its subsidiaries, and/or issue of marketable securities giving entitlement to the allocation of debt securities (to be used only during public tender offer periods)	26 months (until July 2, 2018)	€225 millions for shares <sup>(1)(2)</sup> +€5 billion for debt securities <sup>(1)</sup>	None	Full amount of the authorization
20 <sup>th</sup>	Issue, without preferential subscription rights, of ordinary shares or other marketable securities, as part of an offer referred to in Article L. 411-2 II of the French Monetary and Financial Code (to be used only during public tender offer periods)	26 months (until July 2, 2018)	€225 millions for shares <sup>(1)(2)</sup> +€5 billion for debt securities <sup>(1)</sup>	None	Full amount of the authorization
21 <sup>st</sup>	Increase in the number of shares to be issued in the event of a securities issue with or without preferential subscription rights, in application of the 18 <sup>th</sup> , 19 <sup>th</sup> and 20 <sup>th</sup> resolutions, limited to 15% of the initial issue (to be used only during public tender offer periods)	26 months (until July 2, 2018)	Up to 15% of the initial issue <sup>(1)(2)</sup>	None	Full amount of the authorization
22 <sup>nd</sup>	Issue of ordinary shares and/or marketable securities as remuneration for contributions of securities made, up to a limit of 10% of the share capital, as remuneration for contributions (to be used only during public tender offer periods).	26 months (until July 2, 2018)	€225 millions for shares <sup>(1)(2)</sup> +€5 billion for debt securities <sup>(1)</sup>	None	Full amount of the authorization
23 <sup>rd</sup>	Capital increase reserved for members of the Group Employee Savings Plan	26 months (until July 2, 2018)	1% of the share capital <sup>(2)(3)</sup>	None	Full amount of the authorization
24 <sup>th</sup>	Capital increase reserved for any entity formed as part of the implementation of the international employee shareholding plan offered by the Group	18 months (until November 2, 2017)	0.5% of the share capital <sup>(2)(3)</sup>	None	Full amount of the authorization
26 <sup>th</sup>	Capital increases via the capitalization of premiums, reserves, earnings or other sums (to be used only outside public tender offer periods)	26 months (until July 2, 2018)	Aggregate amount that may be capitalized	None	Full amount of the authorization
27 <sup>th</sup>	Capital increases via the capitalization of premiums, reserves, earnings or other sums (to be used only during public tender offer periods)	26 months (until July 2, 2018)	Aggregate amount that may be capitalized	None	Full amount of the authorization

## Information on the share capital and shareholding

### 5.1 Information on the share capital and non-equity instruments

Resolution	Type of authorization or delegation of authority	Validity and expiration	Maximum nominal amount per authorization	Amounts utilized	Remaining balance
28 <sup>th</sup>	Authorization to reduce the share capital by canceling treasury stock	26 months (until July 2, 2018)	10% of the share capital per 24-month period	None	Full amount of the authorization
29 <sup>th</sup>	Authorization to award bonus shares (i) to employees and/or corporate officers of companies belonging to the Group (with the exception of corporate officers of the Company) and (ii) to employees participating in a Group international employee shareholding plan	18 months (until November 2, 2017)	Maximum shareholding: 0.5% of the share capital <sup>(4)</sup>	None	0.27% of the share capital
30 <sup>th</sup>	Authorization to award bonus shares to certain employees and officers of Group companies (except for officers of the Company)	18 months (until November 2, 2017)	Maximum shareholding: 0.5% of the share capital <sup>(4)</sup>	Allocation on December 14, 2016 of 5.3 million performance shares i.e 0.22% of share on December 31, 2016 and 149,178 Performance Shares on March 1, 2017 i.e. 0.23% of share capital at March 1,2017	0.27% of the share capital

- (1) This is a ceiling set by the Combined Shareholders' Meeting of May 3, 2016 for the issues decided pursuant to the 13<sup>th</sup>, 14<sup>th</sup>, 15<sup>th</sup>, 16<sup>th</sup>, 17<sup>th</sup>, 18<sup>th</sup>, 19<sup>th</sup>, 20<sup>th</sup>, 21<sup>st</sup>, and 22<sup>nd</sup> resolutions.
- (2) The overall maximum nominal amount decided pursuant to the 13<sup>th</sup>, 14<sup>th</sup>, 15<sup>th</sup>, 16<sup>th</sup>, 17<sup>th</sup>, 18<sup>th</sup>, 19<sup>th</sup>, 20<sup>th</sup>, 21<sup>st</sup>, 22<sup>nd</sup>, 23<sup>rd</sup>, and 24<sup>th</sup> resolutions was set at €265 million by the Combined Shareholders' Meeting of May 3, 2016.
- (3) The nominal amount of the issues decided in application of the 24<sup>th</sup> resolution is included in the ceiling of 1% of the share capital under the 23<sup>rd</sup> resolution.
- (4) This is a ceiling set by the Combined Shareholders' Meeting of May 3, 2016 for the awards decided pursuant to the 29<sup>th</sup> and 30<sup>th</sup> resolutions.

## AUTHORIZATIONS GRANTED BY THE COMBINED SHAREHOLDERS' MEETING OF APRIL 28, 2015

Resolution	Type of authorization or delegation of authority	Validity and expiration	Maximum nominal amount per authorization	Amounts utilized	Remaining balance
5 <sup>th</sup>	Authorization to trade in the Company's shares	18 months (until October 27, 2016)	Maximum purchase price: €40. Maximum shareholding: 10% of the share capital. Aggregate amount of purchases: ≤ €9.7 billion	ENGIE held 1.59% of its share capital as of May 3, 2016	Authorization expired (canceled by the 6 <sup>th</sup> resolution of the Combined Shareholders' Meeting of May 3, 2016)
19 <sup>th</sup>	Capital increase reserved for members of the Group Employee Savings Plan	26 months (until June 27, 2017)	1% of the share capital <sup>(1)(2)</sup>	None	Authorization expired (canceled by the 23 <sup>rd</sup> resolution of the Combined Shareholders' Meeting of May 3, 2016)
20 <sup>th</sup>	Capital increase reserved for any entity formed as part of the implementation of the international employee shareholding plan offered by the Group	18 months (until October 27, 2016)	0.5% of the share capital <sup>(1)(2)</sup>	None	Authorization expired (canceled by the 24 <sup>th</sup> resolution of the Combined Shareholders' Meeting of May 3, 2016)
21 <sup>st</sup>	Authorization to award bonus shares (i) to employees and/or corporate officers of companies belonging to the Group (with the exception of corporate officers of the Company) and (ii) to employees participating in a Group international employee shareholding plan	18 months (until October 27, 2016)	Maximum shareholding: 0.5% of the share capital <sup>(3)</sup>	None	Authorization expired (canceled by the 29 <sup>th</sup> resolution of the Combined Shareholders' Meeting of May 3, 2016)
22 <sup>nd</sup>	Authorization to award bonus shares to certain employees and officers of Group companies (except for officers of the Company)	18 months (until October 27, 2016)	Maximum shareholding: 0.5% of the share capital <sup>(3)</sup>	Allocation of 3.3 million Performance Shares on December 16, 2015, and 0.1 million Performance Shares on February 24, 2016 i.e. 0.14% of the share capital as of February 24, 2016	Authorization expired (canceled by the 30 <sup>th</sup> resolution of the Combined Shareholders' Meeting of May 3, 2016)

(1) The nominal amount of the issues decided in application of the 20<sup>th</sup> resolution is included in the ceiling of 1% of the share capital under the 19<sup>th</sup> resolution.

(2) The overall maximum nominal amount of the issues decided in application of the 10<sup>th</sup>, 11<sup>th</sup>, 12<sup>th</sup>, 13<sup>th</sup> and 14<sup>th</sup> resolutions of the Combined Shareholders' Meeting of April 28, 2014 and of the 19<sup>th</sup> and 20<sup>th</sup> resolutions of the Combined Shareholders' Meeting of April 28, 2015 was set at €265 million by the 17<sup>th</sup> resolution of the Combined Shareholders' Meeting of April 28, 2014.

(3) This is a ceiling set by the Combined Shareholders' Meeting of April 28, 2015 for the awards decided pursuant to the 21<sup>st</sup> and 22<sup>nd</sup> resolutions.

## 5.1.4 Five-year summary of changes in the share capital

### ISSUANCE OF SHARES

Date	Event	Par value (in euros)	Premium (in euros)	Share capital (in euros)	Number of shares	Par value per share (in euros)
01/11/2012	Increase of the share capital resulting from the exercise of 1,468,916 stock options	1,468,916 <sup>(1)</sup>	17,838,829.31	2,252,636,208	2,252,636,208	1.00
05/21/2012	Increase of the share capital resulting from the issue of 69,002,807 shares resulting from subscriptions related to the optional payment of a portion of the 2011 dividend in shares	69,002,807	1,057,241,969.05	2,321,639,015	2,321,639,015	1.00
08/01/2012	Increase of the share capital resulting from the exercise of 134,434 stock options	134,434	2,070,175.10	2,321,773,449	2,321,773,449	1.00
10/22/2012	Increase of the share capital resulting from the issue of 86,580,374 shares resulting from subscriptions related to the optional payment of the 2012 interim dividend in shares	86,580,374	1,362,479,204.55	2,408,353,823	2,408,353,823	1.00
01/22/2013	Increase of the share capital resulting from the exercise of 4,470,266 stock options	4,470,266 <sup>(2)</sup>	69,395,152.92	2,412,824,089	2,412,824,089	1.00
12/11/2014	Increase of the share capital resulting from the subscription of 20,307,623 shares under the capital increase reserved for participants in an employee savings plan offered by the Group	20,307,623	277,808,282.64	2,433,131,712	2,433,131,712	1.00
12/11/2014	Increase of the share capital resulting from 328,639 bonus shares issued by deduction from the additional paid-in capital under the capital increase reserved for participants in an employee savings plan offered by the Group	328,639	(328,639.00)	2,433,460,351	2,433,460,351	1.00
12/11/2014	Increase of the share capital resulting from the issue of 1,824,660 shares following the capital increases reserved for any entity constituted in the course of the implementation of the international employee shareholding plan offered by the Group	1,824,660	24,961,348.80	2,435,285,011	2,435,285,011	1.00

(1) These new shares were recorded in ENGIE's financial statements as of December 31, 2011.

(2) These new shares were recorded in ENGIE's financial statements as of December 31, 2012.

## 5.1.5 Stock repurchase

### 5.1.5.1 Treasury stock

The fifth resolution of the Combined Shareholders' Meeting of May 3, 2016 authorized the Company to trade in its own shares with a view to managing its shareholders' equity according to the applicable laws and regulations.

Terms:

- maximum purchase price: €40 per share (excluding transaction costs);
- maximum number of shares that may be purchased for the duration of the program: 10% of the share capital;
- maximum total amount of acquisitions, net of fees: €9.7 billion.

A one-year liquidity agreement, renewable by tacit agreement, of an initial value of €55 million was signed on May 2, 2006, on the Euronext Paris market with Rothschild & Cie Banque. The amount of this agreement was raised to €150 million on July 22, 2008.

The main purpose of this agreement is to reduce the volatility of the ENGIE share and therefore the risk perceived by investors. This agreement complies with the Code of Conduct drawn up by the Association Française des Entreprises d'Investissement (French Association of Investment Companies). This agreement continued to apply in 2016.

Between January 1 and December 31, 2016, under the liquidity agreement, the Company purchased 32,106,259 shares, for a total of €436.3 million or €13.59 per share. Over the same period, and also under this agreement, ENGIE sold 31,106,259 shares for a total price of €425.6 million or €13.68 per share.

Furthermore, between January 1 and December 31, 2016, ENGIE did not purchase any shares intended to cover its commitments to the beneficiaries of stock options, bonus shares or company savings plans.

Between January 1 and February 28, 2017, under the liquidity agreement, ENGIE purchased 2,695,638 shares, for a total of €30.8 million or €11.43 per share. Over the same period, and also under this agreement, ENGIE sold 3,695,638 shares for a total price of €43.1 million or €11.66 per share.

Furthermore, between January 1 and February 28, 2017, ENGIE did not purchase any shares intended to cover its commitments to the beneficiaries of stock options, bonus shares, or company savings plans.

On February 28, 2017, the Company held 1.50% of its share capital, or 36,519,943 shares to cover its commitments to the beneficiaries of stock options, bonus shares, or company savings plans.

### 5.1.5.2 Description of the stock repurchase program to be submitted to the Ordinary and Extraordinary Shareholders' Meeting of May 12, 2017

Pursuant to Articles 241-1 to 241-7 of the AMF's General Regulations, the purpose of the following program description is to set out the objectives, terms and conditions of ENGIE's stock repurchase program, as it will be submitted to the Combined Shareholders' Meeting to be held on May 12, 2017.

#### A. Main features of the program

The main features and goals of the program are summarized below:

- relevant securities: shares listed on Eurolist – SRD at the Paris Stock Exchange or on Eurolist at the Brussels Stock Exchange;
- maximum capital repurchase percentage authorized by the Shareholders' Meeting: 10%;
- maximum purchase price: €30 per share (excluding transaction costs).

#### B. Objectives of the stock repurchase program

The objectives of the ENGIE stock repurchase program are summarized below:

- to ensure liquidity in the Company's shares by an investment service provider under liquidity agreements;
- to provide for the subsequent cancellation of the repurchased shares under a decision or authorization to reduce the share capital by the Extraordinary Shareholders' Meeting;
- to allocate or assign such shares to employees or former employees and corporate officers or former corporate officers of the Group;
- to set up stock purchase plans, bonus share plans on existing shares, or employee shareholding plans under company savings plans;
- to allocate or sell such shares to any entity as part of implementing an international employee shareholding plan;
- to provide for the holding and subsequent delivery of shares (as exchange, payment or otherwise) in the context of external growth transactions within the limit of 5% of the share capital;
- to provide for the hedging of securities conferring entitlement to Company share allocations upon the exercise of the rights attached to securities conferring entitlement to Company shares by conversion, redemption, exchange, upon presentation of a warrant or other means of allocation;
- to implement any other market practices previously or subsequently authorized or to be authorized by market authorities.

## C. Terms and conditions

### Maximum percentage of share capital that may be repurchased and maximum amount payable by ENGIE

The maximum number of shares that may be purchased by ENGIE may not exceed 10% of the share capital of the Company on the date of the General Shareholders' Meeting, i.e., approximately 243.5 million shares, for a maximum theoretical amount of €7.3 billion. ENGIE reserves the right to hold the maximum amount authorized.

On February 28, 2017, ENGIE directly held: 36,519,943 shares, i.e. 1.50% of the share capital.

Therefore, based on the estimated share capital at the date of the Meeting, the stock repurchase program could cover up to 204 million shares, representing 8.38% of the share capital, for a maximum amount payable of €8.1 billion.

### Maximum term of the stock repurchase program

The stock repurchase program will be in effect for a period of 18 months beginning on the date of this Shareholders' Meeting, i.e. until November 11, 2018.

## 5.1.6 Non-equity securities

### 5.1.6.1 Deeply subordinated securities

No deeply subordinated perpetual (or hybrid) notes were issued in 2016 to supplement the transactions of July 2013 and May 2014.

Issuer	Currency	Coupon rate	Issue date	Maturity	First option for redemption	Amount issued	Exchange	ISIN Code
						(in stated currency) (in millions)		
ENGIE	EUR	3.875%	07/10/2013	Perpetual	07/10/2018	600	Paris	FR0011531714
ENGIE	GBP	4.625%	07/10/2013	Perpetual	01/10/2019	300	Paris	FR0011531722
ENGIE	EUR	4.750%	07/10/2013	Perpetual	07/10/2021	750	Paris	FR0011531730
ENGIE	EUR	3.000%	06/02/2014	Perpetual	06/02/2019	1,000	Paris	FR0011942226
ENGIE	EUR	3.875%	06/02/2014	Perpetual	06/02/2024	1,000	Paris	FR0011942283

All of the above securities are rated Baa1 by Moody's and BBB by Standard & Poor's.

In accordance with the provisions of IAS 32, and given their characteristics, these instruments are recognized in equity in the Group's consolidated financial statements (see Section 6.2 "Consolidated financial statements" – Note 17.2.1).

### 5.1.6.2 Euro Medium Term Notes (EMTN) Program

ENGIE has a €25 billion EMTN program. This program was updated on October 11, 2016 and approved by the AMF under reference number 16-474.

To fund these developments, on May 19, 2014, ENGIE issued a green bond for a total of €2.5 billion, in two tranches comprised of €1.2 billion for six years and €1.3 billion for 12 years. The funds raised by this bond are intended to support the Group's investments in projects that satisfy environmental, social and societal criteria, specifically projects that are "eligible" as defined in the "use of proceeds" clause in the final terms of the Green Bond issue (hereafter, the "Eligible Projects").

### 5.1.6.3 Bond issues

The main features of bond issues outstanding as of December 31, 2016 by the Company are detailed in Section 6.4 "Parent company financial statements" – Note 14B.

Until the funds raised are entirely allocated to Eligible Projects (or after, in case of a substantial change in allocations), ENGIE is committed to providing information in its Registration Document on the fund allocations made during the period concerned.

### 5.1.6.4 Green bond

#### 5.1.6.4.1 Description of the bond

To help reduce greenhouse gas emissions, ENGIE is developing a diversified portfolio comprising facilities allowing the production of energy from renewable sources and the implementation of energy efficiency solutions, thus reducing the energy consumption level of its facilities and customers. The Group's investment strategy is based on becoming the leader in the energy transition.

As part of the Green Bond, ENGIE is committed to fulfill the following conditions:

- Eligible Projects must respect the criteria determined by ENGIE in conjunction with Vigeo. Eligible Projects include new projects that meet the eligibility criteria and/or investments made since January 1, 2013 on existing projects that meet the eligibility criteria. The amounts allocated are calculated after deduction of any funding already dedicated to these projects;
- as of December 31 of the relevant year, the Group must hold cash (or cash equivalents) of an amount at least equal to the funds raised by the Green Bond, less amounts allocated to fund Eligible Projects as of that date.

In line with the commitments made in the use of proceeds clause, ENGIE requested one of its Statutory Auditors, Deloitte & Associés, to provide a statement certifying compliance of the retained projects with the eligibility criteria and the amounts allocated to those projects.

Engie refers to the four core components of the Green Bond Principles, which are: (i) Use of proceeds; (ii) Process for project evaluation and selection; (iii) Management of proceeds; and (iv) Reporting.

#### 5.1.6.4.2 CSR Eligibility criteria

The eligibility criteria are described below and are also available in a dedicated section of the ENGIE website (<http://www.engie.com/en/investors/fixed-income/green-bond-fight-climate-change/>).

These criteria were drawn up together with Vigeo and were used to select the projects funded in the period from January 1, 2013 to December 31, 2016.

Project category	Indicators
Renewable energy	Installed capacity in MW
Energy efficiency	Percentage of reduction in energy consumption
Criteria	Principles of action
Fight against climate change	The project is not linked to energy production by fossil fuels or nuclear sources and contributes to the business line's reduction in GHG emissions
Environmental management	Project specifications include environmental requirements Environmental impact assessment (Environmental Impact Analysis or equivalent) and implementation of appropriate measures to limit, mitigate or offset negative impacts Implementation of environmental reporting on the project
Protection of biodiversity and natural resources	Impact analysis on biodiversity and natural resources (included in the EIA or equivalent) and implementation of appropriate measures if the site is classified as a priority
Promotion of local economic and social development	Actions taken to foster economic development through local purchases and/or opportunities generated for local employment, e.g., direct and indirect jobs created
Local consultation and community wellbeing	Assessment of project impacts on local population, health problems and/or cultural heritage (social impact assessment or equivalent) and implementation of appropriate measures to limit, mitigate or offset negative impacts (where appropriate) Consultation carried out and satisfaction survey conducted with local stakeholders
Promotion of business ethics	Promotion of ethical practices with suppliers and subcontractors via "Ethics and CSR" contractual clauses Training of purchasers in business ethics (responsibilities, competition rules, anti-corruption measures) Analysis and approval of subcontractors on their positive records for similar projects and on verification of any reputation risk
Responsible procurement	Traceability of the project's purchasing process, with request for proposal process (if a proposal is required) Integration of CSR and compliance issues in the evaluation of the project's suppliers E-learning for purchasers on responsible procurement
Protection of health and safety conditions	Health & Safety approbation of the project covering risk analysis and prevention plan (or equivalent) for the construction phase Promotion of health and safety protection to suppliers via contractual clause Appointment of Health and Safety Coordinator (or equivalent) for the project duration
Quality of employment conditions	Salaries analysis to ensure that the salaries of all employees involved in the project are higher than the legal minimum wage of the project country <sup>(1)</sup>
ESG assessment	Positive recommendation of ENGIE Sustainability Department based on the project ESG assessment through ENGIE internal CSR investment criteria

(1) This principle of action only applies to ENGIE Group employees.

Note: In 2016, the arrangements in place within the Group were strengthened to take greater account of "Promotion of business ethics" and "Responsible procurement" criteria in contracts.



### 5.1.6.4.3 Eligible projects

In 2015, the Eligible Projects financed by the Green Bond issue and which meet the above conditions were as follows:

Project category	Project name	Region/Country	Indicators <sup>(1)</sup>	Commissioning year <sup>(2)</sup>
Biomass	Heating networks with biomass (4 projects) <sup>(3)</sup>	Europe/France	410 MW (th)	2015 -2019
Cooling network	Cooling network (8 projects) <sup>(3)</sup>	Europe/France	93 MW (th)	2017-2018
Geothermal	Heating and cooling network with geothermal (2 projects) <sup>(3)</sup>	Europe/France	37 MW (th)	2016
Smart gas meters	Gazpar <sup>(3)</sup>	Europe/France	NA	2015-2023
Energy efficiency	OpTerra (acquisition)	North America/USA		NA
Hydroelectricity	Jirau <sup>(3)</sup>	Latin America/Brazil	3700 MW	2016
Hydroelectricity	Salto Santiago modernization <sup>(3)</sup>	Latin America/Brazil	20 MW	2017
Solar	Assu Fotovoltaico	Latin America/Brazil	30 MW	2017
Solar	Solairedirect - Floresta <sup>(4)</sup>	Latin America/Brazil	101 MW	2017
Solar	Solairedirect - Paracatu <sup>(4)</sup>	Latin America/Brazil	150 MW	2018
Solar	Solairedirect - Los Loros <sup>(4)</sup>	Latin America/ Chile	55 MW	2016
Solar	Solairedirect - Pocrí <sup>(4)</sup>	Latin America/Panama	21 MW	2017
Solar	Solairedirect - Batch 2 <sup>(4)</sup>	Europe/France	192 MW	2017
Wind	Campo Largo <sup>(3)</sup>	Latin America/Brazil	330 MW	2019
Wind	Santa Monica <sup>(3)</sup>	Latin America/ Brazil	97 MW	2016
Wind	Lincent et W4F	Europe/ Belgium	71,5 MW	
Wind	Tréport - Noirmoutiers <sup>(3)</sup>	Europe/France	992 MW	2021
Wind	Quadran <sup>(3)</sup>	Europe/France	25 MW	NA
Wind	Cheppes / Cernon 4	Europe/France	25 MW	2016-2017

(1) Total installed capacity, expressed, unless otherwise indicated, in electric megawatts (MW), available at the full commissioning date of the relevant facilities. For acquisitions (OpTerra), total installed capacity commissioned as of December 31, 2016.

(2) Scheduled year for full commissioning. In the case of several sub-projects or phased commissioning, only the first and last years of commissioning are shown.

(3) Eligible Projects with Green Bond allocation in 2014 and/or 2015, for which additional investments were granted in 2016.

(4) One June, 2015, ENGIE announced the acquisition of 95% shareholding in SolaireDirect, a leading competitive solar energy producer. With regard to this acquisition, which took place in September 2015 and includes Eligible Projects, the alignment of the company's systems and procedures with the rules of the Group is currently being finalized.

Total funds allocated to Eligible Projects in 2016 came to €786 million. Taking into account the allocations carried over in 2015 and 2014 of €847 million and €867 million, respectively, the total amount allocated to Eligible Projects was €2.5 billion. The entire amount of Green Bond launched in May 2014 is therefore allocated. Details of the Eligible Projects and allocations for 2014 and 2013 are provided on pages 167 to 171 of the 2014 Registration Document, and for 2015, on pages 160 to 164 of the 2015 Registration Document.

The Green Bond contributes to the funding or acquisition of Eligible Projects in (i) renewable energy (wind, solar, hydroelectric and/or biomass) and (ii) energy efficiency.

#### 1) Renewable energy

Renewable energy represents a substantial share of ENGIE's generation portfolio, and this share is intended to grow. The Group has made its intentions clear by discontinuing development in new coal-fired plants (except for projects already committed), by selling or closing more than 50% of its installed coal capacity compared to the end of 2015, and positioning itself as a leader in the energy transition. With installed generation capacity of 22 GW as of December 31, 2016, ENGIE is already a leader in this sector, which includes hydroelectric power, biomass, biogas, and wind and solar power.

In 2016, ENGIE continued to expand its portfolio of renewable assets in wind power by developing new projects in Europe and Brazil, and in solar power through its subsidiary Solairedirect, and the development of its projects in France and South America.

These low-carbon resources play an essential role in the energy transition and fight against climate change.

At end-December 2016, a total of €2,168.6 million had been allocated to Eligible Projects in the field of renewable energy sources.

In full operational mode, these projects should help to reduce greenhouse gas emissions by a minimum of 7.7 million tons of CO<sub>2</sub> eq. per year.

The contributions of the two projects listed as meeting the criteria of the Kyoto Protocol's "Clean Development Mechanism" (UNFCCC) are as follows:

- Jirau (hydroelectric): 6,180,620 tons of CO<sub>2</sub> eq. per year (in full operational phase – data available at: <https://cdm.unfccc.int/Projects/DB/LRQA%20Ltd1356533361.56/view/>);
- Quitaracsá (hydroelectric): 249,463 tons of CO<sub>2</sub> eq. per year (in full operational phase – data available at: <https://cdm.unfccc.int/PRCCContainer/DB/prcq339154419/view/>);
- Santa Monica: 211,875 tons of CO<sub>2</sub> eq/year (in full operation). Additional information is available at: <http://cdm.unfccc.int/ProgrammeOfActivities/Validation/DB/N285VUBOBO811VUDV813EBUW11SQH1/view.html>.

## 2) Energy efficiency

In 2016, the Group acquired OpTerra in the United States, a company that designs and implements tailor-made projects to help its customers in the public and private sectors reduce their energy consumption and related costs. The eligible activities carried out by OpTerra should contribute to a reduction of 90,538 tons of CO<sub>2</sub> emissions per year.

In 2016, GRDF, an ENGIE subsidiary, continued to roll out smart gas meters (Gazpar meters) through its gas distribution network in France. The aim of this project is to increase energy efficiency, mainly through better control of energy demand and more frequent generation of consumption data, enabling analysis, appropriate advice and practical actions. In a resolution of mid-2013, the French Energy Regulation Commission confirmed the economic interest of the project for the national collectivity and for customers.

As of 31 December 2016, a total amount of €331.3 million had been allocated to Eligible Projects in the field of energy efficiency.

## 3) Results of the Green Bond issued by the Group on May 19, 2014.

The Green Bond issue allowed the Group to finance 77 renewable energy and energy efficiency projects for an average of €32.5 million. The main geographical regions concerned by these projects were South America and Europe, which accounted for 45.7% and 44.2% of the total amount invested, respectively. As for the technologies used, hydroelectricity represented 36.3% of the amount invested and wind power 21.3%.

Geographical area	Allocated funds%
Africa	0.4%
North America	9.7%
Europe	44.2%
Latin America	45.7%

Technology	Allocated funds%
Biomass	9.7%
Geothermal	1.4%
Cooling network	2.1%
Energy Efficiency	13.3%
Hydroelectricity	36.7%
Solar	15.5%
Wind	21.3%

Altogether, the projects financed by the Green Bond enabled the reduction of CO<sub>2</sub> emissions by 8.7 millions of tons of CO<sub>2</sub> emissions per year.

## 4) Methodology used to measure emissions reductions

Pending the completion of a reference methodology for measuring avoided emissions (which would be based on a life cycle analysis approach), Engie has evaluated the emissions reduced by the Green Bond-funded projects by multiplying the plant's capacity by the average operating rate of the technology used in the country concerned, then by the average emissions rate per the country's generation mix.

Per-country reference data for the average operating rates of technologies used and the average carbon emissions rates per kWh of the generation mix were provided by Enerdata for 2015.

For Jirau, Quitarasca, and Santa Monica, which are CDM projects registered and approved by the United Nations, the resulting measurements are derived from the underlying methodologies.

For ECOVA, the results of the calculations are in accordance with the methods in force in the US market<sup>(1)</sup>.

(1) In the United States, electric power operators treat energy efficiency gains as alternative resources to the construction of new generation units. To measure these efficiency gains, the operators, in agreement with the regulators, define the components of the reference portfolio (energy mix), its lifetime and evolution over time. Other assumptions are integrated into the model. This measurement process is very precisely monitored by the operators and regulators. The total CO<sub>2</sub> reduction derived from energy efficiency gains is estimated on the basis of the CO<sub>2</sub> which would have been produced in the event of implementation and operation of a generation unit, taking into account the average lifetime of all the constituent elements of this unit.

5.1.6.4.4 Attestation from one of the Statutory Auditors of ENGIE SA on the information related to the allocation, as of December 31, 2016, of funds raised through the Green Bond issued on May 19, 2014

*This is a free translation into English of the attestation from one of the Statutory Auditors of ENGIE SA on the information related to the allocation, as of December 31, 2016, of funds raised through the Green Bond issued on May 19, 2014 originally issued in French and is provided solely for the convenience of English speaking readers.*

*This attestation should be read in conjunction and construed in accordance with French law and professional auditing standards applicable in France.*

To the Group's Chief Executive Officer,

In our capacity as statutory auditor of ENGIE SA (the "Company") and in accordance with your request, we have prepared this attestation on the information related to the allocation, as of December 31, 2016, of funds raised through the Green Bond issued on May 19, 2014 (the "Issue"), in two tranches totaling €2.5 billion, contained in the attached document "Green Bond", and prepared pursuant to the use of proceeds of the final terms, signed on May 15, 2014, of each of the two tranches (the "Final Terms").

This document, prepared for the purposes of informing the Green Bond debt securities holders, presents an allocation of the funds raised from the Issue to eligible projects ("Eligible Projects"), over the period from January 1, 2013 to December 31, 2016, for a total amount of €2,500 million.

This information was prepared under your responsibility, based on the accounting records used for the preparation of the consolidated financial statements for the years ended December 31, 2013, 2014, 2015 and 2016.

Our role is to report on:

- the compliance, in all material respects, of the Eligible Projects referred to in the attached document, with the eligibility criteria defined and approved jointly by both the Company and Vigeo, referred to in the attached document and in the appendices to the Final Terms (the "Eligibility Criteria");
- the consistency of the amount raised from the Issue allocated to Eligible Projects, as of December 31, 2016, with data underlying the accounting records.

However, we have no responsibility for:

- challenging the Eligibility Criteria, and, in particular, we give no interpretation on the Final Terms;
- forming an opinion on the use of the funds allocated to Eligible Projects after such funds have been allocated.

In the context of our role as Statutory Auditor, we have audited, jointly with the other Statutory Auditor, the consolidated financial statements of the Company for the years ended December 31, 2013, 2014, 2015 and 2016. Our audits were conducted in accordance with professional standards applicable in France, and were planned and performed for the purpose of forming an opinion on the consolidated financial statements taken as a whole and not on any individual component of the accounts

used to determine the information. Accordingly, our audit tests and samples were not carried out with this objective and we do not express any opinion on any component of the accounts taken individually. The consolidated financial statements for the year ended December 31, 2016, which have not yet been approved by the Shareholders' Meeting, have been audited and our report thereon is dated March 10, 2017.

Our engagement, which constitutes neither an audit nor a review, was performed in accordance with professional standards applicable in France. For the purposes of this attestation, our work consisted, using sampling techniques or other methods of selection, in:

- understanding the procedures implemented by the Company for producing the information contained in the attached document;
- verifying the compliance, in all material respects, of the Eligible Projects referred to in the attached document with the Eligibility Criteria;
- verifying the consistency of the amount raised from the Issue allocated to Eligible Projects with data underlying the accounting records.

On the basis of our work, we have no matters to report on:

- the compliance, in all material respects, of the Eligible Projects with the Eligibility Criteria;
- the consistency of the amount raised from the Issue allocated to Eligible Projects as of December 31, 2016 with data underlying the accounting records.

Without modifying the conclusion expressed above, we draw your attention to the note included in section "5.1.6.5.2 Eligibility Criteria" which states that, since 2014, the arrangements in place within the Group have been strengthened to improve the consideration for "Promoting Business Ethics" and "Responsible Purchasing" criteria in contracts and (ii) Note (4) included in paragraph "5.1.6.4.3 Eligible Projects" which states that, with regard to Solairedirect acquired in 2015, the alignment of systems and procedures with those of the Group has been finalized in 2016.

This attestation has been prepared solely for your attention within the context described above and may not be used, distributed or referred to for any other purpose.

Neuilly-sur-Seine, March 17, 2017

One of the Statutory Auditors

Deloitte & Associés

Véronique Laurent

### 5.1.6.5 Negotiable European Commercial Paper (NEU CP)

The Company has short-term financing programs (short-term negotiable securities and US Commercial Paper).

It set up a €5-billion short-term negotiable securities program on August 13, 2008. That program was updated on August 29, 2016 to

take account of the reform of the Negotiable Debt Securities market and to update information relating to ENGIE's short-term rating. The program was approved by Banque de France. As of December 31, 2016 the amount outstanding was €4,657 million.

The Company also has a US commercial paper program in place for US\$4.5 billion. The amount outstanding on December 31, 2016 was US\$1,764 million.

## 5.2 Shareholding

### 5.2.1 Stock exchange quotation

#### TRADING VOLUMES AND HIGH AND LOW PRICES OF ENGIE SHARES IN PARIS

	High <sup>(1)</sup> (in euros)	Low <sup>(1)</sup> (in euros)	Volume of transactions <sup>(2)</sup>
<b>2016</b>			
January	15,750	13,765	6,749,903
February	14,685	13,145	7,387,568
March	14,295	13,430	5,828,695
April	14,590	13,080	5,610,580
May	14,315	13,135	4,266,198
June	14,685	13,180	9,001,258
July	15,080	14,095	4,666,688
August	14,835	14,245	3,585,634
September	14,760	13,540	5,028,889
October	13,680	12,915	5,031,676
November	13,005	11,255	7,837,042
December	12,335	11,520	6,184,320

(1) Rate obtained from daily closing prices.

(2) Daily average (source: Bloomberg).

Subsequent to the deregistration of ENGIE with the U.S. Securities & Exchange Commission on October 30, 2009, ENGIE maintains an unlisted Level 1 American Depositary Receipt (ADR) program on a U.S. stock exchange. These ADRs are traded on the Nasdaq over-the-counter market.

## 5.2.2 Breakdown of share capital

As of December 31, 2016, the Company held 2,435,285,011 shares, including 37,522,838 in treasury stock.

During the fiscal year 2016, there were no changes in the Company's share capital.

### MAJOR CHANGES IN ENGIE SHAREHOLDINGS DURING THE PAST THREE FISCAL YEARS

	December 31, 2016			December 31, 2015		December 31, 2014	
	Number of shares	% of share capital	% of voting rights <sup>(1)</sup>	% of share capital	% of voting rights	% of share capital	% of voting rights
French State	797,804,418	32.76	36.10	32.76	33.30	33.29	33.92
Employee shareholding	66,900,210	2.75	3.01	2.72	2.76	3.18	3.24
CDC Group	45,894,091	1.88	2.06	1.88	1.92	1.88	1.92
CNP Assurances	24,838,195	1.02	0.91	1.77	1.80	1.01	1.03
Groupe Bruxelles Lambert (GBL)	13,970,647	0.57	0.97	2.33	2.37	2.37	2.41
Sofina	-	-	-	0.37	0.37	0.38	0.38
Treasury stock	37,522,838	1.54	-	1.62	-	1.84	-
Management	Not significant	Not significant	Not significant	Not significant	Not significant	Not significant	Not significant
Public		59.48	56.95	56.55	57.48	56.05	57.10
<b>TOTAL</b>	<b>-</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

(1) Calculated based on the number of shares and voting rights outstanding as of December 31, 2016.

## 5.2.3 Statutory disclosure thresholds

04/03/2016	Increase	32.76% of the share capital	-	French State
01/11/2017	Decrease	28.65% of the share capital	31.98% of voting rights	French State

The French State exceeded the threshold of one-third of ENGIE's voting rights on April 3, 2016. This resulted in the assignment of double voting rights.

The French State decreased the threshold of one-third of ENGIE's voting rights and 30% of its share capital on January 11, 2017. This resulted in the disposal of 100,000,000 shares.

To the Company's knowledge, as of the date of this Registration Document, only the French State holds share capital and/or voting rights in ENGIE that exceed one of the legal thresholds.

The Company has no knowledge of any shareholders owning 5% or more of ENGIE's share capital that have notified it of crossing legal disclosure thresholds.

## 5.2.4 Golden share

Pursuant to Article L.111-68 of the French Energy Code and Article 7 of Act No. 2014-384 of March 29, 2014, the French government is required to hold more than one-third of the Company's capital or voting rights, and its stake may only fall below this threshold if it returns to the required ownership threshold for capital or voting rights within two years.

Pursuant to Article L.111-69 the French Energy Code, ENGIE's share capital includes a "golden share" resulting from the conversion of one common share owned by the French state to preserve the essential interests of France in the energy sector relating to the continuity and security of the energy supply. The golden share is granted to the French state indefinitely and entitles it to veto decisions made by ENGIE or its French subsidiaries, which directly or indirectly seek to sell in any form whatsoever, transfer operations, assign as collateral or guarantee or change the intended use of certain assets covered by the French Energy

Code, if it considers they could harm French energy interests, particularly as regards the continuity and safeguarding of supplies.

Under the terms of Article D.111-21 of the French Energy Code, the assets covered by the French State's right of veto pursuant to the golden share are:

- natural gas transmission pipelines located in France;
- assets related to the distribution of natural gas in France;
- underground natural gas storage located in France;
- liquefied natural gas facilities located in France.

Pursuant to those same provisions, all decisions of this nature must be reported to the French Minister of the Economy.

The decisions mentioned above are deemed to be authorized if the Minister of the Economy does not veto them within one month of the

date of their disclosure, as recorded by a receipt issued by the administration. This period may be extended for a period of 15 days by order of the Minister of the Economy. Before the expiration of the aforementioned one-month period, the Minister of the Economy may waive the right to veto. If there is a veto, the Minister of the Economy will communicate the reasons of his or her decision to the company in question. The decision of the Minister of the Economy may be appealed.

Pursuant to Decree 2015-1482 of December 16, 2015 and Decree 93-1296 of December 13, 1993, any transaction executed in violation of these rules is automatically null and void.

As of the date of this Registration Document, to ENGIE's knowledge, there is no agreement relating to an option on any entity that is a member of the ENGIE Group or any agreement which, if implemented, could lead to a change in its control.

## 5.2.5 Dividend distribution policy

ENGIE seeks to pursue a dynamic and attractive dividend distribution policy. To encourage and reward shareholder loyalty, the General Shareholders' Meeting of April 28, 2014 instituted a 10% dividend mark-up for shareholders who have held their shares in registered form for at least two years, this 10% being the maximum amount authorized by Article L. 232-14 of the French Commercial Code. This measure will apply for the first time to the dividend payment for fiscal year 2016 and will be capped at 0.5% of the share capital for a single shareholder, as stipulated in Article 232-14 of the French Commercial Code.

The Group's objectives described in Section 6.1.1.2 "Outlook" do not, however, constitute a commitment by the Company, and future

dividends will be assessed on a year-by-year basis depending on the Company's performance, financial position and any other factor considered relevant by the Board of Directors when preparing its proposals to the General Shareholders' Meetings.

The Board of Directors will propose to the General Shareholders' Meeting of May 12, 2017, the payment of a full dividend for fiscal year 2015 of €1.0 per share, including the €0.50 per share interim dividend already paid on October 14, 2015; the dividend will then be increased by €0.10 per share entitled to the dividend mark-up.

### Dividend per share

#### ENGIE DIVIDENDS OVER THE LAST FIVE YEARS

Fiscal year (fully paid up shares)	Net dividend per share (in euros)
2011	1.50
2012	1.50
2013	1.50
2014	1.00
2015	1.00

After a period of five years, unclaimed dividends are automatically paid to the French Treasury.

# 06

## Financial information

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## 6.1 Consolidated Financial Statements

### 6.1.1 Management Report

#### 6.1.1.1 Summary of the Group's results

After implementing its new organizational structure on January 1, 2016, ENGIE is rolling out its strategy to become the world energy transition leader.

Although the Group continues to face a complex macro-economic and market environment, notably characterized by significant commodity price volatility, its results for 2016 are strong and are already benefiting from the positive impact of the Lean 2018 performance program.

**Revenues** fell by 4.6% on a reported basis to €66.6 billion compared with 2015 (down by 4.0% on an organic basis), impacted by highly unfavorable exchange rate effects (€725 million negative impact) chiefly related to the pound sterling and Brazilian real, partially offset by the positive impact of changes in the scope of consolidation (€210 million positive impact). Besides these impacts, this decrease is mainly attributable to lower commodity prices which impacted the LNG and gas midstream activities, gas and electricity retail businesses, exploration-production, and power generation businesses, but only partially affected margins. The decrease was partially offset by the effect of slightly colder than average temperatures in France in 2016 compared with a warm 2015.

**EBITDA<sup>(1)</sup>** amounted to €10.7 billion, down 5.2% on a reported basis and 2.7% on an organic basis. The decrease on a reported basis is due to the impact of changes in the scope of consolidation (€151 million negative impact) mainly relating to the disposal of the merchant hydropower generation assets in the United States and to an unfavorable exchange rate effect chiefly related to the Norwegian krone, Brazilian real and pound sterling. In 2016, on an organic basis, EBITDA benefited from the restart of the Doel 3, Tihange 2 and Doel 1 nuclear power plants in Belgium in December 2015, the first effects of the Lean 2018 performance program, the favorable temperature effect in France, and the impact of commissioning of assets. These items only partially offset the continued decline in commodity prices.

**Current operating income after share in net income of entities accounted for using the equity method** decreased by 2.4% on a reported basis and increased by 1.6% on an organic basis to €6.2 billion. The organic decrease in EBITDA was offset by the positive effect of lower depreciation and amortization charges as a result of impairment losses recorded at end-2015 and the impact of reclassifying the portfolio of merchant power generation assets in the United States as assets held for sale in 2015.

**Net income/(loss) Group share** represented a net loss of €0.4 billion in 2016, up €4.2 billion on the previous year. It includes (i) lower net of tax impairment losses than in 2015, (ii) a positive change in the fair value of hedging contracts related to electricity and gas purchases and sales, (iii) gains on the partial disposal of Transmisora Eléctrica del Norte (TEN) in Chile, the disposal of the Paiton power plants in Indonesia and Meenakshi power plants in India, the disposal of available-for-sale securities (Transportadora de Gas del Perú (TgP) in Peru and Ores Assets in Belgium) and (iv) the impact of the reduction in the corporate income tax rate in France in 2020 introduced by the 2017 French Finance Law. These items were partially offset by the negative impact of a decrease in the discount rate applied to provisions for the back-end of the nuclear fuel cycle, and an increase in restructuring costs related mainly to the closure of plants in Australia, France, Belgium and the United Kingdom.

**Net recurring income Group share** amounted to €2.5 billion, a decrease of €0.1 billion compared with 2015, in line with the decline in current operating income after share in net income of entities accounted for using the equity method.

**Cash flow from operations (CFFO)** amounted to €9.7 billion, broadly stable compared to 2015 despite the decrease in cash generated from operations before income tax and working capital requirements.

**Net debt** stood at €24.8 billion, down €2.9 billion compared with net debt at December 31, 2015, mainly due to cash flow from operations (€9.7 billion) and the initial effects of the portfolio rotation program (€4.0 billion), and particularly (i) the disposal of the merchant hydropower generation assets portfolio in the United States, (ii) the disposal of thermal power generation assets in Indonesia and India, (iii) the disposal of wind farms operated by Maïa Eolis to Futures Energies Investissements Holding (FEIH), a 50/50 joint venture with Crédit Agricole Assurances, (iv) the disposal of available-for-sale securities (Ores Assets in Belgium and TgP in Peru) and (v) the partnership established as part of the TEN project, which led to the disposal of 50% of the holding in TEN in Chile. These items were partially offset by (i) gross investments in the period (€7.3 billion), (ii) and dividends paid to ENGIE SA shareholders (€2.4 billion) and to non-controlling interests (€0.5 billion).

(1) Data at December 31, 2016 are presented according to the Group's new EBITDA definition. This now excludes the non-recurring portion of the net income of entities accounted for using the equity method, which amounted to €12 million in 2015.



### 6.1.1.2 Outlook

Since 2016, the Group is committed to a 3 year transformation plan aiming at creating value and at improving the Group's risk profile. This plan which is very well advanced today, is based on **3 main programs**:

- the **portfolio rotation program** (€15 billion net debt impact targeted over 2016-2018). The Group has announced to date **€8.0 billion of disposals** (i.e. more than 50% of total program), of which **€7.2 billion** already finalized today;
- the **investment program** (€16 billion<sup>(1)</sup> growth CAPEX over 2016-2018), of which **€4.7 billion<sup>(2)</sup>** are already invested at end December 2016;
- the **performance plan Lean 2018**. Thanks to significant progress made, the Group decides to raise its **objective 2018 by 20%**, i.e. **€1.2 billion of net gains** recorded at EBITDA level by 2018. At end December 2016, €530 million of net gains at EBITDA were achieved, which is higher than the annual 2016 target of €500 million.

For 2017<sup>(3)</sup>, the Group anticipates a **net recurring income Group share between €2.4 and €2.6 billion**, in strong organic growth compared to 2016. This guidance is based on an estimated range for EBITDA of €10.7 to 11.3 billion, also growing strongly organically.

For the 2017-2018 period, the Group anticipates:

- a **net debt/EBITDA ratio** below or equal to 2.5x; and
- an «A» category credit rating.

For fiscal year 2016, the Group confirms the payment of a €1 per share dividend, payable in cash.

For fiscal years 2017 and 2018, the Group commits to pay a €0.70 per share dividend per year, payable in cash.

### 6.1.1.3 Consolidated revenues and earnings

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>	<b>% change (reported basis)</b>	<b>% change (organic basis)</b>
<b>Revenues</b>	<b>66,639</b>	<b>69,883</b>	<b>-4.6%</b>	<b>-4.0%</b>
<b>EBITDA</b>	<b>10,689</b>	<b>11,274</b>	<b>-5.2%</b>	<b>-2.7%</b>
Net depreciation and amortization/Other	(4,517)	(4,947)		
<b>CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD</b>	<b>6,172</b>	<b>6,326</b>	<b>-2.4%</b>	<b>+1.6%</b>

Consolidated revenues for the year ended December 31, 2016 amounted to €66.6 billion, down 4.6% compared with the previous year. On an organic basis (excluding the impact of changes in the scope of consolidation and exchange rates), revenues fell by 4.0%.

Changes in the scope of consolidation had a net positive €210 million impact resulting from (i) acquisitions made in 2015 and 2016 for €612 million, mainly OpTerra Energy Services in the United States (€241 million) and services companies operating in Australia and New Zealand (€137 million), (ii) disposals or deconsolidation of business activities in 2015 or 2016 for €402 million, including the disposal of the retail businesses in Hungary (€209 million negative impact) and merchant hydropower generation assets in the United States (€88 million negative impact). Exchange rates had a negative impact of €725 million on Group revenues, mainly reflecting the appreciation of the

euro against the pound sterling, Brazilian real, Mexican peso and Norwegian krone.

Organic revenue performance was severely affected by lower commodity prices in the gas and LNG midstream, retail, exploration-production and power generation activities. Although these price effects had a significant impact on revenues, their impact on margins was more limited, particularly in the retail businesses. As a result, organic revenue for the Group's segments was up in Infrastructures Europe, Benelux, and Europe excluding France & Benelux, stable in France, Latin America and North America, down slightly in the Other segment, and down significantly in Africa/Asia, E&P and GEM & LNG.

EBITDA declined by 5.2% to €10.7 billion over the year. Excluding the impact of changes in the scope of consolidation and exchange rates, EBITDA decreased by 2.7%.

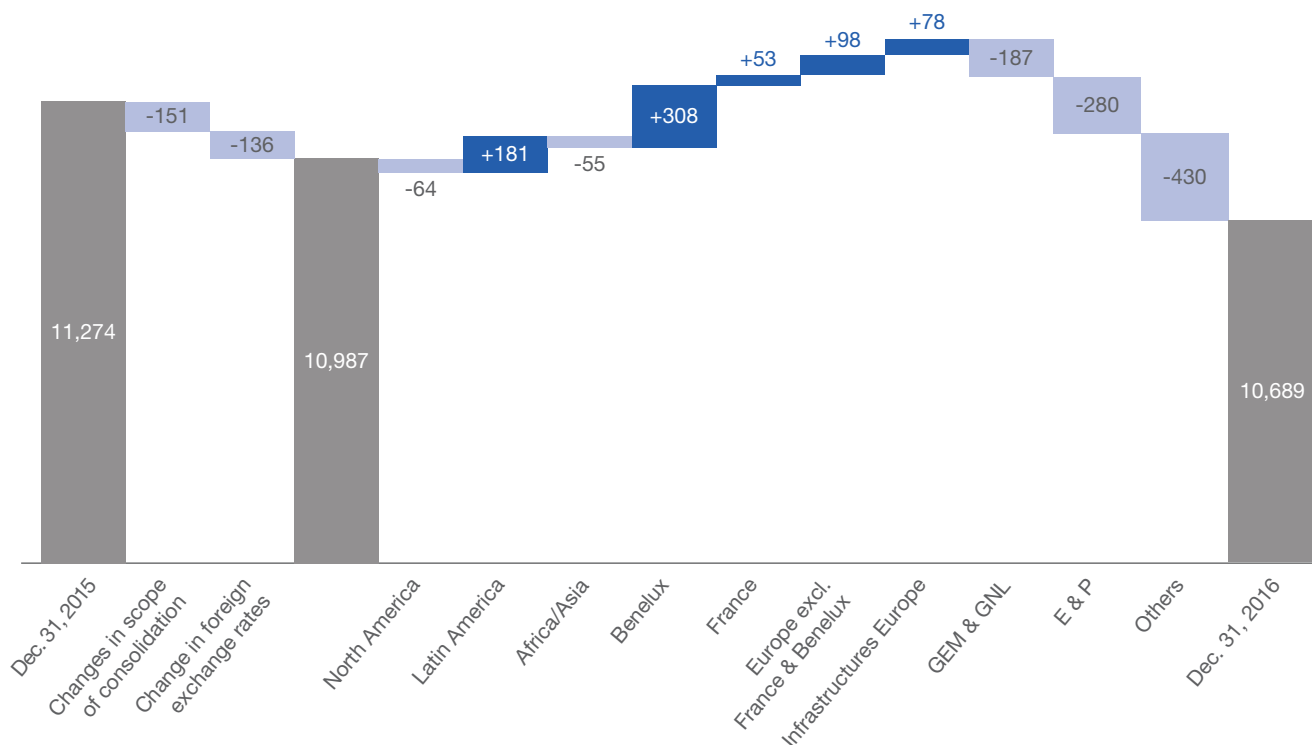
(1) To date, including the disposal of US thermal merchant assets in February 2017.

(2) Including CAPEX on innovation and digital.

(3) These targets and indication assume average weather conditions in France, full pass through of supply costs in French regulated gas tariffs, and unchanged Group accounting principles for supply and logistic gas contracts, no significant regulatory and macro-economic changes, commodity price assumptions based on market conditions as of December 31, 2016 for the non-hedged part of the production, and average foreign exchange rates as follows for 2017: €/€\$: 1.07; €/BRL: 3.54. These financial objectives include the impact of the Belgian nuclear contribution on EBITDA but do not consider significant impacts on disposals not already announced.

## EBITDA TRENDS

In millions of euros



Changes in the scope of consolidation had a negative €151 million impact on EBITDA and chiefly resulted from the disposal of merchant hydropower generation assets in the United States, coupled with the impact of the disposal or recognition as assets held for sale of some entities accounted for using the equity method. Changes in exchange rates had a negative €136 million impact, mainly due to the appreciation of the euro against the Norwegian krone, Brazilian real and pound sterling.

On an organic basis, EBITDA was down 2.7%, or €298 million. It benefited from the positive impact of (i) the effects of the Lean 2018 performance program, (ii) the restart of the Doel 3, Tihange 2 and Doel 1 nuclear power plants in Belgium in December 2015, (iii) a positive temperature effect in France, (iv) the favorable impact of a provision reversal (in the Latin America segment), and (v) the commissioning of assets in the Latin America, Africa/Asia and E&P segments. However, these positive impacts only partially offset (i) negative price effects, mainly in the exploration-production, midstream gas and LNG, and power generation businesses, (ii) the impact of positive one-off items recognized in 2015, and (iii) unfavorable volume effects, particularly in the exploration-production and storage businesses in France.

Organic EBITDA performance varied significantly between segments:

- EBITDA for North America and Africa/Asia was down due to unfavorable price effects affecting margins of power generation assets (notably in North America, Thailand, Singapore and India), and the lower availability of coal assets in Australia. These impacts were partially offset by good cost control and the favorable impact of commissioning assets in South Africa;
- EBITDA for Latin America was up sharply on an organic basis, driven by the commissioning of the Mayakan gas pipeline extension in Mexico, the Quitaracsa and Nodo Energetico power generation assets in Peru and the full commissioning of the Jirau hydroelectric power plant in Brazil. Brazil also benefited from the favorable impact of a provision reversal;
- EBITDA for Benelux was up sharply, driven by the positive impact of the restart of the Doel 3, Tihange 2 and Doel 1 nuclear power plants at end-2015, which was partially offset by the deterioration in EBITDA from the services business, particularly in Oil & Gas;
- EBITDA for France improved due to a positive temperature effect on gas sales, a rise in electricity volumes sold, and a good performance in the network business. These increases were partially offset by the fall in electricity prices captured by the hydro generation business and difficulties in gas sales to business customers;
- growth in EBITDA in Europe excluding France and Benelux was driven by an improved performance from services (particularly in the United Kingdom) and from energy sales in Italy, partially offset by the adverse impact of new gas distribution tariffs in Romania;
- EBITDA for Infrastructures Europe increased due to the positive temperature effect and tariff increases in distribution and transportation;
- EBITDA for the GEM & LNG segment declined due to greater revisions to gas supply conditions in 2015 than in 2016 and the discontinuance of shipments from Yemen since April 2015;
- EBITDA for exploration-production activities was down due to the fall in the market prices of oil and gas, coupled with a decrease in hydrocarbon production due notably to the outages at Njord and Hyme since June 2016;

- EBITDA for the Other segment was down on an organic basis mainly due to the positive impact of one-off items recorded in 2015 and a contraction in engineering activities, which were only partially offset by a good operating performance from thermal power generation activities in Europe.

Current operating income after share in net income of entities accounted for using the equity method amounted to €6.2 billion, up 1.6% on an organic basis compared with 2015. Changes in this indicator for each segment reflect EBITDA trends, plus the positive impact of reduced depreciation and amortization charges as a result of the impairment losses recorded at end-2015 and the impact of reclassifying the portfolio of merchant power generation assets in the United States as assets held for sale.

#### 6.1.1.4 Reportable segment business trends

##### North America

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>	<b>% change (reported basis)</b>	<b>% change (organic basis)</b>
<b>Revenues</b>	<b>3,814</b>	<b>3,673</b>	<b>+3.9%</b>	<b>-0.5%</b>
<b>EBITDA</b>	<b>475</b>	<b>633</b>	<b>-25.0%</b>	<b>-11.8%</b>
Net depreciation and amortization/Other	(45)	(300)		
<b>CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD</b>	<b>430</b>	<b>332</b>	<b>+29.4%</b>	<b>+61.3%</b>

Revenues for the North America segment totaled €3,814 million, up 3.9% on a reported basis. Revenues were down 0.5% on an organic basis due to lower generation volumes and prices, partly mitigated by higher retail volumes. The change on a reported basis also factored in the scope impact of the acquisition of OpTerra Energy Services in February 2016 and the disposal of the merchant hydropower generation assets in June 2016.

Electricity sales decreased by 2.9 TWh to 65.8 TWh due to lower US generation volumes, primarily a consequence of weaker wholesale commodity prices, but were also impacted by the disposal mentioned above. US retail sales volumes increased, offsetting some of the reduction in generation volumes.

EBITDA totaled €475 million, down 25.0% on a reported basis but down only 11.8% organically. The organic decline resulted primarily from lower margins in the US generation business, partly mitigated by a stronger performance in the US retail business coupled with cost savings. The segment's reported results were negatively impacted by the disposal of the merchant hydropower generation assets and the reclassification of some entities accounted for using the equity method as assets held for sale.

Current operating income after share in net income of entities accounted for using the equity method amounted to €430 million, up 29.4% on a reported basis and up 61.3% on an organic basis, due to the positive impact on depreciation and amortization of both the accounting treatment of assets held for sale and the impairment losses recognized in 2015.

## Latin America

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>	<b>% change (reported basis)</b>	<b>% change (organic basis)</b>
<b>Revenues</b>	<b>4,075</b>	<b>4,197</b>	<b>-2.9%</b>	<b>+0.2%</b>
<b>EBITDA</b>	<b>1,696</b>	<b>1,563</b>	<b>+8.5%</b>	<b>+12.0%</b>
Net depreciation and amortization/Other	(412)	(388)		
<b>CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD</b>	<b>1,284</b>	<b>1,175</b>	<b>+9.3%</b>	<b>+13.2%</b>

Revenues for the Latin America segment totaled €4,075 million, representing a 2.9% decrease on a reported basis, impacted by the depreciation of the Brazilian real and Mexican peso, and a 0.2% organic increase.

In Brazil, the impact of inflation on average prices under bilateral agreements failed to offset the impact of the very high spot prices which had boosted 2015 performance. Peru trended upwards thanks to the commissioning of the Quitarasca hydroelectric power plant (October 2015) and the Nodo Energetico thermal power plant (October 2016). Mexico was positively impacted by the commissioning of the Mayakan gas pipeline extension (April 2015) and by distributed gas volumes and tariff increases. In Chile, the decrease in commodity prices affected selling prices.

Electricity sales decreased by 0.7 TWh to 59.3 TWh and gas sales increased by 3.9 TWh to 30.4 TWh.

EBITDA totaled €1,696 million, an increase of 8.5% on a reported basis and 12% on an organic basis, despite the negative impact of the depreciation of the Brazilian real and Mexican peso. The 12% organic growth was due to the positive impact of a provision reversal in Brazil, and by a stronger performance in Peru and Mexico, partially offset by weaker results in Chile.

Current operating income after share in net income of entities accounted for using the equity method amounted to €1,284 million, up 13.2% on an organic basis primarily due to the EBITDA improvement.

## Africa/Asia

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>	<b>% change (reported basis)</b>	<b>% change (organic basis)</b>
<b>Revenues</b>	<b>3,804</b>	<b>4,244</b>	<b>-10.4%</b>	<b>-12.1%</b>
<b>EBITDA</b>	<b>1,162</b>	<b>1,237</b>	<b>-6.0%</b>	<b>-4.5%</b>
Net depreciation and amortization/Other	(239)	(265)		
<b>CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD</b>	<b>923</b>	<b>972</b>	<b>-5.1%</b>	<b>-1.7%</b>

Revenues for the Africa/Asia segment totaled €3,804 million, down 10.4% on a reported basis and 12.1% organically. In respect of changes in the scope of consolidation, the contribution of the Australian and New Zealand services activities acquired at end-2015 more than offset the negative foreign exchange impact, mainly due to the strengthening of the euro against the Thai baht and Turkish lira as well as the impact of the sale of the Meenakshi coal-fired power plant in India in September 2016. The organic decline resulted from a combination of lower generation volumes and reduced cost pass-through (gas and coal costs to electricity sale prices) in Thailand and Turkey.

Electricity sales decreased by 3.8 TWh to 51 TWh, with reduced volumes in Thailand and Australia.

EBITDA totaled €1,162 million, down 6.1% on a reported basis and 4.5% organically, mainly reflecting the reduced availability of the coal-fired assets in Australia and lower margins in Thailand, Singapore and India, partially offset by cost savings achieved under the Lean 2018 performance program and by the power generation assets commissioned in South Africa (Avon, West Coast and Dedisa).

Current operating income after share in net income of entities accounted for using the equity method amounted to €923 million, down 1.7% on an organic basis primarily for the same reasons as those given above for EBITDA. It was also favorably impacted by lower depreciation and amortization charges due to the impairment losses recognized at end-2015.

## Benelux

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>	<b>% change (reported basis)</b>	<b>% change (organic basis)</b>
<b>Revenues</b>	<b>9,044</b>	<b>8,732</b>	<b>+3.6%</b>	<b>+3.4%</b>
<b>EBITDA</b>	<b>755</b>	<b>445</b>	<b>+69.5%</b>	<b>+69.2%</b>
Net depreciation and amortization/Other	(383)	(354)		
<b>CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD</b>	<b>371</b>	<b>91</b>	<b>NA</b>	<b>NA</b>

Revenues for the Benelux segment amounted to €9,044 million, up 3.6% on a reported basis and 3.4% on an organic basis compared to 2015. This rise reflects the restart of the Doel 1, Doel 3 and Tihange 2 nuclear power plants at the end of 2015. It was partly offset by a decrease in selling prices (no margin impact) on the gas retail business and by the fall in revenues from services businesses, notably in the Oil & Gas business.

Electricity sales in Belgium and Luxembourg were up 9.0 TWh, mainly due to increased availability of nuclear power plants. The retail market share in Belgium remained stable at 46%. Electricity sales in the Netherlands edged up 1.1 TWh.

Natural gas sales in Benelux totaled 49.2 TWh, an increase of 2.2 TWh compared to 2015. The retail market share in Belgium remained stable at 43%.

Despite the decline in the services businesses, EBITDA was up sharply by 69.5% to €755 million on a reported basis, driven by the restart of three nuclear power plants at the end of 2015 and by cost savings resulting from the Lean 2018 performance program.

Current operating income after share in net income of entities accounted for using the equity method increased in line with EBITDA.

## France

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>	<b>% change (reported basis)</b>	<b>% change (organic basis)</b>
<b>Revenues</b>	<b>20,332</b>	<b>20,248</b>	<b>+0.4%</b>	<b>+0.2%</b>
<b>EBITDA</b>	<b>1,315</b>	<b>1,274</b>	<b>+3.2%</b>	<b>+4.3%</b>
Net depreciation and amortization/Other	(620)	(565)		
<b>CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD</b>	<b>695</b>	<b>709</b>	<b>-1.9%</b>	<b>+2.8%</b>

## VOLUMES SOLD

<i>In TWh</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>	<b>% change (reported basis)</b>
Gas sales	154.1	150.1	+2.7%
Electricity sales	56.9	50.9	+11.8%

## FRANCE CLIMATIC ADJUSTMENT

<i>In TWh</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>	<b>Total change in TWh</b>
Climate adjustment volumes (negative figure = warm climate, positive figure = cold climate)	2.2	(6.6)	+8.8

Revenues for the France segment amounted to €20,332 million, up slightly by 0.4% on a reported basis and by 0.2% organically. The increase was driven by growth in electricity sales to both BtoB and BtoC customers coupled with a positive temperature effect on gas sales, partially offset by a decrease in the number of customers and in selling prices.

Natural gas sales were up 4.0 TWh, comprising a positive 8.8 TWh temperature effect and a negative 4.8 TWh impact from the loss of customers due to competitive pressure. ENGIE holds around 74% of the BtoC market and around 25% of the BtoB market. Electricity sales were up 6.0 TWh compared to 2015 and continued to advance in terms of sales to end customers (up 2.1 TWh), sales to business customers (up 2.5 TWh) and production of renewable energy (up 1.4 TWh).

EBITDA amounted to €1,315 million, up 4.3% on an organic basis, led by a good performance from the heating networks business and BtoB services, a rise in electricity volumes sold to BtoB and BtoC customers and in power renewable generation, as well as good cost control. These

impacts were partly offset by the fall in prices and volumes of gas sold to business customers.

Current operating income after share in net income of entities accounted for using the equity method amounted to €695 million, up 2.8% on an organic basis in line with organic EBITDA growth.

## Europe excluding France and Benelux

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>	<b>% change (reported basis)</b>	<b>% change (organic basis)</b>
<b>Revenues</b>	<b>8,118</b>	<b>8,491</b>	<b>-4.4%</b>	<b>+1.9%</b>
<b>EBITDA</b>	<b>612</b>	<b>559</b>	<b>+9.5%</b>	<b>+19.2%</b>
Net depreciation and amortization/Other	(202)	(218)		
<b>CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD</b>	<b>410</b>	<b>341</b>	<b>+20.2%</b>	<b>+36.4%</b>

Revenues for the Europe excluding France and Benelux segment totaled €8,118 million, down 4.4% on a reported basis reflecting the foreign exchange impact (mainly due to the depreciation of the pound sterling) combined with the disposal of retail activities in Hungary in September 2015. Revenues were up 1.9% organically, mainly due to favorable weather conditions in Romania which more than offset the lower gas distribution tariffs in Romania, coupled with growth in revenues from the services business.

Electricity sales were up 1.1 TWh to 29.1 TWh. Gas sales fell by 6.3 TWh to 68.2 TWh, mainly due to the disposal of the retail activities in Hungary.

EBITDA totaled €612 million, representing an organic increase of 19.2%. This growth was driven mainly by the positive impacts of the Lean 2018 performance program, an increase in margins on services business in the United Kingdom, and improved performance in the energy retail business in Italy, partially offset by the fall in gas distribution tariffs in Romania.

Current operating income after share in net income of entities accounted for using the equity method rose 36.4% to €410 million on an organic basis in line with organic EBITDA growth.

## Infrastructures Europe

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>	<b>% change (reported basis)</b>	<b>% change (organic basis)</b>
<b>Revenues</b>	<b>3,267</b>	<b>3,027</b>	<b>+8.0%</b>	<b>+8.1%</b>
<b>Total revenues (incl. intra-group transactions)</b>	<b>6,762</b>	<b>6,585</b>	<b>+2.7%</b>	
<b>EBITDA</b>	<b>3,459</b>	<b>3,381</b>	<b>+2.3%</b>	<b>+2.3%</b>
Net depreciation and amortization/Other	(1,390)	(1,327)		
<b>CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD</b>	<b>2,068</b>	<b>2,054</b>	<b>+0.7%</b>	<b>+0.6%</b>

Total revenues for the Infrastructures Europe segment, including intra-Group transactions, amounted to €6,762 million, up 2.7% on 2015, reflecting:

- the annual review in France of distribution infrastructure access tariffs (3.9% increase on July 1, 2015 and 2.8% increase on July 1, 2016) and of transport infrastructure access tariffs (2.5% increase on April 1, 2015 and 4.6% increase on April 1, 2016);
- a favorable temperature effect <sup>(1)</sup>.

Despite:

- lower storage capacity sales in France;
- the decrease in gas purchases and sales to maintain technical performance of the storage facilities (low summer/winter spreads).

The contribution to Group revenues was €3,267 million, up 8.0% on 2015. The improved contribution essentially reflects the growth in distribution and transportation activities for third parties and the positive impact of tariff increases.

EBITDA amounted to €3,459 million, up 2.3% on the previous year due to growth in revenues.

Current operating income after share in net income of entities accounted for using the equity method came in at €2,068 million for the period, up 0.7% on 2015, with a rise in net depreciation and amortization charges resulting from new assets commissioned by GRTgaz and GRDF in 2015.

(1) A 12.2 TWh decrease due to the mild conditions in 2015 and a 4 TWh increase due to the colder conditions in 2016, representing a €114 million increase in revenues calculated at €7/MWh.

## GEM &amp; LNG

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>	<b>% change (reported basis)</b>	<b>% change (organic basis)</b>
<b>Revenues</b>	<b>8,981</b>	<b>11,320</b>	<b>-20.7%</b>	<b>-20.5%</b>
<b>EBITDA</b>	<b>3</b>	<b>196</b>	<b>-98.3%</b>	<b>-98.3%</b>
Net depreciation and amortization/Other	(77)	(86)		
<b>CURRENT OPERATING INCOME/(LOSS) AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD</b>	<b>(74)</b>	<b>110</b>	<b>NA</b>	<b>NA</b>

Global Energy Management (GEM) and LNG's contribution to Group revenues in 2016 amounted to €8,981 million, down 20.7% compared to 2015. This decrease was mainly due the drop in commodity prices in Europe and Asia since 2015.

External LNG sales were stable at 81 TWh, representing 108 cargoes.

EBITDA was down on 2015 to €3 million, due mostly to the recognition of profits relating to the revised gas supply conditions introduced in 2015, which were higher than in 2016, and to the discontinuance of

shipments from Yemen as from April 2015. The impacts were partially offset by LNG sale opportunities in Asia in the fourth quarter of 2016 and by the significant gains generated as a result of the Lean 2018 performance program.

The business incurred a current operating loss after share in net income of entities accounted for using the equity method of €74 million in 2016, representing a deterioration on both a reported and organic basis, in line with EBITDA.

## E&amp;P

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>	<b>% change (reported basis)</b>	<b>% change (organic basis)</b>
<b>Revenues</b>	<b>1,799</b>	<b>2,242</b>	<b>-19.8%</b>	<b>-17.8%</b>
<b>EBITDA</b>	<b>1,198</b>	<b>1,514</b>	<b>-20.9%</b>	<b>-18.9%</b>
Net depreciation and amortization/Other	(662)	(969)		
<b>CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD</b>	<b>536</b>	<b>546</b>	<b>-1.8%</b>	<b>-0.2%</b>

The contribution of E&P to Group revenues amounted to €1,799 million in 2016, down 19.8% on a reported basis and 17.8% on an organic basis, mainly due to the slump in oil and gas prices and a 2.8 Mbep decrease in total hydrocarbon production (56.3 Mbep in 2016 versus 59.1 Mbep in 2015), due to outages at Njord and Hyme in Norway in early June, partially offset by a good performance from other assets and the final impacts of the commissioning of Gudrun. Exchange rate differences account for the remainder of the reported decrease in revenues.

EBITDA amounted to €1,198 million, down 20.9% on a reported basis or 18.9% on an organic basis, in line with revenue trends. The decline in EBITDA was partially offset by a sharp decrease in extraction and exploration costs.

Current operating income after share in net income of entities accounted for using the equity method amounted to €536 million in 2016, down 1.8% on a reported basis and down 0.2% on an organic basis, as the decrease in EBITDA was largely offset by lower depreciation and amortization charges due to the impairment losses recorded at end-2015 and by lower charges in respect of pre-capitalized exploration costs.

## Other

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>	<b>% change (reported basis)</b>	<b>% change (organic basis)</b>
<b>Revenues</b>	<b>3,405</b>	<b>3,710</b>	<b>-8.2%</b>	<b>-6.7%</b>
<b>EBITDA</b>	<b>15</b>	<b>472</b>	<b>-96.9%</b>	<b>-92.4%</b>
Net depreciation and amortization/Other	(487)	(476)		
<b>CURRENT OPERATING INCOME/(LOSS) AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD</b>	<b>(472)</b>	<b>(4)</b>	<b>NA</b>	<b>NA</b>

The Other segment comprises the activities of the Generation Europe, Tractebel and GTT business units, as well as the Group's holding and corporate activities, which notably include the entities centralizing the Group's financing requirements, Solairedirect's business and the equity-accounted contribution of SUEZ.

Revenues amounted to €3,405 million, down 8.2% on a reported basis and down 6.7% organically. The negative foreign exchange impact relating to the pound sterling was partially offset by the positive contributions from newly-consolidated acquisitions, including Solairedirect. The organic decrease was mainly due to the closure of the coal-fired power plants at Rugeley (1 GW) in early June 2016 and Gelderland (0.6 GW) at end-2015 and the Twining gas-fired power plant (0.4 GW) in June 2016.

Electricity sales amounted to 21.6 TWh, representing a decrease of 0.5 TWh compared to 2015. The closures of Rugeley, Gelderland and

Twining were offset by an increase in production mainly at the gas-fired power plants in the Netherlands.

EBITDA amounted to €15 million, down on both a reported and organic basis compared to 2015, due to the positive one-off items recorded in 2015 (including damages and late payment interest received in relation to two coal-fired power plant projects in Germany and the Netherlands) and a contraction in Tractebel's engineering business, notwithstanding an improved performance from thermal power generation activities due notably to the commissioning of Wilhelmshaven in October 2015.

Current operating loss after share in net income of entities accounted for using the equity method was €472 million for the period, representing a deterioration on both reported and organic basis, in line with EBITDA trends.

## 6.1.1.5 Other income statement items

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>	<b>% change (reported basis)</b>
<b>Current operating income after share in net income of entities accounted for using the equity method</b>	<b>6,172</b>	<b>6,326</b>	<b>-2.4%</b>
Mark to market on commodity contracts other than trading instruments	1,254	(261)	
Impairment losses	(4,192)	(8,748)	
Restructuring costs	(476)	(265)	
Changes in scope of consolidation	544	(46)	
Other non-recurring items	(850)	(248)	
<b>Income/(loss) from operating activities</b>	<b>2,452</b>	<b>(3,242)</b>	<b>NA</b>
Net financial income/(loss)	(1,380)	(1,547)	
Income tax expense	(909)	(324)	
<b>NET INCOME/(LOSS)</b>	<b>163</b>	<b>(5,113)</b>	<b>NA</b>
o/w net income/(loss) Group share	(415)	(4,617)	
o/w non-controlling interests	579	(496)	

Income from operating activities amounted to €2,452 million, up compared to 2015 due mainly to (i) lower impairment losses compared to the previous year, (ii) the positive impact of the change in fair value of commodity derivatives, and (iii) gains on disposals of assets and available-for-sale securities, partially offset by (iv) the fall in current operating income after share in net income of companies accounted for using the equity method, and (v) by the recognition of additional costs relating to the three-yearly revision of nuclear provisions in Belgium, to the dismantling and rehabilitation of the Hazelwood power plant and adjacent coal mine in Australia, and to restructuring plans initiated by the Group under its transformation program.

In 2016, the Group recognized impairment losses of €1,690 million against goodwill, €2,485 million against property, plant and equipment and intangible assets, and €147 million against financial assets and investments in entities accounted for using the equity method. These impairment losses related mainly to the Benelux, GEM & LNG, France and North America reportable segments. After taking into account the deferred tax effects and the share of impairment losses attributable to non-controlling interests, the impact of these impairment losses on net income Group share was a negative €3,866 million. These impairment losses are described in Note 8.2 "Impairment losses" to the consolidated financial statements.



In 2015, the Group recognized impairment losses of €2,628 million against goodwill, €5,731 million against property, plant and equipment and intangible assets, and €402 million against financial assets and investments in entities accounted for using the equity method. These impairment losses related mainly to the E&P, GEM & LNG, Africa/Asia, North America and France reportable segments.

Income from operating activities was also affected by:

- changes in the fair value of commodity derivatives relating to operating items, which had a positive impact of €1,254 million on income from operating activities (reflecting the impact of transactions not eligible for hedge accounting), compared with a negative impact of €261 million in 2015. The impact for the period results chiefly from positive overall price effects on these positions, combined with the net positive impact of unwinding positions with a negative market value at December 31, 2015;
- restructuring costs of €476 million (compared with €265 million the previous year) including notably (i) costs related to decisions to shut down production and close some entities, sites and power plants for €230 million and (ii) costs related to various staff reduction plans implemented as part of the Group's transformation program, as well as measures to adapt to economic conditions for €154 million;
- changes in the scope of consolidation (gains and losses on disposals of consolidated entities or remeasurements of previously-held interests in accordance with IFRS 3), which had a positive impact of €544 million, including gains on the disposal of the Group's entire 40.5% interest in the Paiton coal-fired power plants in Indonesia for €225 million, the disposal of a 50% interest in Transmisora Eléctrica del Norte (TEN) in Chile for €211 million, and the disposal of the 89.9% interest in the Meenakshi coal-fired power plants in India for €84 million (see Note 4.1);

- other non-recurring items representing a loss of €850 million, mainly including the €584 million net expense related to additions to provisions for the back-end of the nuclear fuel cycle under the three-yearly revision of nuclear provisions in Belgium (see Note 18.2), as well as a €124 million expense corresponding to the recognition of additional dismantling and rehabilitation costs for the Hazelwood power plant and adjacent coal mine in Australia following the shut-down and rehabilitation plan approved by the shareholders at the end of 2016.

The Group's net financial loss narrowed to €1,380 million in 2016 from €1,547 million in 2015, owing to the fall in the cost of gross debt and lower non-recurring expenses compared to 2015.

The income tax charge amounted to €909 million in 2016 (€324 million in 2015). It includes an income tax benefit of €824 million arising on non-recurring income statement items (versus €1,110 million in 2015), mainly related to the remeasurement of deferred taxes recognized by the French entities at the new rate of 28.92% provided for in the 2017 French Finance Law (€904 million), and to the impairment losses recognized against property, plant and equipment and intangible assets in 2016 (€326 million). Adjusted for these non-recurring items, the effective recurring tax rate was 41.9%, higher than the 2015 rate of 39.0% due mainly to the impacts of the reversal of tax litigation provisions in 2015.

Net income attributable to non-controlling interests was up year-on-year at €579 million due mainly to the impact of the capital gain on the disposal of a 50% interest in Transmisora Eléctrica del Norte (TEN) which affected the net income of the Group's 53%-owned subsidiary ENGIE Energía Chile, as well as improved income from exploration-production activities and in Australia.

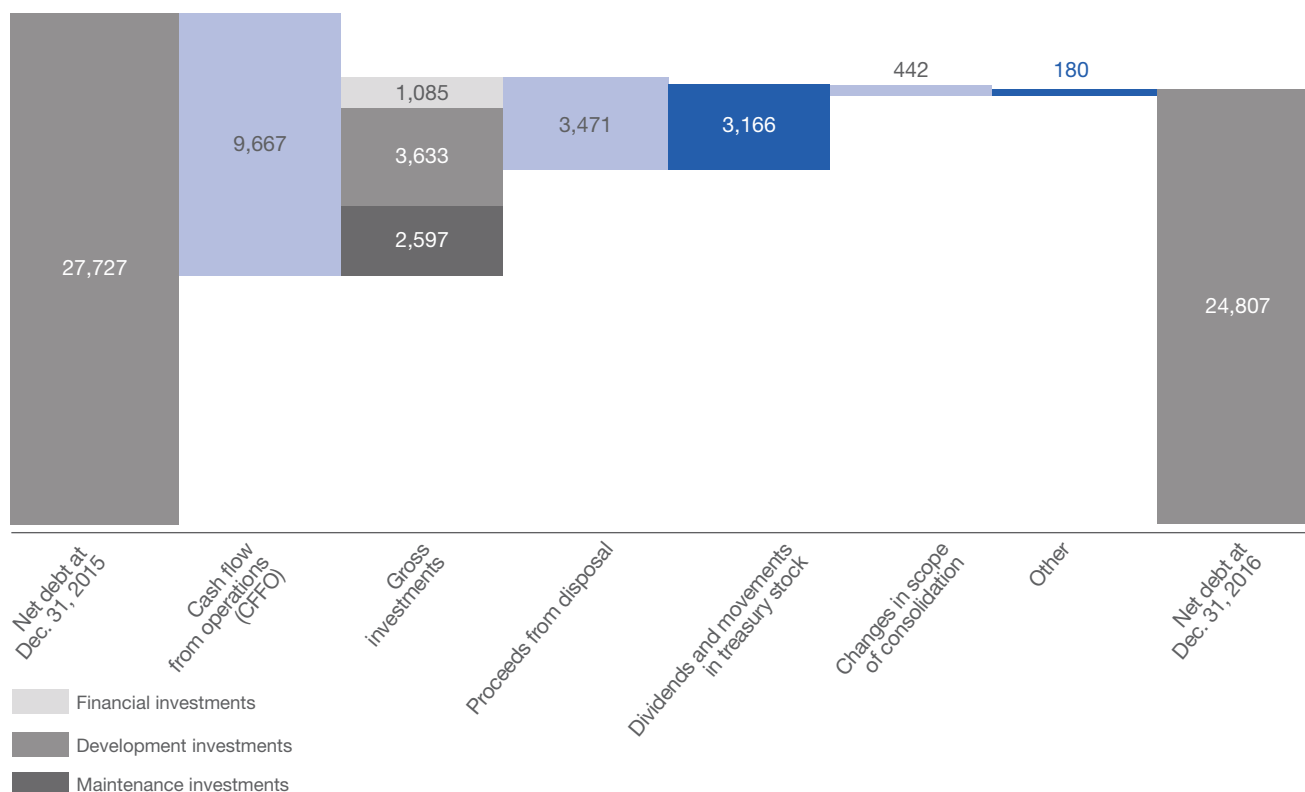
### 6.1.1.6 Changes in net debt

Net debt stood at €24.8 billion, down €2.9 billion compared with net debt at December 31, 2015, mainly due to cash flow from operations (€9.7 billion) and the initial effects of the portfolio rotation program (€4.0 billion), and particularly (i) the disposal of the merchant hydro generation assets portfolio in the United States, (ii) the disposal of thermal power generation assets in Indonesia and India, (iii) the disposal of wind farms operated by Maia Eolis to Futures Energies Investissements Holding (FEIH), a 50/50 joint venture with Crédit

Agricole Assurances, (iv) the disposal of available-for-sale securities (Ores Assets in Belgium and TgP in Peru) and (v) the partnership established as part of the TEN project, which led to the disposal of 50% of the holding in TEN in Chile. These items were partially offset by (i) gross investments in the period (€7.3 billion), (ii) and dividends paid to ENGIE SA shareholders (€2.4 billion) and to non-controlling interests (€0.5 billion).

Changes in net debt break down as follows:

In million of euros



The net debt to EBITDA ratio came out at 2.32 at December 31, 2016.

In millions of euros

	Dec. 31, 2016	Dec. 31, 2015
Net debt	24,807	27,727
EBITDA	10,689	11,274
<b>NET DEBT/EBITDA RATIO</b>	<b>2.32</b>	<b>2.46</b>

### 6.1.1.6.1 Cash flow from operations (CFFO)

Cash generated from operations before income tax and working capital requirements amounted to €10,263 million in 2016, down €679 million compared with 2015.

The fall was in line with the EBITDA performance.

The change in working capital requirements represents a positive impact of €1.4 billion related to the impact of changes in commodity prices compared to 2015.

### 6.1.1.6.2 Net investments

Gross investments during the period amounted to €7,315 million and included:

- financial investments for €1,085 million, relating primarily to the acquisition of OpTerra Energy Services and Green Charge Networks in the United States for €187 million and €51 million respectively, the acquisition of 51% of Maïa Eolis (wind farms in France) for €152 million, and a €248 million increase in Synatom investments;

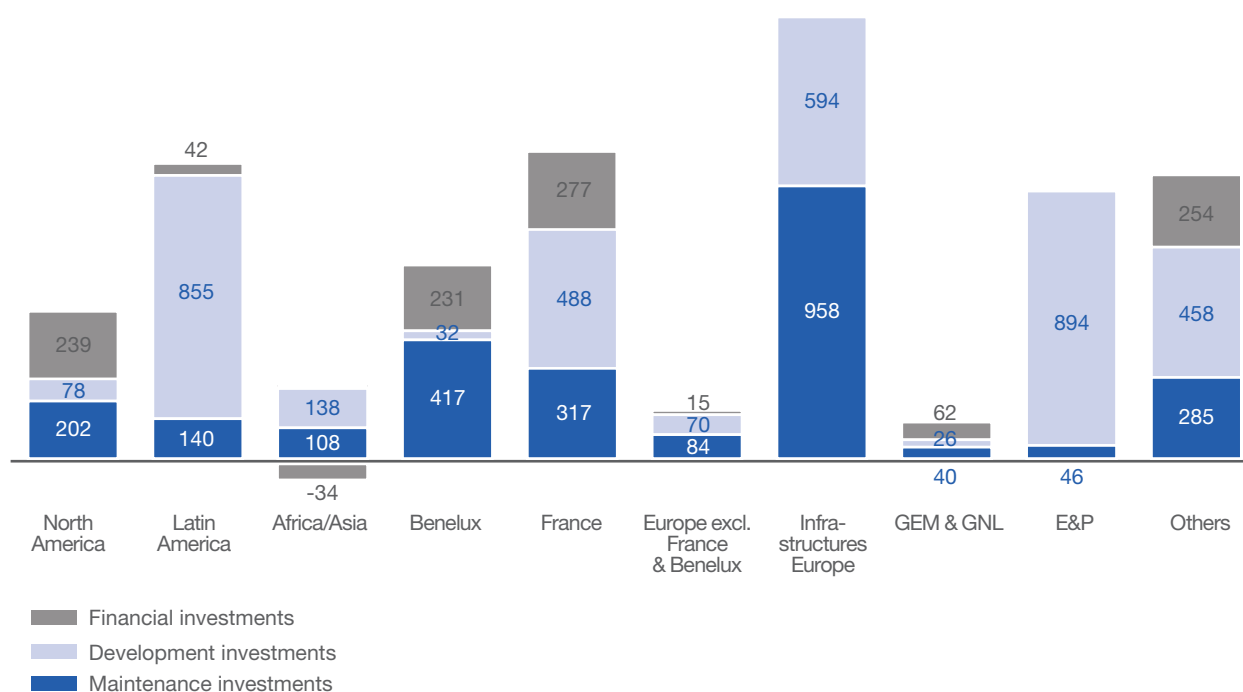
- development investments totaling €3,633 million, including (i) €855 million invested in the Latin America segment to build power plants and develop wind farms in Peru, Chile and Brazil, (ii) €894 million invested in the E&P segment to develop gas fields primarily in Algeria, Indonesia, the United Kingdom and Norway, (iii) €594 million invested in the Infrastructures Europe segment and (iv) €429 million to develop Solairedirect's photovoltaic projects mainly in India and Chile;
- maintenance investments for an amount of €2,597 million.

Disposals represented a cash amount of €3,471 million, mainly including the Group's disposal of its merchant hydropower generation assets in the United States for €868 million, its entire 40.5% interest in Piton for €1,268 million, its entire 89.9% interest in Meenakshi for a negative €278 million, a 50% interest in Transmisora Eléctrica del Norte (TEN) for €272 million, and Ores Assets shares for €410 million.

Taking into account changes in the scope of consolidation for the period relating to acquisitions and disposals of subsidiaries (€442 million negative impact), the impact on net debt of investments net of proceeds from disposals amounted to €3,402 million.

Capital expenditure breaks down as follows by segment:

In million of euros



### 6.1.1.6.3 Dividends and movements in treasury stock

Dividends and movements in treasury stock during the period amounted to €3,166 million and included:

- €2,397 million in dividends paid by ENGIE SA to its shareholders, which corresponds to the balance of the 2015 dividend

(€0.50 per share) paid in May 2016, and an interim dividend in respect of 2016 (€0.50 per share) paid in October 2016;

- dividends paid by various subsidiaries to their non-controlling shareholders in an amount of €541 million, the payment of interest on hybrid debt for €146 million, withholding tax and movements in treasury stock.



#### 6.1.1.6.4 Net debt at December 31, 2016

Excluding amortized cost but including the impact of foreign currency derivatives, at December 31, 2016 a total of 77% of net debt was denominated in euros, 13% in US dollars and 3% in pounds sterling.

Including the impact of financial instruments, 83% of net debt is at fixed rates.

The average maturity of the Group's net debt is 9.4 years.

At December 31, 2016, the Group had total undrawn confirmed credit lines of €13.6 billion.

#### 6.1.1.7 Other items in the statement of financial position

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>	<b>Net change</b>
<b>Non-current assets</b>	<b>98,905</b>	<b>101,204</b>	<b>(2,299)</b>
of which goodwill	17,372	19,024	(1,652)
of which property, plant and equipment and intangible assets, net	64,378	64,001	378
of which investments in entities accounted for using the equity method	6,624	6,977	(353)
<b>Current assets</b>	<b>59,595</b>	<b>59,454</b>	<b>141</b>
<b>Total equity</b>	<b>45,447</b>	<b>48,750</b>	<b>(3,303)</b>
Provisions	22,208	18,835	3,372
Borrowings	36,950	39,155	(2,206)
Other liabilities	53,895	53,917	(22)

The carrying amount of **property, plant and equipment and intangible assets** was €64.4 billion, up €0.4 billion on December 31, 2015. The increase was primarily the result of capital expenditure during the year (€6.1 billion positive impact), other changes (€1.0 billion positive impact, relating mainly to an increase in dismantling assets recorded against the increase in provisions for dismantling nuclear facilities in Belgium), translation adjustments (€0.6 billion positive impact), partially offset by depreciation and amortization charges (€4.4 billion negative impact) and impairment losses (€2.5 billion negative impact).

**Goodwill** decreased by €1.7 billion to €17.4 billion, mainly due to the recognition of impairment losses.

**Total equity** amounted to €45.5 billion, a decrease of €3.3 billion compared to December 31, 2015. This decrease results essentially from

the payment of cash dividends (€2.9 billion negative impact) and other comprehensive income (€0.5 billion negative impact, chiefly relating to actuarial differences and net investment and cash flow hedges net of tax, partially offset by translation adjustments).

**Provisions** amounted to €22.2 billion, an increase of €3.4 billion compared to December 31, 2015. This increase stems mainly from the impact of the revision to provisions for dismantling nuclear facilities (€1.1 billion positive impact), actuarial losses on provisions for post-employment benefits (€0.7 billion positive impact) owing to the fall in discount rates in the period, and the impact of unwinding the discount on the provisions (€0.6 billion positive impact).

### 6.1.1.8 Parent company's financial statements

The figures provided below relate to the financial statements of ENGIE SA, prepared in accordance with French GAAP and applicable regulations.

Revenues for ENGIE SA in 2016 totaled €17,939 million, down 10% on 2015 due mainly to the impact of lower gas sales, partly offset by an upturn in electricity activity.

The Company posted a net operating loss of €1,252 million versus a net operating loss of €744 million in 2015, chiefly reflecting the decrease in the energy margin and the increase in other external expenses excluding infrastructure costs.

The Company reported net financial income of €1,294 million compared with €1,089 million in 2015. This mainly includes dividends received from subsidiaries for €2,043 million versus €2,055 million in 2015, and the cost of debt which decreased slightly to €744 million, chiefly consisting of the interest expense on bond issues.

Net non-recurring expenses amounted to €266 million, chiefly due to the combined effect of litigation provisions (expense of €190 million), impairment losses on a contractual intangible asset as well as miscellaneous expenses relating to restructuring transactions. The additional non-recurring expense was mainly related to net impairment losses on securities (€54 million) and special depreciation allowances (€39 million).

The income tax benefit amounted to €672 million compared to a benefit of €540 million in 2015. These two amounts included a tax consolidation benefit of €405 million and €350 million in 2016 and 2015, respectively.

Net income for the year came out at €448 million.

Shareholders' equity amounted to €37,976 million at end-2016, versus €39,903 million at December 31, 2015, mainly reflecting the cash dividend payout. Distributable profit and capacity amounted to respectively €1,941 million and €34,741 million.

At December 31, 2016, net debt stood at €30,709 million, and cash and cash equivalents totaled €5,075 million (of which €3,077 million relating to affiliates current accounts).

### INFORMATION RELATING TO SUPPLIER PAYMENT DEADLINES

The law in favor of the modernization of the economy ("LME" law No. 2008-776 of August 4, 2008) and its implementing decree (No. 2008-1492 of December 30, 2008), provide that companies whose annual financial statements are certified by a Statutory Auditor must

publish information regarding supplier payment deadlines. The purpose of publishing this information is to demonstrate that there are no significant delays in the payment of suppliers.

The breakdown by maturity of outstanding amounts payable by ENGIE SA to its suppliers over the last two reporting periods is as follows:

<i>In millions of euros</i>	Dec. 31, 2016			Dec. 31, 2015		
	External	Group	Total	External	Group	Total
Past due	93	149	242	20	112	132
30 days	260	347	607	254	30	284
45 days	65	4	69	141	253	394
More than 45 days	17	-	17	54	-	54
<b>TOTAL</b>	<b>435</b>	<b>500</b>	<b>935</b>	<b>469</b>	<b>395</b>	<b>864</b>

## 6.1.2 Cash and shareholders' equity

### 6.1.2.1 Borrowing conditions and financial structure applicable to the issuer

#### Debt structure

Gross debt (excluding bank overdrafts, amortized cost and financial derivative instruments) amounted to €34.8 billion at December 31, 2016, down from the previous year, and was primarily made up of €22 billion in bond issues and €6.2 billion in bank loans (including finance leases). Other loans and drawdowns on credit lines accounted for a total of €0.4 billion. Short-term loans (commercial paper) / securities accounted for 18% of this total gross debt at the end of 2016.

A total of 81% of the gross debt was issued on financial markets (bond issues and commercial paper / short-term securities).

Net debt, excluding amortized costs, the effect of financial derivative instruments and cash collateral, came to €24.8 billion at the end of 2016.

At the end of 2016, the net debt was 77% denominated in euros, 13% in US dollars and 3% in British pounds, excluding amortized cost but after the foreign exchange impact of derivatives.

After the impact of derivatives, 83% of the net debt was at a fixed rate. The average cost of gross debt was 2.78%, down by 21 basis points compared to 2015. The average maturity of net debt was 9.4 years at the end of 2016.

#### Main transactions in 2016

The main transactions performed in 2016 affecting financial debt are described in Note 15.3.2 of Section 6.2 "Consolidated financial statements." In addition, the Group extended the maturities of the €5.5 billion and €5 billion pooled syndicated credit lines by one year, to November 2021 and March 2021, respectively. In 2016, the annual update of the prospectus for ENGIE's €25 billion EMTN program received approval No. 16-474 from the AMF, dated October 11, 2016.

#### Ratings

Since April 2016, ENGIE has been rated A-/A-2 with negative outlook by Standard & Poor's, and A2/P-1 with stable outlook by Moody's.

### 6.1.2.2 Restrictions on the use of capital

On December 31, 2016, the Group had total undrawn confirmed credit lines (usable, among other things, as back-up lines for the commercial

paper / short-term marketable securities programs) of €13.6 billion. A total of 93% of these lines are centrally managed and their availability is not subject to any financial covenant or linked to a credit risk rating. The counterparties of these lines are well diversified, with no single counterparty holding more than 6% of the total of these pooled lines. No pooled credit facility was in use as at the end of 2016.

Furthermore, the Group has set up credit lines in some subsidiaries, for which the documentation includes ratios related to their financial standing. These lines of credit are not guaranteed by ENGIE SA or GIE ENGIE Alliance.

The definition, as well as the level of these ratios, also known as "financial covenants," are determined by agreement with the lenders and may be reviewed during the life of the loan.

The most frequent ratios are:

- Debt Service Cover Ratio = Free Cash Flow (Principal + interest expense) or for servicing interest (Interest Cover Ratio = EBITDA/interest expense);
- Loan Life Cover Ratio (adjustment of the average cost of the future Free Cash Flows debt divided by the borrowed amount still owed);
- Debt/Equity ratio or maintenance of a minimum amount of equity.

At December 31, 2016, all Group companies whose debt is consolidated were compliant with the covenants and representations contained in their financial documentation.

### 6.1.2.3 Expected sources on financing to honor commitments relative to investment decisions

The Group believes that its funding needs will be covered by available cash and the possible use of its existing credit facilities. However, it may call upon the capital markets on an ad hoc basis.

If necessary, dedicated financing could be established for very specific projects.

The Group has a total of €4.8 billion in credit lines or loans expiring in 2017 (excluding the maturity of €6.3 billion in commercial paper / short-term marketable securities). In addition, at December 31, 2016 it had €10 billion in cash (net of bank overdrafts) and a total of €13.6 billion in available lines (not net of the amount of commercial paper / short-term marketable securities), including €1.5 billion expiring in 2017.

## 6.2 Consolidated financial statements

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## 6.2.1 Consolidated financial statements

### Income statement

<i>In millions of euros</i>	Notes	Dec. 31, 2016	Dec. 31, 2015
Revenues	7.1	66,639	69,883
Purchases		(36,688)	(39,308)
Personnel costs	7.2	(10,231)	(10,168)
Depreciation, amortization and provisions	7.3	(4,869)	(5,007)
Other operating expenses		(10,841)	(11,163)
Other operating income		1,399	1,617
<b>CURRENT OPERATING INCOME</b>	<b>7</b>	<b>5,408</b>	<b>5,854</b>
Share in net income of entities accounted for using the equity method	3	764	473
<b>CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD</b>		<b>6,172</b>	<b>6,326</b>
Mark-to-market on commodity contracts other than trading instruments	8.1	1,254	(261)
Impairment losses	8.2	(4,192)	(8,748)
Restructuring costs	8.3	(476)	(265)
Changes in scope of consolidation	8.4	544	(46)
Other non-recurring items	8.5	(850)	(248)
<b>INCOME/(LOSS) FROM OPERATING ACTIVITIES</b>	<b>8</b>	<b>2,452</b>	<b>(3,242)</b>
Financial expenses		(2,245)	(2,413)
Financial income		865	866
<b>NET FINANCIAL INCOME/(LOSS)</b>	<b>9</b>	<b>(1,380)</b>	<b>(1,547)</b>
Income tax expense	10	(909)	(324)
<b>NET INCOME/(LOSS)</b>		<b>163</b>	<b>(5,113)</b>
Net income/(loss) Group share		(415)	(4,617)
Non-controlling interests		579	(496)
<b>BASIC EARNINGS/(LOSS) PER SHARE (EUROS)</b>	<b>11</b>	<b>(0.23)</b>	<b>(1.99)</b>
<b>DILUTED EARNINGS/(LOSS) PER SHARE (EUROS)</b>	<b>11</b>	<b>(0.23)</b>	<b>(1.99)</b>

NB: The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.



## Statement of comprehensive income

<i>In millions of euros</i>	Notes	Dec. 31, 2016	Dec. 31, 2016 Owners of the parent	Dec. 31, 2016 Non- controlling interests	Dec. 31, 2015	Dec. 31, 2015 Owners of the parent	Dec. 31, 2015 Non- controlling interests
<b>NET INCOME/(LOSS)</b>		<b>163</b>	<b>(415)</b>	<b>579</b>	<b>(5,113)</b>	<b>(4,617)</b>	<b>(496)</b>
Available-for-sale securities	15	146	144	2	(19)	(19)	-
Net investment hedges		(86)	(86)	-	(364)	(364)	-
Cash flow hedges (excl. commodity instruments)	16	(250)	(260)	10	277	263	13
Commodity cash flow hedges	16	(641)	(401)	(240)	101	(1)	103
Deferred tax on items above	10	386	286	100	(65)	(18)	(47)
Share of entities accounted for using the equity method in recyclable items, net of tax		108	108	-	(162)	(162)	-
Translation adjustments		474	306	168	903	799	105
<b>TOTAL RECYCLABLE ITEMS</b>		<b>137</b>	<b>97</b>	<b>40</b>	<b>671</b>	<b>498</b>	<b>173</b>
Actuarial gains and losses	19	(670)	(628)	(42)	446	433	13
Deferred tax on actuarial gains and losses	10	47	49	(2)	(139)	(135)	(4)
Share of entities accounted for using the equity method in non-recyclable items from actuarial gains and losses, net of tax		(50)	(50)	-	(34)	(34)	-
<b>TOTAL NON-RECYCLABLE ITEMS</b>		<b>(672)</b>	<b>(628)</b>	<b>(44)</b>	<b>274</b>	<b>264</b>	<b>9</b>
<b>TOTAL COMPREHENSIVE INCOME/(LOSS)</b>		<b>(371)</b>	<b>(946)</b>	<b>575</b>	<b>(4,168)</b>	<b>(3,855)</b>	<b>(313)</b>

NB: The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

## Statement of financial position

### ASSETS

In millions of euros	Notes	Dec. 31, 2016	Dec. 31, 2015
<b>Non-current assets</b>			
Intangible assets, net	13	6,639	7,013
Goodwill	12	17,372	19,024
Property, plant and equipment, net	14	57,739	56,988
Available-for-sale securities	15	2,997	3,016
Loans and receivables at amortized cost	15	2,250	2,377
Derivative instruments	15	3,603	4,026
Investments in entities accounted for using the equity method	3	6,624	6,977
Other assets	26	431	503
Deferred tax assets	10	1,250	1,280
<b>TOTAL NON-CURRENT ASSETS</b>		<b>98,905</b>	<b>101,204</b>
<b>Current assets</b>			
Loans and receivables at amortized cost	15	595	731
Derivative instruments	15	9,047	10,857
Trade and other receivables, net	15	20,835	19,349
Inventories	26	3,656	4,207
Other assets	26	10,692	9,348
Financial assets at fair value through income	15	1,439	1,172
Cash and cash equivalents	15	9,825	9,183
Assets classified as held for sale	4	3,506	4,607
<b>TOTAL CURRENT ASSETS</b>		<b>59,595</b>	<b>59,454</b>
<b>TOTAL ASSETS</b>		<b>158,499</b>	<b>160,658</b>

NB: The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

**LIABILITIES**

<i>In millions of euros</i>	Notes	Dec. 31, 2016	Dec. 31, 2015
Shareholders' equity		39,578	43,078
Non-controlling interests	2	5,870	5,672
<b>TOTAL EQUITY</b>	<b>17</b>	<b>45,447</b>	<b>48,750</b>
<b>Non-current liabilities</b>			
Provisions	18	19,461	16,804
Long-term borrowings	15	24,411	28,123
Derivative instruments	15	3,410	4,216
Other financial liabilities	15	200	237
Other liabilities	26	1,203	1,108
Deferred tax liabilities	10	6,775	8,131
<b>TOTAL NON-CURRENT LIABILITIES</b>		<b>55,461</b>	<b>58,619</b>
<b>Current liabilities</b>			
Provisions	18	2,747	2,032
Short-term borrowings	15	12,539	11,032
Derivative instruments	15	9,228	8,642
Trade and other payables	15	17,075	17,101
Other liabilities	26	15,702	13,782
Liabilities directly associated with assets classified as held for sale	4	300	699
<b>TOTAL CURRENT LIABILITIES</b>		<b>57,591</b>	<b>53,288</b>
<b>TOTAL EQUITY AND LIABILITIES</b>		<b>158,499</b>	<b>160,658</b>

NB: The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

## Statement of changes in equity

<i>In millions of euros</i>	Number of shares	Share capital	Addi- tional paid-in capital	Consoli- dated reserves	Deeply subor- dinated perpetual notes	Changes in fair value and other	Translation adju- stments	Treasury holders' stock	Share- holders' equity	Non- control- ing interests	Total
<b>EQUITY AT DECEMBER 31, 2014</b>	<b>2,435,285,011</b>	<b>2,435</b>	<b>32,506</b>	<b>12,436</b>	<b>3,564</b>	<b>(627)</b>	<b>191</b>	<b>(957)</b>	<b>49,548</b>	<b>6,433</b>	<b>55,981</b>
Net income/(loss)				(4,617)				(4,617)		(496)	(5,113)
Other comprehensive income/(loss)				264		(301)	799	762		183	945
<b>TOTAL COMPREHENSIVE INCOME/(LOSS)</b>				<b>(4,353)</b>	<b>-</b>	<b>(301)</b>	<b>799</b>	<b>-(3,855)</b>		<b>(313)</b>	<b>(4,168)</b>
Employee share issues and share-based payment				46				46		-	46
Dividends paid in cash				(2,392)				(2,392)		(482)	(2,875)
Purchase/disposal of treasury stock				(134)				135	1	-	1
Coupons of deeply-subordinated perpetual notes					(145)			(145)		-	(145)
Transactions between owners				(60)				(60)		21	(39)
Transactions between owners within entities accounted for using the equity method				(73)				(73)		-	(73)
Share capital increases/decreases subscribed by non-controlling interests									-	22	22
Other changes				8				8		(8)	-
<b>EQUITY AT DECEMBER 31, 2015</b>	<b>2,435,285,011</b>	<b>2,435</b>	<b>32,506</b>	<b>5,479</b>	<b>3,419</b>	<b>(928)</b>	<b>990</b>	<b>(822)</b>	<b>43,078</b>	<b>5,672</b>	<b>48,750</b>

NB: The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

<i>In millions of euros</i>	Number of shares	Share capital	Additional paid-in capital	Consolidated reserves	Deeply-subordinated perpetual notes	Changes in fair value and other	Translation adjustments	Treasury stock	Shareholders' equity	Non-controlling interests	Total
<b>EQUITY AT DECEMBER 31, 2015</b>	<b>2,435,285,011</b>	<b>2,435</b>	<b>32,506</b>	<b>5,479</b>	<b>3,419</b>	<b>(928)</b>	<b>990</b>	<b>(822)</b>	<b>43,078</b>	<b>5,672</b>	<b>48,750</b>
Net income/(loss)				(415)					(415)	579	163
Other comprehensive income/(loss)				(628)		(209)	306		(531)	(3)	(535)
<b>TOTAL COMPREHENSIVE INCOME/(LOSS)</b>				<b>(1,044)</b>	<b>-</b>	<b>(209)</b>	<b>306</b>	<b>-</b>	<b>(946)</b>	<b>575</b>	<b>(371)</b>
Employee share issues and share-based payment				37					37	-	37
Dividends paid in cash (see Note 17.2.3)				(2,397)					(2,397)	(507)	(2,903)
Purchase/disposal of treasury stock (see Note 17.1.2)				(72)				61	(11)	-	(11)
Coupons of deeply subordinated perpetual notes (see Note 17.2.1)					(146)				(146)	-	(146)
Transactions between owners				(37)					(37)	20	(17)
Transactions between owners within entities accounted for using the equity method				6					6	-	6
Share capital increases/decreases subscribed by non-controlling interests									-	81	81
Other changes				(7)					(7)	27	20
<b>EQUITY AT DECEMBER 31, 2016</b>	<b>2,435,285,011</b>	<b>2,435</b>	<b>32,506</b>	<b>1,967</b>	<b>3,273</b>	<b>(1,137)</b>	<b>1,296</b>	<b>(761)</b>	<b>39,578</b>	<b>5,870</b>	<b>45,447</b>

NB : The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

## Statement of cash flows

<i>In millions of euros</i>	Notes	Dec. 31, 2016	Dec. 31, 2015
<b>NET INCOME/(LOSS)</b>		<b>163</b>	<b>(5,113)</b>
- Share in net income of entities accounted for using the equity method		(764)	(473)
+ Dividends received from entities accounted for using the equity method		469	503
- Net depreciation, amortization, impairment and provisions		9,995	13,890
- Impact of changes in scope of consolidation and other non-recurring items		(676)	(47)
- Mark-to-market on commodity contracts other than trading instruments		(1,254)	261
- Other items with no cash impact		41	50
- Income tax expense		909	324
- Net financial income/(loss)		1,380	1,547
<b>Cash generated from operations before income tax and working capital requirements</b>		<b>10,263</b>	<b>10,942</b>
+ Tax paid		(1,459)	(1,722)
<b>Change in working capital requirements</b>	<b>26.1</b>	<b>1,369</b>	<b>1,163</b>
<b>CASH FLOW FROM OPERATING ACTIVITIES</b>		<b>10,174</b>	<b>10,383</b>
Acquisitions of property, plant and equipment and intangible assets	5.5	(6,230)	(6,459)
Acquisitions of controlling interests in entities, net of cash and cash equivalents acquired	5.5	(411)	(259)
Acquisitions of investments in entities accounted for using the equity method and joint operations	5.5	(208)	(241)
Acquisitions of available-for-sale securities	5.5	(391)	(252)
Disposals of property, plant and equipment, and intangible assets		202	507
Loss of controlling interests in entities, net of cash and cash equivalents sold		983	(48)
Disposals of investments in entities accounted for using the equity method and joint operations		1,457	1
Disposals of available-for-sale securities		768	41
Interest received on non-current financial assets		-	133
Dividends received on non-current financial assets		145	103
Change in loans and receivables originated by the Group and other	5.5	30	245
<b>CASH FLOW FROM (USED IN) INVESTING ACTIVITIES</b>		<b>(3,655)</b>	<b>(6,230)</b>
Dividends paid <sup>(1)</sup>		(3,155)	(3,107)
Repayment of borrowings and debt		(4,760)	(4,846)
Change in financial assets at fair value through income		(257)	296
Interest paid		(799)	(918)
Interest received on cash and cash equivalents		137	126
Cash flow on derivatives qualifying as net investment hedges and compensation payments on derivatives and on early buyback of borrowings		(236)	(660)
Increase in borrowings		2,994	5,834
Increase/decrease in capital		78	21
Purchase and/or sale of treasury stock		(11)	1
Changes in ownership interests in controlled entities	5.5	(26)	(42)
<b>CASH FLOW FROM (USED IN) FINANCING ACTIVITIES</b>		<b>(6,034)</b>	<b>(3,295)</b>
Effects of changes in exchange rates and other		157	(221)
<b>TOTAL CASH FLOW FOR THE PERIOD</b>		<b>642</b>	<b>637</b>
<b>CASH AND CASH EQUIVALENTS AT BEGINNING OF PERIOD</b>		<b>9,183</b>	<b>8,546</b>
<b>CASH AND CASH EQUIVALENTS AT END OF PERIOD</b>		<b>9,825</b>	<b>9,183</b>

(1) The line "Dividends paid" includes the coupons paid to the owners of the deeply subordinated perpetual notes for an amount of €146 million at December 31, 2016 and €145 million at December 31, 2015.

NB: The amounts shown in the tables are expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the totals.

## 6.2.2 Notes to the consolidated financial statements

ENGIE SA, the parent company of the Group, is a French société anonyme with a Board of Directors that is subject to the provisions of Book II of the French Commercial Code (Code de commerce), as well as to all other provisions of French law applicable to French commercial companies. It was incorporated on November 20, 2004 for a period of 99 years.

*It is governed by current and future laws and by regulations applicable to sociétés anonymes and its bylaws.*

*The Group is headquartered at 1 place Samuel de Champlain, 92400 Courbevoie (France).*

*ENGIE shares are listed on the Paris, Brussels and Luxembourg stock exchanges.*

*On March 1, 2017, the Group's Board of Directors approved and authorized for issue the consolidated financial statements of the Group for the year ended December 31, 2016.*

### NOTE 1 Accounting standards and methods

#### 1.1 Accounting standards

Pursuant to European Regulation (EC) 809/2004 on prospectuses dated April 29, 2004, financial information concerning the assets, liabilities, financial position, and profit and loss of ENGIE has been provided for the last two reporting periods (ended December 31, 2015 and 2016). This information was prepared in accordance with European Regulation (EC) 1606/2002 "on the application of international accounting standards" dated July 19, 2002. The Group's consolidated financial statements for the year ended December 31, 2016 have been prepared in accordance with IFRS Standards as published by the International Accounting Standards Board and endorsed by the European Union <sup>(1)</sup>.

The accounting standards applied in the consolidated financial statements for the year ended December 31, 2016 are consistent with the policies used to prepare the consolidated financial statements for the year ended December 31, 2015, except for those described in §1.1.1 below.

##### 1.1.1 IFRS Standards, amendments or IFRIC Interpretations applicable in 2016

- Amendments to IFRS 11 – *Joint Arrangements: Accounting for acquisitions of interests in Joint Operations.*
- Amendments to IAS 16 – *Property, Plant and Equipment* and IAS 38 – *Intangible Assets: Clarification of acceptable methods of depreciation and amortization.*
- Amendments to IAS 1 – *Presentation of Financial Statements: Disclosure initiative.*
- Amendments to IAS 19 – *Employee Benefits – Defined benefit plans: employee contributions.*
- Annual Improvements to IFRS Standards 2010-2012 Cycle.
- Annual Improvements to IFRS Standards 2012-2014 Cycle.

These amendments have no significant impact on the Group's consolidated financial statements.

##### 1.1.2 IFRS Standards, amendments or IFRIC Interpretations effective in 2017 and that the Group has elected not to early adopt

- Amendments to IAS 7 – *Statement of Cash Flows: Disclosure initiative* <sup>(2)</sup>.

(1) Available on the European Commission's website: [http://ec.europa.eu/internal\\_market/accounting/ias/index\\_en.htm](http://ec.europa.eu/internal_market/accounting/ias/index_en.htm).

(2) These standards and amendments have not yet been adopted by the European Union.

- Amendments to IAS 12 – *Income Taxes: Recognition of deferred tax assets for unrealized losses* <sup>(2)</sup>.

##### 1.1.3 IFRS Standards, amendments or IFRIC Interpretations effective after 2017

- IFRS 9 – *Financial Instruments.*

A dedicated project has been launched within the Group in 2015, built around the three phases of the new standard.

For Phase I 'classification and measurement', the main expected key impact is the reclassification of available-for-sale securities, currently measured at fair value through other comprehensive income. Under IFRS 9, most of them will be recognized either as equity instruments measured at fair value through other comprehensive income or through the income statement, or as debt instruments measured at fair value through other comprehensive income.

For Phase II 'impairment', expected credit loss models have been set up according to the new standard. Impact analyses will continue in 2017.

The Group is also concerned by Phase III 'hedge accounting' but does not expect a material impact to date.

The Group has decided to apply this new standard as from the reporting period beginning January 1, 2018, and not to elect for its early application.

- IFRS 15 – *Revenue from Contracts with Customers.*

A project has been deployed within the Group in order to identify the issues likely to have an impact on how revenue is recognized by the various activities of the Group.

The work carried out so far has highlighted two issues likely to have an impact on consolidated revenue.

In certain countries where the Group acts as energy provider without distributing it, the analysis under IFRS 15 may lead to recognizing only energy sales as revenue. This will lead to a decrease in revenue, without any impact on the energy margin.

Commodities sales/purchases transactions which are within the scope of IFRS 9 – *Financial Instruments*, are not within the scope of IFRS 15. The related sales should thus be presented on a line separate from the one showing the IFRS 15 revenue.

The Group has decided to apply this new standard as from the reporting period beginning January 1, 2018, and not to elect for its early application.

- IFRS 16 – *Leases* <sup>(1)</sup>.

An in-house project has been launched as from the issuance of IFRS 16. Under the new standard, all lease commitments will be recognized on the face of the statement of financial position, without distinguishing between operating leases, currently shown in off-balance sheet commitments (see *Note 22*) and finance leases.

Determining the impacts of the transition will continue in 2017, notably by identifying lease contracts within the Group and analyzing them in accordance with the new standard (identifying a lease, assessing the term of the lease, determining the discount rates, etc.).

- Amendments to IFRS 2 – *Share-Based Payment: Classification and measurement of share-based payment transactions* <sup>(1)</sup>.
- IFRIC 22 – *Foreign Currency Transactions and Advance Consideration* <sup>(1)</sup>.
- Annual Improvements to IFRS Standards 2014-2016 Cycle <sup>(2)</sup>

The impact resulting from the application of these IFRS Standards, amendments and IFRIC Interpretation is currently being assessed.

#### 1.1.4 Reminder of IFRS 1 transition options

The Group used some of the options available under IFRS 1 for its transition to the IFRS Standards in 2005. The options that continue to have an effect on the consolidated financial statements are:

- translation adjustments: the Group elected to reclassify cumulative translation adjustments within consolidated equity at January 1, 2004;
- business combinations: the Group elected not to restate business combinations that took place prior to January 1, 2004 in accordance with IFRS 3.

### 1.2 Measurement and presentation basis

The consolidated financial statements have been prepared using the historical cost convention, except for financial instruments that are accounted for according to the financial instrument categories defined by IAS 39.

#### Assets or groups of assets held for sale

In accordance with IFRS 5 - *Non-Current Assets Held for Sale and Discontinued Operations*, assets or groups of assets held for sale are presented separately on the face of the statement of financial position, at the lower of their carrying amount and fair value less costs to sell.

Assets are classified as “held for sale” when they are available for immediate sale in their present condition, their sale is highly probable within twelve months from the date of classification, management is

committed to a plan to sell the asset and an active program to locate a buyer and complete the plan has been initiated. To assess whether a sale is highly probable, the Group takes into consideration among other items, indications of interest and offers received from potential buyers and specific risks to the execution of certain transactions.

### 1.3 Use of estimates and judgment

Developments in the economic and financial environment prompted the Group to step up its risk oversight procedures and include an assessment of these risks in measuring financial instruments and performing impairment tests. The Group’s estimates used in business plans and determination of discount rates used in impairment tests and for calculating provisions take into account the environment and the important market volatility.

#### 1.3.1 Estimates

The preparation of consolidated financial statements requires the use of estimates and assumptions to determine the value of assets and liabilities and contingent assets and liabilities at the reporting date, as well as income and expenses reported during the period.

Due to uncertainties inherent in the estimation process, the Group regularly revises its estimates in light of currently available information. Final outcomes could differ from those estimates.

The key estimates used in preparing the Group’s consolidated financial statements relate mainly to:

- measurement of the fair value of assets acquired and liabilities assumed in a business combination (see *Note 4*);
- measurement of the recoverable amount of goodwill, other intangible assets and property, plant and equipment (see § 1.4.4 and 1.4.5);
- measurement of provisions, particularly for back-end of nuclear fuel cycle, dismantling obligations, disputes, pensions and other employee benefits (see § 1.4.15);
- financial instruments (see § 1.4.11);
- measurement of revenue not yet metered, so called un-metered revenue (see § 1.3.1.6);
- measurement of recognized tax loss carry-forwards (see *Note 10.3*).

##### 1.3.1.1 Measurement of the fair value of assets acquired and liabilities assumed in a business combination

The key assumptions and estimates used to determine the fair value of assets acquired and liabilities assumed include the market outlook for the measurement of future cash flows and the applicable discount rates.

These assumptions reflect management’s best estimates.

The improvements of this cycle are applicable as from 2018, apart from IFRS 12 which is applicable as from 2017.

(1) These standards and amendments have not yet been adopted by the European Union.

(2) The improvements of this cycle are applicable as from 2018, apart from IFRS 12 which is applicable as from 2017.



### 1.3.1.2 Recoverable amount of goodwill, other intangible assets and property, plant and equipment

The recoverable amount of goodwill, other intangible assets and property, plant and equipment is based on estimates and assumptions, regarding in particular the expected market outlook and changes in of the regulatory framework, which are used for the measurement of cash flows, whose sensitivity varies depending on the activity, and the determination of the discount rate. Any changes in these assumptions could have a material impact on the measurement of the recoverable amount and could result in adjustments to the impairment losses to be recognized.

The key assumptions used in the impairment tests on the main goodwill CGUs are as follows:

- **Benelux CGU**

The cash flow projections for the Benelux CGU are based on a large number of key assumptions, such as the long-term prices for fuel and CO<sub>2</sub>, expected trends in gas and electricity demand and in electricity prices, the market outlook, and changes in the regulatory environment (especially concerning nuclear capacities in Belgium and the extension of drawing rights agreements for French nuclear plants). The key assumptions also include the discount rate used to calculate the value in use of this goodwill CGU.

- **GRDF CGU**

The cash flow projections are drawn up based on the tariff for public natural gas distribution networks (known as "ATRD 5"), which entered into effect for a period of four years on July 1, 2016, and on the overall level of investments agreed by the French Energy Regulation Commission (*Commission de Régulation de l'Énergie* – CRE) as part of its decision on the ATRD 5 tariff. The terminal value calculated at the end of the medium-term business plan corresponds to the expected Regulated Asset Base (RAB) with no premium at the end of 2022. The RAB is the value assigned by the regulator to the assets operated by the distributor.

- **France BtoC CGU**

The main assumptions and key estimates primarily include the discount rates, expected trends in gas and electricity demand in France, changes in the Group's market share and sales margin forecasts.

- **France Renewable Energy CGU**

The main key assumptions, notably include the prospects of renewing the hydropower concession agreements in France, expected trends in electricity sales prices and discount rates.

- **Generation Europe CGU**

The main assumptions and key estimates used are based on expected trends in electricity demand and price forecasts for CO<sub>2</sub>, fuel and electricity, as well as on discount rate levels.

- **Stoerengy CGU**

The key assumptions used for the test are based on (i) forecast capacity sales in France and Germany, which depend on changes in market conditions, and particularly on seasonal natural gas spreads and on (ii) expected changes in regulations concerning underground natural gas storage activities in France.

### 1.3.1.3 Estimates of provisions

Parameters having a significant influence on the amount of provisions, and particularly, but not solely, those relating to the back-end of nuclear fuel cycle and to the dismantling of nuclear facilities, as well as those relating to the dismantling of gas infrastructures in France, include:

- cost forecasts (notably the retained scenario for the reprocessing and storage of radioactive nuclear fuel consumed) (see *Note 18.2*);
- the timing of expenditure (notably, for nuclear power generation activities, the timetable for reprocessing radioactive nuclear fuel consumed and for dismantling facilities as well as the timetable for the end of gas operations regarding the gas infrastructure businesses in France) (see *Notes 18.2 and 18.3*);
- and the discount rate applied to cash flows.

These parameters are based on information and estimates deemed to be relevant by the Group at the current time.

The modification of certain parameters could involve a significant adjustment of these provisions.

### 1.3.1.4 Pensions

Pension commitments are measured on the basis of actuarial assumptions. The Group considers that the assumptions used to measure its obligations are relevant and documented. However, any change in these assumptions could have a significant impact on the resulting calculations.

### 1.3.1.5 Financial instruments

To determine the fair value of financial instruments that are not listed on an active market, the Group uses valuation techniques that are based on certain assumptions. Any change in these assumptions could have a significant impact on the resulting calculations.

### 1.3.1.6 Revenue

Revenue generated from types of customers whose energy consumption is metered during the accounting period, particularly customers supplied with low-voltage electricity or medium-pressure gas, is estimated at the reporting date based on historical data, consumption statistics and estimated selling prices. For sales on networks used by a large number of grid operators, the Group is allocated a certain volume of energy transiting through the networks by the grid managers. The final allocations are sometimes only known several months down the line, which means that revenue figures are only an estimate.

However, the Group has developed measuring and modeling tools allowing it to estimate revenue with a satisfactory degree of accuracy and subsequently ensure that risks of error associated with estimating quantities sold and the related revenue can be considered as not significant. In France, un-metered revenue ("gas in the meter") is calculated using a direct method taking into account estimated customers' consumption since the last metering not yet billed. These estimates are in line with the volume of energy allocated by the grid managers over the same period. The average price is used to measure the "gas in the meter". The average price used takes account of the category of customer and the age of the delivered unbilled "gas in the meter". The portion of unbilled revenue at year-end varies according to the assumptions about volume and average price.

### 1.3.1.7 Measurement of recognized tax loss carry-forwards

Deferred tax assets are recognized on tax loss carry-forwards when it is probable that taxable profit will be available against which the tax loss carry-forwards can be utilized. The probability that taxable profit will be available against which the unused tax losses can be utilized, is based on taxable temporary differences relating to the same taxation authority and the same taxable entity and estimates of future taxable profits. These estimates and utilizations of tax loss carry-forwards were prepared on the basis of profit and loss forecasts as included in the medium-term business plan and, if necessary, on the basis of additional forecasts.

### 1.3.2 Judgment

As well as relying on estimates, Group management also makes judgments to define the appropriate accounting policies to apply to certain activities and transactions, particularly when the effective IFRS Standards and IFRIC Interpretations do not specifically deal with the related accounting issues.

In particular, the Group exercised its judgment in determining the nature of control, the classification of arrangements which contain a lease, the recognition of acquisitions of non-controlling interests prior to January 1, 2010 and the identification of "own use" contracts, as defined by IAS 39, within non-financial purchase and sale contracts (electricity, gas, etc.).

Entities for which judgment on the nature of control has been exercised are listed in Notes 2 "Main subsidiaries at December 31, 2016" and 3 "Investments in entities accounted for using the equity method".

In accordance with IAS 1, the Group's current and non-current assets and liabilities are shown separately on the consolidated statement of financial position. For most of the Group's activities, the breakdown into current and non-current items is based on when assets are expected to be realized, or liabilities extinguished. Assets expected to be realized or liabilities extinguished within 12 months of the reporting date are classified as current, while all other items are classified as non-current.

## 1.4 Accounting methods

### 1.4.1 Scope and methods of consolidation

#### Controlled entities (subsidiaries)

Controlled entities (subsidiaries) are fully consolidated in accordance with IFRS 10 – Consolidated Financial Statements. An investor (the Group) controls an entity and therefore must consolidate it as a subsidiary, if it has all the following:

- the ability to direct the relevant activities of the entity;
- rights to variable returns from its involvement with the entity;

- the ability to use its power over the entity to affect the amount of the investor's return.

#### Investments in Associates and Joint Ventures

The Group accounts for its investments in associates (entities over which the Group has significant influence) and joint ventures, using the equity method. Under IFRS 11 – Joint Arrangements, a joint venture is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the net assets of the arrangement.

#### Investments in Joint Operations

Under IFRS 11 – Joint Arrangements, a joint operation is a joint arrangement whereby the parties that have joint control of the arrangement have rights to the assets and obligations for the liabilities, relating to the arrangement.

In accordance with this standard, the Group accounts for the assets, liabilities, revenue and expenses relating to its interest in a joint operation in accordance with the IFRS Standards applicable to these assets, liabilities, revenue and expenses.

Production sharing contracts, in particular in oil and gas exploration-production activities, are considered to be outside the scope of IFRS 11. Contractors account for their rights to a portion of production and reserves, based on the contractual clauses.

### 1.4.2 Foreign currency translation methods

#### 1.4.2.1 Presentation currency of the consolidated financial statements

The Group's consolidated financial statements are presented in euros (€).

#### 1.4.2.2 Functional currency

Functional currency is the currency of the primary economic environment in which an entity operates, which in most cases corresponds to local currency. However, certain entities may have a functional currency different from local currency when that other currency is used for an entity's main transactions and better reflects its economic environment.

#### 1.4.2.3 Foreign currency transactions

Foreign currency transactions are recorded in the functional currency at the exchange rate prevailing on the date of the transaction. At each reporting date:

- monetary assets and liabilities denominated in foreign currencies are translated at year-end exchange rates. The related translation gains and losses are recorded in the consolidated statement of income for the year to which they relate;
- non-monetary assets and liabilities denominated in foreign currencies are recognized at the historical cost applicable at the date of the transaction.

#### 1.4.2.4 Translation of the financial statements of subsidiaries with a functional currency other than the euro (the presentation currency)

The statements of financial position of these subsidiaries are translated into euros at the official year-end exchange rates. Income statement and cash flow statement items are translated using the average exchange rate for the year. Any differences arising from the translation of the financial statements of these subsidiaries are recorded under "Translation adjustments" as other comprehensive income.

Goodwill and fair value adjustments arising on the acquisition of foreign entities are classified as assets and liabilities of those foreign entities and are therefore denominated in the functional currencies of the entities and translated at the year-end exchange rate.

### 1.4.3 Business combinations

Business combinations carried out prior to January 1, 2010 have been accounted for in accordance with IFRS 3 prior to the revision. In accordance with IFRS 3 revised, these business combinations have not been restated.

Since January 1, 2010, the Group applies the purchase method as defined in IFRS 3 revised, which consists in recognizing the identifiable assets acquired and liabilities assumed at their fair values at the acquisition date, as well as any non-controlling interests in the acquiree. Non-controlling interests are measured either at fair value or at the entity's proportionate interest in the net identifiable assets of the acquiree. The Group determines on a case-by-case basis which measurement option to be used to recognize non-controlling interests.

### 1.4.4 Intangible assets

Intangible assets are carried at cost less any accumulated amortization and any accumulated impairment losses.

#### 1.4.4.1 Goodwill

##### Recognition of goodwill

Due to the application of IFRS 3 revised at January 1, 2010, the Group is required to separately identify business combinations carried out before or after this date.

##### Business combinations carried out prior to January 1, 2010

Goodwill represents the excess of the cost of a business combination (acquisition price of shares plus any costs directly attributable to the business combination) over the Group's interest in the fair value of the acquiree's identifiable assets, liabilities and contingent liabilities recognized at the acquisition date (except if the business combination is achieved in stages).

For a business combination achieved in stages – i.e. where the Group acquires a subsidiary through successive share purchases – the amount of goodwill is determined for each exchange transaction separately based on the fair values of the acquiree's identifiable assets, liabilities and contingent liabilities at the date of each exchange transaction.

##### Business combinations carried out after January 1, 2010

Goodwill is measured as the excess of the aggregate of:

- (i) the consideration transferred;
- (ii) the amount of any non-controlling interests in the acquiree; and

(iii) in a business combination achieved in stages, the acquisition-date fair value of the previously held equity interest in the acquiree;

over the net of the acquisition-date fair values of the identifiable assets acquired and liabilities assumed.

The amount of goodwill recognized at the acquisition date cannot be adjusted after the end of the measurement period.

Goodwill relating to interests in associates is recorded under "Investments in entities accounted for using the equity method".

##### Measurement of goodwill

Goodwill is not amortized but tested for impairment each year, or more frequently where an indication of impairment is identified. Impairment tests are carried out at the level of cash-generating units (CGUs) or groups of CGUs which constitute groups of assets generating cash inflows that are largely independent of the cash inflows from other CGUs.

The methods used to carry out these impairment tests are described in § 1.4.8 "Impairment of property, plant and equipment and intangible assets".

Impairment losses in relation to goodwill cannot be reversed and are shown under "Impairment losses" in the consolidated income statement.

#### 1.4.4.2 Other intangible assets

##### Development costs

Research costs are expensed as incurred.

Development costs are capitalized when the asset recognition criteria set out in IAS 38 are met. Capitalized development costs are amortized over the useful life of the intangible asset recognized.

##### Other internally-generated or acquired intangible assets

Other intangible assets include mainly:

- amounts paid or payable as consideration for rights relating to concession contracts or public service contracts;
- customer portfolios acquired on business combinations;
- capacity rights, in particular regarding power stations; the Group helped finance the construction of certain nuclear power stations operated by third parties and in consideration received the right to purchase a share of the production over the life of the assets. Said capacity rights are amortized over the useful life of the related assets, not exceeding 40 years;
- concession assets.

Intangible assets are amortized on the basis of the expected pattern of consumption of the estimated future economic benefits embodied in the asset. Amortization is calculated mainly on a straight-line basis over the following useful lives:

Main depreciation periods (years)	Useful life	
	Minimum	Maximum
Concession rights	10	30
Customer portfolio	10	40
Other intangible assets	1	40

Some intangible assets with an indefinite useful life are not amortized but an impairment test has to be performed annually.

## 1.4.5 Property, plant and equipment

### 1.4.5.1 Initial recognition and subsequent measurement

Items of property, plant and equipment are recognized at historical cost less any accumulated depreciation and any accumulated impairment losses.

The carrying amount of these items is not revalued as the Group has elected not to apply the allowed alternative method, which consists of regularly revaluing one or more categories of property, plant and equipment.

Investment subsidies are deducted from the gross value of the assets concerned.

In accordance with IAS 16, the initial cost of the item of property, plant and equipment includes an initial estimate of the costs of dismantling and removing the item and restoring the site on which it is located, when the entity has a present, legal or constructive obligation to dismantle the item or restore the site. A corresponding provision for this obligation is recorded for the amount of the asset component.

Property, plant and equipment acquired under finance leases is carried in the consolidated statement of financial position at the lower of market value and the present value of the related minimum lease payments. The corresponding liability is recognized under borrowings. These assets are depreciated using the same methods and useful lives as set out below.

Borrowing costs that are directly attributable to the construction of the qualifying asset are capitalized as part of the cost of that asset.

### Cushion gas

“Cushion” gas injected into underground storage facilities is essential for ensuring that reservoirs can be operated effectively, and is therefore inseparable from these reservoirs. Unlike “working” gas which is included in inventories, cushion gas is reported in property, plant and equipment (see § 1.4.10 “Inventories”).

### 1.4.5.2 Depreciation

In accordance with the components approach, each significant component of an item of property, plant and equipment with a different useful life from that of the main asset to which it relates is depreciated separately over its own useful life.

Property, plant and equipment is depreciated mainly using the straight-line method over the following useful lives:

Main depreciation periods (years)	Useful life	
	Minimum	Maximum
Plant and equipment		
• Storage - Production - Transport - Distribution	5	60 <sup>(1)</sup>
• Installation - Maintenance	3	10
• Hydraulic plant and equipment	20	65
Other property, plant and equipment	2	33

(1) Excluding cushion gas.

The range of useful lives is due to the diversity of the assets in each category. The minimum periods relate to smaller equipment and furniture, while the maximum periods concern network infrastructures and storage facilities. In accordance with the law of January 31, 2003 adopted by the Belgian Chamber of Representatives with respect to the gradual phase-out of nuclear energy for the industrial production of electricity, the useful lives of nuclear power stations were reviewed and adjusted prospectively to 40 years as from 2003, except Tihange 1, Doel 1 and Doel 2 the operating life of which has been extended by 10 years.

Fixtures and fittings relating to the hydro plant operated by the Group are depreciated over the shorter of the contract term and useful life of the assets, taking into account the renewal of the concession period if such renewal is considered to be reasonably certain.

## 1.4.6 Assets relating to the exploration and production of mineral resources

The Group applies IFRS 6 – Exploration for and Evaluation of Mineral Resources.

Geological and geophysical studies are expensed in the year in which they are incurred.

Exploration costs (other than geological and geophysical studies) are temporarily capitalized in “pre-capitalized exploration costs” before the confirmation of the technical feasibility and commercial viability of extracting resources. These exploration drilling costs are temporarily capitalized when the following two conditions are met:

- sufficient reserves have been found to justify completion as a producing well assuming the required capital expenditure is made;
- the Group has made significant progress in determining that reserves exist and that the project is technically and economically viable. This progress is assessed based on criteria such as whether any additional exploratory work (drilling, seismic studies or other significant surveys) is underway or firmly planned for the near future. Progress is also assessed based on any expenses incurred in conducting development studies and on the fact that the Group may be required to wait for the relevant government or third party authorizations for the project, or for available transport capacity or treatment capacity at existing facilities.

In accordance with this method known as “successful efforts” method, when the exploratory phase has resulted in proven, commercially viable reserves, the related costs are reported in property, plant and equipment and depreciated over the period during which the reserves are extracted. Otherwise, the costs are expensed as incurred.

The depreciation of production assets, including site rehabilitation costs, starts when the oil or gas field is brought into production, and is based on the unit of production method (UOP). According to this method, the depletion rate is equal to the ratio of oil and gas production for the period to probable reserves.

### 1.4.7 Concession arrangements

SIC 29 – Service Concession Arrangements: Disclosures, prescribes the information that should be disclosed in the notes to the financial statements of a concession grantor and concession operator, while IFRIC 12 deals with the treatment to be applied by the concession operator in respect of certain concession arrangements.

For a concession arrangement to fall within the scope of IFRIC 12, usage of the infrastructure must be controlled by the concession grantor. This requirement is met when the following two conditions are met:

- the grantor controls or regulates what services the operator must provide with the infrastructure, to whom it must provide them, and at what price; and
- the grantor controls the infrastructure, i.e. retains the right to take back the infrastructure at the end of the concession.

### Concessions outside the scope of IFRIC 12

Concession infrastructures that do not meet the requirements of IFRIC 12 are presented as property, plant and equipment.

This is the case of the distribution of gas in France. The related assets are recognized in accordance with IAS 16, since GRDF operates its network under long-term concession arrangements, most of which are mandatorily renewed upon expiration pursuant to French law No. 46-628 of April 8, 1946.

### 1.4.8 Impairment of property, plant and equipment and intangible assets

In accordance with IAS 36, impairment tests are carried out on items of property, plant and equipment and intangible assets where there is an indication that the assets may be impaired. Such indications may be based on events or changes in the market environment, or on internal sources of information. Intangible assets that are not amortized are tested for impairment annually.

#### Impairment indicators

Property, plant and equipment and intangible assets with finite useful lives are only tested for impairment when there is an indication that they may be impaired. This is generally the result of significant changes to the environment in which the assets are operated or when economic performance is less than expected.

The main impairment indicators used by the Group are described below:

- external sources of information:
  - significant changes in the economic, technological, regulatory, political or market environment in which the entity operates or to which an asset is dedicated;

- fall in demand;
- adverse changes in energy prices and US dollar exchange rates;
- internal sources of information:
  - evidence of obsolescence or physical damage not budgeted for in the depreciation/amortization schedule;
  - less-than-expected performance;
  - fall in resources for exploration-production activities.

#### Impairment

Items of property, plant and equipment and intangible assets are tested for impairment at the level of the individual asset or cash-generating unit (CGU) as appropriate, determined in accordance with IAS 36. If the recoverable amount of an asset is lower than its carrying amount, the carrying amount is written down to the recoverable amount by recording an impairment loss. Upon recognition of an impairment loss, the depreciable amount and possibly the useful life of the assets concerned is revised.

Impairment losses recorded in relation to property, plant and equipment or intangible assets may be subsequently reversed if the recoverable amount of the assets is once again higher than their carrying amount. The increased carrying amount of an item of property, plant or equipment attributable to a reversal of an impairment loss may not exceed the carrying amount that would have been determined (net of depreciation/amortization) had no impairment loss been recognized in prior periods.

#### Measurement of recoverable amount

In order to review the recoverable amount of property, plant and equipment and intangible assets, the assets are grouped, where appropriate, into CGUs and the carrying amount of each CGU is compared with its recoverable amount.

For operating entities which the Group intends to hold on a long-term and going concern basis, the recoverable amount of a CGU corresponds to the higher of its fair value less costs to sell and its value in use. Value in use is primarily determined based on the present value of future operating cash flows and a terminal value. Standard valuation techniques are used based on the following main economic data:

- discount rates based on the specific characteristics of the operating entities concerned;
- terminal values in line with the available market data specific to the operating segments concerned and growth rates associated with these terminal values, not to exceed the inflation rate.

Discount rates are determined on a post-tax basis and applied to post-tax cash flows. The recoverable amounts calculated on the basis of these discount rates are the same as the amounts obtained by applying the pre-tax discount rates to cash flows estimated on a pre-tax basis, as required by IAS 36.

For operating entities which the Group has decided to sell, the related recoverable amount of the assets concerned is based on market value less costs of disposal. Where negotiations are ongoing, this value is determined based on the best estimate of their outcome as of the reporting date.

In the event of a decline in value, the impairment loss is recorded in the consolidated income statement under “Impairment losses”.

### 1.4.9 Leases

The Group holds assets for its various activities under lease contracts.

These leases are analyzed based on the situations and indicators set out in IAS 17 in order to determine whether they constitute operating leases or finance leases.

A finance lease is defined as a lease which transfers substantially all the risks and rewards incidental to the ownership of the related asset to the lessee. All leases which do not comply with the definition of a finance lease are classified as operating leases.

The following main factors are considered by the Group to assess if a lease transfers substantially all the risks and rewards incidental to ownership: whether (i) the lessor transfers ownership of the asset to the lessee by the end of the lease term; (ii) the lessee has an option to purchase the asset and if so, the conditions applicable to exercising that option; (iii) lease term is for the major part of the economic life of the asset; (iv) the asset is of a highly specialized nature; and (v) the present value of minimum lease payments amounts to at least substantially all of the fair value of the leased asset.

#### 1.4.9.1 Accounting for finance leases

On initial recognition, assets held under finance leases are recorded as property, plant and equipment and the related liability is recognized under borrowings. At inception of the lease, finance leases are recorded at amounts equal to the fair value of the leased asset or, if lower, the present value of the minimum lease payments.

#### 1.4.9.2 Accounting for operating leases

Payments made under operating leases are recognized as an expense on a straight-line basis over the lease term.

#### 1.4.9.3 Accounting for arrangements that contain a lease

IFRIC 4 deals with the identification of services and take-or-pay sales or purchasing contracts that do not take the legal form of a lease but convey rights to customers/suppliers to use an asset or a group of assets in return for a payment or a series of fixed payments. Contracts meeting these criteria should be identified as either operating leases or finance leases. In the latter case, a finance receivable should be recognized to reflect the financing deemed to be granted by the Group where it is considered as acting as lessor and its customers as lessees.

The Group is concerned by this interpretation mainly with respect to:

- some energy purchase and sale contracts, particularly where the contract conveys to the purchaser of the energy an exclusive right to use a production asset;
- certain contracts with industrial customers relating to assets held by the Group.

### 1.4.10 Inventories

Inventories are measured at the lower of cost and net realizable value. Net realizable value corresponds to the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to make the sale.

The cost of inventories is determined based on the first-in, first-out method or the weighted average cost formula.

Nuclear fuel purchased is consumed in the process of producing electricity over a number of years. The consumption of this nuclear fuel inventory is recorded based on estimates of the quantity of electricity produced per unit of fuel.

#### Gas inventories

Gas injected into underground storage facilities includes working gas which can be withdrawn without adversely affecting the operation of the reservoir and cushion gas which is inseparable from the reservoirs and essential for their operation (see § 1.4.5.1).

Working gas is classified in inventory and measured at weighted average purchase cost upon entering the transportation network regardless of its source, including any regasification costs.

Group inventory outflows are valued using the weighted average unit cost method.

An impairment loss is recognized when the net realizable value of inventories is lower than their weighted average cost.

#### Greenhouse gas emissions rights

European Directive 2003/87/EC establishes a greenhouse gas (GHG) emissions allowance trading scheme within the European Union. Under the Directive, each year the sites concerned have to surrender a number of allowances equal to the total emissions from the installations during the previous calendar year. As there are no specific rules under IFRS Standards dealing with the accounting treatment of GHG emissions allowances, the Group decided to apply the following principles:

- emission rights are classified as inventories, as they are consumed in the production process;
- emission rights purchased on the market are recognized at acquisition cost;
- emission rights granted free of charge are recorded in the statement of financial position at a value of nil.

The Group records a liability at year-end in the event that it does not have enough emission rights to cover its GHG emissions during the period. This liability is measured at the market value of the allowances required to meet its obligations at year-end or based on the contract price concluded to hedge this lack of emission rights.

## Energy savings certificates (ESC)

In the absence of current IFRS Standards or IFRIC Interpretations on accounting for energy savings certificates (ESC), the following principles are applied:

- in the event that the number of ESCs held exceeds the obligation at the reporting date, this is accounted for as inventory; otherwise, a liability is recorded;
- ESC inventories are valued at weighted average cost (acquisition cost for those ESCs acquired or cost incurred for those ESCs generated internally).

### 1.4.11 Financial instruments

Financial instruments are recognized and measured in accordance with IAS 32 and IAS 39.

#### 1.4.11.1 Financial assets

Financial assets comprise available-for-sale securities, loans and receivables carried at amortized cost including trade and other receivables and financial assets measured at fair value through income, including derivative financial instruments. Financial assets are broken down into current and non-current assets in the consolidated statement of financial position.

##### Available-for-sale securities

“Available-for-sale securities” include the Group’s investments in non-consolidated companies and equity or debt instruments that do not satisfy the criteria for classification in another category (see below). Cost is determined using the weighted average cost formula.

These items are measured at fair value on initial recognition, which generally corresponds to the acquisition cost plus transaction costs.

At each reporting date, available-for-sale securities are measured at fair value. For listed securities, fair value is determined based on the quoted market price at the reporting date. For unlisted securities, fair value is measured using valuation models based primarily on recent market transactions, discounted dividends and future cash flows or net asset value. Changes in fair value are recorded directly in other comprehensive income, except when the decline in the value of the investment below its historical acquisition cost is judged significant or prolonged enough to require an impairment loss to be recognized. In this case, the loss is recognized in income under “Impairment losses”. Only impairment losses recognized on debt instruments (debt securities/bonds) may be reversed through income.

##### Loans and receivables carried at amortized cost

This item primarily includes loans granted to affiliated companies, loans and advances to associates or non-consolidated companies, guarantee deposits, trade and other receivables.

On initial recognition, these loans and receivables are recorded at fair value plus transaction costs. At each statement of financial position date, they are measured at amortized cost using the effective interest rate method.

Leasing guarantee deposits are recognized at their nominal value.

On initial recognition, trade and other receivables are recorded at fair value, which generally corresponds to their nominal value. Impairment

losses are recorded based on the estimated risk of non-recovery. This item also includes amounts due from customers under construction contracts.

#### Financial assets at fair value through income

These financial assets meet the qualification or designation criteria set out in IAS 39.

This item mainly includes trading securities and short-term investments which do not meet the criteria for classification as cash or cash equivalents (see § 1.4.12). The financial assets are measured at fair value at the statement of financial position date and changes in fair value are recorded in the consolidated income statement.

#### 1.4.11.2 Financial liabilities

Financial liabilities include borrowings, trade and other payables, derivative financial instruments and other financial liabilities.

Financial liabilities are broken down into current and non-current liabilities in the consolidated statement of financial position. Current financial liabilities primarily comprise:

- financial liabilities with a settlement or maturity date within 12 months of the reporting date;
- financial liabilities in respect of which the Group does not have an unconditional right to defer settlement for at least 12 months after the reporting date;
- financial liabilities held primarily for trading purposes;
- derivative financial instruments qualifying as fair value hedges where the underlying is classified as a current item;
- all commodity trading derivatives not qualifying as hedges.

##### Measurement of borrowings and other financial liabilities

Borrowings and other financial liabilities are measured at amortized cost using the effective interest rate method.

On initial recognition, any issue or redemption premiums and discounts and issuing costs are added to/deducted from the nominal value of the borrowings concerned. These items are taken into account when calculating the effective interest rate and are therefore recorded in the consolidated income statement over the life of the borrowings using the amortized cost method.

As regards structured debt instruments that do not have an equity component, the Group may be required to separate an “embedded” derivative instrument from its host contract (see § 1.4.11.3). The conditions under which these instruments must be separated are detailed below. When an embedded derivative is separated from its host contract, the initial carrying amount of the structured instrument is broken down into an embedded derivative component, corresponding to the fair value of the embedded derivative, and a financial liability component, corresponding to the difference between the amount of the issue and the fair value of the embedded derivative. The separation of components upon initial recognition does not give rise to any gains or losses.

The debt is subsequently recorded at amortized cost using the effective interest method while the derivative is measured at fair value, with changes in fair value taken to income.

### Put options on non-controlling interests

Other financial liabilities primarily include put options granted by the Group in respect of non-controlling interests.

#### Put options on non-controlling interests granted prior to January 1, 2010

As no specific guidance is provided by IFRS Standards and based on recommendations issued by the AMF for the 2009 reporting period, the Group decided to continue accounting for instruments recognized prior to January 1, 2010 using its previous accounting policies:

- when the put option with a variable price is initially granted, the present value of the exercise price is recognized as a financial liability, with a corresponding reduction in non-controlling interests. When the value of the put option is greater than the carrying amount of the non-controlling interests, the difference is recognized as goodwill;
- at each reporting date, the amount of the financial liability is revised and any changes in the amount are recorded with a corresponding adjustment to goodwill;
- payments of dividends to non-controlling interests result in an increase in goodwill;
- in the consolidated income statement, non-controlling interests are allocated their share in income. In the consolidated statement of financial position, the share in income allocated to non-controlling interests reduces the carrying amount of goodwill. No finance costs are recognized in respect of changes in the fair value of liabilities recognized against goodwill.

#### 1.4.11.3 Derivatives and hedge accounting

The Group uses financial instruments to manage and reduce its exposure to market risks arising from fluctuations in interest rates, foreign currency exchange rates and commodity prices, mainly for gas and electricity. The use of derivative instruments is governed by a Group policy for managing interest rate, currency and commodity risks.

##### Definition and scope of derivative financial instruments

Derivative financial instruments are contracts (i) whose value changes in response to the change in one or more observable variables, (ii) that do not require any material initial net investment, and (iii) that are settled at a future date.

Derivative instruments therefore include swaps, options, futures and swaptions, as well as forward commitments to purchase or sell listed and unlisted securities, and firm commitments or options to purchase or sell non-financial assets that involve physical delivery of the underlying.

For purchases and sales of electricity and natural gas, the Group systematically analyzes whether the contract was entered into in the

“normal” course of operations and therefore falls outside the scope of IAS 39. This analysis consists firstly of demonstrating that the contract is entered into and held for the purpose of making or taking physical delivery of the commodity in accordance with the Group’s expected purchase, sale or usage requirements.

The second step is to demonstrate that the Group has no practice of settling similar contracts on a net basis and that these contracts are not equivalent to written options. In particular, in the case of electricity and gas sales allowing the buyer a certain degree of flexibility concerning the volumes delivered, the Group distinguishes between contracts that are equivalent to capacity sales considered as transactions falling within the scope of ordinary operations and those that are equivalent to written financial options, which are accounted for as derivative financial instruments.

Only contracts that meet all of the above conditions are considered as falling outside the scope of IAS 39. Adequate specific documentation is compiled to support this analysis.

##### Embedded derivatives

An embedded derivative is a component of a hybrid (combined) instrument that also includes a non-derivative host contract – with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative.

The main Group contracts that may contain embedded derivatives are contracts with clauses or options potentially affecting the contract price, volume or maturity. This is the case primarily with contracts for the purchase or sale of non-financial assets, whose price is revised based on an index, the exchange rate of a foreign currency or the price of an asset other than the contract’s underlying.

Embedded derivatives are separated from the host contract and accounted for as derivatives when:

- the host contract is not a financial instrument measured at fair value through income;
- if separated from the host contract, the embedded derivative still fulfills the criteria for classification as a derivative instrument (existence of an underlying, no material initial net investment, settlement at a future date); and
- its characteristics are not closely related to those of the host contract. The analysis of whether or not the characteristics of the derivative are “closely related” to the host contract is made when the contract is signed.

Embedded derivatives that are separated from the host contract are recognized in the consolidated statement of financial position at fair value, with changes in fair value recognized in income (except when the embedded derivative is part of a designated hedging relationship).



### Hedging instruments: recognition and presentation

Derivative instruments qualifying as hedging instruments are recognized in the consolidated statement of financial position and measured at fair value. However, their accounting treatment varies according to whether they are classified as (i) a fair value hedge of an asset or liability; (ii) a cash flow hedge or (iii) a hedge of a net investment in a foreign operation.

#### Fair value hedges

A fair value hedge is defined as a hedge of the exposure to changes in fair value of a recognized asset or liability such as a fixed-rate loan or borrowing, or of assets, liabilities or an unrecognized firm commitment denominated in a foreign currency.

The gain or loss from remeasuring the hedging instrument at fair value is recognized in income. The gain or loss on the hedged item attributable to the hedged risk adjusts the carrying amount of the hedged item and is also recognized in income even if the hedged item is in a category in respect of which changes in fair value are recognized through other comprehensive income. These two adjustments are presented net in the consolidated income statement, with the net effect corresponding to the ineffective portion of the hedge.

#### Cash flow hedges

A cash flow hedge is a hedge of the exposure to variability in cash flows that could affect the Group's income. The hedged cash flows may be attributable to a particular risk associated with a recognized financial or non-financial asset or a highly probable forecast transaction.

The portion of the gain or loss on the hedging instrument that is determined to be an effective hedge is recognized directly in other comprehensive income, net of tax, while the ineffective portion is recognized in income. The gains or losses accumulated in equity are reclassified to the consolidated income statement under the same caption as the loss or gain on the hedged item – i.e. current operating income for operating cash flows and financial income or expenses for other cash flows – in the same periods in which the hedged cash flows affect income.

If the hedging relationship is discontinued, in particular because the hedge is no longer considered effective, the cumulative gain or loss on the hedging instrument remains recognized in equity until the forecast transaction occurs. However, if a forecast transaction is no longer expected to occur, the cumulative gain or loss on the hedging instrument is immediately recognized in income.

### Hedge of a net investment in a foreign operation

In the same way as for a cash flow hedge, the portion of the gain or loss on the hedging instrument that is determined to be an effective hedge of the currency risk is recognized directly in other comprehensive income, net of tax, while the ineffective portion is recognized in income. The gains or losses accumulated in other comprehensive income are transferred to the consolidated income statement when the investment is liquidated or sold.

### Hedging instruments: identification and documentation of hedging relationships

The hedging instruments and hedged items are designated at the inception of the hedging relationship. The hedging relationship is formally documented in each case, specifying the hedging strategy, the hedged risk and the method used to assess hedge effectiveness. Only derivative contracts entered into with external counterparties are considered as being eligible for hedge accounting.

Hedge effectiveness is assessed and documented at the inception of the hedging relationship and on an ongoing basis throughout the periods for which the hedge was designated. Hedges are considered to be effective when changes in fair value or cash flows between the hedging instrument and the hedged item are offset within a range of 80%-125%.

Hedge effectiveness is demonstrated both prospectively and retrospectively using various methods, based mainly on a comparison between changes in fair value or cash flows between the hedging instrument and the hedged item. Methods based on an analysis of statistical correlations between historical price data are also used.

### Derivative instruments not qualifying for hedge accounting: recognition and presentation

These items mainly concern derivative financial instruments used in economic hedges that have not been – or are no longer – documented as hedging relationships for accounting purposes.

When a derivative financial instrument does not qualify or no longer qualifies for hedge accounting, changes in fair value are recognized directly in income, under "Mark-to-market" or "Mark-to-market on commodity contracts other than trading instruments" below current operating income for derivative instruments with non-financial assets as the underlying, and in financial income or expenses for currency, interest rate and equity derivatives.

Derivative instruments not qualifying for hedge accounting used by the Group in connection with proprietary commodity trading activities and other derivatives expiring in less than 12 months are recognized in the consolidated statement of financial position in current assets and liabilities, while derivatives expiring after this period are classified as non-current items.

### Fair value measurement

The fair value of instruments listed on an active market is determined by reference to the market price. In this case, these instruments are presented in level 1 of the fair value hierarchy.

The fair value of unlisted financial instruments for which there is no active market and for which observable market data exist is determined based on valuation techniques such as option pricing models or the discounted cash flow method.

Models used to evaluate these instruments take into account assumptions based on market inputs:

- the fair value of interest rate swaps is calculated based on the present value of future cash flows;
- the fair value of forward foreign exchange contracts and currency swaps is calculated by reference to current prices for contracts with similar maturities by discounting the future cash flow spread (difference between the forward exchange rate under the contract and the forward exchange rate recalculated in line with the new market conditions applicable to the nominal amount);
- the fair value of currency and interest rate options is calculated using option pricing models;
- commodity derivatives contracts are valued by reference to listed market prices based on the present value of future cash flows (commodity swaps or commodity forwards) and option pricing models (options), for which market price volatility may be a factor. Contracts with maturities exceeding the depth of transactions for which prices are observable, or which are particularly complex, may be valued based on internal assumptions;
- exceptionally, for complex contracts negotiated with independent financial institutions, the Group uses the values established by its counterparties.

These instruments are presented in level 2 of the fair value hierarchy except when the evaluation is based mainly on data that are not observable; in which case they are presented in level 3 of the fair value hierarchy. Most often, this is the case for derivatives with a maturity that falls outside the observability period for market data relating to the underlying or when some parameters such as the volatility of the underlying are not observable.

Except in case of enforceable master netting arrangements or similar agreements, counterparty risk is included in the fair value of financial derivative instrument assets and liabilities. It is calculated according to the “expected loss” method and takes into account the exposure at default, the probability of default and the loss given default. The probability of default is determined on the basis of credit ratings assigned to each counterparty (“historical probability of default” approach).

### 1.4.12 Cash and cash equivalents

These items include cash equivalents as well as short-term investments that are considered to be readily convertible into a known amount of cash and where the risk of a change in their value is deemed to be negligible based on the criteria set out in IAS 7.

Bank overdrafts are not included in the calculation of cash and cash equivalents and are recorded under “Short-term borrowings”.

### 1.4.13 Treasury shares

Treasury shares are recognized at cost and deducted from equity. Gains and losses on disposals of treasury shares are recorded directly in equity and do not therefore impact income for the period.

### 1.4.14 Share-based payment

Under IFRS 2, share-based payments made in consideration for services provided are recognized as personnel costs. These services are measured at the fair value of the instruments awarded.

### Equity-settled instruments: bonus share plans and performance shares granted to employees

The fair value of bonus share plans is estimated by reference to the share price at the grant date, taking into account the fact that no dividend is payable over the vesting period, and based on the estimated turnover rate for the employees concerned and the probability that the Group will meet its performance targets. The fair value measurement also takes into account the non-transferability period associated with these instruments. The cost of shares granted to employees is expensed over the vesting period of the rights and offset against equity.

A Monte Carlo pricing model is used for performance shares granted on a discretionary basis and subject to external performance criteria.

### 1.4.15 Provisions

#### 1.4.15.1 Provisions for post-employment benefit obligations and other long-term employee benefits

Depending on the laws and practices in force in the countries where the Group operates, Group companies have obligations in terms of pensions, early retirement payments, retirement bonuses and other benefit plans. Such obligations generally apply to all of the employees within the companies concerned.

The Group's obligations in relation to pensions and other employee benefits are recognized and measured in compliance with IAS 19. Accordingly:

- the cost of defined-contribution plans is expensed based on the amount of contributions payable in the period;
- the Group's obligations concerning pensions and other employee benefits payable under defined-benefit plans are assessed on an actuarial basis using the projected unit credit method. These calculations are based on assumptions relating to mortality, staff turnover and estimated future salary increases, as well as the economic conditions specific to each country or subsidiary of the Group. Discount rates are determined by reference to the yield, at the measurement date, on high-quality corporate bonds in the related geographical area (or on government bonds in countries where no representative market for such corporate bonds exists).

Provisions are recorded when commitments under these plans exceed the fair value of plan assets. Where the value of plan assets (capped where appropriate) is greater than the related commitments, the surplus is recorded as an asset under “Other assets” (current or non-current).

As regards post-employment benefit obligations, actuarial gains and losses are recognized in other comprehensive income. Where appropriate, adjustments resulting from applying the asset ceiling to net assets relating to overfunded plans are treated in a similar way. However, actuarial gains and losses on other long-term benefits such as long-service awards, are recognized immediately in income.

Net interest on the net defined-benefit liability (asset) is presented in net financial expense (income).

#### 1.4.15.2 Other provisions

The Group records a provision where it has a present obligation (legal or constructive), the settlement of which is expected to result in an outflow of resources embodying economic benefits with no corresponding consideration in return.

A provision for restructuring costs is recorded when the general criteria for setting up a provision are met, i.e. when the Group has a detailed formal plan relating to the restructuring and has raised a valid expectation in those affected that it will carry out the restructuring by starting to implement that plan or announcing its main features to those affected by it.

Provisions with a maturity of over 12 months are discounted when the effect of discounting is material. The Group's main long-term provisions are provisions for the back-end of the nuclear fuel cycle, provisions for dismantling facilities and provisions for site restoration costs. The discount rates used reflect current market assessments of the time value of money and the risks specific to the liability concerned. Expenses corresponding to the reversal of discounting adjustments to long-term provisions are recorded under other financial income and expenses.

A provision is recognized when the Group has a present legal or constructive obligation to dismantle facilities or to restore a site. An asset is recorded simultaneously by including this dismantling obligation in the carrying amount of the facilities concerned. Adjustments to the provision due to subsequent changes in the expected outflow of resources, the dismantling date or the discount rate are deducted from or added to the cost of the corresponding asset in a symmetrical manner. The impacts of unwinding the discount are recognized in expenses for the period.

### 1.4.16 Revenue

Group revenue (as defined by IAS 18) is mainly generated from the following:

- energy sales;
- rendering of services;
- construction and lease contracts.

Revenue on sales of goods is recognized on delivery, i.e. when the significant risks and rewards of ownership are transferred to the buyer. For services and construction contracts, revenue is recognized using the percentage-of-completion method. In both cases, revenue is recognized solely when the transaction price is fixed or can be reliably determined and the recovery of the amounts due is probable.

Revenue is measured at the fair value of the consideration received or receivable. Where deferred payment has a material impact on the measurement of the fair value of this consideration, this is taken into account by discounting future receipts.

#### 1.4.16.1 Energy sales

This revenue primarily includes sales of electricity and gas, transport and distribution fees relating to services such as electricity and gas distribution network maintenance and heating network sales.

Part of the price received by the Group under certain long-term energy sales contracts may be fixed rather than being based on volumes. In rare cases, the fixed amount can change over the term of the contract. In accordance with IAS 18, revenue from such components is recognized on a straight-line basis because, in substance, the fair value of the services rendered does not vary from one period to the next.

In accordance with IAS 1 and IAS 18, both proprietary energy trading transactions and energy trading carried out on behalf of customers are recorded within "Revenues" after netting off sales and purchases.

In addition, revenue from hedging contracts aimed at optimizing production assets and from fuel purchase and energy sale contracts is recognized based on the net amount.

#### 1.4.16.2 Rendering of services

This revenue relates mainly to installation, maintenance and energy services, and is recognized in accordance with IAS 18, which requires services to be accounted for on a percentage-of-completion basis.

### 1.4.16.3 Construction and lease contracts

Revenue from construction contracts is determined using the percentage-of-completion method and more generally in accordance with the provisions of IAS 11. Depending on the contract concerned, the stage of completion may be determined either based on the proportion that costs incurred to date bear to the estimated total costs of the transaction, or on the physical progress of the contract based on factors such as contractually defined milestones.

Revenue also includes revenue from financial concession assets (IFRIC 12) and finance lease receivables (IFRIC 4).

### 1.4.17 Current operating income

Current operating income is an indicator used by the Group to present “a level of operational performance that can be used as part of an approach to forecast recurring performance” (this complies with ANC Recommendation 2013-03 on the format of financial statements of entities applying IFRS Standards). Current operating income is a sub-total which helps to better understand the Group’s performance because it excludes elements which are inherently difficult to predict due to their unusual, irregular or non-recurring nature. For the Group, such elements relate to mark-to-market on commodity contracts other than trading instruments, impairment losses, restructuring costs, changes in the scope of consolidation and other non-recurring items, and are defined as follows:

- “Mark-to-market on commodity contracts other than trading instruments” corresponds to changes in the fair value (marked-to-market) of financial instruments relating to commodities, gas and electricity, which do not qualify as either trading or hedging instruments. These contracts are used in economic hedges of operating transactions in the energy sector. Since changes in the fair value of these instruments which must be recognized through income under IAS 39 can be material and difficult to predict, they are presented on a separate line of the consolidated income statement;
- “Impairment losses” include impairment losses on goodwill, other intangible assets and property, plant and equipment, investments in

entities accounted for using the equity method and available-for-sale securities;

- “Restructuring costs” concern costs corresponding to a restructuring program planned and controlled by management that materially changes either the scope of a business undertaken by the entity, or the manner in which that business is conducted, based on the criteria set out in IAS 37;
- “Changes in the scope of consolidation”. This line includes:
  - direct costs related to acquisitions of controlling interests;
  - in the event of a business combination achieved in stages, impacts of the remeasurement of the previously held equity interest at acquisition-date fair value;
  - subsequent changes in the fair value of contingent consideration;
  - gains or losses from disposals of investments which result in a change in consolidation method, as well as any impact of the remeasurement of retained interests;
- “Other non-recurring items” notably include capital gains and losses on disposals of non-current assets and available-for-sale securities.

### 1.4.18 Consolidated statement of cash flows

The consolidated statement of cash flows is prepared using the indirect method starting from net income.

“Interest received on non-current financial assets” is classified within investing activities because it represents a return on investments. “Interest received on cash and cash equivalents” is shown as a component of financing activities because the interest can be used to reduce borrowing costs. This classification is consistent with the Group’s internal organization, where debt and cash are managed centrally by the treasury department.

As impairment losses on current assets are considered to be definitive losses, changes in current assets are presented net of impairment.

Cash flows relating to the payment of income tax are presented on a separate line.

### 1.4.19 Income tax expense

The Group computes taxes in accordance with prevailing tax legislation in the countries where income is taxable.

In accordance with IAS 12, deferred taxes are recognized according to the liability method on temporary differences between the carrying amounts of assets and liabilities in the consolidated financial statements and their tax bases, using tax rates that have been enacted or substantively enacted by the reporting date. However, under the provisions of IAS 12, no deferred tax is recognized for temporary differences arising from goodwill for which impairment losses are not deductible for tax purposes, or from the initial recognition of an asset or liability in a transaction which (i) is not a business combination and (ii) at the time of the transaction, affects neither accounting income nor taxable income. In addition, deferred tax assets are only recognized to the extent that it is probable that taxable income will be available against which the deductible temporary differences can be utilized.

Temporary differences arising on restatements of finance leases result in the recognition of deferred taxes.

A deferred tax liability is recognized for all taxable temporary differences associated with investments in subsidiaries, associates, joint ventures and branches, except if the Group is able to control the timing of the reversal of the temporary difference and it is probable that the temporary difference will not reverse in the foreseeable future.

Net balances of deferred taxes are calculated based on the tax position of each company or on the total income of companies included within the relevant consolidated tax group, and are presented in assets or liabilities for their net amount per tax entity.

Deferred taxes are reviewed at each reporting date to take into account factors including the impact of changes in tax laws and the prospects of recovering deferred tax assets arising from deductible temporary differences.

Deferred tax assets and liabilities are not discounted.

Tax effects relating to coupon payments on deeply subordinated perpetual notes are recognized in profit or loss.

### 1.4.20 Earnings per share

Basic earnings per share are calculated by dividing net income Group share for the year by the weighted average number of ordinary shares outstanding during the year. The average number of ordinary shares outstanding during the year is the number of ordinary shares outstanding at the beginning of the year, adjusted by the number of ordinary shares bought back or issued during the year.

The weighted average number of shares and basic earnings per share are adjusted to take into account the impact of the conversion or exercise of any dilutive potential ordinary shares (options, warrants and convertible bonds, etc.).

**NOTE 2** Main subsidiaries at December 31, 2016**2.1** List of main subsidiaries at December 31, 2016

The list of main subsidiaries presented below was determined, as regards operating entities, based on their contribution to Group revenues, EBITDA and net debt. The main equity-accounted investments (associates and joint ventures) are presented in Note 3 "Investments in entities accounted for using the equity method".

"FC" indicates the full consolidation method.

Some entities such as ENGIE SA, ENGIE Energie Services SA or Electrabel SA comprise both operating activities and headquarters functions which report to management teams of different reportable segments. In the following tables, these operating activities and headquarters functions are shown within their respective reportable segments under their initial company name followed by a (\*) sign.

**NORTH AMERICA**

Company name	Activity	Country	% interest		Consolidation method	
			Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015
GDF SUEZ Energy Generation North America Group <sup>(1)</sup>	Electricity generation	United States	100.0	100.0	FC	FC
ENGIE Holding Inc.	Holding - parent company	United States	100.0		FC	
Distrigas of Massachussetts	LNG terminals	United States	100.0	100.0	FC	FC
ENGIE Resources Inc.	Energy sales	United States	100.0	100.0	FC	FC
Ecova	Energy services	United States	100.0	100.0	FC	FC

(1) Assets classified as "Assets held for sale" at December 31, 2016.

**LATIN AMERICA**

Company name	Activity	Country	% interest		Consolidation method	
			Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015
ENGIE Energía Chile Group	Electricity distribution and generation	Chile	52.8	52.8	FC	FC
ENGIE Energía Perú	Electricity distribution and generation	Peru	61.8	61.8	FC	FC
ENGIE Brasil Energia Group	Electricity distribution and generation	Brazil	68.7	68.7	FC	FC

**AFRICA/ASIA**

Company name	Activity	Country	% interest		Consolidation method	
			Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015
GLOW Group	Electricity distribution and generation	Thailand	69.1	69.1	FC	FC
Hazelwood Power Partnership	Electricity generation	Australia	72.0	72.0	FC	FC
Loy Yang B Group	Electricity generation	Australia	70.0	70.0	FC	FC
Simply Energy	Energy sales	Australia	72.0	72.0	FC	FC
Baymina Enerji A.S.	Electricity generation	Turkey	95.0	95.0	FC	FC

## BENELUX

Company name	Activity	Country	% interest		Consolidation method	
			Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015
Electrabel SA (*)	Electricity generation/ Energy sales	Belgium	100.0	100.0	FC	FC
Synatom	Managing provisions relating to power plants and nuclear fuel	Belgium	100.0	100.0	FC	FC
Cofely Fabricom SA	Systems, facilities and maintenance services	Belgium	100.0	100.0	FC	FC
ENGIE Energie Nederland N.V. (*)	Energy sales	Netherlands	100.0	100.0	FC	FC
ENGIE Services Nederland N.V.	Energy services	Netherlands	100.0	100.0	FC	FC

## FRANCE

Company name	Activity	Country	% interest		Consolidation method	
			Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015
ENGIE SA (*)	Energy sales	France	100.0	100.0	FC	FC
ENGIE Energie Services SA (*)	Energy services/ Networks	France	100.0	100.0	FC	FC
Axima Concept	Systems, facilities and maintenance services	France	100.0	100.0	FC	FC
Endel Group	Systems, facilities and maintenance services	France	100.0	100.0	FC	FC
INEO Group	Systems, facilities and maintenance services	France	100.0	100.0	FC	FC
Compagnie Nationale du Rhône	Electricity distribution and generation	France	49.9	49.9	FC	FC
CPCU	Urban heating networks	France	64.4	64.4	FC	FC

## EUROPE EXCLUDING FRANCE &amp; BENELUX

Company name	Activity	Country	% interest		Consolidation method	
			Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015
ENGIE Energielösungen GmbH	Energy services	Germany	100.0	100.0	FC	FC
ENGIE Italia S.p.A (*)	Energy sales	Italy	100.0	100.0	FC	FC
COFELY Italia S.p.A	Energy services	Italy	100.0	100.0	FC	FC
ENGIE Romania	Natural gas distribution/ Energy sales	Romania	51.0	51.0	FC	FC
ENGIE UK Retail	Energy sales	United Kingdom	100.0	100.0	FC	FC
First Hydro Holdings Company	Electricity generation	United Kingdom	75.0	75.0	FC	FC
ENGIE Services Holding UK Ltd	Energy services	United Kingdom	100.0	100.0	FC	FC
ENGIE Services Limited	Energy services	United Kingdom	100.0	100.0	FC	FC

## INFRASTRUCTURES EUROPE

Company name	Activity	Country	% interest		Consolidation method	
			Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015
Elengy	LNG terminals	France	100.0	100.0	FC	FC
Fosmax LNG	LNG terminals	France	72.5	72.5	FC	FC
GRDF	Natural gas distribution	France	100.0	100.0	FC	FC
GRTgaz Group	Natural gas transportation	France	74.7	74.7	FC	FC
Storengy Deutschland GmbH	Underground natural gas storage	Germany	100.0	100.0	FC	FC
Storengy SA	Underground natural gas storage	France	100.0	100.0	FC	FC

## GEM &amp; LNG

Company name	Activity	Country	% interest		Consolidation method	
			Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015
Electrabel SA (*)	Energy management trading	France/ Belgium	100.0	100.0	FC	FC
ENGIE Global Markets	Energy management trading	France/ Belgium/ Singapore	100.0	100.0	FC	FC
ENGIE Energy Management (*)	Energy management trading	France/ Belgium/ Italy	100.0	100.0	FC	FC
ENGIE Gas & LNG LLC	Natural gas/ LNG	United States	100.0	100.0	FC	FC
ENGIE SA (*)	Energy management trading/ Energy sales/ LNG	France	100.0	100.0	FC	FC

## E&amp;P

Company name	Activity	Country	% interest		Consolidation method	
			Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015
ENGIE E&P International Group	Exploration-production	France and other countries	70.0	70.0	FC	FC
<i>ENGIE E&amp;P International</i>	<i>Holding - parent company</i>	<i>France</i>	<i>70.0</i>	<i>70.0</i>	<i>FC</i>	<i>FC</i>
<i>ENGIE E&amp;P Nederland B.V.</i>	<i>Exploration-production</i>	<i>Netherlands</i>	<i>70.0</i>	<i>70.0</i>	<i>FC</i>	<i>FC</i>
<i>ENGIE E&amp;P Deutschland GmbH</i>	<i>Exploration-production</i>	<i>Germany</i>	<i>70.0</i>	<i>70.0</i>	<i>FC</i>	<i>FC</i>
<i>ENGIE E&amp;P Norge AS</i>	<i>Exploration-production</i>	<i>Norway</i>	<i>70.0</i>	<i>70.0</i>	<i>FC</i>	<i>FC</i>
<i>ENGIE E&amp;P UK Ltd.</i>	<i>Exploration-production</i>	<i>United Kingdom</i>	<i>70.0</i>	<i>70.0</i>	<i>FC</i>	<i>FC</i>



## OTHERS

Company name	Activity	Country	% interest		Consolidation method	
			Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015
ENGIE SA (*)	Holding - parent company	France	100.0	100.0	FC	FC
Electrabel SA (*)	Holding/ Electricity generation	Belgium	100.0	100.0	FC	FC
ENGIE Energie Services SA (*)	Holding	France	100.0	100.0	FC	FC
International Power Limited	Holding	United Kingdom	100.0	100.0	FC	FC
ENGIE CC	Financial subsidiaries/ Central functions	Belgium	100.0	100.0	FC	FC
ENGIE FINANCE SA	Financial subsidiaries	France	100.0	100.0	FC	FC
Solairedirect	Electricity generation	France	100.0	96.6	FC	FC
ENGIE Energie Nederland N.V. (*)	Electricity generation	Netherlands	100.0	100.0	FC	FC
ENGIE Cartagena	Electricity generation	Spain	100.0	100.0	FC	FC
ENGIE Deutschland AG (*)	Electricity generation	Germany	100.0	100.0	FC	FC
ENGIE Kraftwerk Wilhelmshaven GmbH & Co. KG	Electricity generation	Germany	57.0	57.0	FC	FC
ENGIE Energia Polska SA (*) (1)	Electricity generation	Poland	100.0	100.0	FC	FC
ENGIE Thermique France	Electricity generation	France	100.0	100.0	FC	FC
Rugeley Power Limited	Electricity generation	United Kingdom	75.0	75.0	FC	FC
Saltend	Electricity generation	United Kingdom	75.0	75.0	FC	FC
Gaztransport & Technigaz (GTT)	Engineering	France	40.4	40.4	FC	FC
Tractebel Engineering	Engineering	Belgium	100.0	100.0	FC	FC

(1) Assets classified as "Assets held for sale" at December 31, 2016.

## 2.2 Significant judgments exercised when assessing control

The Group primarily considers the following information and criteria when determining whether it has control over an entity:

- governance arrangements: voting rights and whether the Group is represented in the governing bodies, majority, veto rights;
- whether substantive or protective rights are granted to shareholders, particularly in relation to the entity's relevant activities;
- the consequences of a "deadlock" clause;
- whether the Group is exposed, or has rights, to variable returns from its involvement with the entity.

The Group exercised its judgment regarding the entities and sub-groups described below.

### Entities in which the Group has the majority of the voting rights

This category mainly comprises the ENGIE E&P International (70%) and GRTgaz (74.7%) sub-groups.

#### ENGIE E&P International (E&P): 70%

On October 31, 2011, ENGIE and China Investment Corporation (CIC) signed a partnership agreement for the acquisition by CIC of a 30% stake in the Group's exploration-production activities (ENGIE E&P International). The shareholder agreement provides that certain

investment decisions relating to major development projects require an unanimous decision from the two shareholders, after a consultation period.

ENGIE considered that it continued to control ENGIE E&P International, as the rights granted to CIC represent minority protective rights, regarding in particular the risks to which all shareholders are exposed when undertaking exploration-production activities.

#### GRTgaz (Infrastructures Europe): 74.7%

In addition to the analysis of the shareholder agreement with *Société d'Infrastructures Gazières*, a subsidiary of *Caisse des Dépôts et Consignations* (CDC), which owns 24.9% of the share capital of GRTgaz, the Group also assessed the rights granted to the French Energy Regulatory Commission (*Commission de Régulation de l'Énergie* – CRE). As a regulated activity, GRTgaz has a dominant position on the gas transportation market in France. Accordingly, since the transposition of the Third European Directive of July 13, 2009 into French law (Energy Code of May 9, 2011), GRTgaz has been subject to independence rules as concerns its directors and senior management team. The French Energy Code confers certain powers on the CRE in the context of its duties to control the proper functioning of the gas markets in France, including verifying the independence of the members of the Board of Directors and senior management and assessing its choice of investments. The Group considers that it exercises control over GRTgaz in view of its current ability to appoint the majority of the members of the Board of Directors and take decisions about the relevant activities, especially in terms of the level of investment and planned financing.

### Entities in which the Group does not have the majority of the voting rights

In the entities in which the Group does not have a majority of the voting rights, judgment is exercised with regard to the following items, in order to assess whether there is a situation of *de facto* control:

- dispersion of shareholding structure: number of voting rights held by the Group relative to the number of rights held respectively by the other vote holders and their dispersion;
- voting patterns at shareholders' meetings: the percentages of voting rights exercised by the Group at shareholders' meetings in recent years;
- governance arrangements: representation in the governing body with strategic and operational decision-making power over the relevant activities, as well as the rules for appointing key management personnel;
- contractual relationships and material transactions.

The main fully consolidated entities in which the Group does not have the majority of the voting rights are Compagnie Nationale du Rhône (49.98%) and Gaztransport & Technigaz (40.4%).

### Compagnie Nationale du Rhône ("CNR" – France): 49.98%

The Group holds 49.98% of the share capital of CNR, with CDC holding 33.2%, and the balance (16.82%) being dispersed among around 200 local authorities. In view of the current provisions of the French "Murcef" law, under which a majority of CNR's share capital must remain under public ownership, the Group is unable to hold more than 50% of the share capital of CNR. However, the Group considers that it exercises *de facto* control as it holds the majority of the voting rights exercised at shareholders' meetings due to the widely dispersed shareholding structure and the absence of evidence of the minority shareholders acting in concert.

### Gaztransport & Technigaz ("GTT" – Others): 40.4%

Since GTT's initial public offering in February 2014, ENGIE has been the largest shareholder in that company with a 40.4% stake, the free float representing around 49% of the share capital. The Group holds the majority of the voting rights exercised at shareholders' meetings in view of the widely dispersed shareholding structure and the absence of evidence of minority shareholders acting in concert. ENGIE also holds the majority of the seats on the Board of Directors. The Group considers that it exercises *de facto* control over GTT, based on an IFRS 10 criteria analysis.

### 2.3 Subsidiaries with material non-controlling interests

The following table shows the non-controlling interests in Group entities that are deemed to be material, the respective contributions to equity and net income at December 31, 2016 and December 31, 2015, as well as the dividends paid to non-controlling interests of these significant subsidiaries:

Corporate name	Activity	Percentage interest of non-controlling interests		Net income/(loss) of non-controlling interests		Equity of non-controlling interests		Dividends paid to non-controlling interests	
		Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015
GRTgaz Group (Infrastructures Europe, France)	Regulated gas transportation activities in France	25.3	25.3	137	86	987	945	86	91
ENGIE Energía Chile Group (Latin America, Chile) <sup>(1)</sup>	Electricity distribution and generation - thermal power plants	47.2	47.2	112	45	941	838	47	26
ENGIE Brasil Energia Group (Latin America, Brazil) <sup>(1)</sup>	Electricity distribution and generation	31.3	31.3	131	130	621	507	105	68
GLOW Group (Africa/Asia, Thailand) <sup>(1)</sup>	Electricity distribution and generation - hydroelectric, wind and thermal power plants	30.9	30.9	94	107	599	566	84	71
ENGIE Romania Group (Europe excluding France & Benelux, Romania)	Distribution of natural gas/Energy sales	49.0	49.0	39	44	470	433	-	22
Gaztransport & Technigaz (Other, France) <sup>(1)</sup>	Naval engineering, cryogenic membrane containment systems for LNG transportation	59.6	59.6	27	23	355	386	59	54
ENGIE Energía Perú (Latin America, Peru) <sup>(1)</sup>	Electricity distribution and generation - thermal and hydroelectric power plants	38.2	38.2	45	65	351	312	19	17
ENGIE E&P International Group (E&P, France and other countries)	Portfolio of exploration-production assets and oil and gas field operation assets	30.0	30.0	(47)	(641)	320	363	-	22
Other subsidiaries with non-controlling interests				40	(355)	1,226	1,322	106	111
<b>TOTAL</b>				<b>579</b>	<b>(496)</b>	<b>5,870</b>	<b>5,672</b>	<b>507</b>	<b>482</b>

(1) The ENGIE Energía Chile, ENGIE Energía Brasil and GLOW groups, as well as Gaztransport & Technigaz and ENGIE Energía Perú are listed on the stock markets in their respective countries.

## 2.3.1 Condensed financial information on subsidiaries with material non-controlling interests

The condensed financial information concerning these subsidiaries presented in the table below is based on a 100% interest and is shown before intragroup eliminations.

	GRTgaz Group		ENGIE Energia Chile Group		ENGIE Brasil Energia Group		GLOW Group	
	Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015
<i>In millions of euros</i>								
<b>Income statement</b>								
Revenues	1,993	1,956	876	1,033	1,670	1,750	1,343	1,679
Net income/(loss)	544	342	223	86	417	415	241	271
Net income/(loss) Group share	406	255	111	41	286	285	147	164
Other comprehensive income/(loss) – Owners of the parent	(26)	1	41	78	192	(249)	35	44
<b>TOTAL COMPREHENSIVE INCOME/(LOSS) – OWNERS OF THE PARENT</b>	<b>381</b>	<b>257</b>	<b>152</b>	<b>119</b>	<b>478</b>	<b>36</b>	<b>183</b>	<b>208</b>
<b>Statement of financial position</b>								
Current assets	586	641	601	504	957	1,103	588	626
Non-current assets	9,114	8,966	2,601	2,435	3,162	2,449	2,558	2,695
Current liabilities	(699)	(691)	(280)	(248)	(489)	(730)	(383)	(419)
Non-current liabilities	(5,094)	(5,177)	(997)	(994)	(1,772)	(1,312)	(1,300)	(1,416)
<b>TOTAL EQUITY</b>	<b>3,908</b>	<b>3,739</b>	<b>1,926</b>	<b>1,697</b>	<b>1,858</b>	<b>1,511</b>	<b>1,463</b>	<b>1,486</b>
<b>TOTAL NON-CONTROLLING INTERESTS</b>	<b>987</b>	<b>945</b>	<b>941</b>	<b>838</b>	<b>621</b>	<b>507</b>	<b>599</b>	<b>566</b>
<b>Statement of cash flows</b>								
Cash flow from operating activities	1,069	925	266	313	658	723	432	522
Cash flow from (used in) investing activities	(619)	(559)	(55)	(351)	(355)	(232)	(17)	(50)
Cash flow from (used in) financing activities	(450)	(210)	(109)	(66)	(437)	(277)	(456)	(374)
<b>TOTAL CASH FLOW FOR THE PERIOD <sup>(1)</sup></b>	<b>-</b>	<b>156</b>	<b>102</b>	<b>(105)</b>	<b>(134)</b>	<b>214</b>	<b>(41)</b>	<b>99</b>

(1) Excluding effects of changes in exchange rates and other.

	ENGIE Romania Group		Gaztransport & Technigaz		ENGIE Energía Perú		ENGIE E&P International Group	
	Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015
<i>In millions of euros</i>								
<b>Income statement</b>								
Revenues	989	975	236	226	665	639	1,909	2,406
Net income/(loss)	80	90	(115)	(14)	119	169	(158)	(2,136)
Net income/(loss) Group share	41	46	(143)	(37)	73	105	(111)	(1,495)
Other comprehensive income/(loss) – Owners of the parent	(2)	(4)	1	-	20	48	(191)	200
<b>TOTAL COMPREHENSIVE INCOME/(LOSS) – OWNERS OF THE PARENT</b>	<b>39</b>	<b>42</b>	<b>(141)</b>	<b>(37)</b>	<b>94</b>	<b>153</b>	<b>(302)</b>	<b>(1,296)</b>
<b>Statement of financial position</b>								
Current assets	564	391	201	219	258	203	1,668	2,057
Non-current assets	752	757	582	668	1,902	1,713	4,887	4,639
Current liabilities	(321)	(172)	(101)	(138)	(351)	(348)	(1,571)	(1,281)
Non-current liabilities	(49)	(104)	(87)	(101)	(894)	(754)	(4,077)	(4,367)
<b>TOTAL EQUITY</b>	<b>946</b>	<b>872</b>	<b>595</b>	<b>648</b>	<b>916</b>	<b>814</b>	<b>907</b>	<b>1,049</b>
<b>TOTAL NON-CONTROLLING INTERESTS</b>	<b>470</b>	<b>433</b>	<b>355</b>	<b>386</b>	<b>351</b>	<b>312</b>	<b>320</b>	<b>363</b>
<b>Statement of cash flows</b>								
Cash flow from operating activities	188	96	95	123	206	272	111	965
Cash flow from (used in) investing activities	(42)	(68)	(3)	(7)	(192)	(337)	(899)	(745)
Cash flow from (used in) financing activities	(29)	(48)	(102)	(101)	(36)	86	708	(4)
<b>TOTAL CASH FLOW FOR THE PERIOD <sup>(1)</sup></b>	<b>117</b>	<b>(21)</b>	<b>(11)</b>	<b>15</b>	<b>(22)</b>	<b>21</b>	<b>(80)</b>	<b>216</b>

(1) Excluding effects of changes in exchange rates and other.

### 2.3.2 Other information on material non-controlling interests

During the first-half of 2016, ENGIE E&P International shareholders subscribed to a €290 million capital increase according to their respective ownership percentage interest (€203 million for ENGIE and €87 million for China Investment Corporation (CIC)).

### NOTE 3 Investments in entities accounted for using the equity method

The respective contributions of associates and joint ventures in the statement of financial position, the income statement and the statement of comprehensive income at December 31, 2016 and December 31, 2015, are as follows:

<i>In millions of euros</i>	Dec. 31, 2016	Dec. 31, 2015
<b>Statement of financial position</b>		
Investments in associates	4,736	5,157
Investments in joint ventures	1,888	1,820
<b>INVESTMENTS IN ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD</b>	<b>6,624</b>	<b>6,977</b>
<b>Income statement</b>		
Share in net income/(loss) of associates	671	338
Share in net income/(loss) of joint ventures	92	135
<b>SHARE IN NET INCOME/(LOSS) OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD</b>	<b>764</b>	<b>473</b>
<b>Statement of comprehensive income</b>		
Share of associates in "Other comprehensive income/(loss)"	47	(195)
Share of joint ventures in "Other comprehensive income/(loss)"	12	-
<b>SHARE OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD IN "OTHER COMPREHENSIVE INCOME/(LOSS)"</b>	<b>59</b>	<b>(195)</b>

#### Significant judgments

The Group primarily considers the following information and criteria in determining whether it has joint control or significant influence over an entity:

- governance arrangements: whether the Group is represented in the governing bodies, majority rules, veto rights;
- whether substantive or protective rights are granted to shareholders, particularly in relation to the entity's relevant activities.

This can be difficult to determine in the case of "project management" or "one-asset" entities, as certain decisions concerning the relevant activities are made upon the creation of the joint arrangement and remain valid throughout the project. Accordingly, the decision-making analysis concerns the relevant residual activities of the entity (those that significantly affect the returns of the entity);

- the consequences of a "deadlock" clause;
- whether the Group is exposed, or has rights, to variable returns from its involvement with the entity.

This can also involve analyzing the Group's contractual relations with the entity, in particular the conditions in which contracts are entered into, contract terms and the management of any conflicts of interest that may arise when the entity's governing body casts votes.

The Group exercised its judgment regarding the following entities and sub-groups:

#### Project management entities in the Middle East

The significant judgments made in determining the consolidation method to be applied to these project management entities concerned the risks and rewards relating to contracts between ENGIE and the entity concerned, as well as an analysis of the residual relevant activities over which the entity retains control after its creation. The Group considers that it has significant influence or joint control over these entities, since the decisions taken throughout the term of the project

about the relevant activities such as refinancing, or the renewal or amendment of significant contracts (sales, purchases, operating and maintenance services), require, depending on the case, the unanimous consent of two or more parties sharing control.

#### SUEZ Group (32.6%)

With effect from July 22, 2013, the date on which the SUEZ shareholders' agreement expired, ENGIE no longer controls SUEZ but exercises significant influence over the company. In particular, this is because: (i) the Group does not have a majority of members on SUEZ's Board of Directors, (ii) at Shareholders' Meetings, although SUEZ's shareholder base is fragmented and ENGIE holds a large interest, past voting shows that ENGIE alone did not have the majority at Ordinary and Extraordinary Shareholders' Meetings between 2010 and 2016 and (iii) the operational transition agreements (essentially relating to a framework agreement governing purchases and IT) were entered into on an arm's length basis.

#### Associates in which the Group holds an interest of less than 20%

##### Cameron Holding LNG LLC (16.6%)

ENGIE entered into a partnership agreement with Sempra (50.2%), Mitsubishi (16.6%) and Mitsui (16.6%) to develop the Cameron LNG project in the United States. Pursuant to these agreements, ENGIE has held a 16.6% stake in the project management entity Cameron Holding LNG LLC since October 1, 2014 and will have a long-term liquefaction capacity of 4 million tons per year (mtpa). Construction work has begun on the project and the facility should be operational for commercial purposes as from 2018.

The agreement grants all shareholders the right to participate in all decisions about the relevant activities, on the basis of qualified majorities. Accordingly, ENGIE has significant influence over this entity, which it has accounted for as an associate.

## Joint ventures in which the Group holds an interest of more than 50%

### Tihama (60%)

ENGIE holds a 60% stake in the Tihama cogeneration plant in Saudi Arabia and its partner Saudi Oger holds 40%. The Group considers that it has joint control over Tihama since the decisions about its relevant activities, including for example preparation of the budget and amendments to major contracts, require the unanimous consent of the parties sharing control.

## Joint control – difference between joint ventures and joint operations

Classifying a joint arrangement requires the Group to use its judgment to determine whether the entity in question is a joint venture or a joint operation. IFRS 11 requires an analysis of “other facts and circumstances” when determining the classification of jointly controlled entities.

The IFRS Interpretations Committee (IFRS IC) (November 2014) decided that for an entity to be classified as a joint operation, other facts and circumstances must give rise to direct enforceable rights to the assets, and obligations for the liabilities, of the joint arrangement.

In view of this position and its application to our analyses, the Group has no material joint operations at December 31, 2016.

## 3.1 Investments in associates

### 3.1.1 Contribution of material associates and of associates that are not material to the Group taken individually

The table hereafter shows the contribution of each material associate along with the aggregate contribution of associates deemed not material taken individually, in the consolidated statement of financial position, income statement, statement of comprehensive income, and the “Dividends received from companies accounted for using the equity method” line of the statement of cash flows.

The Group used qualitative and quantitative criteria to determine material associates. These criteria include the contribution to the consolidated line items “Share in net income/(loss) of associates” and “Investments in associates”, the total assets of associates in Group share, and associates carrying major projects in the study or construction phase for which the related investment commitments are material.

Corporate name	Activity	Capacity	Percentage interest of investments in associates		Carrying amount of investments in associates		Share in net income/(loss) of associates		Other comprehensive income/(loss) of associates		Dividends received from associates	
			Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015
<i>In millions of euros</i>												
SUEZ Group (Other)	Water and waste processing		32.57	33.55	1,906	1,940	139	134	(40)	(123)	119	118
Paiton (Africa/Asia, Indonesia) <sup>(1)</sup>	Coal-fired power plant	2,035 MW	-	40.51	-	851	141	85	21	-	67	44
Energia Sustentável Do Brasil (Latin America, Brazil)	Hydro power plant	3,750 MW	40.00	40.00	774	446	197	(76)	-	-	-	-
Project management entities in the Middle East (Africa/Asia, Saudi Arabia, Bahrain, Qatar, United Arab Emirates, Oman, Kuwait) <sup>(2)</sup>	Gas-fired power plants and seawater desalination facilities				651	547	129	146	52	(41)	99	110
Senoko (Africa/Asia, Singapore)	Gas-fired power plants	3,201 MW	30.00	30.00	355	331	(10)	8	31	9	-	-
GASAG (Europe excluding France & Benelux, Germany) <sup>(3)</sup>	Gas and heat networks		31.58	31.58	231	293	5	11	15	(4)	11	10
Cameron LNG (GEM & LNG, United States)	Gas liquefaction terminal		16.60	16.60	193	162	(6)	(4)	2	(21)	-	-
Canadian renewable energy activities (North America, Canada)	Wind farm	679 MW	40.00	40.00	161	159	13	12	(14)	(3)	21	25
Other investments in associates that are not material taken individually					466	427	63	22	(19)	(13)	38	42
<b>INVESTMENTS IN ASSOCIATES</b>					<b>4,736</b>	<b>5,157</b>	<b>671</b>	<b>338</b>	<b>47</b>	<b>(195)</b>	<b>355</b>	<b>350</b>

(1) The total 40.51% interest in Paiton was sold on December 22, 2016 (see Note 4 "Main changes in Group structure").

(2) Investments in associates operating gas-fired power plants and seawater desalination facilities in the Arabian Peninsula have been grouped together under "Project management entities in the Middle East". This includes around 40 associates operating thermal power plants with a total installed capacity of 23,563 MW (at 100%) and a further 2,481 MW (at 100%) in capacity under construction.

These associates have fairly similar business models and joint arrangements: the project management entities selected as a result of a competitive bidding process develop, build and operate power generation plants and seawater desalination facilities. The entire output of these facilities is sold to government-owned companies under power and water purchase agreements, over periods generally spanning from 20 to 30 years.

In accordance with their contractual arrangements, the corresponding plants are recognized as property, plant and equipment or as financial receivables whenever substantially all of the risks and rewards associated with the assets are transferred to the buyer of the output. This treatment complies with IFRIC 4 and IAS 17. The shareholding structure of these entities systematically includes a government-owned company based in the same country as the project management entity. The Group's percent interest and percent voting rights in each of these entities varies between 20% and 50%.

(3) Share in net income/(loss) of associates excluding the €70 million of impairment losses accounted for at December 31, 2016 by the Group on the net value of its investment in GASAG.

The share in net income/(loss) of associates includes net non-recurring income for a total amount of €27 million in 2016 (compared to net non-recurring income of €3 million in 2015), mainly including changes in

the fair value of derivative instruments and disposal gains and losses, net of taxes (see Note 5.2 "Net recurring income Group share").



## 3.1.2 Financial information regarding material associates

The tables below provide condensed financial information for the Group's main associates. The amounts shown have been determined in accordance with IFRS, before the elimination of intragroup items and after (i) adjustments made in line with Group accounting policies and

(ii) fair value measurements of the assets and liabilities of the associate performed at the date of acquisition at the level of ENGIE, as required by IAS 28. All amounts are presented based on a 100% interest with the exception of "Total equity attributable to ENGIE".

<i>In millions of euros</i>	Revenues	Net income/(loss)	Other comprehensive income/(loss)	Total comprehensive income/(loss)	Current assets	Non-current assets	Current liabilities	Non-current liabilities	Total equity	% interest of Group	Total equity attributable to ENGIE
<b>AT DECEMBER 31, 2016</b>											
SUEZ Group <sup>(1)</sup>	15,322	420	(333)	87	9,086	20,198	10,037	11,881	7,366	32.57	1,906
Paiton	695	349	52	400	-	-	-	-	-	40.51	-
Project management entities in the Middle East	4,004	557	227	784	2,360	24,294	5,302	18,617	2,735	-	651
Energia Sustentável Do Brasil	578	493	-	493	308	6,108	919	3,563	1,934	40.00	774
Senoko	1,125	(34)	102	68	308	2,763	141	1,744	1,185	30.00	355
GASAG <sup>(2)</sup>	1,164	14	48	63	810	1,730	1,592	217	732	31.58	231
Cameron LNG	60	(36)	13	(23)	50	5,167	256	3,801	1,161	16.60	193
Canadian renewable energy activities	172	41	(36)	6	76	1,247	66	857	401	40.00	161
<b>AT DECEMBER 31, 2015</b>											
SUEZ Group <sup>(1)</sup>	15,135	408	58	465	8,039	19,593	9,271	11,555	6,805	33.55	1,940
Paiton	783	210	2	212	486	3,582	381	1,587	2,101	40.51	851
Project management entities in the Middle East	3,857	605	(239)	366	2,337	23,479	3,702	19,864	2,250	-	547
Energia Sustentável Do Brasil	570	(191)	-	(191)	285	4,910	1,380	2,699	1,116	40.00	446
Senoko	1,500	25	29	55	327	2,883	260	1,848	1,103	30.00	331
GASAG	1,054	36	(12)	24	851	1,956	1,674	206	928	31.58	293
Cameron LNG	60	(27)	(125)	(152)	50	3,287	232	2,129	977	16.60	162
Canadian renewable energy activities	174	40	(36)	4	68	1,231	69	832	397	40.00	159

(1) The data indicated in the table for SUEZ correspond to financial information published by SUEZ. Total SUEZ equity attributable to the Group amounts to €5,496 million based on the published financial statements of SUEZ and €5,852 million based on the financial statements of ENGIE. The €356 million difference in these amounts chiefly reflects the fair value measurement of the assets and liabilities of SUEZ at the date the Group changed its consolidation method (July 22, 2013).

(2) Share in net income/(loss) of associates excluding the €70 million of impairment losses accounted for at December 31, 2016 by the Group on the net value of its investment in GASAG.

SUEZ is the only material listed associate. Based on the closing share price at December 31, 2016, the market value of this interest was €2,576 million.

### 3.1.3 Transactions between the Group and its associates

The data below set out the impact of transactions with associates on the Group's 2016 consolidated financial statements.

<i>In millions of euros</i>	Purchases of goods and services	Sales of goods and services	Net financial income (excluding dividends)	Trade and other receivables	Loans and receivables at amortized cost	Trade and other payables	Borrowings and debt
Project management entities in the Middle East	-	313	-	8	384	-	-
Paiton	-	-	30	-	-	-	-
Contassur <sup>(1)</sup>	-	-	-	115	-	-	-
Energia Sustentável Do Brasil	159	-	-	-	62	-	-
Other	20	6	-	9	49	-	-
<b>AT DECEMBER 31, 2016</b>	<b>179</b>	<b>319</b>	<b>30</b>	<b>132</b>	<b>495</b>	<b>-</b>	<b>-</b>

(1) Contassur is a life insurance company accounted for using the equity method. Contassur offers insurance contracts, chiefly with pension funds that cover post-employment benefit obligations for Group employees and also employees of other companies mainly engaged in regulated activities in the electricity and gas sector in Belgium. Insurance contracts entered into by Contassur represent reimbursement rights recorded within "Other assets" in the statement of financial position. These reimbursement rights totaled €115 million at December 31, 2016 (€167 million at December 31, 2015).

## 3.2 Investments in joint ventures

### 3.2.1 Contribution of material joint ventures and of joint ventures that are not material to the Group taken individually

The table below shows the contribution of each material joint venture along with the aggregate contribution of joint ventures deemed not material taken individually, to the consolidated statement of financial

position, income statement, statement of comprehensive income, and the "Dividends received from entities accounted for using the equity method" line of the statement of cash flows.

The Group used qualitative and quantitative criteria to determine material joint ventures. These criteria include the contribution to the lines "Share in net income/(loss) of joint ventures" and "Investments in joint ventures", the Group's share in total assets of joint ventures, and joint ventures conducting major projects in the study or construction phase for which the related investment commitments are material.

Corporate name	Activity	Capacity	Percentage interest of investments in joint ventures		Carrying amount of investments in joint ventures		Share in net income/(loss) of joint ventures		Other comprehensive income/(loss) of joint ventures		Dividends received from joint ventures	
			Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015
<i>In millions of euros</i>												
EcoEléctrica (North America, Puerto Rico)	Combined-cycle gas-fired power plant and LNG terminal	507 MW	50.00	50.00	504	487	38	31	-	-	37	47
Portfolio of power generation assets in Portugal (Europe excluding France & Benelux, Portugal)	Electricity generation	2,895 MW	50.00	50.00	420	388	62	37	1	2	30	-
WSW Energie und Wasser AG (Europe excluding France & Benelux, Germany) <sup>(1)</sup>	Electricity distribution and generation		33.10	33.10	185	194	12	1	-	-	3	6
Tihama Power Generation Co (Africa/Asia, Saudi Arabia)	Electricity generation	1,599 MW	60.00	60.00	136	104	21	30	6	4	-	11
Megal GmbH (Infrastructures Europe, Germany)	Gas transmission network		49.00	49.00	105	112	5	4	-	-	17	23
Maïa Eolis (France Renewable Energies, France) <sup>(2)</sup>	Wind farm		-	49.00	-	96	1	(1)	1	-	-	-
Transmisora Eléctrica del Norte (Latin America, Chile)	Electricity transmission line		50.00	-	79	-	(1)	-	-	-	(5)	-
NELP (North America, United States) <sup>(3)</sup>	Gas-fired power plants	615 MW	50.00	50.00	-	-	-	34	-	-	-	43
Other investments in joint ventures that are not material taken individually					459	439	(46)	(3)	4	(6)	32	23
<b>INVESTMENTS IN JOINT VENTURES</b>					<b>1,888</b>	<b>1,820</b>	<b>92</b>	<b>135</b>	<b>12</b>	<b>-</b>	<b>114</b>	<b>153</b>

(1) The share in net income in WSW Energie und Wasser AG does not include the €21 million of impairment losses accounted for by the Group at December 31, 2016 on the net value of its investment in the joint venture.

(2) Since Maïa Eolis is accounted for under the full consolidation method from May 25, 2016 to December 15, 2016, the amounts presented under this line correspond to the contribution from January 1, 2016 to May 24, 2016 (see Note 4 "Main changes in Group structure").

(3) The 50% interest in NELP is included in the portfolio of power generation assets in the United States classified as "Assets held for sale". Since December 31, 2015, the interest in NELP is recorded under "Assets classified as held for sale". The carrying amount of the Group's interest in NELP amounted to €158 million at December 31, 2016.

The share in net income/(loss) of joint ventures includes non-recurring expenses of €8 million in 2016 (non-recurring expenses of €15 million in 2015), resulting chiefly from changes in the fair value of derivatives,

impairment losses and disposal gains and losses, net of tax (see Note 5.2 "Net recurring income Group share").

### 3.2.2 Financial information regarding material joint ventures

The amounts shown have been determined in accordance with IFRS before the elimination of intragroup items and after (i) adjustments made

in line with Group accounting policies and (ii) fair value measurements of the assets and liabilities of the joint venture performed at the date of acquisition at the level of ENGIE, as required by IAS 28. All amounts are presented based on a 100% interest with the exception of "Total equity attributable to ENGIE" in the statement of financial position.

#### INFORMATION ON THE INCOME STATEMENT AND STATEMENT OF COMPREHENSIVE INCOME

<i>In millions of euros</i>	Revenues	Depreciation and amortization on intangible assets and property, plant and equipment	Net financial income/(loss) <sup>(1)</sup>	Income tax expense	Net income/(loss)	Other comprehensive income/(loss)	Total comprehensive income/(loss)
<b>AT DECEMBER 31, 2016</b>							
EcoEléctrica	309	(66)	(5)	(3)	76	-	76
Portfolio of power generation assets in Portugal	680	(79)	(36)	(38)	179	(2)	177
WSW Energie und Wasser AG <sup>(2)</sup>	1,179	(16)	(4)	(19)	37	-	37
Megal GmbH	115	(55)	(4)	(1)	11	-	11
Tihama Power Generation Co	126	(6)	(29)	(3)	35	11	46
Maia Eolis <sup>(3)</sup>	23	(11)	(1)	(2)	1	3	4
Transmisora Eléctrica del Norte	-	-	(2)	1	(2)	(10)	(12)
NELP	101	(20)	1	-	43	-	43
<b>AT DECEMBER 31, 2015</b>							
EcoEléctrica	320	(72)	(5)	(3)	62	-	61
Portfolio of power generation assets in Portugal	764	(100)	(50)	(46)	110	9	120
WSW Energie und Wasser AG	1,091	(13)	(7)	(12)	5	1	7
Megal GmbH	114	(52)	(5)	2	9	-	9
Tihama Power Generation Co	101	(6)	(22)	(5)	50	7	57
Maia Eolis	42	(26)	(2)	1	(1)	1	(1)
NELP	140	(25)	-	-	68	-	68

(1) Interest income is not material.

(2) The share in net income in WSW Energie und Wasser AG does not include the €21 million impairments losses accounted for by the Group at December 31, 2016 on the net value of its investment in the joint venture.

(3) Since Maia Eolis is accounted for under the full consolidation method from May 25, 2016 to December 15, 2016, the amounts presented under this line correspond to the contribution from January 1, 2016 to May 24, 2016 (see Note 4 "Main changes in Group structure").

## INFORMATION ON THE STATEMENT OF FINANCIAL POSITION

<i>In millions of euros</i>	Cash and cash equivalents	Other current assets	Non-current assets	Short-term borrowings	Other current liabilities	Long-term borrowings	Other non-current liabilities	Total equity	% interest of Group	Total equity attributable to ENGIE
<b>AT DECEMBER 31, 2016</b>										
EcoEléctrica	74	131	959	1	16	108	29	1,009	50.00	504
Portfolio of power generation assets in Portugal <sup>(1)</sup>	275	729	1,699	382	162	1,113	130	917	50.00	420
WSW Energie und Wasser AG <sup>(2)</sup>	37	171	754	33	174	126	95	534	33.10	185
Megal GmbH	24	8	726	3	69	389	84	214	49.00	105
Tihama Power Generation Co	64	108	660	55	27	508	16	227	60.00	136
Transmisora Eléctrica del Norte	29	3	733	1	119	487	-	158	50.00	79
NELP	17	57	284	-	14	-	34	311	50.00	155
<b>AT DECEMBER 31, 2015</b>										
EcoEléctrica	33	137	998	57	31	75	30	975	50.00	487
Portfolio of power generation assets in Portugal	402	258	2,401	519	220	1,203	146	972	50.00	388
WSW Energie und Wasser AG	21	158	805	60	147	124	93	561	33.10	194
Megal GmbH	17	1	711	84	48	279	90	228	49.00	112
Tihama Power Generation Co	37	90	702	70	26	543	17	173	60.00	104
Maia Eolis	56	27	314	21	20	120	40	196	49.00	96
NELP	4	75	296	-	13	-	58	305	50.00	153

(1) Equity Group share amounts to €840 million for the Portuguese sub-group. The share of this €840 million attributable to ENGIE is therefore €420 million.

(2) Equity Group share amounts to €523 million for the WSW Energie und Wasser AG sub-group. The share of this €523 million attributable to ENGIE is therefore €173 million. This amount is increased by an additional share of €12 million in respect of a noncontrolling interest held directly by ENGIE in a subsidiary of this sub-group (and is therefore not included in the €523 million in equity attributable to the owners of the parent).

## 3.2.3 Transactions between the Group and its joint ventures

The data below set out the impact of transactions with joint ventures on the Group's 2016 consolidated financial statements.

<i>In millions of euros</i>	Purchases of goods and services	Sales of goods and services	Net financial income (excluding dividends)	Trade and other receivables	Loans and receivables at amortized cost	Trade and other payables	Borrowings and debt
EcoEléctrica	-	113	-	-	-	-	-
WSW Energie und Wasser AG	15	61	-	3	-	-	-
Megal GmbH	65	-	-	-	-	5	-
Futures Energies Investissements Holding	-	-	-	-	148	-	-
Other	28	-	-	1	118	5	-
<b>AT DECEMBRE 31, 2016</b>	<b>108</b>	<b>174</b>	<b>-</b>	<b>4</b>	<b>266</b>	<b>10</b>	<b>-</b>

### 3.3 Other information on investments accounted for using the equity method

#### 3.3.1 Unrecognized share of losses of associates and joint ventures

Cumulative unrecognized losses of associates (corresponding to the cumulative amount of losses exceeding the carrying amount of investments in the associates concerned) including other comprehensive income/(loss), amounted to €289 million in 2016 (€326 million in 2015). Unrecognized losses relating to fiscal year 2016 amounted to €33 million.

These unrecognized losses mainly correspond to (i) the negative fair value of derivative instruments designated as interest rate hedges ("Other comprehensive income/(loss)") contracted by associates in the Middle East in connection with the financing of construction projects for power generation and seawater desalination plants and (ii) cumulative losses arising on Tirreno Power joint venture.

#### 3.3.2 Commitments and guarantees given by the Group in respect of entities accounted for using the equity method

At December 31, 2016, the main commitments and guarantees given by the Group in respect of entities accounted for using the equity method concern the following three companies and groups of companies:

- Cameron LNG for an aggregate amount of USD 1,664 million (€1,579 million).

Commitments and guarantees given by the Group in respect of this associate correspond to:

- a capital contribution commitment for USD 339 million (€322 million);
- a performance bond for USD 1,230 million (€1,167 million), designed to guarantee the lenders against any risk of non-payment in the event that the project cannot be

completed or enter into operation. At December 31, 2016, debt drawdowns made by Cameron LNG, in respect of the share guaranteed by the Group, amounted to USD 664 million (€631 million) including accrued interest;

- miscellaneous guarantees for a total amount of USD 95 million (€90 million). At December 31, 2016, the Group's net exposure in respect of these guarantees amounted to USD 41 million (€37 million);
- Energia Sustentável do Brasil ("Jirau") for an aggregate amount of BRL 4,484 million (€1,305 million).

At December 31, 2016, the amount of loans granted by Banco Nacional de Desenvolvimento Econômico e Social, the Brazilian Development Bank, to Energia Sustentável do Brasil amounted to BRL 11,209 million (€3,263 million). Each partner stands as guarantor for this debt to the extent of its ownership interest in the consortium;

- the project management entities in the Middle East and Africa, for an aggregate amount of €1,825 million.

Commitments and guarantees given by the Group in respect of these project management entities chiefly correspond to:

- an equity contribution commitment (capital/subordinated debt) for €674 million. These commitments only concern entities acting as holding companies for projects in the construction phase;
- letters of credit to guarantee debt service reserve accounts for an aggregate amount of €218 million. The project financing set up in certain entities can require those entities to maintain a certain level of cash within the company (usually enough to service its debt for six months). This is particularly the case when the financing is without recourse. This level of cash may be replaced by letters of credit;
- collateral given to lenders in the form of pledged shares in the project management entities, for an aggregate amount of €483 million;
- performance bonds and other guarantees for an amount of €450 million.

## NOTE 4 Main changes in group structure

### 4.1 Disposals carried out in 2016

As part of its transformation plan, on February 25, 2016, the Group presented a €15 billion asset disposal program in order to reduce its exposure to high CO<sub>2</sub> emitting activities and merchant activities over the 2016-2018 period.

The table below shows the cumulative impact of the main disposals and sales agreements on the Group's net debt at December 31, 2016:

<i>In millions of euros</i>	Disposal price	Reduction in net debt at Dec. 31, 2016
<b>Transactions finalized in 2016 relating to "Assets held for sale" at December 31, 2015</b>	<b>868</b>	<b>(861)</b>
Disposal of a portion of the portfolio of merchant power generation assets - United States		
• Disposal of the merchant hydropower generation assets	868	(861)
<b>Transactions carried out in 2016</b>	<b>1,916</b>	<b>(2,661)</b>
Disposal of Paiton coal-fired power plants - Indonesia	1,167	(1,359)
Disposal of Meenakshi coal-fired power plants - India	(242)	(142)
Disposal of a 50% interest in Transmisora Eléctrica del Norte (TEN) - Chile	195	(267)
Disposal of a portfolio of Maia Eolis' wind farm assets to Futures Energies Investissements Holding (FEIH) - France	102	(199)
Disposals of "available-for-sale securities"		
• Stake in the Walloon distribution network operator	410	(410)
• Stake in Transportadora de Gas del Perú (TgP)	154	(154)
Reclassification in "Assets held for sale" of Polaniec power plant - Poland		-
<b>Other disposals</b>		<b>(601)</b>
<b>TOTAL</b>		<b>(3,992)</b>

The €3,992 million reduction in net debt at December 31, 2016 is in addition to the €193 million decrease in net debt recognized at December 31, 2015 following the reclassification of the portfolio of merchant power generation assets in the United States in "Assets held for sale".

#### 4.1.1 Disposal of a portion of the portfolio of merchant power generation assets in the United States

At December 31, 2015, the Group considered that the sale of its portfolio of merchant power generation assets in the United States was highly probable in view of the progress made in the divestiture process and, as a result, classified the portfolio in "Assets held for sale" (see Note 4.1 "Assets held for sale" to the 2015 consolidated financial statements). An impairment loss of €1,111 million was recorded at December 31, 2015 in respect of this group of assets held for sale.

At December 31, 2016, the Group finalized the sale of the hydropower generation assets. The remaining assets in the portfolio that were unsold at December 31, 2016, i.e., the thermal merchant power plants, were still classified in "Assets held for sale". On February 7, 2017, the Group finalized the sale of the remaining thermal assets in the United States to Dynegy, for a sale price of USD 3,294 million (see Note 28 "Subsequent Events").

In 2016, the Group recorded additional impairment losses of €238 million corresponding to the difference between the sale prices and carrying amounts of these merchant power plants.

#### 4.1.1.1 Disposal of the merchant hydropower generation assets

On June 1, 2016, the Group finalized the sale of its merchant hydropower generation assets in the United States to PSP Investments (Public Sector Pension Investment Board) for a total amount of USD 968 million (€868 million). These assets represent a total installed capacity of 1.4 GW and are located in Massachusetts and Connecticut.

This transaction resulted in an €861 million reduction in the Group's net debt at December 31, 2016 (i.e., €868 million in consideration received, less transaction fees of €7 million).

#### 4.1.1.2 Thermal merchant power plant portfolio

On February 24, 2016, the Group entered into a sales agreement with a consortium made up of Dynegy and ECP for the sale of the thermal merchant power plant portfolio, representing a total installed capacity of 8.7 GW (at 100%) and operating in Ercot, PJM and New England, for an enterprise value of USD 3.3 billion.

This disposal was finalized on February 7, 2017, subsequent to the closing of the accounts at December 31, 2016. Consequently, the assets and liabilities comprising the thermal merchant power plant portfolio remained classified as "held for sale" at December 31, 2016.

#### 4.1.2 Paiton coal-fired power plants (Indonesia)

On February 24, 2016, the Group entered into an agreement with a group led by Nebras Power for the sale of its entire 40.5% stake in Paiton, which was accounted for using the equity method in the Group's consolidated financial statements. Its power station includes two coal-fired power plants currently in operation with a total capacity of 2 GW.

On December 22, 2016, the Group finalized the sale of its stake in Paiton to the group formed by Nebras Power and Mitsui. The Group received a total payment of USD 1,473 million (€1,376 million) at the date of sale, including USD 262 million (€244 million) corresponding to the repayment of shareholder loans. At December 31, 2016, this transaction resulted in a reduction in net debt of €1,359 million and the recognition of a disposal gain of €225 million, including €157 million recycled from "Other comprehensive income" to the income statement.

#### 4.1.3 Meenakshi coal-fired power plants (India)

The Group also entered into an agreement on February 24, 2016 with the Indian group India Power Corporation Limited (IPCL) for the sale of its entire 89.9% stake in the fully-consolidated entity Meenakshi. The Meenakshi power station includes a plant currently in operation with a capacity of 0.3 GW, and a plant under construction with a planned capacity of 0.7 GW.

On September 30, 2016, the Group finalized the sale to IPCL for negative consideration of €242 million.

Overall, this transaction resulted in a reduction in consolidated net debt of €142 million, corresponding to the derecognition of Meenakshi's net debt totaling €420 million less amounts paid to IPCL and related sales costs of €242 million and €35 million, respectively.

The disposal gain amounted to €84 million, including €48 million in respect of translation adjustments recycled from "Other comprehensive income" to the income statement. In 2015, the Group had recognized a €713 million impairment loss in relation to its Meenakshi assets (see Note 7.2.3 "Energy International's assets" to the 2015 consolidated financial statements).

#### 4.1.4 Disposal of a 50% interest in Transmisora Eléctrica del Norte (TEN) (Chile)

On January 27, 2016, the Group finalized the sale to Red Eléctrica Internacional (via its subsidiary ENGIE Energía Chile, in which the Group holds a 53% interest) of a 50% interest in Transmisora Eléctrica del Norte (TEN), a company responsible for building an electrical transmission line to interconnect Chile's two main electricity networks (SING and SIC).

The Group received a payment of USD 304 million (€272 million), of which USD 218 million (€195 million) corresponded to the sale price for

50% of the TEN shares, and USD 86 million (€77 million) corresponded to the repayment by Red Eléctrica Internacional of 50% of the shareholder's loan granted to TEN.

The Group lost control of this subsidiary as a result of the transaction, and its remaining 50% interest in TEN is now accounted for as a joint venture. The total gain generated on the disposal, including the capital gain on the 50% interest disposal and the revaluation gain on the remaining interest, amounted to USD 234 million (€211 million) in 2016.

#### 4.1.5 Disposals of available-for-sale securities

##### 4.1.5.1 Stake in the Walloon distribution network operator

On December 22, 2016, the Group, via its subsidiary Electrabel, sold its entire residual 25% interest in the capital of Ores Assets, the electricity and gas distribution network operator in Wallonia, to the Belgian public sector for €410 million. The capital gain generated on the disposal of these available-for-sale securities, which amounted to €86 million, was presented under "Other non-recurring items" within "Income from operating activities". The €410 million payment received on December 22, 2016 is presented under "Disposals of available-for-sale securities" in the statement of cash flows.

This transaction marks the end of Electrabel's withdrawal from the management of distribution networks in Belgium. The conclusion of the process in Wallonia is fully in line with previous transactions carried out by the Group in other regions: in Flanders where the Group sold its entire residual interest in the distribution network operators in 2014, and in Brussels, where the Group sold its interest in Sibelga in 2012.

##### 4.1.5.2 Stake in Transportadora de Gas del Perú (TgP)

On December 15, 2016, the Group finalized the sale of its 8.07% stake in Transportadora de Gas del Perú (TgP), a natural gas transportation network operator in Peru. It was jointly acquired by the Canadian Pension Plan Investment Board (CPPIB) and the Spanish group Enagas. The Group received consideration of USD 175 million (€154 million) corresponding to the sale price of its shares in TgP.

The disposal gain amounted to €137 million, including €144 million in respect of fair-value adjustments recognized in "Other comprehensive income" and recycled to the income statement.

##### 4.1.5.3 Stake in Société d'Enrichissement du Tricastin Holding (SETH)

On November 25, 2016, the Group finalized the sale to Areva of its 5% stake in Société d'Enrichissement du Tricastin Holding (SETH), an Areva subsidiary that operates the Georges Besse II (GB II) uranium-enrichment plant in Tricastin. The disposal gain is not material.



## 4.2 Assets held for sale

Total "Assets classified as held for sale" and total "Liabilities directly associated with assets classified as held for sale" amounted to €3,506 million and €300 million, respectively, at December 31, 2016.

The main categories of assets and liabilities reclassified on these two lines of the statement of financial position are detailed below:

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
Property, plant and equipment and intangible assets, net	3,153	4,139
Other assets	353	468
<b>TOTAL ASSETS CLASSIFIED AS HELD FOR SALE</b>	<b>3,506</b>	<b>4,607</b>
Borrowings and debt	-	244
Other liabilities	300	455
<b>TOTAL LIABILITIES DIRECTLY ASSOCIATED WITH ASSETS CLASSIFIED AS HELD FOR SALE</b>	<b>300</b>	<b>699</b>

At December 31, 2016, "Assets held for sale" included, in addition to the thermal merchant power plant portfolio in the United States (see Note 4.1.1), the Polaniec power plant in Poland.

### Polaniec power plant (Poland)

On December 23, 2016, the Group announced that it had signed an agreement with Enea, a state-owned Polish utility company, for the acquisition of 100% of its shares in ENGIE Energia Polska, the owner of the Polaniec power plant in Poland. The plant consists of seven coal units and one biomass unit with a total installed capacity of 1.9 GW.

At December 31, 2016, the Group considered that the sale of these assets was highly probable in view of progress made in the divestiture process and, as a result, classified the power plant in "Assets held for sale".

As the carrying amount of these assets held for sale was €375 million greater than the expected sale price, the Group recognized an impairment loss for the full amount of the difference, of which €139 million against the entire goodwill allocated to the group of assets held for sale, and €237 million against property, plant and equipment of the same group.

The classification in "Assets held for sale" had no impact on consolidated net debt at December 31, 2016.

The Group expects to finalize this transaction during the first half of 2017.

### 4.3 Acquisition of OpTerra Energy Services (United States)

On February 25, 2016, the Group (via its subsidiary Cofely USA) completed the acquisition of 100% of US company OpTerra Energy Services, a specialist in energy services. OpTerra Energy Services helps its customers to manage their energy consumption by offering technological solutions ranging from energy efficiency to renewable energy sources. The acquisition was carried out based on a transaction price of USD 209 million (€187 million).

The accounting for this business combination was complete at December 31, 2016. Goodwill of €158 million was recorded in respect of this acquisition at December 31, 2016.

## 4.4 Transactions in the wind-farm sector in France

In 2016, the Group took control of Maia Eolis. It subsequently sold the portfolio of Maia Eolis' wind farm assets in operation to Futures Energies Investissements Holding (FEIH), its 50/50 joint venture with Crédit Agricole Assurances.

### 4.4.1 Acquisition of a controlling interest in Maia Eolis

On May 25, 2016, the Group finalized its acquisition from Maia Group of 51% of Maia Eolis, a company specialized in the development, construction, operation and maintenance of wind farms in France. The scope of the transaction included a portfolio of wind farm assets representing 246 MW of installed production capacity, in addition to assets under construction or which had obtained planning permission representing a further 250 MW production capacity.

This transaction, which represents an investment of €152 million, enabled the Group to increase its stake in Maia Eolis from 49% to 100%, thereby taking control of a company that had been hitherto accounted for as a joint venture using the equity method. Consequently, Maia Eolis has been fully consolidated in ENGIE's consolidated financial statements since May 25, 2016.

The change in consolidation method for the 49% stake previously held in Maia Eolis gave rise to a revaluation loss of €22 million.

### 4.4.2 Disposal of a portfolio of Maia Eolis' wind farm assets to FEIH

On December 15, 2016, the Group sold the portfolio of Maia Eolis' wind farm assets in operation to FEIH, its 50/50 joint venture with Crédit Agricole Assurances accounted for using the equity method in the Group's consolidated financial statements. The sold portfolio represents 267 MW of installed production capacity and increases FEIH's installed capacity of onshore wind farms from 543 MW to 810 MW.

The Group received a payment of €158 million at the date of sale, of which €102 million corresponded to the sale price of the wind farm asset portfolio to FEIH and €56 million to the repayment of a shareholder's loan.

This transaction resulted in a reduction in net debt of €199 million, corresponding to the derecognition of the net debt attached to the sold portfolio in an amount of €120 million, plus €158 million in consideration received and less the shareholder's loan of €79 million granted by the

Group to FEIH (the shareholders of the joint venture are responsible for financing the transaction).

This transaction had no impact on the Group's consolidated income statement for the year ended December 31, 2016.

## 4.5 Other transactions in 2016

Various other acquisitions, equity investments and disposals took place in 2016, notably in the United States, where the Group acquired Green Charge Networks (GCN), an energy storage company, and a customer portfolio from Guttman Energy, and also in Germany, where the Group took control of Energieversorgung Gera GmbH. Their individual and cumulative impacts on the Group's consolidated financial statements are not significant.

## 4.6 Follow-up of the main changes in Group structure in 2015

### 4.6.1 Acquisition of Solairedirect

On September 3, 2015, the Group finalized its acquisition of a 96.55% stake in Solairedirect, which develops, builds and operates photovoltaic facilities under service contracts. Solairedirect operates production facilities generating some 490 MW, of which 60 MW is generated at directly-operated sites and 430 MW under operations and maintenance contracts.

The Group invested a total of €321 million in the following transactions carried out on September 3, 2015:

- the acquisition of 94.16% of Solairedirect's shares as well as all the share subscription warrants held by the company's executive management for a total of €176 million;
- a simultaneous subscription to a reserved share capital increase for €130 million, increasing the Group's interest in Solairedirect to 96.55%;
- the transaction also includes price adjustment clauses subject to the achievement of operating targets during the two years following the acquisition. At the acquisition date, the fair value of these clauses, estimated at €15 million, was included in Solairedirect's purchase price.

Solairedirect has been fully consolidated since its acquisition date of September 3, 2015.

In the second half of 2016, the Group finalized the recognition of the assets acquired and liabilities assumed at their fair value at the acquisition date. On completion, goodwill on the acquisition amounted to €89 million.

### 4.6.2 Change in the consolidation method applied to Solféa

On December 21, 2015, the Group and BNP Paribas approved an addendum to the shareholders' agreement for Solféa, in which they respectively hold a 55% and 45% stake, resulting in the Group's loss of control. As of this date, the Group's interest in Solféa is accounted for using the equity method.

## NOTE 5 Financial indicators used in financial communication

The purpose of this note is to present the main non-GAAP financial indicators used by the Group as well as their reconciliation with the aggregates of the IFRS consolidated financial statements.

### 5.1 EBITDA <sup>(1)</sup>

The reconciliation between EBITDA and current operating income after share in net income of entities accounted for using the equity method is as follows:

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
<b>CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD</b>	<b>6,172</b>	<b>6,326</b>
Net depreciation and amortization/Other	4,477	4,885
Share-based payments (IFRS 2)	60	50
Non-recurring share in net income of entities accounted for using the equity method	(19)	12
<b>EBITDA</b>	<b>10,689</b>	<b>11,274</b>

(1) Data at December 31, 2016 are presented according to the Group's new EBITDA definition. This now excludes the non-recurring portion of the net income of entities accounted for using the equity method. Comparative data for 2015 have been restated in order to reflect this new definition. EBITDA as published in the financial statements for 2015 amounted to €11,262 million.

### 5.2 Net recurring income Group share

Net recurring income Group share is a financial indicator used by the Group in its financial reporting to present net income Group share adjusted for unusual or non-recurring items.

This financial indicator therefore excludes:

- all items presented between the lines "Current operating income after share in net income of entities accounted for using the equity method" and "Income/(loss) from operating activities", i.e. "Mark-to-market on commodity contracts other than trading instruments", "Impairment losses", "Restructuring costs", "Changes in scope of consolidation" and "Other non-recurring items". These items are defined in Note 1.4.17 "Current operating income";
- the following components of net financial income/(loss): the impact of debt restructuring, compensation payments on the early unwinding of derivative instruments net of the reversal of the fair value of these derivatives that were settled early, changes in the fair value of derivative instruments which do not qualify as hedges under IAS 39 – *Financial Instruments: Recognition and Measurement*, as well as the ineffective portion of derivative instruments that qualify as hedges;
- the income tax impact of the items described above, determined using the statutory income tax rate applicable to the relevant tax entity;
- the deferred tax income of €338 million recorded in 2015 in respect of the recognition of deferred tax assets in Luxembourg (see Note 10.1.2);
- the deferred tax income of €904 million recorded in 2016 in respect of the impact of tax rate change on the deferred balance in France as of January 1, 2020 as approved by the 2017 French Finance Law (see Note 10.1.2);
- net non-recurring items included in "Share in net income of entities accounted for using the equity method". The excluded items correspond to the non-recurring items as defined above.

The reconciliation of net income/(loss) with net recurring income Group share is as follows:

<i>In millions of euros</i>	Notes	Dec. 31, 2016	Dec. 31, 2015
<b>NET INCOME/(LOSS) GROUP SHARE</b>		<b>(415)</b>	<b>(4,617)</b>
Non-controlling interests		579	(496)
<b>NET INCOME/(LOSS)</b>		<b>163</b>	<b>(5,113)</b>
<b>Reconciliation items between CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD and INCOME/(LOSS) FROM OPERATING ACTIVITIES</b>		<b>3,720</b>	<b>9,568</b>
<i>Mark-to-market on commodity contracts other than trading instruments</i>	8.1	(1,254)	261
<i>Impairment losses</i>	8.2	4,192	8,748
<i>Restructuring costs</i>	8.3	476	265
<i>Changes in scope of consolidation</i>	8.4	(544)	46
<i>Other non-recurring items</i>	8.5	850	248
<b>Other adjusted items</b>		<b>(736)</b>	<b>(1,204)</b>
<i>Ineffective portion of derivatives qualified as fair value hedges</i>	9.1	5	8
<i>Gains/(losses) on debt restructuring and early unwinding of derivative financial instruments</i>	9.2	-	122
<i>Change in fair value of derivatives not qualified as hedges</i>	9.3	102	102
<i>Deferred income tax for French tax entities (2017 French Finance Law)</i>		(904)	-
<i>Deferred income tax in Luxembourg</i>		-	(338)
<i>Taxes on non-recurring items</i>		80	(1,110)
<i>Non-recurring income included in share in net income of entities accounted for using the equity method</i>	3	(19)	12
<b>NET RECURRING INCOME</b>		<b>3,147</b>	<b>3,251</b>
Net recurring income attributable to non-controlling interests		670	663
<b>NET RECURRING INCOME GROUP SHARE</b>		<b>2,477</b>	<b>2,588</b>

### 5.3 Industrial capital employed

The reconciliation of industrial capital employed with items in the statement of financial position is as follows:

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
(+) Property, plant and equipment and intangible assets, net	64,378	64,001
(+) Goodwill	17,372	19,024
(-) Goodwill arising on the Gaz de France - SUEZ merger <sup>(1)</sup>	(6,616)	(6,647)
(-) Goodwill arising on the International Power combination <sup>(1)</sup>	(1,833)	(2,036)
(+) IFRIC 4 and IFRIC 12 receivables	1,008	1,042
(+) Investments in entities accounted for using the equity method	6,624	6,977
(-) Goodwill arising on the International Power combination <sup>(1)</sup>	(173)	(168)
(+) Trade and other receivables, net	20,835	19,349
(-) Margin calls <sup>(1, 2)</sup>	(1,691)	(1,054)
(+) Inventories	3,656	4,207
(+) Other current and non-current assets	11,123	9,851
(+) Deferred tax	(5,525)	(6,851)
(+) Cancellation of deferred tax on other recyclable items <sup>(1)</sup>	(477)	(100)
(-) Provisions	(22,208)	(18,835)
(+) Actuarial gains and losses in shareholders' equity (net of deferred tax) <sup>(1)</sup>	2,566	1,894
(-) Trade and other payables	(17,075)	(17,101)
(+) Margin calls <sup>(1, 2)</sup>	771	1,476
(-) Other liabilities	(17,106)	(15,128)
<b>INDUSTRIAL CAPITAL EMPLOYED</b>	<b>55,629</b>	<b>59,899</b>

(1) For the purpose of calculating industrial capital employed, the amounts recorded in respect of these items have been adjusted from those appearing in the statement of financial position.

(2) Margin calls included in "Trade and other receivables, net" and "Trade and other payables" correspond to advances received or paid as part of collateralization agreements set up by the Group to reduce its exposure to counterparty risk on commodity transactions.

### 5.4 Cash flow from operations (CFFO)

The reconciliation of cash flow from operations (CFFO) with items in the statement of cash flows is as follows:

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
Cash generated from operations before income tax and working capital requirements	10,263	10,942
Tax paid	(1,459)	(1,722)
Change in working capital requirements	1,369	1,163
Interests received on non-current financial assets	-	133
Dividends received on non-current financial assets	145	103
Interest paid	(799)	(918)
Interest received on cash and cash equivalents	137	126
Change in financial assets at fair value through income	(257)	296
(+) Change in financial assets at fair value through income recorded in the statement of financial position	267	(286)
<b>CASH FLOW FROM OPERATIONS (CFFO)</b>	<b>9,667</b>	<b>9,836</b>

## 5.5 Capital expenditures (CAPEX)

The reconciliation of capital expenditures (CAPEX) with items in the statement of cash flows is as follows:

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
Acquisitions of property, plant and equipment and intangible assets	6,230	6,459
Acquisitions of controlling interests in entities, net of cash and cash equivalents acquired	411	259
<i>(+) Cash and cash equivalents acquired</i>	80	246
Acquisitions of investments in entities accounted for using the equity method and joint operations	208	241
Acquisitions of available-for-sale securities	391	252
Change in loans and receivables originated by the Group and other	(30)	(245)
<i>(+) Other</i>	-	(1)
Change in ownership interests in controlled entities	26	42
<i>(+) Payments received in respect of the disposal of non-controlling interests</i>	-	(12)
<b>TOTAL CAPITAL EXPENDITURE (CAPEX)</b>	<b>7,315</b>	<b>7,240</b>

## NOTE 6 Segment information

### 6.1 Operating segments and reportable segments

#### 6.1.1 ENGIE's new organizational structure and determination of operating segments

Since January 1, 2016, the Group is organized into 24 Business Units (BUs) primarily based on a region-centered approach within a single country or group of countries.

##### 11 geographic BUs (excluding France)

North America	Asia-Pacific	United Kingdom
Latin America	Middle East, Southern and Central Asia and Turkey	North, South and Eastern Europe
Brazil	China	Generation Europe
Africa	Benelux	

##### 8 BUs in France

France BtoB	France Networks	GRDF	Elengy
France BtoC	France Renewable Energy	GRTgaz	Storengy

##### 5 Global businesses BUs

Exploration & Production	Global Energy Management	GTT
Global LNG	Tractebel	

Each Business Unit corresponds to an "operating segment" whose operational and financial performance are regularly reviewed by the Group's Executive Committee, which is the Group's "chief operating decision maker" within the meaning of IFRS 8.

The Executive Committee monitors the performance of each Business Unit in terms of:

- revenues;
- EBITDA;

- current operating income after share in net income of entities accounted for using the equity method;

- industrial capital employed.

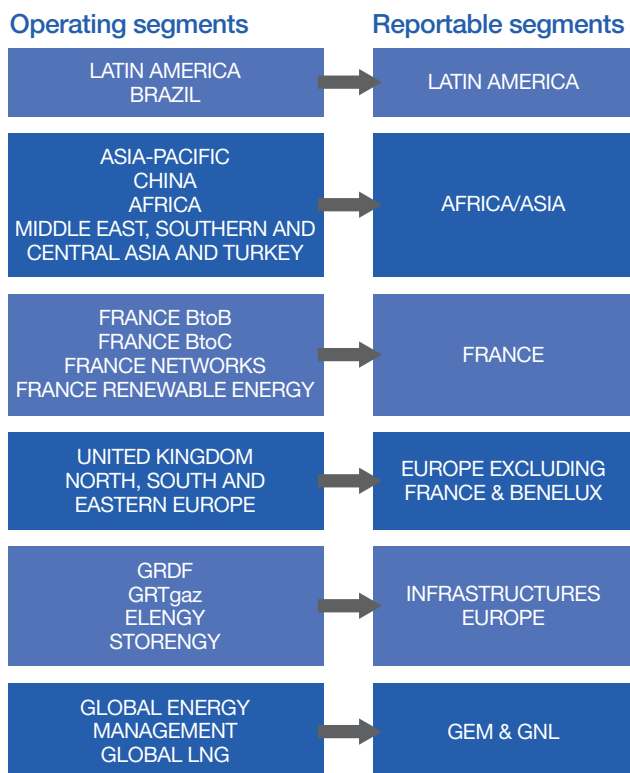
Net financial income and income taxes are monitored at the Group level.

Until December 31, 2015, the Group was organized into the following five operating segments: Energy International, Energy Europe, Global Gas & LNG, Infrastructures and Energy Services.

### 6.1.2 Definition of reportable segments

In accordance with IFRS 8, ENGIE has grouped its operating segments into ten reportable segments to present the Group's segment information:

- three reportable segments corresponding to operating segments: North America, Benelux and Exploration & Production (E&P);
- six reportable segments corresponding to groups of operating segments, broken down as follows:



- a tenth reportable segment called "Other" that comprises operating segments that cannot be grouped together (Tractebel, GTT, Generation Europe, Solairedirect) due to the specificity of their businesses and markets or due to their particular risk profile, as well as the Group's holding and corporate activities.

In order to determine how to group together the operating segments, as set out above, the Group exercised its judgment to decide whether two or more operating segments could be grouped together in the same reportable segment. The following key factors were examined to assess the similarity of the operating segments' economic characteristics:

- regulatory environment;
- economic environment in which the concerned activities operate (market maturity, growth prospects, political risks, etc.);
- risk profiles of the activities;
- how the activities fit into the Group's strategy and new business model.

The Group decided to organize the operating segments within the six reportable segments set out in the diagram above, for the following reasons:

- the Latin America and Brazil operating segments were grouped together within the Latin America reportable segment as these segments share relatively similar growth prospects and a substantial proportion of their revenue is generated by electricity sales under long-term agreements;
- the Asia-Pacific, China, Africa and Middle East, Southern and Central Asia and Turkey operating segments were grouped together within the Africa/Asia reportable segment as all these regions have high power generation requirements and consequently represent significant growth prospects for the Group in the energy and energy services businesses. A substantial proportion of their revenue is also generated by electricity sales under long-term agreements;
- the France BtoB, France BtoC, France Networks and France Renewable Energy operating segments group all the French downstream energy businesses (energy services and gas and electricity sales to BtoB, BtoT and BtoC customers) and the increasingly decentralized renewable energy production. These are complementary businesses that are supported by a well-developed local network and primarily aim to develop a combined offering for local customers: energy services, decentralized production resources and combined gas and electricity supply contracts;
- the United Kingdom and North, South and Eastern Europe operating segments were grouped together within the Europe excluding France & Benelux reportable segment as both BUs have a similar business mix (energy services, production and sales of renewable energy), operate in mature energy markets and are undergoing a transformation as part of the energy transition;
- the GRDF, GRTgaz, Storengy and Elengy operating segments, which comprise the gas infrastructure businesses in Europe (distribution, transport, storage and LNG terminals), were grouped together within the Infrastructures Europe reportable segment as they are all regulated (or pending regulation) businesses with similar risk profiles and margins;
- the Global Energy Management and Global LNG operating segments were grouped together within the GEM & LNG reportable segment as they are both responsible for managing and optimizing the Group's gas supply contracts.

### 6.1.3 Description of reportable segments

- North America:** includes power generation, energy services and natural gas and electricity sales activities in the United States, Canada and Puerto Rico.
- Latin America:** groups together the activities of (i) the Brazil BU and (ii) the Latin America BU (Argentina, Chile, Mexico and Peru). The subsidiaries concerned are involved in the centralized power generation and gas chain businesses, and energy services.
- Africa/Asia:** groups together the activities of the following BUs: (i) Asia-Pacific (Australia, New Zealand, Thailand, Singapore, Indonesia and Laos), (ii) China, (iii) Africa (Morocco, South Africa) and (iv) the Middle East, South and Central Asia and Turkey (including India and Pakistan). In all of these regions, the Group is active in electricity generation and sales, gas distribution and sales, energy services and seawater desalination in the Arabian peninsula.



- **Benelux:** includes the Group's activities in Belgium, the Netherlands and Luxembourg: (i) power generation using its nuclear power plants and renewable power generation facilities, (ii) natural gas and electricity sales and (iii) energy services.
- **France:** groups together the activities of the following BUs: (i) France BtoB: energy sales and services for buildings and industry, cities and regions and major infrastructures, (ii) France BtoC: sales of energy and related services to individual and professional customers, (iii) France Renewable Energy: development, construction, financing, operation and maintenance of all renewable power generation assets in France (excluding Solairedirect) and (iv) France Networks, which designs, finances, builds and operates decentralized energy production and distribution facilities (heating and cooling networks).
- **Europe excluding France & Benelux:** groups together the activities of the following BUs: (i) United Kingdom (management of renewable power generation assets and the portfolio of distribution assets, supply of energy services and solutions, etc.) and (ii) North, South and Eastern Europe (sales of natural gas and electricity and related energy services and solutions, operation of renewable power generation assets, management of distribution networks).
- **Infrastructures Europe:** groups together the GRDF, GRTgaz, Elengy and Storengy BUs, which operate natural gas transportation, storage and distribution networks and facilities, and LNG terminals, mainly in France and Germany. They also sell access rights to these infrastructures to third parties.
- **GEM & LNG:** includes the activities of the Global Energy Management (GEM) and Global LNG BUs. The aim of the GEM BU is to manage and optimize the Group's portfolios of physical and contractual assets (excluding gas infrastructures), particularly on the European market, on behalf of the BUs that hold power generation assets. It is also responsible for sales of energy to major pan-European and national industrial clients, and leverages its expertise in the energy-related financial markets to provide solutions to third parties. The Global LNG BU manages a long-term supply contract portfolio and interests in LNG infrastructures and operates an LNG fleet.
- **E&P:** groups together the Group's activities relating to the exploration, development and operation of oil and gas fields.
- **Other:** includes the activities of the following BUs: (i) Generation Europe, comprising the Group's thermal power generation activities in Europe, (ii) Tractebel (engineering companies specializing in energy,

hydraulics and infrastructures), (iii) GTT (specialized in the design of cryogenic membrane confinement systems for sea transportation and storage of LNG, both on land and at sea), as well as the Group's holding and corporate activities which include the entities centralizing the Group's financing requirements, Solairedirect's activities and the contribution of the associate SUEZ.

The main commercial relationships between the reportable segments are as follows:

- relationships between the "Infrastructures Europe" reportable segment and the users of these infrastructures, i.e. the "GEM & LNG" and "France" reportable segments: services relating to the use of the Group's gas infrastructures in France are billed based on regulated fees applicable to all network users, except for storage infrastructure. The prices for reservation and use of storage facilities are established by storage operators based on a "negotiated access" system;
- relationships between the "GEM & LNG" reportable segment and the "France", "Benelux" and "Europe excluding France & Benelux" reportable segments: the "GEM & LNG" reportable segment manages the Group's natural gas supply contracts and sells gas at market prices to commercial companies within the "France", "Benelux" and "Europe excluding France & Benelux" reportable segments. As regards electricity, GEM manages and optimizes the power stations and sales portfolios on behalf of entities that hold power generation assets and deducts a percentage of the energy margin in return for providing these services. The revenue and margins related to power generation activities (minus the percentage deducted by GEM) are reported by the segments that hold power generation assets ("France", "Benelux", "Europe excluding France & Benelux" and "Generation Europe" within the "Other" reportable segment);
- relationships between the "Generation Europe" segment, which is part of the "Other" reportable segment, and the commercial entities in the "France", "Benelux" and "Europe excluding France & Benelux" reportable segments: a portion of the power generated by the thermal assets within the "Generation Europe" BU is sold to commercial entities from these segments at market prices.

Due to the variety of its businesses and their geographical location, the Group serves a very diverse range of situations and customer types (industry, local authorities and individual customers). Accordingly, no external customer represents individually 10% or more of the Group's consolidated revenues.

## 6.2 Key indicators by reportable segment

The recognition and measurement methods used for internal reporting purposes reviewed by the Executive Committee are the same as those used to prepare the consolidated financial statements. EBITDA, industrial capital employed and capital expenditure (CAPEX) are

reconciled with the consolidated financial statements in Note 5 “Financial indicators used in financial communication”.

- Comparative segment information for 2015 has been restated in order to present this information in accordance with the new segment structure introduced by the Group on January 1, 2016.

### Revenues

<i>In millions of euros</i>	Dec. 31, 2016			Dec. 31, 2015		
	External revenues	Intra-Group Revenues	Total	External revenues	Intra-Group Revenues	Total
North America	3,814	39	3,853	3,673	-	3,673
Latin America	4,075	1	4,076	4,197	-	4,197
Africa/Asia	3,804	4	3,808	4,244	-	4,244
Benelux	9,044	1,230	10,274	8,732	1,082	9,813
France	20,332	383	20,714	20,248	381	20,629
Europe excluding France & Benelux	8,118	112	8,230	8,491	346	8,837
Infrastructures Europe	3,267	3,495	6,762	3,027	3,558	6,585
GEM & LNG	8,981	6,979	15,959	11,320	8,162	19,482
E&P	1,799	110	1,909	2,242	164	2,406
Others	3,405	1,308	4,712	3,710	1,918	5,628
Elimination of internal transactions	-	(13,659)	(13,659)	-	(15,610)	(15,610)
<b>TOTAL REVENUES</b>	<b>66,639</b>	<b>-</b>	<b>66,639</b>	<b>69,883</b>	<b>-</b>	<b>69,883</b>

### EBITDA <sup>(1)</sup>

<i>In millions of euros</i>	Dec. 31, 2016	Dec. 31, 2015
North America	475	633
Latin America	1,696	1,563
Africa/Asia	1,162	1,237
Benelux	755	445
France	1,315	1,274
Europe excluding France & Benelux	612	559
Infrastructures Europe	3,459	3,381
GEM & LNG	3	196
E&P	1,198	1,514
Others	15	472
<b>TOTAL EBITDA</b>	<b>10,689</b>	<b>11,274</b>

(1) Data at December 31, 2016 are presented according to the Group's new EBITDA definition. This now excludes the non-recurring portion of the net income of entities accounted for using the equity method. Comparative data for 2015 have been restated in order to reflect this new definition. EBITDA as published in the financial statements for 2015 amounted to €11,262 million.

## Depreciation and amortization

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
North America <sup>(1)</sup>	(48)	(294)
Latin America	(410)	(387)
Africa/Asia	(235)	(263)
Benelux	(381)	(353)
France	(612)	(562)
Europe excluding France & Benelux	(203)	(205)
Infrastructures Europe	(1,390)	(1,325)
GEM & LNG	(74)	(85)
E&P	(569)	(823)
Others	(462)	(442)
<b>TOTAL DEPRECIATION AND AMORTIZATION</b>	<b>(4,385)</b>	<b>(4,740)</b>

(1) The decrease in depreciation and amortization for North America is mainly due to the classification in "Assets held for sale" of the portfolio of merchant power generation assets in the United States at December 31, 2015.

## Share in net income of entities accounted for using the equity method

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
North America	63	92
Latin America	197	(81)
Africa/Asia	312	286
Benelux	2	-
France	(22)	(6)
Europe excluding France & Benelux	60	63
Infrastructures Europe	11	9
GEM & LNG	1	4
E&P	12	14
Others	127	91
<i>Of which share in net income of SUEZ</i>	<i>139</i>	<i>134</i>
<b>TOTAL SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD</b>	<b>764</b>	<b>473</b>

Associates and joint ventures account for €671 million and €92 million respectively of share in net income of entities accounted for using the equity method at December 31, 2016, compared to €338 million and €135 million at December 31, 2015.

### Current operating income/(loss) after share in net income of entities accounted for using the equity method

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
North America	430	332
Latin America	1,284	1,175
Africa/Asia	923	972
Benelux	371	91
France	695	709
Europe excluding France & Benelux	410	341
Infrastructures Europe	2,068	2,054
GEM & LNG	(74)	110
E&P	536	546
Others	(472)	(4)
<b>TOTAL CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD</b>	<b>6,172</b>	<b>6,326</b>

### Industrial capital employed

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
North America	1,520	1,247
Latin America	8,793	7,754
Africa/Asia	5,520	6,472
Benelux	(2,552)	(466)
France	5,304	5,989
Europe excluding France & Benelux	4,720	5,221
Infrastructures Europe	19,693	18,975
GEM & LNG	1,330	2,576
E&P	2,855	2,571
Others	8,445	9,561
<i>Of which SUEZ equity value</i>	1,977	1,974
<b>TOTAL INDUSTRIAL CAPITAL EMPLOYED</b>	<b>55,629</b>	<b>59,899</b>

To ensure the comparability of financial information, the figures presented by segment at December 31, 2015 have been restated and include goodwill reallocations to the new goodwill CGUs (see Note 12.2 "Goodwill CGUs") as they were recorded at January 1, 2016 following the reorganization of the Group.

### Capital expenditure (Capex)

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
North America	519	283
Latin America	1,037	1,140
Africa/Asia	212	257
Benelux	680	600
France	1,083	886
Europe excluding France & Benelux	169	290
Infrastructures Europe	1,552	1,551
GEM & LNG	127	57
E&P	940	1,027
Others	997	1,150
<b>TOTAL CAPITAL EXPENDITURE (CAPEX)</b>	<b>7,315</b>	<b>7,240</b>

### 6.3 Key indicators by geographic area

The amounts set out below are analyzed by:

- destination of products and services sold for revenues;
- geographic location of consolidated companies for industrial capital employed.

<i>In millions of euros</i>	Revenues		Industrial capital employed	
	Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015
France	24,946	25,066	29,721	30,320
Belgium	9,359	9,067	(1,326)	1,321
Other EU countries	16,256	18,507	8,827	10,753
Other European countries	1,664	2,103	686	735
North America	4,691	4,592	1,906	1,589
Asia, Middle East & Oceania	5,531	6,165	6,347	7,126
South America	3,857	4,076	8,598	7,478
Africa	334	306	870	577
<b>TOTAL</b>	<b>66,639</b>	<b>69,883</b>	<b>55,629</b>	<b>59,899</b>

**NOTE 7** Current operating income**7.1 Revenues**

Group revenues break down as follows:

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
Energy sales	45,789	49,455
Rendering of services	20,349	19,712
Lease and construction contracts	501	716
<b>REVENUES</b>	<b>66,639</b>	<b>69,883</b>

“Lease and construction contracts” mainly include operating lease revenues for €412 million (€632 million in 2015).

**7.2 Personnel costs**

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
Short-term benefits	(9,697)	(9,669)
Share-based payments (see Note 23)	(60)	(50)
Costs related to defined-benefit plans (see Note 19.3.4)	(337)	(314)
Costs related to defined-contribution plans (see Note 19.4)	(137)	(134)
<b>PERSONNEL COSTS</b>	<b>(10,231)</b>	<b>(10,168)</b>

**7.3 Depreciation, amortization and provisions**

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
Depreciation and amortization (see Notes 13 and 14)	(4,385)	(4,740)
Net change in write-downs of inventories, trade receivables and other assets	(178)	(208)
Net change in provisions (see Note 18)	(306)	(59)
<b>DEPRECIATION, AMORTIZATION AND PROVISIONS</b>	<b>(4,869)</b>	<b>(5,007)</b>

At December 31, 2016, depreciation and amortization mainly break down as €770 million for intangible assets and €3,627 million for property, plant and equipment. A breakdown by type of asset is provided in Note 13 “Intangible assets” and Note 14 “Property, plant and equipment”, respectively.

## NOTE 8 Income/(loss) from operating activities

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
<b>CURRENT OPERATING INCOME AFTER SHARE IN NET INCOME OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD</b>	<b>6,172</b>	<b>6,326</b>
Mark-to-market on commodity contracts other than trading instruments	1,254	(261)
Impairment losses	(4,192)	(8,748)
Restructuring costs	(476)	(265)
Changes in scope of consolidation	544	(46)
Other non-recurring items	(850)	(248)
<b>INCOME/(LOSS) FROM OPERATING ACTIVITIES</b>	<b>2,452</b>	<b>(3,242)</b>

### 8.1 Mark-to-market on commodity contracts other than trading instruments

In 2016, this item represents net income of €1,254 million, compared with a net expense of €261 million in 2015. It mainly reflects the changes in the fair value of (i) electricity and natural gas sale and purchase

contracts falling within the scope of IAS 39 and (ii) financial instruments used as economic hedges but not eligible for hedge accounting.

This income is mainly due to (i) a positive price effect related to changes in the forward prices of the underlying commodities, as well as (ii) the positive impact of the settlement of positions over the period with a negative fair value at December 31, 2015.

### 8.2 Impairment losses

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
<b>Impairment losses:</b>		
Goodwill	(1,690)	(2,628)
Property, plant and equipment and other intangible assets	(2,485)	(5,731)
Investments in entities accounted for using the equity method and related provisions	(98)	(188)
Financial assets and other	(49)	(214)
<b>TOTAL IMPAIRMENT LOSSES</b>	<b>(4,321)</b>	<b>(8,761)</b>
<b>Reversal of impairment losses:</b>		
Property, plant and equipment and other intangible assets	127	7
Financial assets	2	6
<b>TOTAL REVERSALS OF IMPAIRMENT LOSSES</b>	<b>130</b>	<b>13</b>
<b>TOTAL</b>	<b>(4,192)</b>	<b>(8,748)</b>

Net impairment losses recognized at December 31, 2016 amounted to €4,192 million, primarily relating to the following CGUs: Benelux (€1,437 million), Generation Europe (€660 million), France Renewable Energy (€421 million), North America (€357 million) and Global Energy

Management (€352 million). After taking into account the deferred tax effects and the share of impairment losses attributable to non-controlling interests, the impact of these impairment losses on net income Group share for 2016 amounts to €3,812 million.

Impairment losses recognized against goodwill, property, plant and equipment, intangible assets and investments in entities accounted for using the equity method at December 31, 2016 can be analyzed as follows:

<i>In millions of euros</i>	Location	Impairment losses on goodwill	Impairment losses on property, plant and equipment and intangible assets	Impairment losses on entities accounted for using the equity method and related provisions	Total impairment losses	Valuation method	Discount rate
<b>Benelux goodwill CGU</b>		<b>(1,362)</b>	<b>(68)</b>	-	<b>(1,430)</b>		
Drilling rig	Netherlands		(46)			Fair value	
Other			(22)				
<b>Generation Europe goodwill CGU</b>		<b>(139)</b>	<b>(520)</b>	-	<b>(659)</b>		
Thermal power plants			(520)				
	Poland	(139)	(237)			Fair value less costs to sell	
	Netherlands		(168)			Value-in-use - DCF	7.4%
	Germany		(59)			Value-in-use - DCF	7.3%
	France/Italy/United-Kingdom		(56)			Value-in-use - DCF	6.5% - 7.5%
<b>France Renewable Energy goodwill CGU</b>		-	<b>(419)</b>	-	<b>(419)</b>		
Hydropower generation asset			(414)			Value-in-use - DCF	7.8%
Other			(5)				
<b>North, South and Eastern Europe goodwill CGU</b>		-	<b>(148)</b>	<b>(91)</b>	<b>(239)</b>		
Power generation assets	Poland		(119)			Value-in-use - DCF	9.5%
Interests in groups present across the gas chain	Germany			(91)			
Other			(29)				
<b>North America goodwill CGU</b>		-	<b>(357)</b>	-	<b>(357)</b>		
Portfolio of merchant power generation assets	United States		(238)			Fair value less costs to sell	
LNG terminal	United States		(53)			Value-in-use - DCF	6.7%
Power generation assets	United States/Canada		(66)			Value-in-use - DCF	3.9% - 7.5%
<b>Latin America goodwill CGU</b>		-	<b>(109)</b>	-	<b>(109)</b>		
Hydropower generation asset	Chile		(72)			Value-in-use - DCF	8.0%
Other			(37)				
<b>Exploration &amp; Production (E&amp;P) goodwill CGU</b>		-	<b>(189)</b>	-	<b>(189)</b>		
Exploration-production assets	North Sea/ Egypt/ Indonesia		(154)			Value-in-use - DCF	6.6% - 13.9%
Exploration-production licenses	Algeria		(35)			Fair value	
<b>GTT goodwill CGU</b>		<b>(161)</b>			<b>(161)</b>		
Goodwill	France	(161)				Fair value	
<b>Global LNG goodwill CGU</b>		<b>(24)</b>	<b>(153)</b>	-	<b>(177)</b>		
LNG carriers			(141)			Fair value	
Other			(12)				
<b>Global Energy Management (GEM) CGU</b>		-	<b>(350)</b>	-	<b>(350)</b>		
Drawing rights on power generation assets	Italy		(225)			Value-in-use - DCF	7.5%
Portfolio of long-term supply contracts			(83)			Value-in-use - DCF	5.7% - 9.6%
Other			(42)				
Other impairment losses		(4)	(172)	(7)	(183)		
<b>TOTAL AT DECEMBER 31, 2016</b>		<b>(1,690)</b>	<b>(2,485)</b>	<b>(98)</b>	<b>(4,273)</b>		



### 8.2.1 Economic conditions in the power generation industry in Europe

The merchant power generation business in Europe is faced with challenging market conditions, with electricity prices falling over the short term and persistently poor economic conditions over the medium- to long-term.

Against this backdrop, and given the latest available forecasts, the Group has significantly downgraded its reference scenario for medium- to long-term electricity prices in Europe, as well as the margins captured by thermal power plants. The change is due mainly to an upward revision of the share of renewable energy capacity in the European energy mix, coupled with a downward revision of fuel price forecasts.

In view of the updated price scenario and the resulting deterioration in financial projections, the Group recognized impairment losses against the Benelux CGU (see Note 8.2.3), the France Renewable Energy and Generation Europe CGUs (see Note 8.2.5).

### 8.2.2 Information on cash flow projections used in impairment tests

In most cases, the recoverable value of CGUs is determined by reference to a value in use that is calculated based on cash flow projections drawn from the 2017 budget and from the 2018-2019 medium-term business plan, as approved by the Executive Committee and the Board of Directors, and on extrapolated cash flows beyond that time frame.

Cash flow projections are determined on the basis of macroeconomic assumptions (inflation, exchange rates and growth rates) and price forecasts resulting from the Group's reference scenario for 2016-2040. The forecasts that feature in the reference scenario were approved by the Executive Committee in December 2016. The forecasts and projections included in the reference scenario were determined on the basis of the following inputs:

Activities	Assumptions applied beyond the term of the business plan
Nuclear power generation in Belgium	For Doel 1, Doel 2 and Tihange 1, cash flow projection over a useful life of 50 years. For the second generation reactors (Doel 3, Doel 4, Tihange 2 and Tihange 3), cash flow projection over 40 years, then extension of the operating life of half of this power plant portfolio for a period of 20 years.
Drawing rights on Chooz B and Tricastin power plants	Cash flow projection over the remaining term of existing contracts plus assumption that drawing rights will be extended for a further ten years.
Marketing and sales activities	Cash flow projections to 2022 then application of an exit value based on normative cash flow using a long-term growth rate of 1.9%.

- forward market prices over the liquidity period for fuel (coal, oil and gas), CO<sub>2</sub> and electricity on each market;
- beyond this period, medium- and long-term energy prices were determined by the Group based on macroeconomic assumptions and fundamental supply and demand equilibrium models, the results of which are regularly compared against forecasts prepared by external energy sector specialists. Long-term projections for CO<sub>2</sub> prices are those presented in the “Canfin, Grandjean et Mestrallet” report published in July 2016. More specifically, medium- and long-term electricity prices were determined by the Group using electricity demand forecasting models, medium- and long-term forecasts of fuel and CO<sub>2</sub> prices, and expected trends in installed capacity and in the technology mix of the production assets within each power generation system.

### 8.2.3 Impairment on Benelux CGU goodwill

The total amount of goodwill allocated to this CGU prior to the 2016 impairment test was €5,601 million. The Benelux CGU includes the Group's activities in Belgium, the Netherlands and Luxembourg: (i) power generation activities using its nuclear power plants and wind farms, (ii) natural gas and electricity sales activities, and (iii) energy services activities, as well as drawing rights on the Chooz B and Tricastin power plants.

#### Key assumptions used for the impairment test

The 2016 value in use of the activities included in this CGU was calculated using the cash flow projections drawn up on the basis of the 2017 budget and the 2018-2019 medium-term business plan, as approved by the Executive Committee and the Board of Directors. Cash flow projections for the period beyond the medium-term business plan were determined as described below:

The discount rates applied to these cash flows ranged from 5.5% to 9.1%, depending on the risk profiles of each business activity.

Key assumptions used for impairment tests for the Benelux goodwill CGU included expected changes in the regulatory environment, changes in the price of electricity, changes in demand for gas and electricity, and discount rates.

The most important assumptions concerning the Belgian regulatory environment relate to the operating life of existing nuclear reactors and the level of royalties and nuclear contributions paid to the Belgian State.

In order to ensure the security of supply in Belgium, the operating life of the Tihange 1, Doel 1 and Doel 2 reactors was extended for a period of 10 years until 2025. The law of January 31, 2003 on the gradual phase-out of nuclear power was amended accordingly in January 2014 (Tihange 1) and July 2015 (Doel 1 and 2). In addition, the agreement entered into with the Belgian government in November 2015 came into effect on December 29, 2016. This agreement provides for annual royalties totaling €20 million for the extension of the Doel 1 and Doel 2 reactors, as well as new conditions for determining the nuclear contribution applicable to second-generation reactors (Doel 3 and 4 and Tihange 2 and 3) through their 40th year of operation.

The impairment test carried out in 2016 therefore took into account the impacts of this law, i.e., the 10-year extension of the two reactors, capital expenditure required for the extension, the payment of annual royalties totaling €20 million in respect of said extension, as well as the new conditions for determining the Belgian nuclear contribution, as defined in the December 29, 2016 law.

As regards second-generation reactors, in December 2013 the previous government confirmed the principle of a gradual phase-out of nuclear power, with the shutdown of Doel 3 in 2022, Tihange 2 in 2023, and Tihange 3 and Doel 4 in 2025, after 40 years of operation. The principle and schedule were reaffirmed in the law of June 18, 2015.

However, in view of (i) the extension of the operating life of Tihange 1, Doel 1 and Doel 2 beyond 40 years, (ii) the importance of nuclear power generation in the Belgian energy mix, (iii) the lack of a sufficiently detailed and attractive industrial plan enticing energy utilities to invest in replacement thermal capacity, and (iv) CO<sub>2</sub> emissions reduction targets, the Group considers that nuclear power will still be needed to guarantee the energy equilibrium in Belgium after 2025. Accordingly, in calculating value in use, the Group assumes a 20-year extension of the operating life of half of its second-generation reactors, while taking into account a mechanism of nuclear contributions to be paid to the Belgian government.

In France, the Group included an assumption that its drawing rights on the Tricastin and Chooz B nuclear plants expiring in 2021 and 2037, respectively, would be extended by 10 years. Although no such decision has been taken by the government and the nuclear safety authority, the Group considers that extending the reactors' operating life is the most credible and likely scenario at this point in time. This is also consistent

with the expected French energy mix featured in the Group's reference scenario.

### Results of the impairment test

Given the downward revision of the cash flow projections due to the economic conditions described in Note 8.2.1, and the negative effects of the test on the margin due to the upward revision of provisions for dismantling the Belgian nuclear power plants (see Note 18.2), the recoverable amount of the Benelux CGU was €1,362 million lower than its carrying amount at December 31, 2016. The Group therefore recognized an impairment loss of €1,362 million, entirely against goodwill. After the impairment loss, the carrying amount of the residual goodwill was €4,239 million.

### Sensitivity analyses

A decrease of €10/MWh in electricity prices for nuclear power generation would lead to an additional impairment loss of €1,890 million. Conversely, if prices increased by €10/MWh, the recoverable amount would be higher than the carrying amount.

An increase of 50 basis points in the discount rates used would lead to an additional impairment loss of €400 million while a decrease of 50 basis points would reduce impairment by €440 million.

Various transformational scenarios were considered concerning nuclear power generation in Belgium:

- the disappearance of the entire nuclear component from the portfolio in 2025 after 50 years of operation in the case of Tihange 1, Doel 1 and Doel 2, and 40 years of operation for the second-generation reactors would have a strongly adverse impact on the results of the test, with the recoverable amount falling significantly below the carrying amount. In this scenario, the impairment risk would represent around €2,800 million;
- if the life of half of the second-generation reactors were to be extended by 10 years and the entire nuclear component subsequently disappear, the recoverable amount would fall below the carrying amount and the impairment risk would represent €1,300 million.

### 8.2.4 Impairment on GTT CGU goodwill

GTT is a listed subsidiary specialized in the design of cryogenic membrane containment systems for sea transportation and storage of LNG, both onshore and offshore.

At June 30, 2016, the Group recognized an impairment loss of €161 million against the goodwill allocated to the GTT CGU following the fall in GTT's share price, based on the market price at June 30, 2016. At December 31, 2016, the change in share price did not lead to any additional impairment.

A 10% fall in the share price relative to the December 31, 2016 price would not lead to any additional goodwill impairment.

### 8.2.5 Impairment losses on property, plant and equipment and intangible assets

Net impairment losses recognized at December 31, 2016 amounted to €2,485 million, primarily relating to:

#### SHEM's hydropower generation assets (France Renewable Energy CGU)

Given the fall in forward electricity prices and electricity price forecasts in France, the Group recognized an impairment loss of €416 million against SHEM's hydropower generation assets.

A decrease of €10/MWh in electricity prices would lead to an additional impairment loss of €100 million against these assets. Conversely, an increase of €10/MWh would reduce impairment by €100 million.

A 50 basis point increase in the discount rate used would lead to an additional impairment loss totaling €27 million, while a 50 basis point decrease would reduce impairment by €35 million.

The conditions for determining value in use and, in particular, the key assumptions underlying the test are described in Note 12.3.4.

#### Generation Europe CGU assets

At December 31, 2016, the Group classified the Polaniec power plant in Poland as "Assets held for sale" (see Note 4.2). As the carrying amount was €375 million greater than the expected sale price, the Group recognized an impairment loss of €375 million at December 31, 2016, of which €139 million against the entire goodwill allocated to the assets held for sale, and €237 million against property, plant and equipment and intangible assets.

The Group also recognized a €283 million impairment loss against its thermal power plants in Europe, broken down as follows:

- €166 million for a gas-fired power plant in the Netherlands, due to the downward revision of forecast captured margins over the long term;
- €36 million for coal-fired power plants in Germany, mainly due to the decision to mothball a power plant;
- €19 million for a coal-fired power plant in the United Kingdom following the Group's decision in the first half of 2016 to close this plant earlier than scheduled.

#### Exploration & Production CGU assets

At December 31, 2016, impairment losses against the E&P CGU's production assets and exploration licenses amounted to €189 million. Most of these impairment losses were recognized at June 30, 2016 and were due mainly to the downward revision of natural gas and Brent crude oil price forecasts over the assets' expected operating lives.

The value in use of these assets was calculated using the cash flow forecasts for the assets' operating life drawn up by management.

#### Global Energy Management (GEM) CGU assets

At December 31, 2016, the Group recognized impairment losses of €225 million against drawing rights on power facilities in Italy, corresponding to the entire carrying amount of the asset.

The Group also recognized impairment losses of €83 million against a portfolio of long-term natural gas supply contracts that had been recognized as intangible assets following the merger with Gaz de France in 2008, corresponding to the entire carrying amount of these contracts which was zero at December 31, 2016.

#### Other impairment losses

Other impairment losses recognized by the Group mainly concern:

- the portfolio of merchant power generation assets in the United States, classified as "Assets held for sale" since December 31, 2015 (€238 million), as the fair value less costs to sell was lower than the carrying amount of the groups of assets held for sale;
- LNG carriers (€141 million), due to the difficult conditions in the LNG market;
- wind farm assets in Poland (€119 million) following a fall in the prices of electricity and green certificates;
- a hydropower generation plant in Chile (€72 million);
- a drilling rig in the Benelux region (€46 million) following the expiration of the operating agreement, in a challenging market environment for exploration-production activities.

## 8.2.6 Impairment losses recognized in 2015

Impairment losses recognized against goodwill, property, plant and equipment and intangible assets at December 31, 2015 amounted to €8,547 million and can be analyzed as follows:

<i>In millions of euros</i>	Location	Impairment losses on goodwill	Impairment losses on property, plant and equipment and intangible assets	Impairment losses on entities accounted for using the equity method and related provisions	Total impairment losses	Valuation method	Discount rate
<b>Global Gas &amp; LNG goodwill CGU</b>		<b>(1,619)</b>	<b>(2,541)</b>	-	<b>(4,160)</b>	Value-in-use - DCF	6.5% - 13.5%
Exploration-production assets			(2,454)		-	Value-in-use - DCF	Multiple of reserves
Exploration-production licenses	Qatar		(87)		-	Fair value	
<b>Energy - North America goodwill CGU</b>		<b>(927)</b>	<b>(405)</b>	-	<b>(1,331)</b>		
Portfolio of merchant power generation assets		(911)	(200)		-	Fair value less costs to sell	
Regasification terminal	United States		(195)		-	Value-in-use - DCF	6.95%
Other		(16)	(9)		-		
<b>Energy - Latin America goodwill CGU</b>		-	<b>(54)</b>	<b>(188)</b>	<b>(242)</b>		
Share in a regasification terminal	Uruguay			(188)	-	Fair value	
Other property, plant and equipment and intangible assets			(54)		-		
<b>Energy - Asia-Pacific goodwill CGU</b>		-	<b>(1,009)</b>	-	<b>(1,009)</b>		
Power plant	India		(1,009)		-	Value-in-use - DCF	7.8%
<b>Energy - South Asia, Middle East and Africa goodwill CGU</b>		<b>(83)</b>	<b>(630)</b>	-	<b>(713)</b>		
Thermal power plant		(83)	(630)		-		11.85%
<b>Energy - United Kingdom - Turkey goodwill CGU</b>		-	<b>(151)</b>	-	<b>(151)</b>		
Thermal power plant	United Kingdom		(151)		-	Value-in-use - DCF	6.4%
<b>Energy - Central Western Europe goodwill CGU</b>		-	<b>(550)</b>	-	<b>(550)</b>		
GDF Gaz de France brand	France		(455)		-	Value-in-use - DCF	8.6%
Customer relations intangible asset	France		(95)		-	Value-in-use - DCF	8.6%
<b>Other impairment losses in Europe</b>		-	<b>(194)</b>	-	<b>(194)</b>		
Thermal power plant			(194)		-	Value-in-use - DCF	7.7% - 8.6%
<b>Other impairment losses</b>		-	<b>(197)</b>	-	<b>(197)</b>		
<b>TOTAL AT DECEMBER 31, 2015</b>		<b>(2,628)</b>	<b>(5,731)</b>	<b>(188)</b>	<b>(8,547)</b>		

Including writedowns of financial assets, total impairment losses (net of reversals) for 2015 amounted to €8,748 million. After taking into account the deferred tax effects and the share of impairment losses attributable to non-controlling interests, the impact of these impairment losses on 2015 net income Group share amounted to €6,761 million.

The annual impairment tests took account of the particularly challenging environment for the oil and gas production business, which was affected by the slump in natural gas and oil prices. In light of these market conditions as well as the analysis of market fundamentals, the Group significantly lowered its reference scenario for long- and medium-term commodity price projections.

The LNG business was also badly affected by the sudden downturn in LNG market conditions, caused by a slowdown in demand for LNG in Asia and an influx of supply on the market due to the commissioning of new liquefaction capacities in Australia and the United States during the 2015-2017 period.

### 8.3 Restructuring costs

Restructuring costs totaled €476 million in 2016, mainly including:

- costs related to decisions to shut down production and close some entities, premises and power plants (€230 million);
- costs related to various staff reduction plans implemented as part of the Group's transformation program, as well as measures to adapt to economic conditions (€154 million); and
- various other restructuring costs (€90 million), including external costs related to the Group's corporate brand change.

In 2015, restructuring costs totaled €265 million, including €47 million of external costs related to the corporate brand change, as well as costs incurred to adapt to economic conditions (€54 million for France, €61 million for Benelux and €57 million for Europe excluding France & Benelux).

### 8.4 Changes in scope of consolidation

In 2016, this item amounted to a positive €544 million, and mainly comprised:

- a €225 million gain on the disposal of the Group's 40.5% interest in Paiton, in Indonesia including €157 million in respect of items of other comprehensive income recycled to the income statement (see Note 4.1.2);
- a €211 million gain on the disposal of a 50% interest in subsidiary Transmisora Eléctrica del Norte (TEN) in Chile (see Note 4.1.4);
- a €84 million gain on the disposal of the Group's 89.9% interest in Meenakshi in India, including €48 million in respect of translation adjustments recognized in "Other comprehensive income" and recycled to the income statement (see Note 4.1.3).

In 2015, this item amounted to a negative €46 million, and mainly comprised the €47 million loss on the sale of GDF Suez Energia Magyarország Zrt.'s activities in Hungary, of which €40 million in respect of translation adjustments recognized in "Other comprehensive income" and recycled to the income statement.

### 8.5 Other non-recurring items

In 2016, this item mainly comprised a net expense of €584 million related to additions to provisions for nuclear waste processing and storage under the triennial revision of nuclear provisions in Belgium (see Note 18.2), as well as a €124 million expense corresponding to the recognition of additional dismantling and rehabilitation costs for the Hazelwood power plant in Australia following the shut-down plan approved in November 2016 by the shareholders.

In 2015, this item included an expense of €340 million, corresponding to the recognition of additional costs for the dismantling and rehabilitation of the Hazelwood power plant in Australia, which was partly offset by the €42 million gain on the disposal of Portgas available-for-sale securities, of which €17 million in respect of changes in fair value recognized in "Other comprehensive income" and recycled to the income statement.

**NOTE 9** Net financial income/(loss)

<i>In millions of euros</i>	Dec. 31, 2016			Dec. 31, 2015		
	Expense	Income	Total	Expense	Income	Total
Cost of net debt	(915)	152	(763)	(981)	143	(839)
Income from debt restructuring transactions and from early unwinding of derivative financial instruments	(66)	66	-	(276)	154	(122)
Other financial income and expenses	(1,263)	647	(617)	(1,156)	570	(586)
<b>NET FINANCIAL INCOME/(LOSS)</b>	<b>(2,245)</b>	<b>865</b>	<b>(1,380)</b>	<b>(2,413)</b>	<b>866</b>	<b>(1,547)</b>

**9.1** Cost of net debt

The main items of the cost of net debt break down as follows:

<i>In millions of euros</i>	Expense	Income	Total	
			Dec. 31, 2016	Dec. 31, 2015
Interest expense on gross debt and hedges	(1,038)	-	(1,038)	(1,151)
Foreign exchange gains/losses on borrowings and hedges	-	5	5	8
Ineffective portion of derivatives qualified as fair value hedges	(5)	-	(5)	(8)
Gains and losses on cash and cash equivalents and financial assets at fair value through income	-	147	147	135
Capitalized borrowing costs	128	-	128	178
<b>COST OF NET DEBT</b>	<b>(915)</b>	<b>152</b>	<b>(763)</b>	<b>(839)</b>

The decrease in the cost of net debt is mainly due to a slight reduction in the volume of average debt since the end of 2015, to the positive impacts of debt financing transactions realized by the Group and to

active interest-rate management (see Note 15.3.2 "Financial instruments – Main events of the period").

**9.2** Income from debt restructuring transactions and from early unwinding of derivative financial instruments

The main effects of debt restructuring break down as follows:

<i>In millions of euros</i>	Expense	Income	Total	
			Dec. 31, 2016	Dec. 31, 2015
<b>Impact of early unwinding of derivative financial instruments on income statement</b>	<b>(66)</b>	<b>66</b>	<b>-</b>	<b>(3)</b>
<i>of which cash payments made on the unwinding of swaps</i>	(66)	-	(66)	(157)
<i>of which reversal of the negative fair value of these derivatives that were settled early</i>	-	66	66	154
<b>Impact of debt restructuring transactions on the income statement</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>(119)</b>
<i>of which early refinancing transactions expenses</i>	-	-	-	(119)
<b>GAINS AND LOSSES ON DEBT RESTRUCTURING TRANSACTIONS AND ON THE EARLY UNWINDING OF DERIVATIVE FINANCIAL INSTRUMENTS</b>	<b>(66)</b>	<b>66</b>	<b>-</b>	<b>(122)</b>

## 9.3 Other financial income and expenses

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
<b>Other financial expenses</b>		
Change in fair value of derivatives not qualified as hedges	(102)	(102)
Gains and losses on the dequalification and inefficiency of economic hedges on other financial items	(5)	(2)
Unwinding of discounting adjustments to other long-term provisions	(577)	(555)
Net interest expense on post-employment benefits and other long-term benefits	(141)	(127)
Interest on trade and other payables	(59)	(46)
Other financial expenses	(380)	(323)
<b>TOTAL</b>	<b>(1,263)</b>	<b>(1,156)</b>
<b>Other financial income</b>		
Income from available-for-sale securities	114	101
Gains and losses on the dequalification and inefficiency of economic hedges on other financial items	3	-
Interest income on trade and other receivables	30	26
Interest income on loans and receivables at amortized cost	78	79
Other financial income	422	364
<b>TOTAL</b>	<b>647</b>	<b>570</b>
<b>OTHER FINANCIAL INCOME AND EXPENSES, NET</b>	<b>(617)</b>	<b>(586)</b>

**NOTE 10** Income tax expense

**10.1** Actual income tax expense recognized in the income statement

**10.1.1** Breakdown of actual income tax expense recognized in the income statement

The income tax expense recognized in the income statement for 2016 amounts to €909 million (€324 million in 2015), breaking down as follows:

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
Current income taxes	(1,861)	(1,348)
Deferred taxes	952	1,024
<b>TOTAL INCOME TAX EXPENSE RECOGNIZED IN INCOME</b>	<b>(909)</b>	<b>(324)</b>



### 10.1.2 Reconciliation of theoretical income tax expense with actual income tax expense

A reconciliation of theoretical income tax expense with the Group's actual income tax expense is presented below:

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
<b>Net income/(loss)</b>	<b>163</b>	<b>(5,113)</b>
Share in net income of entities accounted for using the equity method	764	473
Income tax expenses	(909)	(324)
<b>Income/(loss) before income tax expense and share in net income of associates (A)</b>	<b>308</b>	<b>(5,261)</b>
Of which French companies	786	(1,439)
Of which companies outside France	(477)	(3,822)
Statutory income tax rate of the parent company (B)	34.4%	38.0%
<b>THEORETICAL INCOME TAX EXPENSE (C) = (A) × (B)</b>	<b>(106)</b>	<b>1,999</b>
<b>Reconciling items between theoretical and actual income tax expense</b>		
Difference between statutory tax rate applicable to the parent and statutory tax rate in force in jurisdictions in France and abroad	(61)	(195)
Permanent differences <sup>(1)</sup>	(903)	(1,295)
Income taxed at a reduced rate or tax-exempt <sup>(2)</sup>	258	136
Additional tax expense <sup>(3)</sup>	(508)	(411)
Effect of unrecognized deferred tax assets on tax loss carry-forwards and other tax-deductible temporary differences <sup>(4)</sup>	(1,119)	(1,651)
Recognition or utilization of tax income on previously unrecognized tax loss carry-forwards and other tax-deductible temporary differences <sup>(5)</sup>	174	431
Impact of changes in tax rates <sup>(6)</sup>	839	(73)
Tax credits and other tax reductions <sup>(7)</sup>	356	739
Other	160	(5)
<b>ACTUAL INCOME TAX EXPENSE</b>	<b>(909)</b>	<b>(324)</b>

- (1) Includes mainly the disallowable impairment losses on goodwill, non-deductible expenses recorded by the project companies in the exploration-production business, disallowable operating expenses, and effects relating to the cap on allowable interest on borrowings in France.
- (2) Reflects notably capital gains on disposals of securities exempt from tax or taxed at a reduced rate in some tax jurisdictions, the impact of the specific tax regimes used by some entities, the disallowable impairment losses and capital losses on securities, and the impact of the untaxed income from remeasuring previously held (or retained) equity interests in connection with acquisitions and changes in consolidation methods.
- (3) Includes mainly tax on dividends resulting from the parent company tax regime and the withholding tax on dividends and interest levied in several tax jurisdictions, the 3% tax on the dividends paid in cash by the French companies, the flat-rate contribution on nuclear activities payable by nuclear-sourced electricity utilities in Belgium (€117 million in 2016 and €166 million in 2015), allocations to provisions for income tax, and regional corporate taxes.
- (4) Includes (i) the cancellation of the net deferred tax asset position for some tax entities in the absence of sufficient profit being forecast and (ii) the impact of the disallowable impairment losses on the assets.
- (5) Includes the impact of the recognition of net deferred tax asset positions for some tax entities, mainly in Luxembourg for an amount of €338 million in 2015, arising from a new law entering into force.
- (6) In 2016, includes mainly the impact of tax rate change on the deferred tax balances in France (see below).
- (7) Includes notably the reversals of provisions for tax litigation (mainly in 2015), the impact of deductible notional interest in Belgium, and tax credits in Norway, the United Kingdom, the Netherlands and France.

Since 2011, the 34.43% income tax rate payable by tax entities in France had been increased by an exceptional contribution, leading finally to a 38% tax rate in 2015. This exceptional contribution has been eliminated in the 2016 French Finance Law.

The 2017 French Finance Law approved on December 20, 2016 plans a tax rate decrease to 28.92% as of 2020 for any French tax entity. This rate results from the decrease in the common income tax rate from

33.33% to 28.00%, plus the 3.3% social contribution. The deferred tax recorded by French entities which are expected to be released after 2020 have been re-measured at this new rate in the December 31, 2016 accounts. It results in a positive impact of €904 million on the non-recurring income and a negative impact of €187 million on the deferred tax recognized in the statement of comprehensive income.

### 10.1.3 Analysis of the deferred tax income/(expense) recognized in the income statement, by type of temporary difference

<i>In millions of euros</i>	Impact in the income statement	
	Dec. 31, 2016	Dec. 31, 2015
<b>Deferred tax assets:</b>		
Tax loss carry-forwards and tax credits	(371)	176
Pension obligations	(108)	4
Non-deductible provisions	6	157
Difference between the carrying amount of PP&E and intangible assets and their tax bases	132	103
Measurement of financial instruments at fair value (IAS 32/39)	245	267
Other	10	(138)
<b>TOTAL</b>	<b>(86)</b>	<b>569</b>
<b>Deferred tax liabilities:</b>		
Difference between the carrying amount of PP&E and intangible assets and their tax bases	1,344	1,035
Measurement of financial instruments at fair value (IAS 32/39)	(473)	(524)
Other	167	(56)
<b>TOTAL</b>	<b>1,038</b>	<b>455</b>
<b>DEFERRED TAX INCOME/(EXPENSE)</b>	<b>952</b>	<b>1,024</b>

The deferred tax income recorded in 2016 comes notably from the future tax rate decrease approved in France. The deferred tax income recorded in 2015 resulted mainly from the tax impacts of some impairment losses on property, plant and equipment.

### 10.2 Deferred tax income/(expense) recognized in “Other comprehensive income”

Net deferred tax income/(expense) recognized in “Other comprehensive income” is broken down by component as follows:

<i>In millions of euros</i>	Dec. 31, 2016	Dec. 31, 2015
Available-for-sale financial assets	(12)	(7)
Actuarial gains and losses	47	(139)
Net investment hedges	13	70
Cash flow hedges on other items	382	(142)
Cash flow hedges on net debt	4	14
<b>TOTAL EXCLUDING SHARE OF ENTITIES ACCOUNTED FOR USING THE EQUITY METHOD</b>	<b>434</b>	<b>(204)</b>
Share of entities accounted for using the equity method	10	(18)
<b>TOTAL</b>	<b>444</b>	<b>(222)</b>

## 10.3 Deferred taxes presented in the statement of financial position

### 10.3.1 Change in deferred taxes

Changes in deferred taxes recognized in the statement of financial position, after netting deferred tax assets and liabilities by tax entity, break down as follows:

<i>In millions of euros</i>	Assets	Liabilities	Net position
<b>At December 31, 2015</b>	<b>1,280</b>	<b>(8,131)</b>	<b>(6,851)</b>
Impact on net income of the year	(86)	1,038	952
Impact on other comprehensive income items	20	414	434
Impact of change in scope of consolidation	8	124	132
Impact of translation adjustments	(21)	(36)	(57)
Transfers to assets and liabilities classified as held for sale	84	(218)	(135)
Impact of netting by tax entity	(35)	33	(2)
<b>AT DECEMBER 31, 2016</b>	<b>1,250</b>	<b>(6,775)</b>	<b>(5,525)</b>

### 10.3.2 Analysis of the net deferred tax position recognized in the statement of financial position (before netting deferred tax assets and liabilities by tax entity), by type of temporary difference

<i>In millions of euros</i>	Statement of financial position at	
	Dec. 31, 2016	Dec. 31, 2015
<b>Deferred tax assets:</b>		
Tax loss carry-forwards and tax credits	2,178	2,532
Pension obligations	1,451	1,438
Non-deductible provisions	631	642
Difference between the carrying amount of PP&E and intangible assets and their tax bases	1,258	1,115
Measurement of financial instruments at fair value (IAS 32/39)	3,285	1,795
Other	585	564
<b>TOTAL</b>	<b>9,388</b>	<b>8,086</b>
<b>Deferred tax liabilities:</b>		
Difference between the carrying amount of PP&E and intangible assets and their tax bases	(10,886)	(12,181)
Measurement of financial instruments at fair value (IAS 32/39)	(3,214)	(1,827)
Other	(813)	(929)
<b>TOTAL</b>	<b>(14,913)</b>	<b>(14,937)</b>
<b>NET DEFERRED TAX ASSETS/(LIABILITIES)</b>	<b>(5,525)</b>	<b>(6,851)</b>

The deferred tax assets recognized in respect of tax loss carry-forwards are justified by the existence of adequate taxable timing differences and/or by expectations that these loss carry-forwards will be used over a six-year tax projection period, as approved by management, except when the specific context justifies otherwise.

## 10.4 Unrecognized deferred taxes

At December 31, 2016, the tax effect of tax losses and tax credits eligible for carry-forward but not utilized and not recognized in the

statement of financial position amounted to €3,716 million (€3,308 million at December 31, 2015). Most of these unrecognized tax losses relate to companies based in countries which allow losses to be carried forward indefinitely (mainly Belgium, Luxembourg, France, Australia and the United Kingdom) or up to nine years in the Netherlands. These tax loss carry-forwards did not give rise to the recognition of deferred tax due to the absence of sufficient profit forecasts in the medium term.

The tax effect of other tax-deductible temporary differences not recorded in the statement of financial position was €1,698 million at end-December 2016 versus €1,472 million at end-December 2015.

**NOTE 11** Earnings per share

	Dec. 31, 2016	Dec. 31, 2015
Numerator <i>(in millions of euros)</i>		
<b>Net income/(loss) Group share</b>	<b>(415)</b>	<b>(4,617)</b>
Interest from deeply subordinated perpetual notes	(146)	(145)
<b>Net income used to calculate earnings per share</b>	<b>(562)</b>	<b>(4,762)</b>
Impact of dilutive instruments	-	-
<b>Diluted net income/(loss) Group share</b>	<b>(562)</b>	<b>(4,762)</b>
Denominator <i>(in millions of shares)</i>		
<b>Average number of outstanding shares</b>	<b>2,396</b>	<b>2,392</b>
Impact of dilutive instruments:		
Bonus share plans reserved for employees	9	11
<b>Diluted average number of outstanding shares</b>	<b>2,405</b>	<b>2,403</b>
Earnings per share <i>(in euros)</i>		
<b>Basic earnings/(loss) per share</b>	<b>(0.23)</b>	<b>(1.99)</b>
<b>Diluted earnings/(loss) per share</b>	<b>(0.23)</b>	<b>(1.99)</b>

In compliance with IAS 33 – *Earnings per Share*, earnings per share and diluted earnings per share are based on net income/(loss) Group share after deduction of payments to bearers of deeply subordinated perpetual notes (see Note 17.2.1).

The Group's dilutive instruments included in the calculation of diluted earnings per share include the bonus shares and performance shares granted in the form of ENGIE securities.

Due to their accretive effect, all stock option plans were excluded from the 2015 and 2016 diluted earnings per share calculation. Instruments that were accretive at December 31, 2016 may become dilutive in subsequent periods due to changes in the average annual share price. These plans are described in Note 23 "Share-based payments".

**NOTE 12** Goodwill**12.1** Movements in the carrying amount of goodwill

<i>In millions of euros</i>	<b>Net amount</b>
<b>At December 31, 2014</b>	<b>21,222</b>
Impairment losses	(2,628)
Changes in scope of consolidation and Other	201
Translation adjustments	230
<b>At December 31, 2015</b>	<b>19,024</b>
Impairment losses	(1,690)
Changes in scope of consolidation and Other	39
Translation adjustments	(1)
<b>AT DECEMBER 31, 2016</b>	<b>17,372</b>

The impact of changes in the scope of consolidation at December 31, 2016 relates primarily to the recognition of goodwill arising on the acquisition of OpTerra Energy Services (€158 million) and Green Charge Networks (€47 million), and the acquisition of a controlling interest in Maia Eolis (€40 million), coupled with the derecognition of €199 million of goodwill relating to businesses disposed of during the year.

As a result of the annual impairment tests performed on the goodwill CGUs, the Group recognized impairment losses against goodwill totaling €1,690 million, including €1,362 million against the Benelux CGU, €161 million against the GTT CGU, €139 million against the group of assets held for sale comprising the Polaniec power plant and €24 million against the Global LNG CGU. The impairment tests performed on the CGUs in 2016 are described in Note 8.2 "Impairment losses".

The decrease in this caption in 2015 related chiefly to the recognition of impairment losses against goodwill totaling €2,628 million, including €1,619 million against the former Global Gas & LNG CGU, €911 million

against the group of assets held for sale in the United States and €83 million against the former South Asia, Middle East & Africa CGU.

**12.2** Goodwill CGUs

Due to its new operational structure, which took effect on January 1, 2016 (see Note 6 "Segment information"), the Group has re defined its goodwill CGUs and started reallocating goodwill to the new goodwill CGUs from the former ones.

The Group now has 26 goodwill CGUs corresponding to the 24 Business Units described in Note 6, with the exception of the Asia Pacific BU, which is split into two goodwill CGUs (Australia and Asia-Pacific excluding Australia), plus the Solairedirect goodwill CGU.

The table below shows material goodwill CGUs for which the amount of goodwill is greater than 5% of the total value of the Group's goodwill at December 31, 2016, as well as CGUs with goodwill exceeding €500 million.

<i>In millions of euros</i>	<b>Operating segment</b>	<b>Dec. 31, 2016</b>
<b>MATERIAL CGUS</b>		
Benelux	Benelux	4,239
GRDF	Infrastructures Europe	4,009
France BtoC	France	1,010
France Renewable Energy	France	871
<b>OTHER SIGNIFICANT CGUS</b>		
North America	North America	797
Generation Europe	Other	682
United Kingdom	Europe excl. France and Benelux	651
GRTgaz	Infrastructures Europe	614
Northern, South and Central Europe	Europe excl. France and Benelux	612
Storengy	Infrastructures Europe	543
France BtoB	France	503
<b>OTHER CGUS (GOODWILL INDIVIDUALLY LESS THAN €500 MILLION)</b>		<b>2,842</b>
<b>TOTAL</b>		<b>17,372</b>

## 12.3 Impairment testing of goodwill CGUs

All goodwill Cash Generating Units (goodwill CGUs) are tested for impairment based on data as of end-June, completed by a review of events arisen in the second half of the year. In most cases, the recoverable value of the goodwill CGUs is determined by reference to a value in use that is calculated based on cash flow projections drawn from the 2017 budget and from the 2018-2019 medium-term business plan, as approved by the Executive Committee and the Board of Directors, and on extrapolated cash flows beyond that time frame.

Cash flow projections are drawn up in accordance with the conditions described in Note 8.2 "Impairment losses".

The discount rates used correspond to the weighted average cost of capital, which is adjusted in order to reflect the business, market, country and currency risk relating to each goodwill CGU reviewed. The discount rates used are consistent with available external information sources. The post-tax rates used in 2016 to measure the value in use of the goodwill CGUs for discounting future cash flows ranged between 4.7% and 15.1%, compared with a range of between 4.7% and 14.5% in 2015. The discount rates used for the main goodwill CGUs are shown in Notes 12.3.1 "Material CGUs" and 12.3.2 "Other significant CGUs" below.

### 12.3.1 Material CGUs

This section presents the method for determining value in use, the key assumptions underlying the valuation, and the sensitivity analyses for the impairment tests on CGUs where the amount of goodwill represents more than 5% of the Group's total goodwill at December 31, 2016.

The impairment test related to the goodwill allocated to the Benelux CGU is described in Note 8.2 "Impairment losses".

### 12.3.2 GRDF CGU

The total amount of goodwill allocated to the GRDF CGU was €4,009 million at December 31, 2016. The GRDF CGU groups together the Group's regulated natural gas distribution activities in France.

The value in use of the GRDF CGU was calculated using the cash flow projections drawn up on the basis of the 2017 budget, the 2018-2019 medium-term business plan approved by the Executive Committee and the Board of Directors, and cash flow projections for the 2020-2022 period. The terminal value corresponds to the expected Regulated Asset Base (RAB) with no premium at the end of 2022. The RAB is the value assigned by the French Energy Regulation Commission (CRE) to the assets operated by the distributor. It is the sum of the future pre-tax cash flows, discounted at a rate that equals the pre-tax rate of return guaranteed by the regulator.

The cash flow projections are drawn up based on the tariff for public natural gas distribution networks, known as the "ATRD 5 tariff", which entered into effect for a period of four years on July 1, 2016, and on the overall level of investments agreed by the CRE as part of its decision on the ATRD 5 tariff.

Given the regulated nature of the businesses grouped within the GRDF CGU, a reasonable change in any of the valuation inputs would not result in the recoverable value falling below the carrying amount.

### 12.3.3 France BtoC CGU

The goodwill allocated to the France BtoC CGU amounted to €1,010 million at December 31, 2016. The France BtoC CGU groups together sales of energy and related services to individual and professional customers in France.

Value in use was calculated using the cash flow projections drawn up on the basis of the 2017 budget and the 2018-2019 medium-term business plan, as approved by the Executive Committee and the Board of Directors. A terminal value was calculated by extrapolating the cash flows beyond that period using a long-term growth rate of 1.9%.

The main assumptions and key estimates relate primarily to discount rates, expected trends in gas and electricity demand in France, changes in the Group's market share and sales margin forecasts.

The discount rates applied are between 7.5% and 8.3%.

An increase of 50 basis points in the discount rates used would have a negative 9% impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU. However, the recoverable amount would remain above the carrying amount. A reduction of 50 basis points in the discount rates used would have a positive 11% impact on the calculation.

A decrease of 5% in the margin on gas and electricity sales activities would have a negative 9% impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU. However, the recoverable amount would remain above the carrying amount. Conversely, an increase of 5% in the margin on gas and electricity sales activities would have a positive 9% impact on the calculation.

### 12.3.4 France Renewable Energy CGU

The goodwill allocated to the France Renewable Energy CGU amounted to €871 million at December 31, 2016. The France Renewable Energy CGU groups together the development, construction, financing, operation and maintenance of all of the renewable power generation assets in France (hydraulic, wind and photovoltaic, with the exception of the photovoltaic parks developed and operated by Solairedirect).

Value in use was calculated using the cash flow projections drawn up on the basis of the 2017 budget and the 2018-2019 medium-term business plan, as approved by the Executive Committee and the Board of Directors. For the hydraulics business, a terminal value was calculated by extrapolating the cash flows beyond that period based on the reference scenario adopted by the Group.

The main assumptions and key estimates relate primarily to discount rates, assumptions on the renewal of the hydropower concession agreements and changes in the sales prices of electricity beyond the liquidity period.

The discount rates applied are between 5.2% and 8.5%, depending on whether they relate to regulated assets or merchant activities.

Value in use of the Compagnie Nationale du Rhône and SHEM were calculated based on assumptions including the renewal or a process tender for the concession agreements, as well as on the conditions of a potential renewal.

The cash flows for the periods covered by the renewal of the concession agreements are based on a number of assumptions relating to the economic and regulatory conditions for operating these assets (royalty rates, required level of investment, etc.) during this period.

### Results of the impairment test

An impairment loss of €416 million was recognized against SHEM's hydropower generation assets (see Note 8.2.5).

### Sensitivity analyses

A decrease of €10/MWh in electricity prices for hydropower generation would have a negative 52% impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU. However, the recoverable amount would remain above the carrying amount.

Conversely, an increase of €10/MWh in electricity prices would have a positive 52% impact on the calculation.

An increase of 50 basis points in the discount rates used would have a negative 34% impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU. However, the recoverable value would remain above the carrying amount. A reduction of 50 basis points in the discount rates used would have a positive 43% impact on the calculation.

If the Compagnie Nationale du Rhône hydropower concession agreements are not renewed beyond 2023, this would have a strong adverse impact on the results of the test, with the recoverable amount falling significantly below the carrying amount. In this scenario, the impairment risk would represent around €550 million.

## 12.3.5 Other significant CGUs

The table below sets out the assumptions used to determine the recoverable amount of the other main CGUs.

CGU	Reportable segment	Measurement	Discount rate
Generation Europe	Other	DCF + DDM	6.5% - 10.1%
North America	North America	DCF + DDM	3.8% - 12.7%
United Kingdom	Europe excl. France & Benelux	DCF + DDM	6.3% - 9.1%
North, South and Eastern Europe	Europe excl. France & Benelux	DCF + DDM	5.6% - 12.4%
Storengy	Infrastructures Europe	DCF	4.7% - 9.3%
France BtoB	France	DCF	7.8% - 8.5%

DDM refers to the discounted dividend model.

### 12.3.5.1 Generation Europe CGU

The goodwill allocated to the Generation Europe CGU amounted to €682 million at December 31, 2016. The Generation Europe CGU groups together the thermal power generation activities in Europe.

The value in use of these activities was calculated using the cash flow projections drawn up on the basis of the 2017 budget and the 2018-2019 medium-term business plan approved by the Executive Committee and the Board of Directors. Beyond this three-year period, cash flows were projected over the useful lives of the assets based on the reference scenario adopted by the Group.

The discount rates applied to these cash flow projections ranged between 6.5% and 10.1%.

The main assumptions and key estimates relate primarily to discount rates, estimated demand for electricity and changes in the price of CO<sub>2</sub>, fuel and electricity beyond the liquidity period.

### Results of the impairment test

Impairment losses of €659 million were recognized at December 31, 2016, including €520 million against thermal power plants and €139 million corresponding to the share of the CGU's goodwill allocated to the group of assets held for sale in Poland (see Note 8.2.5).

### Sensitivity analyses

An increase of 50 basis points in the discount rates used would have a negative 61% impact on the excess of the recoverable amount over the carrying amount of the goodwill CGU. However, the recoverable amount would remain above the carrying amount. A reduction of 50 basis points in the discount rates used would have a positive 65% impact on the calculation.

In the event of a 10% decrease in the margin captured by the thermal power plants, the recoverable amount would fall below the carrying amount and result in an impairment loss of around €100 million.

### 12.3.5.2 Storengy CGU

The goodwill allocated to the Storengy CGU amounted to €543 million at December 31, 2016. The Storage CGU groups together the entities that own, operate, market and sell underground natural gas storage capacities in France, Germany, and the United Kingdom.

The value in use of these activities was calculated using the cash flow projections drawn up on the basis of the 2017 budget and the 2018-2019 medium-term business plan approved by the Executive Committee and the Board of Directors. Cash flow projections beyond this three-year period were based on the reference scenario adopted by the Group.

Cash flows for storage activities in France and Germany were projected up to 2025, which is when the Group estimates that seasonal spreads will have reached their long-term price equilibrium. A terminal value was calculated for 2026 by applying to the normative cash flows for 2025 a growth rate corresponding to the long-term inflation rate expected in the Eurozone.

The discount rates applied to these cash flow projections were 5.7% for France, 7.9% for the United Kingdom and between 4.7% and 9.3% for the German storage activities.

The key assumptions underlying the test related to (i) forecast capacity sales in France and Germany, which depend on changes in market conditions, and particularly on seasonal natural gas spreads, and (ii) changes in the regulatory environment for the underground natural gas storage activities in France.

A change in seasonal spreads would affect the level of revenues as a result of the impact of the spreads on both (i) the sales price of certain capacity sales agreements which are closely correlated to spreads, and (ii) overall sales volumes.

A 5% decrease in storage revenues in France and Germany over the 2017-2025 period and the normative cash flow used to calculate the

terminal value would lead to an impairment loss of approximately €300 million.

Should the seasonal spread remain at its expected 2021 level throughout the remainder of the cash flow projection period, the impairment risk would be approximately €250 million.

## 12.4 Goodwill segment information

The carrying amount of goodwill can be analyzed as follows by operating segment:

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>
North America	797
Latin America	810
Africa-Asia	978
Benelux	4,239
France	2,799
Europe excl. France & Benelux	1,263
Infrastructures Europe	5,338
GEM & LNG	-
E&P	32
Other	1,116
<b>TOTAL</b>	<b>17,372</b>



**NOTE 13** Intangible assets**13.1** Movements in intangible assets

<i>In millions of euros</i>	<b>Intangible rights arising on concession contracts</b>	<b>Capacity entitlements</b>	<b>Other</b>	<b>Total</b>
<b>GROSS AMOUNT</b>				
<b>At December 31, 2014</b>	<b>2,825</b>	<b>2,493</b>	<b>10,523</b>	<b>15,841</b>
Acquisitions	241	-	644	886
Disposals	(4)	-	(246)	(251)
Translation adjustments	(2)	-	163	162
Changes in scope of consolidation	27	-	(175)	(149)
Transfers to "Assets classified as held for sale"	-	-	(16)	(16)
Other	21	52	19	92
<b>At December 31, 2015</b>	<b>3,108</b>	<b>2,545</b>	<b>10,912</b>	<b>16,565</b>
Acquisitions	169	-	584	753
Disposals	(54)	(13)	(51)	(119)
Translation adjustments	(43)	-	27	(16)
Changes in scope of consolidation	5	-	106	112
Transfers to "Assets classified as held for sale"	-	-	(4)	(4)
Other	19	33	38	91
<b>AT DECEMBER 31, 2016</b>	<b>3,205</b>	<b>2,565</b>	<b>11,613</b>	<b>17,383</b>
<b>ACCUMULATED AMORTIZATION AND IMPAIRMENT</b>				
<b>At December 31, 2014</b>	<b>(1,062)</b>	<b>(1,646)</b>	<b>(5,564)</b>	<b>(8,272)</b>
Amortization	(101)	(71)	(565)	(737)
Impairment	(7)	-	(940)	(947)
Disposals	4	-	207	211
Translation adjustments	1	-	(74)	(73)
Changes in scope of consolidation	(2)	-	211	209
Transfers to "Assets classified as held for sale"	-	-	3	3
Other	(3)	-	56	53
<b>At December 31, 2015</b>	<b>(1,171)</b>	<b>(1,716)</b>	<b>(6,666)</b>	<b>(9,553)</b>
Amortization	(108)	(61)	(601)	(770)
Impairment	(6)	(225)	(176)	(407)
Disposals	29	13	34	76
Translation adjustments	3	-	4	7
Changes in scope of consolidation	-	-	(10)	(10)
Transfers to "Assets classified as held for sale"	-	-	3	3
Other	(7)	-	(84)	(92)
<b>AT DECEMBER 31, 2016</b>	<b>(1,259)</b>	<b>(1,988)</b>	<b>(7,497)</b>	<b>(10,744)</b>
<b>CARRYING AMOUNT</b>				
<b>At December 31, 2015</b>	<b>1,938</b>	<b>828</b>	<b>4,247</b>	<b>7,013</b>
<b>AT DECEMBER 31, 2016</b>	<b>1,946</b>	<b>576</b>	<b>4,116</b>	<b>6,639</b>

In 2016, impairment losses on intangible assets amounted to €407 million. They related mainly to drawing rights on power generation assets in Italy (€225 million) and a portfolio of natural gas long-term supply contracts (€125 million) (see Note 8.2 "Impairment losses").

In 2015, impairment losses on intangible assets (€947 million) related primarily to the corporate brand GDF Gaz de France (€455 million) and to the France customer relations portfolio (€95 million) as well as exploration licenses in Australia (€257 million) and in Qatar (€87 million).

### 13.1.1 Intangible rights arising on concession contracts

This item primarily includes the right to bill users of public services recognized in accordance with the intangible asset model as set out in IFRIC 12. Acquisitions mainly relate to the France Networks businesses.

### 13.1.2 Capacity entitlements

The Group has acquired capacity entitlements from power stations operated by third parties. These power station capacity rights were acquired in connection with transactions or within the scope of the Group's involvement in financing the construction of certain power stations. In consideration, the Group received the right to purchase a share of the production over the useful life of the underlying assets. These rights are amortized over the useful life of the underlying assets, not to exceed 40 years. The Group currently holds entitlements in the Chooz B and Tricastin power plants in France and in the virtual power plant (VPP) in Italy.

### 13.1.3 Other

At December 31, 2016, this caption notably relates to software, licenses and intangible assets acquired as a result of business combinations.

The exploration and production licenses presented under "Other" in the table above are detailed in Note 20 "Exploration-production activities".

## 13.2 Information regarding research and development costs

Research and development activities primarily relate to various studies regarding technological innovation, improvements in plant efficiency, safety, environmental protection, service quality, and the use of energy resources.

Research and development costs, excluding technical assistance costs, totaled €191 million in 2016, of which €23 million in expenses related to in-house projects in the development phase that meet the criteria for recognition as an intangible asset as defined in IAS 38.

## NOTE 14 Property, plant and equipment

### 14.1 Movements in property, plant and equipment

<i>In millions of euros</i>	Land	Buildings	Plant and equipment	Vehicles	Dismantling costs	Assets in progress	Other	Total
<b>GROSS AMOUNT</b>								
<b>At December 31, 2014</b>	<b>944</b>	<b>4,460</b>	<b>92,831</b>	<b>390</b>	<b>2,141</b>	<b>7,626</b>	<b>1,053</b>	<b>109,446</b>
Acquisitions	4	31	541	70	-	4,874	68	5,589
Disposals	(147)	(117)	(320)	(17)	(2)	(199)	(61)	(862)
Translation adjustments	(5)	76	409	6	5	202	2	695
Changes in scope of consolidation	(3)	-	(28)	6	(4)	(19)	(3)	(51)
Transfers to "Assets classified as held for sale"	(82)	1	(5,588)	(20)	(18)	(138)	(5)	(5,850)
Other	44	542	5,356	1	196	(5,917)	60	282
<b>At December 31, 2015</b>	<b>755</b>	<b>4,993</b>	<b>93,201</b>	<b>437</b>	<b>2,318</b>	<b>6,428</b>	<b>1,115</b>	<b>109,248</b>
Acquisitions	7	26	893	46	-	4,299	65	5,336
Disposals	(8)	(46)	(743)	(41)	(97)	(20)	(48)	(1,003)
Translation adjustments	16	(46)	717	3	(11)	10	(2)	688
Changes in scope of consolidation	(6)	22	38	3	-	(718)	9	(653)
Transfers to "Assets classified as held for sale"	(3)	(7)	(1,208)	-	(23)	(47)	(2)	(1,291)
Other	(5)	746	2,615	2	842	(3,489)	37	749
<b>AT DECEMBER 31, 2016</b>	<b>756</b>	<b>5,687</b>	<b>95,514</b>	<b>451</b>	<b>3,029</b>	<b>6,462</b>	<b>1,174</b>	<b>113,073</b>
<b>ACCUMULATED DEPRECIATION AND IMPAIRMENT</b>								
<b>At December 31, 2014</b>	<b>(147)</b>	<b>(2,151)</b>	<b>(39,627)</b>	<b>(258)</b>	<b>(1,039)</b>	<b>(1,422)</b>	<b>(770)</b>	<b>(45,414)</b>
Depreciation	(17)	(136)	(3,528)	(47)	(190)	-	(93)	(4,011)
Impairment	(14)	(12)	(3,066)	-	(35)	(1,653)	(3)	(4,784)
Disposals	52	64	240	14	2	1	53	427
Translation adjustments	7	(10)	(126)	(3)	2	(36)	(1)	(166)
Changes in scope of consolidation	3	3	(2)	(4)	2	-	-	3
Transfers to "Assets classified as held for sale"	-	-	1,709	8	-	1	-	1,719
Other	2	10	(977)	(23)	-	977	(22)	(33)
<b>At December 31, 2015</b>	<b>(113)</b>	<b>(2,231)</b>	<b>(45,377)</b>	<b>(314)</b>	<b>(1,259)</b>	<b>(2,132)</b>	<b>(834)</b>	<b>(52,259)</b>
Depreciation	(8)	(265)	(3,148)	(43)	(74)	-	(89)	(3,627)
Impairment	(14)	(438)	(1,126)	(11)	31	(151)	(2)	(1,711)
Disposals	1	27	555	36	97	1	44	761
Translation adjustments	(7)	5	(198)	(3)	11	93	3	(95)
Changes in scope of consolidation	-	(12)	(29)	(2)	-	444	(5)	396
Transfers to "Assets classified as held for sale"	-	5	977	-	12	-	2	996
Other	(5)	(15)	(186)	(1)	(142)	550	4	205
<b>AT DECEMBER 31, 2016</b>	<b>(145)</b>	<b>(2,925)</b>	<b>(48,531)</b>	<b>(337)</b>	<b>(1,324)</b>	<b>(1,195)</b>	<b>(878)</b>	<b>(55,334)</b>
<b>CARRYING AMOUNT</b>								
<b>At December 31, 2015</b>	<b>642</b>	<b>2,762</b>	<b>47,824</b>	<b>123</b>	<b>1,059</b>	<b>4,296</b>	<b>281</b>	<b>56,988</b>
<b>AT DECEMBER 31, 2016</b>	<b>612</b>	<b>2,762</b>	<b>46,983</b>	<b>114</b>	<b>1,706</b>	<b>5,268</b>	<b>296</b>	<b>57,739</b>

In 2016, the net increase in “Property, plant and equipment” takes into account:

- maintenance and development investments for a total amount of €5,336 million mainly relating to the construction of new plants and the development of wind farms in Latin America and France, the extension of the transportation and distribution networks in the Infrastructures Europe segment and developments in the exploration-production business;
- a €981 million increase in dismantling assets recorded against provisions for dismantling nuclear facilities in Belgium (see Note 18.2);
- positive net translation adjustments of €593 million, mainly resulting from the Brazilian real (positive impact of €557 million), the US dollar (positive impact of €267 million), the Norwegian krone (positive impact of €87 million), and the pound sterling (negative impact of €349 million);
- depreciation for a total amount of €3,627 million;
- impairment losses amounting to €1,711 million, mainly related to thermal power generation assets in Europe (€520 million), hydro generation assets in France (€414 million), LNG tankers (€142 million), and exploration-production assets;
- the classification of the Polaniec power plant in Poland as “Assets held for sale” (negative impact of €295 million); the carrying amount of the corresponding property, plant and equipment having been transferred to the “Assets classified as held for sale” position in the statement of financial position;
- changes in scope of consolidation for a negative €257 million, mainly resulting from the disposal of a 50% interest in Transmisora Eléctrica del Norte SA (TEN) in Chile (negative impact of €202 million) and the sale of the Meenakshi coal-fired plants in India (negative impact of €131 million), partly offset by the acquisition of a controlling interest in Energieversorgung Gera GmbH in Germany (positive impact of €100 million).

In 2015, the net decrease in “Property, plant and equipment” mainly resulted from:

- impairment losses on property, plant and equipment, mainly related to exploration-production assets (€2,197 million), power generation assets in Africa/Asia (€1,639 million) and in Europe excluding France & Benelux (€345 million), as well as a regasification terminal in North America (€195 million);
- net disposals of property, plant and equipment of €435 million comprising in particular the disposal of interests in

exploration-production licenses in Indonesia for €197 million as well as the disposal of real estate for €148 million;

- positive net translation adjustments of €529 million, mainly relating to the US dollar (positive impact of €1,158 million), the pound sterling (positive impact of €145 million), the Brazilian real (negative impact of €706 million), and the Norwegian krone (negative impact of €98 million);
- the transfer of the carrying amount of property, plant and equipment of the portfolio of merchant power generation assets in the United States to “Assets classified as held for sale”.

Assets relating to exploration-production included in the table above are detailed by nature in Note 20 “Exploration-production activities”. Fields under development are shown under “Assets in progress”, while fields in production are included in “Plant and equipment”.

## 14.2 Pledged and mortgaged assets

Items of property, plant and equipment pledged by the Group to guarantee borrowings and debt amounted to €3,727 million at December 31, 2016 versus €5,267 million at December 31, 2015. The change mainly relates to the disposal of the merchant hydro generation assets in the United States.

## 14.3 Contractual commitments to purchase property, plant and equipment

In the ordinary course of their operations, some Group companies have entered into commitments to purchase, and the related third parties to deliver, property, plant and equipment. These commitments relate mainly to orders for equipment, and material related to the construction of energy production units and to service agreements.

Investment commitments made by the Group to purchase property, plant and equipment totaled €3,079 million at December 31, 2016 versus €3,181 million at December 31, 2015.

## 14.4 Other information

Borrowing costs for 2016 included in the cost of property, plant and equipment amounted to €128 million at December 31, 2016 versus €178 million at December 31, 2015.

## NOTE 15 Financial instruments

### 15.1 Financial assets

The following table presents the Group's different categories of financial assets, broken down into current and non-current items:

In millions of euros	Dec. 31, 2016			Dec. 31, 2015		
	Non-current	Current	Total	Non-current	Current	Total
Available-for-sale securities	2,997	-	2,997	3,016	-	3,016
Loans and receivables at amortized cost	2,250	21,430	23,680	2,377	20,080	22,457
Loans and receivables at amortized cost (excluding trade and other receivables)	2,250	595	2,845	2,377	731	3,108
Trade and other receivables	-	20,835	20,835	-	19,349	19,349
Other financial assets at fair value	3,603	10,486	14,089	4,026	12,029	16,055
Derivative instruments	3,603	9,047	12,650	4,026	10,857	14,883
Financial assets at fair value through income	-	1,439	1,439	-	1,172	1,172
Cash and cash equivalents	-	9,825	9,825	-	9,183	9,183
<b>TOTAL</b>	<b>8,850</b>	<b>41,741</b>	<b>50,591</b>	<b>9,419</b>	<b>41,292</b>	<b>50,711</b>

#### 15.1.1 Available-for-sale securities

In millions of euros

<b>At December 31, 2014</b>	<b>2,893</b>
Acquisitions	272
Disposals - carrying amount excluding changes in fair value recorded in "Other comprehensive income"	(23)
Disposals - "Other comprehensive income" derecognized	(17)
Other changes in fair value recorded in equity	(2)
Changes in fair value recorded in income	(147)
Changes in scope of consolidation, foreign currency translation and other changes	39
<b>At December 31, 2015</b>	<b>3,016</b>
Acquisitions	407
Disposals - carrying amount excluding changes in fair value recorded in "Other comprehensive income"	(500)
Disposals - "Other comprehensive income" derecognized	(152)
Other changes in fair value recorded in equity	298
Changes in fair value recorded in income	(21)
Changes in scope of consolidation, foreign currency translation and other changes	(49)
<b>AT DECEMBER 31, 2016</b>	<b>2,997</b>

The Group's available-for-sale securities amounted to €2,997 million at December 31, 2016 breaking down as €1,977 million of listed securities and €1,020 million of unlisted securities (respectively, €1,593 million and €1,423 million at December 31, 2015).

The main changes over the period correspond to the acquisition by Synatom of money market funds and bonds as part of its investing objectives designed to cover nuclear provisions (see Note 15.1.5) and to

the sales of interests previously held by the Group in the Walloon distribution network operator, in Transportadora de Gas del Perú, and in Société d'Enrichissement du Tricastin Holding (see Note 4.1.5).

In 2015, the main change over the period corresponded to the acquisition by Synatom of money market funds and bonds as part of its investing objectives designed to cover nuclear provisions (see Note 15.1.5).

### 15.1.1.1 Gains and losses on available-for-sale securities recognized in equity or income

The table below shows gains and losses on available-for-sale securities recognized in equity or income:

<i>In millions of euros</i>	Dividends	Post-acquisition measurement			Reclassified to income	Net gain/(loss) on disposals
		Change in fair value	Foreign currency translation	Impairment		
Equity <sup>(1)</sup>	-	298	1	-	(152)	-
Income	114	-	-	(21)	152	90
<b>TOTAL AT DECEMBER 31, 2016</b>	<b>114</b>	<b>298</b>	<b>1</b>	<b>(21)</b>	<b>-</b>	<b>90</b>
Equity <sup>(1)</sup>	-	(2)	16	-	(17)	-
Income	101	-	-	(147)	17	64
<b>TOTAL AT DECEMBER 31, 2015</b>	<b>101</b>	<b>(2)</b>	<b>16</b>	<b>(147)</b>	<b>-</b>	<b>64</b>

(1) Excluding tax impact.

In 2016, the disposal gain recorded in "Other items of comprehensive income" and reclassified to income mainly comprised the sale of the Group's interest in Transportadora de Gas del Perú for €152 million (see Note 4.1.5.2).

### 15.1.1.2 Analysis of available-for-sale securities in connection with impairment tests

The Group reviewed the value of its available-for-sale securities on a case-by-case basis in order to determine whether any impairment losses should be recognized in light of the current market environment.

Among factors taken into account, an impairment indicator for listed securities is when the value of any such security falls below 50% of its historical cost or remains below its historical cost for more than 12 months.

The Group recognized impairment losses for an amount of €21 million at December 31, 2016.

Based on its analyses, the Group has not identified any evidence of material unrealized capital losses at December 31, 2016 on other securities.

### 15.1.2 Loans and receivables at amortized cost

<i>In millions of euros</i>	Dec. 31, 2016			Dec. 31, 2015		
	Non-current	Current	Total	Non-current	Current	Total
Loans and receivables at amortized cost (excluding trade and other receivables)	2,250	595	2,845	2,377	731	3,108
<i>Loans granted to affiliated companies</i>	718	441	1,159	735	467	1,202
<i>Other receivables at amortized cost</i>	655	22	678	707	157	864
<i>Amounts receivable under concession contracts</i>	14	6	20	14	6	20
<i>Amounts receivable under finance leases</i>	862	125	987	921	101	1,021
Trade and other receivables	-	20,835	20,835	-	19,349	19,349
<b>TOTAL</b>	<b>2,250</b>	<b>21,430</b>	<b>23,680</b>	<b>2,377</b>	<b>20,080</b>	<b>22,457</b>

The table below shows impairment losses on loans and receivables at amortized cost:

<i>In millions of euros</i>	Dec. 31, 2016			Dec. 31, 2015		
	Gross	Allowances and impairment	Net	Gross	Allowances and impairment	Net
Loans and receivables at amortized cost (excluding trade and other receivables)	3,092	(248)	2,845	3,369	(261)	3,108
Trade and other receivables	21,897	(1,062)	20,835	20,412	(1,063)	19,349
<b>TOTAL</b>	<b>24,989</b>	<b>(1,310)</b>	<b>23,680</b>	<b>23,781</b>	<b>(1,324)</b>	<b>22,457</b>

Information on the age of receivables past due but not impaired and on counterparty risk associated with loans and receivables at amortized

cost (including trade and other receivables) are provided in Note 16.2 "Counterparty risk".

Net gains and losses recognized in the consolidated income statement with regard to loans and receivables at amortized cost (including trade and other receivables) break down as follows:

<i>In millions of euros</i>	Interest income	Post-acquisition measurement	
		Foreign currency translation	Impairment
At December 31, 2016	115	32	(111)
At December 31, 2015	110	(4)	(195)

#### Loans and receivables at amortized cost (excluding trade and other receivables)

At December 31, 2016, no material impairment losses had been recognized against loans and receivables at amortized cost (excluding trade and other receivables).

At December 31, 2015, the Group recognized an impairment loss against loans granted to a joint venture commissioned to build an offshore storage and regasification LNG terminal in Uruguay.

#### Trade and other receivables

On initial recognition, trade and other receivables are recorded at fair value, which generally corresponds to their nominal value. Impairment losses are recorded based on the estimated risk of non-recovery. The carrying amount of trade and other receivables in the consolidated statement of financial position represents a reasonable estimate of the fair value.

Impairment losses recognized against trade and other receivables are stable, at €1,062 million at December 31, 2016 (€1,063 million at December 31, 2015).

## 15.1.3 Other financial assets at fair value through income

In millions of euros	Dec. 31, 2016			Dec. 31, 2015		
	Non-current	Current	Total	Non-current	Current	Total
<b>Derivative instruments</b>	<b>3,603</b>	<b>9,047</b>	<b>12,650</b>	<b>4,026</b>	<b>10,857</b>	<b>14,883</b>
Derivatives hedging borrowings	888	250	1,138	1,174	240	1,413
Derivatives hedging commodities	1,875	8,712	10,587	1,962	10,510	12,472
Derivatives hedging other items <sup>(1)</sup>	840	85	925	890	107	998
<b>Financial assets at fair value through income (excluding margin calls)</b>	<b>-</b>	<b>816</b>	<b>816</b>	<b>-</b>	<b>797</b>	<b>797</b>
Financial assets qualifying as at fair value through income	-	816	816	-	779	779
Financial assets designated as at fair value through income	-	-	-	-	17	17
<b>Margin calls on derivatives hedging borrowings - assets</b>	<b>-</b>	<b>622</b>	<b>622</b>	<b>-</b>	<b>375</b>	<b>375</b>
<b>TOTAL</b>	<b>3,603</b>	<b>10,486</b>	<b>14,089</b>	<b>4,026</b>	<b>12,029</b>	<b>16,055</b>

(1) Derivatives hedging other items mainly include the interest rate component of interest rate derivatives (not qualifying as hedges or qualifying as cash flow hedges) that are excluded from net debt, as well as net investment hedge derivatives.

Financial assets qualifying as at fair value through income (excluding margin calls) are mainly money market funds held for trading purposes and held to be sold in the near term. They are included in the calculation of the Group's net debt (see Note 15.3 "Net debt").

Gains on financial assets qualifying as at fair value through income held for trading purposes totaled €8 million in 2016 versus €9 million in 2015.

Gains and losses on financial assets designated as at fair value through income in 2016 and 2015 were not material.

## 15.1.4 Cash and cash equivalents

Cash and cash equivalents totaled €9,825 million at December 31, 2016 (€9,183 million at December 31, 2015).

This amount also included €246 million in cash and cash equivalents subject to restrictions (€258 million at December 31, 2015). Cash and cash equivalents subject to restrictions include notably €192 million of cash equivalents set aside to cover the repayment of borrowings and debt as part of project financing arrangements in certain subsidiaries.

Gains recognized in respect of "Cash and cash equivalents" amounted to €131 million at December 31, 2016 compared to €121 million at December 31, 2015.

## 15.1.5 Financial assets set aside to cover the future costs of dismantling nuclear facilities and managing radioactive fissile material

As indicated in Note 18.2 "Nuclear dismantling liabilities", the Belgian law of April 11, 2003, amended by the law of April 25, 2007, granted the Group's wholly owned subsidiary Synatom responsibility for managing and investing funds received from operators of nuclear power plants in Belgium and designed to cover the costs of dismantling nuclear power plants and managing radioactive fissile material.

Pursuant to the law, Synatom may lend up to 75% of these funds to operators of nuclear plants provided that they meet certain financial criteria – particularly in terms of credit quality. The funds that cannot be lent to operators are either lent to entities meeting the credit quality criteria set by the law or invested in financial assets such as bonds and money market funds.



Loans to entities outside the Group and other cash investments are shown in the table below:

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
<b>Loans to third parties</b>	<b>562</b>	<b>594</b>
Loan to Eso/Elia	454	454
Loan to Ores Assets	82	82
Loan to Sibelga	26	58
<b>Other cash investments</b>	<b>1,464</b>	<b>1,193</b>
Money market funds	1,464	1,193
<b>TOTAL</b>	<b>2,026</b>	<b>1,787</b>

Loans to entities outside the Group are shown in the statement of financial position as "Loans and receivables at amortized cost". Bonds and money market funds held by Synatom are shown as "Available-for-sale securities".

### 15.1.6 Transfer of financial assets

At December 31, 2016, the outstanding amount of transferred financial assets (as well as the risks to which the Group remains exposed

following the transfer of those financial assets) as part of transactions leading to either (i) all or part of those assets being retained in the statement of financial position, or (ii) their full deconsolidation while retaining a continuing involvement in these financial assets, was not material in terms of the Group's indicators.

In 2016, the Group carried out disposals without recourse of financial assets as part of transactions leading to full derecognition, for an outstanding amount of €762 million at December 31, 2016.

### 15.1.7 Financial assets and equity instruments pledged as collateral for borrowings and debt

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
Financial assets and equity instruments pledged as collateral	4,177	4,348

This item mainly includes the carrying amount of equity instruments pledged as collateral for borrowings and debt.

## 15.2 Financial liabilities

Financial liabilities are recognized either:

- as "Liabilities at amortized cost" for borrowings and debt, trade and other payables, and other financial liabilities;
- as "Financial liabilities at fair value through income" for derivative instruments or financial liabilities designated as derivatives.

The following table presents the Group's different financial liabilities at December 31, 2016, broken down into current and non-current items:

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>			<b>Dec. 31, 2015</b>		
	<b>Non-current</b>	<b>Current</b>	<b>Total</b>	<b>Non-current</b>	<b>Current</b>	<b>Total</b>
Borrowings and debt	24,411	12,539	36,950	28,123	11,032	39,155
Derivative instruments	3,410	9,228	12,638	4,216	8,642	12,858
Trade and other payables	-	17,075	17,075	-	17,101	17,101
Other financial liabilities	200	-	200	237	-	237
<b>TOTAL</b>	<b>28,021</b>	<b>38,842</b>	<b>66,864</b>	<b>32,577</b>	<b>36,775</b>	<b>69,352</b>

## 15.2.1 Borrowings and debt

In millions of euros	Dec. 31, 2016			Dec. 31, 2015		
	Non-current	Current	Total	Non-current	Current	Total
Bond issues	18,617	3,360	21,977	21,912	2,057	23,969
Bank borrowings	4,501	977	5,478	4,694	1,765	6,459
Negotiable commercial paper	-	6,330	6,330	-	5,378	5,378
Drawdowns on credit facilities	12	30	43	95	10	105
Liabilities under finance leases	520	150	670	517	95	611
Other borrowings	90	249	339	319	80	399
<b>TOTAL BORROWINGS</b>	<b>23,740</b>	<b>11,097</b>	<b>34,837</b>	<b>27,537</b>	<b>9,385</b>	<b>36,922</b>
Bank overdrafts and current accounts	-	608	608	-	603	603
<b>OUTSTANDING BORROWINGS AND DEBT</b>	<b>23,740</b>	<b>11,705</b>	<b>35,444</b>	<b>27,537</b>	<b>9,988</b>	<b>37,525</b>
Impact of measurement at amortized cost	235	72	306	276	107	383
Impact of fair value hedges	436	31	468	310	23	333
Margin calls on derivatives hedging borrowings - liabilities	-	731	731	-	914	914
<b>BORROWINGS AND DEBT</b>	<b>24,411</b>	<b>12,539</b>	<b>36,950</b>	<b>28,123</b>	<b>11,032</b>	<b>39,155</b>

The fair value of gross borrowings and debt amounted to €39,343 million at December 31, 2016, compared with a carrying amount of €36,950 million.

Financial income and expenses relating to borrowings and debt are detailed in Note 9 "Net financial income/(loss)".

Borrowings and debt are analyzed in Note 15.3 "Net debt".

## 15.2.2 Derivative instruments

Derivative instruments recorded in liabilities are measured at fair value and broken down as follows:

In millions of euros	Dec. 31, 2016			Dec. 31, 2015		
	Non-current	Current	Total	Non-current	Current	Total
Derivatives hedging borrowings	251	67	318	278	100	377
Derivatives hedging commodities	1,461	9,038	10,499	2,528	8,493	11,022
Derivatives hedging other items <sup>(1)</sup>	1,698	123	1,821	1,410	49	1,459
<b>TOTAL</b>	<b>3,410</b>	<b>9,228</b>	<b>12,638</b>	<b>4,216</b>	<b>8,642</b>	<b>12,858</b>

(1) Derivatives hedging other items mainly include the interest rate component of interest rate derivatives (not qualifying as hedges or qualifying as cash flow hedges), that are excluded from net debt, as well as net investment hedge derivatives.

## 15.2.3 Trade and other payables

In millions of euros	Dec. 31, 2016	Dec. 31, 2015
Trade payables	16,327	16,280
Payable on fixed assets	748	821
<b>TOTAL</b>	<b>17,075</b>	<b>17,101</b>

The carrying amount of these financial liabilities represents a reasonable estimate of their fair value.

### 15.2.4 Other financial liabilities

At December 31, 2016, other financial liabilities amounted to €200 million (compared to €237 million at December 31, 2015), mainly corresponding to debt resulting from:

- purchase obligations (put options on non-controlling interests) granted by the Group notably for 41.01% of the shares of La Compagnie du Vent, which is fully consolidated.

These commitments to purchase equity instruments have been recognized under financial liabilities (see Note 1.4.11.2 "Financial liabilities");

- uncalled share capital of entities accounted for using the equity method, notably Cameron LNG.

## 15.3 Net debt

### 15.3.1 Net debt by type

In millions of euros	Dec. 31, 2016			Dec. 31, 2015		
	Non-current	Current	Total	Non-current	Current	Total
Borrowings and debt outstanding	23,740	11,705	35,444	27,537	9,988	37,525
Impact of measurement at amortized cost	235	72	306	276	107	383
Impact of fair value hedge <sup>(1)</sup>	436	31	468	310	23	333
Margin calls on derivatives hedging borrowings - liabilities	-	731	731	-	914	914
<b>BORROWINGS AND DEBT</b>	<b>24,411</b>	<b>12,539</b>	<b>36,950</b>	<b>28,123</b>	<b>11,032</b>	<b>39,155</b>
Derivatives hedging borrowings - carried in liabilities <sup>(2)</sup>	251	67	318	278	100	377
<b>GROSS DEBT</b>	<b>24,662</b>	<b>12,606</b>	<b>37,268</b>	<b>28,401</b>	<b>11,132</b>	<b>39,533</b>
Assets related to financing	(58)	(1)	(58)	(37)	-	(37)
<b>ASSETS RELATED TO FINANCING</b>	<b>(58)</b>	<b>(1)</b>	<b>(58)</b>	<b>(37)</b>	<b>-</b>	<b>(37)</b>
Financial assets at fair value through income (excluding margin calls)	-	(816)	(816)	-	(797)	(797)
Margin calls on derivatives hedging borrowings - carried in assets	-	(622)	(622)	-	(375)	(375)
Cash and cash equivalents	-	(9,825)	(9,825)	-	(9,183)	(9,183)
Derivatives hedging borrowings - carried in assets <sup>(2)</sup>	(888)	(250)	(1,138)	(1,174)	(240)	(1,413)
<b>NET CASH</b>	<b>(888)</b>	<b>(11,514)</b>	<b>(12,402)</b>	<b>(1,174)</b>	<b>(10,595)</b>	<b>(11,768)</b>
<b>NET DEBT</b>	<b>23,716</b>	<b>1,091</b>	<b>24,807</b>	<b>27,190</b>	<b>537</b>	<b>27,727</b>
Borrowings and debt outstanding	23,740	11,705	35,444	27,537	9,988	37,525
Assets related to financing	(58)	(1)	(58)	(37)	-	(37)
Financial assets at fair value through income (excluding margin calls)	-	(816)	(816)	-	(797)	(797)
Cash and cash equivalents	-	(9,825)	(9,825)	-	(9,183)	(9,183)
<b>NET DEBT EXCLUDING THE IMPACT OF DERIVATIVE INSTRUMENTS, CASH COLLATERAL AND AMORTIZED COST</b>	<b>23,682</b>	<b>1,062</b>	<b>24,744</b>	<b>27,500</b>	<b>8</b>	<b>27,508</b>

(1) This item corresponds to the revaluation of the interest rate component of debt in a qualified fair value hedging relationship.

(2) This item represents the interest rate component of the fair value of derivatives hedging borrowings in a designated fair value hedging relationship. It also represents the exchange rate and outstanding accrued interest rate components of the fair value of all debt-related derivatives irrespective of whether or not they are qualified as hedges.

### 15.3.2 Main events of the period

#### 15.3.2.1 Impact of changes in the scope of consolidation and in exchange rates on net debt

In 2016, changes in exchange rates resulted in a €74 million decrease in net debt (including a €240 million decrease in relation to the pound sterling, a €76 million increase in relation to the US dollar and a €53 million increase in relation to the Brazilian real).

Changes in the scope of consolidation (including the cash impact of acquisitions and disposals) led to a €3,600 million decrease in net debt, reflecting:

- several acquisitions carried out over the period (mainly OpTerra Energy Services, Maïa Eolis and Green Charge Networks), which increased net debt by €392 million (see *Notes 4.3 and 4.4.1*);
- disposals of assets over the period, which reduced net debt by €3,992 million, including the disposal of a 50% interest in Transmisora Eléctrica del Norte (TEN), merchant hydropower generation assets in the United States, the Meenakshi and Paiton coal-fired power plants, a portfolio of Maïa Eolis' wind farm assets to Futures Energies Investissements Holding, and non-consolidated investments in Société d'Enregistrement du Tricastin Holding, Transportadora de Gas del Perú and the Walloon distribution network operator (see *Note 4.1 "Disposals carried out in 2016"*).

#### 15.3.2.2 Financing and refinancing transactions

The Group carried out the following main transactions in 2016:

- the issuance by Glow Energy Public Co. Ltd. on May 18, 2016, of THB 3 billion (€75 million) worth of bonds with a 2.81% coupon maturing in 2026;
- two bond issues by ENGIE Brasil Energia on July 15, 2016:
  - BRL 247 million (€68 million) worth of bonds maturing in 2023 with a variable, inflation-indexed coupon;
  - BRL 353 million (€98 million) worth of bonds maturing in 2026 with a variable, inflation-indexed coupon;
- the redemption of the following bonds, which matured in 2016:
  - €1,043 million worth of ENGIE SA bonds with a coupon of 5.625% which matured on January 18, 2016;
  - €1 billion worth of ENGIE SA bonds with a coupon of 1.5% which matured on February 1, 2016;
- refinancing transactions:
  - on June 26, 2016, the Group secured bank refinancing of AUD 175 million (€117 million) for Pelican Point and Canunda;
  - on June 30, 2016, the Group settled Hazelwood Power Partnership's bank loan of AUD 368 million (€242 million) upon maturity through internal refinancing.

## 15.4 Fair value of financial assets by level in the fair value hierarchy

### 15.4.1 Financial assets

The table below shows the allocation of financial instruments carried in assets to the different levels in the fair value hierarchy:

In millions of euros	Dec. 31, 2016				Dec. 31, 2015			
	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3
Available-for-sale securities	2,997	1,977	-	1,020	3,016	1,593	-	1,423
Derivative instruments	12,650	68	12,560	22	14,883	67	14,753	63
<i>Derivatives hedging borrowings</i>	1,138	-	1,138	-	1,413	-	1,413	-
<i>Derivatives hedging commodities - relating to portfolio management activities</i>	2,504	68	2,414	22	3,485	67	3,354	63
<i>Derivatives hedging commodities - relating to trading activities</i>	8,083	-	8,083	-	8,987	-	8,987	-
<i>Derivatives hedging other items</i>	925	-	925	-	998	-	998	-
Financial assets at fair value through income (excluding margin calls)	816	1	816	-	797	1	796	-
<i>Financial assets qualifying as at fair value through income</i>	816	1	816	-	779	1	779	-
<i>Financial assets designated as at fair value through income</i>	-	-	-	-	17	-	17	-
<b>TOTAL</b>	<b>16,464</b>	<b>2,046</b>	<b>13,376</b>	<b>1,042</b>	<b>18,696</b>	<b>1,661</b>	<b>15,549</b>	<b>1,486</b>

A definition of these three levels is presented in Note 1.4.11.3 "Derivatives and hedge accounting".

#### Available-for-sale securities

Listed securities – measured at their market price at the reporting date – are included in level 1.

Unlisted securities – measured using valuation models based primarily on recent market transactions, the present value of future dividends/cash flows or net asset value – are included in level 3.

At December 31, 2016, changes in level 3 available-for-sale securities can be analyzed as follows:

In millions of euros	Available-for-sale securities
<b>At December 31, 2015</b>	<b>1,423</b>
Acquisitions	158
Disposals - carrying amount excluding changes in fair value recorded in "Other comprehensive income"	(500)
Disposals - "Other comprehensive income" derecognized	(152)
Other changes in fair value recorded in equity	160
Changes in fair value recorded in income	(18)
Changes in scope of consolidation, foreign currency translation and other changes	(51)
<b>At December 31, 2016</b>	<b>1,020</b>
Gains/(losses) recorded in income relating to instruments held at the end of the period	88

A 10% gain or loss in the market price of unlisted shares would generate a gain or loss (before tax) of around €102 million on the Group's comprehensive income.

### Loans and receivables at amortized cost (excluding trade and other receivables)

Loans and receivables at amortized cost (excluding trade and other receivables) in a designated fair value hedging relationship are presented in level 2 in the above table. Only the interest rate component of these items is remeasured, with fair value determined by reference to observable data.

### Derivative instruments

Derivative instruments included in level 1 are mainly futures traded on organized markets with clearing houses. They are measured at fair value based on their quoted price.

The measurement at fair value of derivative instruments included in level 3 is based on non-observable inputs and internal assumptions, usually because the maturity of the instruments exceeds the observable period of the underlying forward price, or because certain inputs such as the volatility of the underlying were not observable at the measurement date.

## 15.4.2 Financial liabilities

The table below shows the allocation of financial instruments carried in liabilities to the different levels in the fair value hierarchy:

In millions of euros	Dec. 31, 2016				Dec. 31, 2015			
	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3
Borrowings used in designated fair value hedges	4,691	-	4,691	-	7,294	-	7,294	-
Borrowings not used in designated fair value hedges	34,652	20,144	14,508	-	33,626	18,803	14,823	-
Derivative instruments	12,638	121	12,483	34	12,858	139	12,667	52
<i>Derivatives hedging borrowings</i>	318	-	318	-	377	-	377	-
<i>Derivatives hedging commodities - relating to portfolio management activities</i>	2,411	119	2,258	34	3,897	135	3,714	48
<i>Derivatives hedging commodities - relating to trading activities</i>	8,088	3	8,085	-	7,125	4	7,117	4
<i>Derivatives hedging other items</i>	1,821	-	1,821	-	1,459	-	1,459	-
<b>TOTAL</b>	<b>51,982</b>	<b>20,266</b>	<b>31,682</b>	<b>34</b>	<b>53,778</b>	<b>18,942</b>	<b>34,785</b>	<b>52</b>

### Borrowings used in designated fair value hedges

This caption includes bonds in a designated fair value hedging relationship which are presented in level 2 in the above table. Only the interest rate component of the bonds is remeasured, with fair value determined by reference to observable inputs.

### Borrowings not used in designated fair value hedges

Listed bond issues are included in level 1.

Other borrowings not used in a designated hedging relationship are presented in level 2 in the above table. The fair value of these borrowings is determined on the basis of future discounted cash flows and relies on directly or indirectly observable data.

The measurement at fair value of other derivative instruments is based on commonly-used models in the trading environment, and includes directly or indirectly observable inputs. These instruments are included in level 2 of the fair value hierarchy.

### Financial assets qualifying or designated as at fair value through income

Financial assets qualifying as at fair value through income for which the Group has regular net asset value data are included in level 1. If net asset values are not available on a regular basis, these instruments are included in level 2.

Financial assets designated as at fair value through income are included in level 2.

### Derivative instruments

The classification of derivative instruments in the fair value hierarchy is detailed in Note 15.4.1 "Financial assets".

## 15.5 Offsetting of financial derivative instrument assets and liabilities

The net amount of financial derivative instruments after taking into account enforceable master netting arrangements or similar agreements, whether or not they are set off in accordance with paragraph 42 of IAS 32, are presented in the table below:

### AT DECEMBER 31, 2016

<i>In millions of euros</i>		<b>Gross amount</b>	<b>Net amount recognized in the statement of financial position <sup>(1)</sup></b>	<b>Other offsetting agreements <sup>(2)</sup></b>	<b>Total net amount</b>
<b>Assets</b>	Derivatives hedging commodities	10,948	10,587	(7,981)	2,607
	Derivatives hedging borrowings and other items	2,063	2,063	(596)	1,467
<b>Liabilities</b>	Derivatives hedging commodities	(10,860)	(10,499)	9,867	(632)
	Derivatives hedging borrowings and other items	(2,139)	(2,139)	390	(1,750)

(1) Net amount recognized in the statement of financial position after taking into account offsetting agreements that meet the criteria set out in Section 42 of IAS 32.

(2) Other offsetting agreements include collateral and other guarantee instruments, as well as offsetting agreements that do not meet the criteria set out in Section 42 of IAS 32.

### AT DECEMBER 31, 2015

<i>In millions of euros</i>		<b>Gross amount</b>	<b>Net amount recognized in the statement of financial position <sup>(1)</sup></b>	<b>Other offsetting agreements <sup>(2)</sup></b>	<b>Total net amount</b>
<b>Assets</b>	Derivatives hedging commodities	12,836	12,472	(8,939)	3,533
	Derivatives hedging borrowings and other items	2,411	2,411	(717)	1,694
<b>Liabilities</b>	Derivatives hedging commodities	(11,386)	(11,022)	10,268	(754)
	Derivatives hedging borrowings and other items	(1,837)	(1,837)	127	(1,710)

(1) Net amount recognized in the statement of financial position after taking into account offsetting agreements that meet the criteria set out in Section 42 of IAS 32.

(2) Other offsetting agreements include collateral and other guarantee instruments, as well as offsetting agreements that do not meet the criteria set out in Section 42 of IAS 32.

## NOTE 16 Risks arising from financial instruments

The Group mainly uses derivative instruments to manage its exposure to market risks. Financial risk management procedures are set out in chapter 2 "Risk factors" of the Registration Document.

### 16.1 Market risks

#### 16.1.1 Commodity risk

Commodity risk arises primarily from the following activities:

- portfolio management; and
- trading.

The Group has identified two types of commodity risks: price risk resulting from fluctuations in market prices, and volume risk inherent to the business.

In the ordinary course of its operations, the Group is exposed to commodity risks on natural gas, electricity, coal, oil and oil products, other fuels, CO<sub>2</sub> and other "green" products. The Group is active on these energy markets either for supply purposes or to optimize and secure its energy production chain and its energy sales. The Group also uses derivatives to offer hedging instruments to its clients and to hedge its own positions.

#### 16.1.1.1 Portfolio management activities

Portfolio management seeks to optimize the market value of assets (power plants, gas and coal supply contracts, energy sales and gas storage and transmission) over various time frames (short-, medium- and long-term). Market value is optimized by:

- guaranteeing supply and ensuring the balance between needs and physical resources;
- managing market risks (price, volume) to unlock optimum value from portfolios within a specific risk framework.

The risk framework aims to safeguard the Group's financial resources over the budget period and smooth out medium-term earnings (over three or five years, depending on the maturity of each market). It encourages portfolio managers to take out economic hedges on their portfolio.

Sensitivities of the commodity-related financial derivatives portfolio used as part of the portfolio management activities as at December 31, 2016 are detailed in the table below. They are not representative of future changes in consolidated earnings and equity, insofar as they do not include the sensitivities relating to the purchase and sale contracts for the underlying commodities.

#### SENSITIVITY ANALYSIS <sup>(1)</sup>

In millions of euros	Changes in price	Dec. 31, 2016		Dec. 31, 2015	
		Pre-tax impact on income	Pre-tax impact on equity	Pre-tax impact on income	Pre-tax impact on equity
Oil-based products	+USD 10/bbl	475	(49)	329	96
Natural gas	+€3/MWh	(23)	(97)	(70)	(98)
Electricity	+€5/MWh	84	(39)	17	(9)
Coal	+USD 10/ton	67	3	97	1
Greenhouse gas emission rights	+€2/ton	64	-	96	-
EUR/USD	+10%	(89)	(7)	(206)	(9)
EUR/GBP	+10%	(42)	8	(7)	1

(1) The sensitivities shown above apply solely to financial commodity derivatives used for hedging purposes as part of the portfolio management activities.

#### 16.1.1.2 Trading activities

The Group's trading activities are primarily conducted within ENGIE Global Markets and ENGIE Energy Management. The purpose of these wholly-owned companies is to (i) assist Group entities in optimizing their asset portfolios; (ii) create and implement energy price risk management solutions for internal and external customers.

Revenues from trading activities totaled €427 million at December 31, 2016 (€389 million at December 31, 2015).

The use of Value at Risk (VaR) to quantify market risk arising from trading activities provides a transversal measure of risk taking all markets and products into account. VaR represents the maximum potential loss on a portfolio of assets over a specified holding period based on a given confidence interval. It is not an indication of expected results but is back-tested on a regular basis.



The Group uses a one-day holding period and a 99% confidence interval to calculate VaR, as well as stress tests, in accordance with banking regulatory requirements.

The VaR shown below corresponds to the global VaR of the Group's trading entities.

### Value at Risk

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>2016 average <sup>(1)</sup></b>	<b>2016 maximum <sup>(2)</sup></b>	<b>2016 minimum <sup>(2)</sup></b>	<b>2015 average <sup>(1)</sup></b>
Trading activities	2	10	20	2	7

(1) Average daily VaR.

(2) Maximum and minimum daily VaR observed in 2016.

### 16.1.2 Hedges of commodity risks

The Group enters into cash flow hedges as defined by IAS 39, using derivative instruments (firm or option contracts) contracted over the-counter or on organized markets. These instruments may be settled net or involve physical delivery of the underlying.

The fair values of commodity derivatives at December 31, 2016 and December 31, 2015 are indicated in the table below:

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>				<b>Dec. 31, 2015</b>			
	<b>Assets</b>		<b>Liabilities</b>		<b>Assets</b>		<b>Liabilities</b>	
	<b>Non-current</b>	<b>Current</b>	<b>Non-current</b>	<b>Current</b>	<b>Non-current</b>	<b>Current</b>	<b>Non-current</b>	<b>Current</b>
Derivative instruments relating to portfolio management activities	1,875	629	(1,461)	(949)	1,962	1,522	(2,528)	(1,369)
<i>Cash flow hedges</i>	87	101	(231)	(283)	242	496	(217)	(326)
<i>Other derivative instruments</i>	1,788	528	(1,230)	(666)	1,720	1,026	(2,312)	(1,042)
Derivative instruments relating to trading activities	-	8,083	-	(8,088)	-	8,987	-	(7,125)
<b>TOTAL</b>	<b>1,875</b>	<b>8,712</b>	<b>(1,461)</b>	<b>(9,038)</b>	<b>1,962</b>	<b>10,510</b>	<b>(2,528)</b>	<b>(8,493)</b>

See also Notes 15.1.3 "Other financial assets at fair value through income" and 15.2.2 "Derivative instruments".

The fair values shown in the table above reflect the amounts for which assets could be exchanged, or liabilities settled, at the end of the

reporting period. They are not representative of expected future cash flows insofar as positions (i) are sensitive to changes in prices; (ii) can be modified by subsequent transactions; and (iii) can be offset by future cash flows arising on the underlying transactions.

### 16.1.2.1 Cash flow hedges

The fair values of cash flow hedges by type of commodity are as follows:

In millions of euros	Dec. 31, 2016				Dec. 31, 2015			
	Assets		Liabilities		Assets		Liabilities	
	Non-current	Current	Non-current	Current	Non-current	Current	Non-current	Current
Natural gas	36	25	(106)	(81)	128	326	(40)	(105)
Electricity	5	9	(42)	(37)	26	17	(20)	(34)
Coal	5	4	-	-	-	-	(1)	(7)
Oil	1	2	(62)	(152)	9	29	(129)	(148)
Other <sup>(1)</sup>	40	61	(21)	(14)	79	124	(26)	(32)
<b>TOTAL</b>	<b>87</b>	<b>101</b>	<b>(231)</b>	<b>(283)</b>	<b>242</b>	<b>496</b>	<b>(217)</b>	<b>(326)</b>

(1) Includes mainly foreign currency hedges on commodities.

Notional amounts and maturities of cash flow hedges are as follows:

#### NOTIONAL AMOUNTS (NET) <sup>(1)</sup>

	Unit	Total at	2017	2018	2019	2020	2021	Beyond 5 years
		Dec. 31, 2016						
Natural gas	GWh	(37,356)	(18,323)	(20,369)	1,166	169	1	-
Electricity	GWh	(7,411)	(1,607)	(2,749)	(2,623)	(314)	(118)	-
Coal	Thousands of tons	562	417	144	-	-	-	-
Oil-based products	Thousands of barrels	2,688	4,544	(1,856)	-	-	-	-
Greenhouse gas emission rights	Thousands of tons	2,506	534	922	900	150	-	-

(1) Long/(short) position.

At December 31, 2016, a loss of €372 million was recognized in equity in respect of cash flow hedges, versus a gain of €148 million at December 31, 2015. A gain of €167 million was reclassified from equity to income in 2016, compared to a gain of €143 million reclassified in 2015.

Gains and losses arising from the ineffective portion of hedges are taken to income. The impact recognized in income was nil in 2016, compared to a gain of €1 million in 2015.

### 16.1.2.2 Other commodity derivatives

Other commodity derivatives include embedded derivatives, commodity purchase and sale contracts which were not entered into within the ordinary course of business at the statement of financial position date, as well as derivative financial instruments not eligible for hedge accounting in accordance with IAS 39.

### 16.1.3 Currency risk

The Group is exposed to currency risk, defined as the impact on its statement of financial position and income statement of fluctuations in exchange rates affecting its operating and financing activities. Currency risk comprises (i) transaction risk arising in the ordinary course of business, (ii) specific transaction risk related to investments, mergers-acquisitions or disposal projects, (iii) translation risk related to assets outside the Eurozone, and (iv) the risk arising on the consolidation in euros of subsidiaries' financial statements with a functional currency other than the euro. The three main translation and consolidation risk exposures correspond, in order, to assets in American dollars, Brazilian real and pound sterling.

### 16.1.3.1 Analysis of financial instruments by currency

The following tables present a breakdown by currency of outstanding gross debt and net debt, before and after hedging:

#### Outstanding gross debt

	Dec. 31, 2016		Dec. 31, 2015	
	Before hedging	After hedging	Before hedging	After hedging
EUR	65%	77%	65%	69%
USD	16%	10%	15%	14%
GBP	7%	2%	8%	5%
Other currencies	12%	11%	12%	12%
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

#### Net debt

	Dec. 31, 2016		Dec. 31, 2015	
	Before hedging	After hedging	Before hedging	After hedging
EUR	59%	77%	61%	67%
USD	21%	13%	18%	17%
GBP	10%	3%	10%	7%
Other currencies	10%	7%	11%	9%
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

### 16.1.3.2 Currency risk sensitivity analysis

Sensitivity was analyzed based on the Group's net debt position (including the impact of interest rate and foreign currency derivatives) and financial instruments qualified as net investment hedges at the reporting date.

For currency risk, sensitivity corresponds to a 10% rise or fall in exchange rates of foreign currencies against the euro compared to closing rates.

#### Impact on income after currency hedges

Changes in exchange rates against the euro only affect income via gains and losses on assets and liabilities denominated in a currency other than the functional currency of companies carrying the assets and liabilities on their statements of financial position, and when the assets and liabilities in question do not qualify as net investment hedges. The impact of a uniform appreciation (or depreciation) of 10% in foreign currencies against the euro would ultimately be a gain (or loss) of €25 million.

#### Impact on equity

For financial instruments (debt and derivatives) designated as net investment hedges, a depreciation of 10% in foreign currencies against the euro would have a positive impact of €508 million on equity. An appreciation of 10% in foreign currencies against the euro would have a negative impact of €508 million on equity. These impacts are counteracted by the offsetting change in the net investment hedged.

### 16.1.4 Interest rate risk

The Group seeks to manage its borrowing costs by limiting the impact of interest rate fluctuations on its income statement. It does this by ensuring a balanced interest rate structure in the medium-term (five years). The Group's aim is therefore to use a mix of fixed rates, floating rates and capped floating rates for its net debt. The interest rate mix may shift within a range defined by the Group Management in line with market trends.

In order to manage the interest rate structure for its net debt, the Group uses hedging instruments, particularly interest rate swaps and options. At December 31, 2016, the Group had a portfolio of interest rate options (caps) protecting it from a rise in short-term interest rates for the euro.

Between 2013 and 2014, the Group contracted 2017, 2018 and 2019 forward interest rate pre-hedges with 10, 20 and 18 year maturities in order to protect the refinancing interest rate on a portion of its debt.

#### 16.1.4.1 Analysis of financial instruments by type of interest rate

The following tables present a breakdown by type of interest rate of outstanding gross debt and net debt before and after hedging.

##### Outstanding gross debt

	Dec. 31, 2016		Dec. 31, 2015	
	Before hedging	After hedging	Before hedging	After hedging
Floating rate	36%	41%	34%	38%
Fixed rate	64%	59%	66%	62%
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

##### Net debt

	Dec. 31, 2016		Dec. 31, 2015	
	Before hedging	After hedging	Before hedging	After hedging
Floating rate	11%	17%	12%	17%
Fixed rate	89%	83%	88%	83%
<b>TOTAL</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

#### 16.1.4.2 Interest rate risk sensitivity analysis

Sensitivity was analyzed based on the Group's net debt position (including the impact of interest rate and foreign currency derivatives relating to net debt) at the reporting date.

For interest rate risk, sensitivity corresponds to a 100-basis-point rise or fall in the yield curve compared with year-end interest rates.

##### Impact on income after hedging

A uniform rise of 100 basis points in short-term interest rates (across all currencies) on the nominal amount of floating-rate net debt and the floating-rate leg of derivatives, would increase net interest expense by €42 million. A fall of 100 basis points in short-term interest rates would reduce net interest expense by €41 million.

In the income statement, a uniform rise of 100 basis points in interest rates (across all currencies) on derivative instruments not qualifying for hedge accounting would result in a gain of €24 million attributable to changes in the fair value of derivatives. However, a fall of 100 basis points in interest rates would generate a loss of €29 million. The asymmetrical impacts are notably attributable to the interest rate options portfolio.

##### Impact on equity

A uniform rise of 100 basis points in interest rates (across all currencies) would generate a gain of €574 million on equity, attributable to changes in the fair value of derivative instruments designated as cash flow hedges. However, a fall of 100 basis points in interest rates would have a negative impact of €710 million.

### 16.1.4.3 Currency and interest rate hedges

The fair values of derivatives (excluding commodity instruments) at December 31, 2016 and December 31, 2015 are indicated in the table below:

<i>In millions of euros</i>	Dec. 31, 2016				Dec. 31, 2015			
	Assets		Liabilities		Assets		Liabilities	
	Non-Current	Current	Non-Current	Current	Non-Current	Current	Non-Current	Current
Derivatives hedging borrowings	888	250	(251)	(67)	1,174	240	(278)	(100)
<i>Fair value hedges</i>	683	-	(19)	-	575	115	(34)	-
<i>Cash flow hedges</i>	68	166	(90)	(1)	509	-	(33)	(1)
<i>Derivative instruments not qualifying for hedge accounting</i>	137	84	(142)	(66)	90	125	(211)	(99)
Derivatives hedging other items	840	85	(1,698)	(123)	890	107	(1,410)	(49)
<i>Fair value hedges</i>	-	-	-	-	-	-	-	-
<i>Cash flow hedges</i>	13	6	(976)	(55)	56	72	(742)	(9)
<i>Net investment hedges</i>	37	-	(118)	-	22	-	(87)	-
<i>Derivative instruments not qualifying for hedge accounting</i>	791	79	(604)	(68)	813	35	(580)	(41)
<b>TOTAL</b>	<b>1,728</b>	<b>335</b>	<b>(1,949)</b>	<b>(190)</b>	<b>2,064</b>	<b>347</b>	<b>(1,688)</b>	<b>(149)</b>

See also Notes 15.1.3 "Other financial assets at fair value through income" and 15.2.2 "Derivative instruments".

The fair values shown in the table above reflect the amounts for which assets could be exchanged, or liabilities settled, at the end of the reporting period. They are not representative of expected future cash

flows insofar as positions (i) are sensitive to changes in prices or to changes in credit ratings, (ii) can be modified by subsequent transactions, and (iii) can be offset by future cash flows arising on the underlying transactions.

The table below shows the fair values and notional amounts of financial instruments designated as currency or interest rate hedges:

#### CURRENCY DERIVATIVES

<i>In millions of euros</i>	Dec. 31, 2016		Dec. 31, 2015	
	Fair value	Nominal amount	Fair value	Nominal amount
Fair value hedges	-	-	115	124
Cash flow hedges	(146)	4,513	370	4,628
Net investment hedges	(81)	6,281	(65)	4,919
Derivative instruments not qualifying for hedge accounting	(102)	9,796	(234)	10,659
<b>TOTAL</b>	<b>(329)</b>	<b>20,591</b>	<b>185</b>	<b>20,329</b>

#### INTEREST RATE DERIVATIVES

<i>In millions of euros</i>	Dec. 31, 2016		Dec. 31, 2015	
	Fair value	Nominal amount	Fair value	Nominal amount
Fair value hedges	664	10,163	541	9,413
Cash flow hedges	(724)	3,520	(518)	4,532
Derivative instruments not qualifying for hedge accounting	313	20,567	366	21,408
<b>TOTAL</b>	<b>253</b>	<b>34,250</b>	<b>389</b>	<b>35,353</b>

The fair values shown in the table above are positive for an asset and negative for a liability.

The Group qualifies foreign currency derivatives hedging firm foreign currency commitments and interest rate swaps transforming fixed-rate debt into floating-rate debt as fair value hedges.

Cash flow hedges are mainly used to hedge future foreign currency cash flows, floating-rate debt as well as future refinancing requirements.

Net investment hedging instruments are mainly cross currency swaps.

Derivative instruments not qualifying for hedge accounting correspond to instruments that do not meet the definition of hedges from an accounting perspective, even though they are used as economic hedges of borrowings and foreign currency commitments.

#### AT DECEMBER 31, 2016

<i>In millions of euros</i>	<b>Total</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Beyond 5 years</b>
Fair value of derivatives by maturity date	(870)	84	(80)	(84)	(84)	(65)	(641)

At December 31, 2016, a loss of €261 million was recognized in equity.

The amount reclassified from equity to income in the period represented a gain of €13 million.

#### Fair value hedges

At December 31, 2016, the net impact of fair value hedges recognized in the income statement represented a loss of €8 million.

#### Cash flow hedges

Foreign currency and interest rate derivatives designated as cash flow hedges can be analyzed as follows by maturity:

The ineffective portion of cash flow hedges recognized in income was not significant at December 31, 2016.

#### AT DECEMBER 31, 2015

<i>In millions of euros</i>	<b>Total</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Beyond 5 years</b>
Fair value of derivatives by maturity date	(149)	36	98	(20)	(43)	(49)	(170)

#### Net investment hedges

The ineffective portion of net investment hedges recognized in income represented a gain of €3 million at December 31, 2016.

## 16.2 Counterparty risk

The Group is exposed to counterparty risk from customers, suppliers, partners, intermediaries and banks on its operating and financing activities, when such parties are unable to honor their contractual obligations. Counterparty risk results from a combination of payment risk (failure to pay for services or deliveries carried out), delivery risk (failure to deliver services or products paid for) and the risk of replacing contracts in default (known as mark-to-market exposure, i.e. the cost of replacing the contract in conditions other than those initially agreed).

### 16.2.1 Operating activities

Counterparty risk arising on operating activities is managed via standard mechanisms such as third-party guarantees, netting agreements and margin calls, using dedicated hedging instruments or special prepayment and debt recovery procedures, particularly for retail customers.

Under the Group's policy, each business unit is responsible for managing counterparty risk, although the Group continues to manage the biggest counterparty exposures.

The credit rating of large- and mid-sized counterparties with which the Group has exposures above a certain threshold is measured based on a specific rating process, while a simplified credit scoring process is used for commercial customers with which the Group has fairly low exposures. These processes are based on formally documented, consistent methods across the Group. Consolidated exposures are monitored by counterparty and by segment (credit rating, sector, etc.) using standard indicators (payment risk, mark-to-market exposure).

The Group's Energy Market Risk Committee consolidates and monitors the Group's exposure to its main energy counterparties on a quarterly basis and ensures that the exposure limits set for these counterparties are respected.

## TRADE AND OTHER RECEIVABLES

Past-due trade and other receivables are analyzed below:

In millions of euros	Past due assets not impaired at the reporting date				Impaired assets	Assets neither impaired nor past due		Total
	0-6 months	6-12 months	Beyond 1 year	Total		Total	Total	
At December 31, 2016	920	196	268	1,384	1,279	19,234	21,897	
At December 31, 2015	877	225	315	1,418	1,218	17,776	20,412	

The age of receivables that are past due but not impaired may vary significantly depending on the type of customer with which the Group does business (private corporations, individuals or public authorities). The Group decides whether or not to recognize impairment on a case-by-case basis according to the characteristics of the customer categories concerned. The Group does not consider that it is exposed to any material concentration of credit risk.

### Commodity derivatives

In the case of commodity derivatives, counterparty risk arises from positive fair value. Counterparty risk is taken into account when calculating the fair value of these derivative instruments.

In millions of euros	Dec. 31, 2016		Dec. 31, 2015	
	Investment Grade <sup>(3)</sup>	Total	Investment Grade <sup>(3)</sup>	Total
Gross exposure <sup>(1)</sup>	9,626	10,588	11,191	12,472
Net exposure <sup>(2)</sup>	2,347	2,571	3,216	3,548
% of credit exposure to "Investment Grade" counterparties	91.3%		90.6%	

(1) Corresponds to the maximum exposure, i.e. the value of the derivatives shown under assets (positive fair value).

(2) After taking into account the liability positions with the same counterparties (negative fair value), collateral, netting agreements and other credit enhancement techniques.

(3) Investment Grade corresponds to transactions with counterparties that are rated at least BBB- by Standard & Poor's, Baa3 by Moody's, or equivalent by Dun & Bradstreet. "Investment Grade" is also determined based on an internal rating tool that is rolled out within the Group, and covers its main counterparties.

## 16.2.2 Financing activities

For its financing activities, the Group has put in place procedures for managing and monitoring risk based on (i) the accreditation of counterparties according to external credit ratings, objective market data (credit default swaps, market capitalization) and financial structure, and (ii) counterparty risk exposure limits.

To reduce its counterparty risk exposure, the Group drew increasingly on a structured legal framework based on master agreements (including netting clauses) and collateralization contracts (margin calls).

The oversight procedure for managing counterparty risk arising from financing activities is managed by a middle office that operates independently of the Group's Treasury department and reports to the Finance division.

### 16.2.2.1 Counterparty risk arising from loans and receivables at amortized cost (excluding trade and other receivables)

#### LOANS AND RECEIVABLES AT AMORTIZED COST (EXCLUDING TRADE AND OTHER RECEIVABLES)

The balance of outstanding past due loans and receivables at amortized cost (excluding trade and other receivables) is analyzed below:

	Past due assets not impaired at the reporting date				Impaired assets	Assets neither impaired nor past due	Total
	0-6 months	6-12 months	Beyond 1 year	Total	Total	Total	
	At December 31, 2016	-	-	2	2	238	
At December 31, 2015	-	-	24	24	397	2,921	3,343

The balance of outstanding loans and receivables carried at amortized cost (excluding trade and other receivables) presented in the above table does not include the impact of impairment losses or changes in fair value and the application of amortized cost, which totaled a negative

€227 million, at December 31, 2016 (compared to a negative €235 million at December 31, 2015). Changes in these items are presented in Note 15.1.2 "Loans and receivables at amortized cost".

### 16.2.2.2 Counterparty risk arising from investing activities and the use of derivative financial instruments

The Group is exposed to counterparty risk arising from investments of surplus cash and from the use of derivative financial instruments. In the case of financial instruments at fair value through income, counterparty

risk arises on instruments with a positive fair value. Counterparty risk is taken into account when calculating the fair value of these derivative instruments.

At December 31, 2016, total outstandings exposed to credit risk amounted to €10,664 million.

In millions of euros	Dec. 31, 2016				Total	Dec. 31, 2015		
	Total	Investment Grade <sup>(1)</sup>	Unrated <sup>(2)</sup>	Non Investment Grade <sup>(2)</sup>		Investment Grade <sup>(1)</sup>	Unrated <sup>(2)</sup>	Non Investment Grade <sup>(2)</sup>
Exposure	10,664	89.0%	4.0%	7.0%	10,167	90.0%	3.0%	7.0%

(1) Counterparties that are rated at least BBB- by Standard & Poor's and Baa3 by Moody's.

(2) Most of these two exposures is carried by consolidated companies that include non-controlling interests, or by Group companies that operate in emerging countries, where cash cannot be pooled and is therefore invested locally.

At December 31, 2016, Crédit Agricole Corporate and Investment Bank is the main Group counterparty and represents 24% of cash surpluses. This relates mainly to a depositary risk.

## 16.3 Liquidity risk

In the context of its operating activities, the Group is exposed to a risk of having insufficient liquidity to meet its contractual obligations. As well as the risks inherent in managing working capital, margin calls are required in certain market activities.

The Group has set up a quarterly committee tasked with managing and monitoring liquidity risk throughout the Group, by maintaining a broad range of investments and sources of financing, preparing forecasts of cash investments and divestments, and performing stress tests on the margin calls put in place when commodity, interest rate and currency derivatives are negotiated.

The Group centralizes virtually all financing needs and cash flow surpluses of the companies it controls, as well as most of their medium- and long-term external financing requirements. Centralization is provided by financing vehicles (long-term and short-term) and by dedicated

Group cash pooling vehicles based in France, Belgium and in Luxembourg.

Surpluses held by these structures are managed in accordance with a uniform policy. Unpooled cash surpluses are invested in instruments selected on a case-by-case basis in light of local financial market imperatives and the financial strength of the counterparties concerned.

The onslaught of successive financial crises since 2008 and the ensuing rise in counterparty risk prompted the Group to tighten its investment policy with the aim of keeping an extremely high level of liquidity and protecting invested capital (95% of cash pooled at December 31, 2016 was invested in overnight bank deposits and standard money market funds with daily liquidity). Performance and counterparty risks are monitored on a daily basis for both investment types, allowing the Group to take immediate action where required in response to market developments.

The Group's financing policy is based on:



- centralizing external financing;
- diversifying sources of financing between credit institutions and capital markets;
- achieving a balanced debt repayment profile.

The Group seeks to diversify its sources of financing by carrying out public or private bond issues within the scope of its Euro Medium Term Notes program. It also issues negotiable commercial paper in France and in the United States.

At December 31, 2016, bank loans accounted for 19% of gross debt (excluding overdrafts and the impact of derivatives and amortized cost), while the remaining debt was raised on capital markets (including €21,977 million in bonds, or 63% of gross debt).

Outstanding negotiable commercial paper issues represented 18% of gross debt, or €6,330 million at December 31, 2016. As negotiable commercial paper is relatively inexpensive and highly liquid, it is used by the Group in a cyclical or structural fashion to finance its short-term cash requirements. However, all outstanding negotiable commercial paper is

backed by confirmed bank lines of credit so that the Group could continue to finance its activities if access to this financing source were to dry up.

Available cash, comprising cash and cash equivalents and financial assets measured at fair value through income (excluding margin calls), totaled €10,642 million at December 31, 2016, of which 79% was invested in the Eurozone.

The Group also has access to confirmed credit lines. These facilities are appropriate for the scale of its operations and for the timing of contractual debt repayments. Confirmed credit facilities had been granted for a total of €13,602 million at December 31, 2016, of which €13,559 million was available. 93% of available credit facilities are centralized. None of these centralized facilities contains a default clause linked to covenants or minimum credit ratings.

At December 31, 2016, all the entities of the Group whose debt is consolidated comply with the covenants and declarations included in their financial documentation.

### 16.3.1 Undiscounted contractual payments relating to financial activities

At December 31, 2016, undiscounted contractual payments on net debt (excluding the impact of derivatives, margin calls and amortized cost) break down as follows by maturity:

#### AT DECEMBER 31, 2016

<i>In millions of euros</i>	<b>Total</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Beyond 5 years</b>
Bond issues	21,977	3,360	1,696	924	2,492	2,169	11,336
Bank borrowings	5,478	977	723	459	805	283	2,230
Negotiable commercial paper	6,330	6,330	-	-	-	-	-
Drawdowns on credit facilities	43	30	2	2	4	-	3
Liabilities under finance leases	670	150	167	154	91	80	28
Other borrowings	339	249	13	35	10	10	22
Bank overdrafts and current accounts	608	608	-	-	-	-	-
<b>OUTSTANDING BORROWINGS AND DEBT</b>	<b>35,444</b>	<b>11,705</b>	<b>2,602</b>	<b>1,574</b>	<b>3,402</b>	<b>2,543</b>	<b>13,619</b>
Assets related to financing	(58)	(1)	(1)	(1)	(3)	(4)	(48)
Financial assets at fair value through income (excluding margin calls)	(816)	(816)	-	-	-	-	-
Cash and cash equivalents	(9,825)	(9,825)	-	-	-	-	-
<b>NET DEBT EXCLUDING THE IMPACT OF DERIVATIVE INSTRUMENTS, MARGIN CALLS AND AMORTIZED COST</b>	<b>24,744</b>	<b>1,062</b>	<b>2,601</b>	<b>1,573</b>	<b>3,399</b>	<b>2,539</b>	<b>13,571</b>

#### AT DECEMBER 31, 2015

<i>In millions of euros</i>	<b>Total</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Beyond 5 years</b>
<b>OUTSTANDING BORROWINGS AND DEBT</b>	<b>37,525</b>	<b>9,988</b>	<b>4,649</b>	<b>2,407</b>	<b>1,328</b>	<b>3,249</b>	<b>15,904</b>
Assets related to financing, financial assets at fair value through income (excluding margin calls) and cash and cash equivalents	(10,017)	(9,983)	-	-	-	(1)	(33)
<b>NET DEBT EXCLUDING THE IMPACT OF DERIVATIVE INSTRUMENTS, MARGIN CALLS AND AMORTIZED COST</b>	<b>27,508</b>	<b>5</b>	<b>4,649</b>	<b>2,407</b>	<b>1,328</b>	<b>3,248</b>	<b>15,872</b>

At December 31, 2016, undiscounted contractual interest payments on outstanding borrowings and debt break down as follows by maturity:

**AT DECEMBER 31, 2016**

<i>In millions of euros</i>	<b>Total</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Beyond 5 years</b>
Undiscounted contractual interest flows on outstanding borrowings and debt	9,688	982	846	773	694	599	5,793

**AT DECEMBER 31, 2015**

<i>In millions of euros</i>	<b>Total</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Beyond 5 years</b>
Undiscounted contractual interest flows on outstanding borrowings and debt	10,874	1,044	935	824	756	681	6,634

At December 31, 2016, undiscounted contractual payments on outstanding derivatives (excluding commodity instruments) recognized in assets and liabilities break down as follows by maturity (net amounts):

**AT DECEMBER 31, 2016**

<i>In millions of euros</i>	<b>Total</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Beyond 5 years</b>
Derivatives (excluding commodity instruments)	(843)	(223)	16	(32)	(83)	(85)	(436)

**AT DECEMBER 31, 2015**

<i>In millions of euros</i>	<b>Total</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Beyond 5 years</b>
Derivatives (excluding commodity instruments)	(1,645)	(416)	(191)	(18)	(38)	(78)	(904)

To better reflect the economic substance of these transactions, the cash flows linked to the derivatives recognized in assets and liabilities shown in the table above relate to net positions.

The maturities of the Group's undrawn credit facility programs are analyzed in the table below:

**AT DECEMBER 31, 2016**

<i>In millions of euros</i>	<b>Total</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Beyond 5 years</b>
Confirmed undrawn credit facility programs	13,559	1,517	483	538	376	10,525	120

Of these undrawn programs, an amount of €6,330 million is allocated to covering commercial paper issues.

At December 31, 2016, no single counterparty represented more than 6% of the Group's confirmed undrawn credit lines.

**AT DECEMBER 31, 2015**

<i>In millions of euros</i>	<b>Total</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Beyond 5 years</b>
Confirmed undrawn credit facility programs	13,998	972	1,317	429	205	10,972	102

### 16.3.2 Undiscounted contractual payments relating to operating activities

The table below provides an analysis of undiscounted fair values due and receivable in respect of commodity derivatives recorded in assets and liabilities at the statement of financial position date.

#### Liquidity risk

The Group provides an analysis of residual contractual maturities for commodity derivative instruments included in its portfolio management activities. Derivative instruments relating to trading activities are considered to be liquid in less than one year, and are presented under current items in the statement of financial position.

#### AT DECEMBER 31, 2016

<i>In millions of euros</i>	<b>Total</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>	<b>Beyond 5 years</b>
Derivative instruments carried in liabilities							
<i>relating to portfolio management activities</i>	(2,404)	(935)	(731)	(513)	(170)	(36)	(19)
<i>relating to trading activities</i>	(8,085)	(8,085)	-	-	-	-	-
Derivative instruments carried in assets							
<i>relating to portfolio management activities</i>	2,514	606	1,082	501	211	71	42
<i>relating to trading activities</i>	8,081	8,081	-	-	-	-	-
<b>TOTAL AT DECEMBER 31, 2016</b>	<b>106</b>	<b>(332)</b>	<b>352</b>	<b>(12)</b>	<b>42</b>	<b>34</b>	<b>22</b>

#### AT DECEMBER 31, 2015

<i>In millions of euros</i>	<b>Total</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>Beyond 5 years</b>
Derivative instruments carried in liabilities							
<i>relating to portfolio management activities</i>	(3,923)	(1,381)	(1,524)	(722)	(206)	(67)	(24)
<i>relating to trading activities</i>	(7,125)	(7,125)	-	-	-	-	-
Derivative instruments carried in assets							
<i>relating to portfolio management activities</i>	3,491	1,527	1,493	376	60	16	19
<i>relating to trading activities</i>	8,988	8,988	-	-	-	-	-
<b>TOTAL AT DECEMBER 31, 2015</b>	<b>1,431</b>	<b>2,010</b>	<b>(31)</b>	<b>(345)</b>	<b>(146)</b>	<b>(51)</b>	<b>(5)</b>

### 16.3.3 Commitments relating to commodity purchase and sale contracts entered into within the ordinary course of business

Some Group operating companies have entered into long-term contracts, some of which include "take-or-pay" clauses. These consist of firm commitments to purchase (sell) specified quantities of gas,

electricity and steam and related services, in exchange for a firm commitment from the other party to deliver (purchase) said quantities and services. These contracts were documented as falling outside the scope of IAS 39. The table below shows the main future commitments arising from contracts entered into by the GEM & GNL, Latin America and North America reportable segments (expressed in TWh):

<i>In TWh</i>	<b>Total at</b>			<b>Total at</b>	
	<b>Dec. 31, 2016</b>	<b>2017</b>	<b>2018-2021</b>	<b>Beyond 5 years</b>	<b>Dec. 31, 2015</b>
Firm purchases	(6,214)	(746)	(2,496)	(2,972)	(6,950)
Firm sales	2,051	400	669	982	1,784

### 16.4 Equity risk

At December 31, 2016, available-for-sale securities held by the Group amounted to €2,997 million (see Note 15.1.1 "Available-for-sale securities").

A fall of 10% in the market price of listed shares would have a negative impact (before tax) of around €198 million on the Group's comprehensive income.

The Group's main unlisted security corresponds to its 9% interest in the Nordstream pipeline, which is measured by reference to the Discounted Dividend Method (DDM).

The Group's portfolio of listed and unlisted securities is managed within the context of a specific investment procedure and its performance is reported on a regular basis to Executive Management.

## NOTE 17 Equity

### 17.1 Share capital

	<b>Number of shares</b>			<b>Value (in millions of euros)</b>		
	<b>Total</b>	<b>Treasury stock</b>	<b>Outstanding</b>	<b>Share capital</b>	<b>Additional paid-in capital</b>	<b>Treasury stock</b>
<b>AT DECEMBER 31, 2014</b>	<b>2,435,285,011</b>	<b>(44,829,797)</b>	<b>2,390,455,214</b>	<b>2,435</b>	<b>32,506</b>	<b>(957)</b>
Purchase/disposal of treasury stock	-	5,422,256	5,422,256	-	-	135
<b>AT DECEMBER 31, 2015</b>	<b>2,435,285,011</b>	<b>(39,407,541)</b>	<b>2,395,877,470</b>	<b>2,435</b>	<b>32,506</b>	<b>(822)</b>
Purchase/disposal of treasury stock	-	1,884,703	1,884,703	-	-	61
<b>AT DECEMBER 31, 2016</b>	<b>2,435,285,011</b>	<b>(37,522,838)</b>	<b>2,397,762,173</b>	<b>2,435</b>	<b>32,506</b>	<b>(761)</b>

Changes in the number of shares during 2016 reflect the delivery of treasury stock for 2 million shares as part of bonus share plans (against 5 million shares in 2015).

### 17.1.1 Potential share capital and instruments providing a right to subscribe for new ENGIE SA shares

At December 31, 2016 only one stock subscription option plan remains in force as described in Note 23.1 "Stock option plans".

Shares to be allocated under bonus share plans, performance share award plans as well as the stock purchase option plans, described in Note 23 "Share-based payments", will be covered by existing ENGIE SA shares.

### 17.1.2 Treasury stock

The Group has a stock repurchase program as a result of the authorization granted to the Board of Directors by the Ordinary and Extraordinary Shareholders' Meeting of May 3, 2016. This program provides for the repurchase of up to 10% of the shares comprising the share capital of ENGIE SA at the date of said Shareholders' Meeting. The aggregate amount of acquisitions net of expenses under the program may not exceed the sum of €9.7 billion, and the purchase price must be less than €40 per share excluding acquisition costs.

At December 31, 2016, the Group held 37.5 million treasury shares, allocated in full to cover the Group's share commitments to employees and corporate officers.

The liquidity agreement signed with an investment service provider assigns to the latter the role of operating on the market on a daily basis, to buy or sell ENGIE SA shares, in order to ensure liquidity and an active market for the shares on the Paris and Brussels stock exchanges. The resources allocated to the implementation of this agreement amounted to €150.0 million.

## 17.2 Other disclosures concerning additional paid-in capital, consolidated reserves and issuance of deeply subordinated perpetual notes (Group share)

Total additional paid-in capital, consolidated reserves and issuance of deeply subordinated perpetual notes (including net income for the fiscal year), amounted to €37,746 million at December 31, 2016, including €32,506 million of additional paid-in capital.

Consolidated reserves include the cumulated income of the Group, the legal and statutory reserves of the company ENGIE SA and the cumulative actuarial differences, net of tax.

Under French law, 5% of the net income of French companies must be allocated to the legal reserve until the latter reaches 10% of share capital. This reserve can only be distributed to shareholders in the event of liquidation. The ENGIE SA legal reserve amounts to €244 million.

The cumulative actuarial differences Group share represent losses of €3,235 million at December 31, 2016 (losses of €2,538 million at December 31, 2015); deferred taxes on these actuarial differences amount to €846 million at December 31, 2016 (€778 million at December 31, 2015).

### 17.2.1 Issuance of deeply subordinated perpetual notes

ENGIE SA carried out two issues of deeply subordinated perpetual notes, the first on July 3, 2013 and the second on May 22, 2014. These transactions were divided into several tranches, offering an average coupon of 3.4% (2014) and 4.4% (2013).

In accordance with the provisions of IAS 32 – *Financial Instruments – Presentation*, and given their characteristics, these instruments were accounted for in equity in the Group's consolidated financial statements for a total amount of €1,907 million in 2014 and €1,657 million in 2013.

The coupons ascribed to the owners of these notes, for which €146 million was paid in 2016, are accounted for as a deduction from equity in the Group's consolidated financial statements; the relating tax saving is accounted for in the income statement.

### 17.2.2 Distributable capacity of ENGIE SA

ENGIE SA's distributable capacity totaled €34,741 million at December 31, 2016 (compared with €36,690 million at December 31, 2015), including €32,506 million of additional paid-in capital.

### 17.2.3 Dividend

The table below shows the dividends and interim dividends paid by ENGIE SA in respect of 2015 and 2016.

	Amount distributed (in millions of euros)	Net dividend per share (in euros)
<b>In respect of 2015</b>		
Interim dividend (paid on October 15, 2015)	1,196	0.50
Remaining dividend (paid on May 5, 2016)	1,198	0.50
<b>In respect of 2016</b>		
Interim dividend (paid on October 14, 2016)	1,198	0.50

The additional 3% contribution, introduced by France's 2012 Finance Law and payable in respect of the dividend and interim dividend distributed in May and October 2016, amounts to €74 million (€72 million for the payments carried out in 2015) and is accounted for in the income statement.

The Shareholders' Meeting of May 3, 2016 approved the distribution of a total dividend of €1 per share in respect of 2015. As an interim dividend of €0.50 per share was paid on October 15, 2015, for an amount of €1,196 million, ENGIE SA settled the remaining dividend balance of €0.50 per share in cash on May 5, 2016, for an amount of €1,198 million. In addition, the Board of Directors' Meeting of July 28, 2016 approved the payment of an interim dividend of €0.50 per share payable on October 14, 2016 for a total amount of €1,198 million.

#### Proposed dividend in respect of 2016

Shareholders at the Shareholders' Meeting convened to approve the ENGIE Group financial statements for the year ended December 31,

2016, will be asked to approve a dividend of €1 per share, representing a total payout of €2,397 million based on the number of shares outstanding at December 31, 2016. This dividend will be increased by 10% for all shares held for at least two continuous years on December 31, 2016 and up to the 2016 dividend payment date. Based on the number of outstanding shares on December 31, 2016, this increase is valued at €16 million. An interim dividend of €0.50 per share was paid on October 14, 2016, representing a total amount of €1,198 million.

Subject to approval by the Shareholders' Meeting, this dividend, net of the interim dividend paid, will be detached on May 16, 2017 and paid on May 18, 2017. It is not recognized as a liability in the financial statements at December 31, 2016, since the financial statements at the end of 2016 are presented before the appropriation of earnings.

### 17.3 Total gains and losses recognized in equity (Group share)

All the items shown in the table below correspond to cumulative gains and losses (Group share) at December 31, 2016 and December 31, 2015, which are recyclable to income in subsequent periods.

<i>In millions of euros</i>	Dec. 31, 2016	Dec. 31, 2015
Available-for-sale securities	587	443
Net investment hedges	(647)	(561)
Cash flow hedges (excl. commodity instruments)	(900)	(641)
Commodity cash flow hedges	(208)	193
Deferred taxes on the items above	432	146
Share of entities accounted for using the equity method in recyclable items, net of tax	(401)	(509)
Translation adjustments	1,296	990
<b>TOTAL RECYCLABLE ITEMS</b>	<b>159</b>	<b>62</b>

### 17.4 Capital management

ENGIE SA looks to optimize its financial structure at all times by pursuing an optimal balance between its net debt and its EBITDA. The Group's key objective in managing its financial structure is to maximize value for shareholders, reduce the cost of capital, while at the same time ensuring that the Group has the financial flexibility required to continue its expansion. The Group manages its financial structure and makes any necessary adjustments in light of prevailing economic conditions. In this context, it may choose to adjust the amount of dividends paid to shareholders, reimburse a portion of capital, carry out share buybacks (see Note 17.1.2 "Treasury stock"), issue new shares, launch

share-based payment plans, recalibrate its investment budget, or sell assets in order to scale back its net debt.

The Group's policy is to maintain an "A" rating by the rating agencies. To achieve this, it manages its financial structure in line with the indicators usually monitored by these agencies, namely the Group's operating profile, financial policy and a series of financial ratios. One of the most commonly used ratios is the ratio where the numerator includes operating cash flows less net financial expense and taxes paid, and the denominator includes adjusted net financial debt. Net debt is mainly adjusted for nuclear provisions, provisions for unfunded pension plans and operating lease commitments.

The Group's objectives, policies and processes for managing capital have remained unchanged over the past few years.

ENGIE SA is not obliged to comply with any minimum capital requirements except those provided for by law.

## NOTE 18 Provisions

<i>In millions of euros</i>	Dec. 31, 2015	Additions	Reversals (utilizations)	Reversals (surplus provisions)	Changes in scope of consolidation	Impact of unwinding discount adjustments	Translation adjustments	Other	Dec. 31, 2016
Post-employment and other long-term benefits	5,785	237	(368)	-	2	141	11	615	6,422
Back-end of the nuclear fuel cycle <sup>(1)</sup>	4,744	698	(39)	-	-	227	-	-	5,630
Dismantling of plant and equipment <sup>(2, 3)</sup>	4,476	267	(6)	-	(2)	215	12	710	5,671
Site rehabilitation	1,474	9	(35)	(58)	1	25	(8)	79	1,487
Litigations, claims, and tax risks	663	582	(157)	(44)	(113)	9	14	180	1,133
Other contingencies	1,694	788	(495)	(11)	109	6	(9)	(217)	1,865
<b>TOTAL PROVISIONS</b>	<b>18,836</b>	<b>2,580</b>	<b>(1,100)</b>	<b>(114)</b>	<b>(4)</b>	<b>623</b>	<b>20</b>	<b>1,367</b>	<b>22,208</b>

(1) Additions of €698 million, of which a €584 million increase relating to the triennial revision of nuclear provisions in Belgium.

(2) Provisions for a total amount of €5,671 million at December 31, 2016, of which €4,997 million in provisions for dismantling nuclear facilities, versus €3,629 million at December 31, 2015.

(3) "Other" column of €710 million, of which a €981 million increase relating to the triennial revision of nuclear provisions in Belgium.

The impact of unwinding discount adjustments in respect of post-employment and other long-term benefits relates to the interest expense on the benefit obligation, net of the interest income on plan assets.

The "Other" column mainly comprises actuarial gains and losses arising on post-employment benefit obligations in 2016 which are recorded in "Other comprehensive income" as well as provisions recorded against a dismantling or site rehabilitation asset.

Additions, reversals and the impact of unwinding discounting adjustments are presented as follows in the consolidated income statement:

<i>In millions of euros</i>	Dec. 31, 2016
Income/(loss) from operating activities	(1,352)
Other financial income and expenses	(623)
Income taxes	(14)
<b>TOTAL</b>	<b>(1,989)</b>

The different types of provisions and the calculation principles applied are described below.

### 18.1 Post-employment benefits and other long-term benefits

See Note 19 "Post-employment benefits and other long-term benefits".

### 18.2 Nuclear power generation activities

In the context of its nuclear power generation activities, the Group assumes obligations relating to the back-end of the nuclear fuel cycle and the dismantling of nuclear facilities.

### 18.2.1 Legal framework

The Belgian law of April 11, 2003 granted Group subsidiary Synatom responsibility for managing provisions set aside to cover the costs of dismantling nuclear power plants and managing radioactive fissile material from such plants. The tasks of the Commission for Nuclear Provisions set up pursuant to the above-mentioned law is to oversee the process of computing and managing these provisions. The Commission also issues opinions on the maximum percentage of funds that Synatom can lend to operators of nuclear plants and on the types of assets in which Synatom may invest its outstanding funds.

To enable the Commission for Nuclear Provisions to carry out its work in accordance with the above-mentioned law, Synatom is required to submit a report every three years describing the core inputs used to measure these provisions.

If any changes are observed from one triennial report to another that could materially impact the financial inputs used, i.e. the industrial scenario, estimated costs and timing, the Commission may revise its opinion.

Synatom submitted its triennial report to the Commission for Nuclear Provisions on September 12, 2016. The Commission issued its opinion on December 12, 2016 based on the opinion given by ONDRAF, the Belgian agency for radioactive waste and enriched fissile materials.

This comprehensive report covers:

- the industrial management scenarios prepared ahead of the shutdown and dismantling of nuclear power plants, as well as for the management of radioactive fissile material from such plants;
- a comprehensive estimate of the related costs and a timetable of planned expenditures;
- the calculation method used to establish provisions;
- an analysis of the discount rate to be used, determined in accordance with established financial analysis techniques.

Provisions at December 31, 2016 were calculated using industrial scenarios and calculation methods that have been reviewed and approved by the Commission.

The report presented and approved by the Commission resulted in:

- an increase of €584 million in the provision for the back-end of the nuclear fuel cycle, for which the matching entry is recorded under other non-recurring items in “Income/(loss) from operating activities”;
- an increase of €1,123 million in the provision for dismantling facilities, for which the main matching entry is recorded as a production unit dismantling component carried in assets in an amount of €981 million, to be depreciated over the remaining useful life of the facilities concerned.

The Group lowered its discount rate to 3.5% from 4.8% previously further to the revised past and prospective analyses of the benchmark long-term rates, while the underlying inflation assumption remained the same, at 2.0%. The increase in provisions as presented above includes the estimated impact of the decrease in the discount rate, which added €1,043 million to the provision for the back-end of the nuclear fuel cycle and €731 million to the provision for the dismantling of nuclear facilities. The discount rate represents one of the assumptions which, when combined with other mutually dependent inputs, aim to factor in the contingencies and other risks inherent to the industrial processes of dismantling nuclear facilities and managing radioactive spent fuel.

On the whole, the industrial strategies presented in the 2016 report have not changed compared to those used previously.

For the back-end of the nuclear fuel cycle, the cost assessment for on-site storage, reprocessing and conditioning was revised based on the most recent cost estimates and studies available. The assessment also took into account the 10-year extension of the operating life of the Doel 1 and 2 reactors, which was authorized in 2015 and confirmed in December 2016 with the adoption of the law governing the nuclear contributions of second-generation reactors.

The estimated cost of dismantling the reactors was revised in 2016 to take into account changes in ONDRAF’s waste disposal tariffs, the update of physical and radiological inventory databases, the 10-year extension of the operating life of the Doel 1 and 2 reactors and its impact on the timing of dismantling operations for the nuclear plant as a whole.

The provisions recognized by the Group were measured taking into account the prevailing contractual and legal framework, which sets the operating life of the Tihange 1 reactor and the Doel 1 and 2 reactors at 50 years, and the other reactors at 40 years.

The provisions set aside take into account all existing or planned environmental regulatory requirements on a European, national and regional level. If new legislation were to be introduced in the future, the cost estimates used as a basis for the calculations could vary. However, the Group is not aware of any planned legislation on this matter which could materially impact the amount of the provisions.

The estimated provision amounts include margins for contingencies and other risks that may arise in connection with dismantling and radioactive spent fuel management procedures. These margins are estimated by the Group for each cost category. The contingency margins relating to the disposal of waste are determined by ONDRAF and built into its tariffs.

The Group considers that the provisions approved by the Commission take into account all currently available information to manage the contingencies and other risks associated with the processes of dismantling nuclear facilities and managing radioactive spent fuel.

## 18.2.2 Provisions for nuclear fuel processing and storage

When spent nuclear fuel is removed from a reactor, it remains radioactive and requires processing. There are two different procedures for managing radioactive spent fuel: reprocessing or conditioning without reprocessing. The Belgian government has not yet decided which scenario will be made compulsory in Belgium.

The Commission for Nuclear Provisions has adopted a “mixed” scenario in which around one-quarter of total fuel is reprocessed, and the rest disposed of directly without reprocessing.

The provisions booked by the Group for nuclear fuel processing and storage cover all of the costs linked to this “mixed” scenario, including on-site storage, transportation, reprocessing by an accredited facility, conditioning, storage and removal. They are calculated based on the following principles and inputs:

- storage costs primarily comprise the costs of building and operating additional dry storage facilities, along with the costs of purchasing containers;
- part of the spent fuel is transferred for reprocessing. The resulting plutonium and uranium is sold to a third party;
- spent fuel that has not been reprocessed is to be conditioned, which requires conditioning facilities to be built according to ONDRAF’s approved criteria;
- the reprocessing residues and conditioned spent fuel are transferred to ONDRAF;
- the cost of burying fuel in deep geological repositories is estimated by ONDRAF;
- the long-term obligation is calculated using estimated internal costs and external costs assessed based on offers received from third parties or fee proposals from independent organizations;
- the discount rate used is 3.5% and was calculated based on an inflation rate of 2.0% (actual rate of 1.5%);
- allocations to the provision are computed based on the average unit cost of the quantities used up to the end of the operating life of the plant;
- an annual allocation is also recognized with respect to unwinding the discount on the provision.

The costs effectively incurred in the future may differ from the estimates in terms of their nature and timing of payment. The provisions may be subsequently adjusted in line with changes in the above-mentioned inputs and related cost estimates. However, these components are based on information and estimates which the Group deems reasonable to date and which have been approved by the Commission for Nuclear Provisions.

Belgium’s current legal framework does not prescribe methods for managing nuclear waste. The reprocessing of spent fuel was suspended following a resolution adopted by the House of Representatives in 1993. The scenario adopted is based on the assumption that the Belgian government will allow Synatom to reprocess uranium and that an agreement will be reached between Belgium and France designating Areva as responsible for these reprocessing operations. The Commission’s 2016 opinion recommends that the necessary steps be officially initiated in the short term to ensure that this partial reprocessing scenario is implemented.

A scenario assuming the direct disposal of waste without reprocessing would lead to a decrease in the provision compared to the provision resulting from the “mixed” scenario currently used and approved by the Commission for Nuclear Provisions.



The Belgian government has not yet taken a decision as to whether the waste should be buried in a deep geological repository or stored over the long term. In accordance with the European Directive, in 2015 the government drew up its national program for the management of spent fuel and radioactive waste. The program remains subject to approval by a ministerial order. The scenario adopted by the Commission for Nuclear Provisions is based on the assumption that the waste will be buried in a deep geological repository at the Boom clay facility, as recommended in ONDRAF's waste management program. To date, there is no accredited site in Belgium where the waste may be buried. The Commission's 2016 opinion requires rapidly coming up with a scenario that provides for the creation of a storage facility concept that the authorities are likely to deem as fit for authorization.

The Group does not expect that demonstrating the feasibility of these facilities will challenge the industrial scenario that is being adopted since it has been reviewed and validated by both national and international experts who, to date, have not raised any objections as to the technical implementation of the proposed solution of burying waste in a deep geological repository.

### 18.2.3 Provisions for dismantling nuclear facilities

Nuclear power plants have to be dismantled at the end of their operating life. Provisions are set aside in the Group's accounts to cover all costs relating to (i) the shutdown phase, which involves removing radioactive fuel from the site and (ii) the dismantling phase, which consists of decommissioning and cleaning up the site.

The dismantling strategy has hardly changed since the 2013 report and is based on the facilities being dismantled (i) immediately after the reactor is shut down and (ii) "serial" rather than on a site-by-site basis, and (iii) completely, the land being subsequently returned to greenfield status.

Provisions for dismantling nuclear facilities are calculated based on the following principles and inputs:

- costs payable over the long term are calculated by reference to the estimated costs for each nuclear facility, based on a study conducted by independent experts under the assumption that the facilities will be dismantled "in series";
- an inflation rate of 2.0% is applied until the dismantling obligations expire in order to determine the value of the future obligation;
- a discount rate of 3.5% (including inflation of 2.0%) is applied to determine the present value (NPV) of the obligation. This rate is the same as that used to calculate the provision for processing spent nuclear fuel;
- the operating life is 50 years for Tihange 1 and Doel 1 and 2, and 40 years for the other facilities;
- the start of the technical shutdown procedures depends on the facility concerned and on the timing of operations for the nuclear reactor as

a whole. The shutdown procedures are immediately followed by dismantling operations;

- the present value of the obligation when the facilities are commissioned represents the initial amount of the provision. The matching entry is an asset recognized for the same amount within the corresponding property, plant and equipment category. This asset is depreciated over the remaining operating life of the facilities;
- an annual allocation to the provision, reflecting the interest cost on the provision carried in the books at the end of the previous year, is calculated at the discount rate used to estimate the present value of the obligation.

The costs effectively incurred in the future may differ from the estimates in terms of their nature and timing of payment. The provisions may be subsequently adjusted in line with changes in the above-mentioned inputs. The assumptions used have a significant impact on the related implementation costs. However, these inputs and assumptions are based on information and estimates which the Group deems reasonable to date and which have been approved by the Commission for Nuclear Provisions.

The scenario adopted is based on a dismantling program and on timetables that have to be approved by the nuclear safety authorities.

Provisions are also recognized for the Group's share of the expected dismantling costs for the nuclear facilities in which it has drawing rights.

### 18.2.4 Sensitivity to discount rates

The remaining balance at end-2016 of provisions for the back-end of the nuclear fuel cycle came to €5.6 billion. The obligation, expressed in current euros and estimated at the share of spent fuel to date amounted to approximately €11.0 billion.

Provisions for dismantling nuclear facilities in Belgium came to €4.6 billion at end-2016. The obligation, expressed in current euros, totaled approximately €7.5 billion.

Based on currently applied inputs for estimating costs and the timing of payments, a change of 10 basis points in the discount rate used could lead to an adjustment of around €120 million in dismantling and nuclear fuel processing and storage provisions. A fall in discount rates would lead to an increase in outstanding provisions, while a rise in discount rates would reduce the provision amount.

Changes arising as a result of the review of the dismantling provision would not have an immediate impact on income, since the matching entry under certain conditions would consist in adjusting the corresponding assets accordingly.

Sensitivity to discount rates as presented above in accordance with the applicable standards, is an automatic calculation and should therefore be interpreted with appropriate caution in view of the variety of other inputs – some of which may be interdependent – included in the evaluation. The frequency with which these provisions are reviewed by the Commission for Nuclear Provisions in accordance with applicable regulations ensures that the overall obligation is measured accurately.

### 18.3 Dismantling of non-nuclear plant and equipment and site rehabilitation

#### 18.3.1 Dismantling obligations arising on other non-nuclear plant and equipment

Certain plant and equipment, including conventional power stations, transmission and distribution pipelines, storage facilities and LNG terminals, have to be dismantled at the end of their operational lives. This obligation is the result of prevailing environmental regulations in the countries concerned, contractual agreements, or an implicit Group commitment.

Based on estimates of proven and probable gas reserves through 2260 using current production levels, dismantling provisions for gas infrastructures in France have a present value near zero.

#### 18.3.2 Exploration-production activities

The Group also sets aside a provision for its obligations in terms of rehabilitating exploration-production facilities.

The provision reflects the present value of the estimated rehabilitation costs until the operating activities are completed. This provision is computed based on the Group's internal assumptions regarding estimated rehabilitation costs and the timing of the rehabilitation work. The timing of the rehabilitation work used as the basis for the provision may vary depending on the time when production is considered no longer economically viable. This consideration is itself closely related to fluctuations in future gas and oil prices.

The provision is recognized with a matching entry to property, plant and equipment.

#### 18.3.3 Hazelwood Power Station & Mine (Australia)

In November 2016, the Group and its partner Mitsui announced their decision to close Hazelwood Power Station and the adjoining mine. The

Group holds a 72% interest in the 1,600 MW power station, which is fully consolidated. The closure will take effect at the end of March 2017.

At end-2016, the provision covering the obligation to dismantle and rehabilitate the mine amounted to €532 million (including €312 million of mine rehabilitation and €220 million of power station dismantling costs).

Dismantling and site rehabilitation work include mine rehabilitation, with the purpose of ensuring long-term land and wall stability, the demolition and dismantling of all of the site's industrial facilities, the monitoring of environmental incidents and any related remediation plans, as well as long-term site monitoring.

Given the complex and specialized nature of the work that will be undertaken to rehabilitate the mine, Hazelwood has brought in geologists and environmental experts to assist in planning, calculating costs and implementing the rehabilitation plan. The rehabilitation plan has been approved by Hazelwood's shareholders and will be presented and discussed in 2017 with the Environment Protection Authority Victoria and the authorities of the State of Victoria.

The applicable laws and regulations are currently undergoing reform by the State of Victoria. The final regulations adopted could change the nature of the work to be carried out, the timing and, consequently, the provisions recorded to cover the related costs.

The average discount rates used to determine the amount of the provision were 5.52% and 5.11% for mine restoration work and power station dismantling work, respectively.

The amount of the provision recognized is based on the Group's best current estimate of the dismantling and rehabilitation costs that Hazelwood is expected to incur. However, the amount of this provision may be adjusted in the future to take into account any changes in the key inputs.

### 18.4 Contingencies and tax risks

This caption includes essentially provisions for commercial contingencies, and claims and tax disputes.

## NOTE 19 Post-employment benefits and other long-term benefits

### 19.1 Description of the main pension plans

The Group's main pension plans are described below.

#### 19.1.1 Companies belonging to the Electricity and Gas Industries sector in France

Since January 1, 2005, the CNIEG (*Caisse Nationale des Industries Électriques et Gazières*) has operated the pension, disability, death, occupational accident and occupational illness benefit plans for electricity and gas industry (hereinafter "EGI") companies in France. The CNIEG is a social security legal entity under private law placed under the joint responsibility of the ministries in charge of social security and the budget.

Employees and retirees of EGI sector companies have been fully affiliated to the CNIEG since January 1, 2005. The main affiliated Group entities are ENGIE SA, GRDF, GRTgaz, ELENGY, STORENGY, ENGIE Thermique France, CPCU, CNR and SHEM.

Following the funding reform of the special EGI pension plan introduced by Law No. 2004-803 of August 9, 2004 and its implementing decrees, specific benefits (pension benefits on top of the standard benefits payable under ordinary law) already vested at December 31, 2004 ("past specific benefits") were allocated between the various EGI entities. Past specific benefits (benefits vested at December 31, 2004) relating to regulated transmission and distribution businesses ("regulated past specific benefits") are funded by the levy on gas and electricity transmission and distribution services (*Contribution Tarifaire d'Acheminement*) and therefore no longer represent an obligation for the ENGIE Group. Unregulated past specific benefits (benefits vested at December 31, 2004) are funded by EGI sector entities to the extent defined by decree no. 2005-322 of April 5, 2005.

The special EGI pension plan is a legal pension plan available to new entrants.

The specific benefits vested under the plan since January 1, 2005 are wholly financed by EGI sector companies in proportion to their respective weight in terms of payroll costs within the EGI sector.

As this plan represents a defined-benefit plan, the Group has set aside a pension provision in respect of specific benefits payable to employees of unregulated activities and specific benefits vested by employees of regulated activities since January 1, 2005. This provision also covers the Group's early retirement obligations. The provision amount may be subject to fluctuations based on the weight of the Group's companies within the EGI sector.

Pension benefit obligations and other "mutualized" obligations are assessed by the CNIEG.

At December 31, 2016, the projected benefit obligation in respect of the special pension plan for EGI sector companies amounted to €3.4 billion (€3.2 billion at December 31, 2015). This increase is mainly due to the decrease in discount rates.

The duration of the pension benefit obligation of the EGI pension plan is 18 years.

#### 19.1.2 Companies belonging to the electricity and gas sector in Belgium

In Belgium, the rights of employees in electricity and gas sector companies, principally Electrabel, Laborelec, ENGIE CC and some ENGIE Energy Management Trading employee categories, are governed by collective bargaining agreements.

These agreements, applicable to "wage-rated" employees recruited prior to June 1, 2002 and managerial staff recruited prior to May 1, 1999, specify the benefits entitling employees to a supplementary pension equivalent to 75% of their most recent annual income, for a full career and in addition to the statutory pension. These top-up pension payments provided under defined-benefit plans are partly reversionary. In practice, the benefits are paid in the form of a lump sum for the majority of plan participants. Most of the obligations resulting from these pension plans are financed through pension funds set up for the electricity and gas sector and by certain insurance companies. Pre-funded pension plans are financed by employer and employee contributions. Employer contributions are calculated annually based on actuarial assessments.

The projected benefit obligation relating to these plans represented around 14% of total pension obligations and related liabilities at December 31, 2016. The average duration is 12 years.

"Wage-rated" employees recruited after June 1, 2002 and managerial staff (i) recruited after May 1, 1999 or (ii) or having opted for the transfer through defined-contribution plans, are covered under defined-contribution plans. However, for contributions paid from January 1, 2004, the law specifies a minimum average annual return (3.75% on wage contributions and 3.25% on employer contributions) when savings are liquidated.

The law on supplementary pensions, approved on December 18, 2015 and enforced on January 1, 2016 henceforth specifies a minimum rate of return, depending on the actual rate of return of Belgian government bonds, within a range of 1.75%-3.25% (the rates are now identical for employee and employer contributions). In 2016, the minimum rate of return stood at 1.75%.

The application of this new law resulted in an increase of the net defined obligation of €10 million at December 31, 2016.

An expense of €24 million was recognized in 2016 in respect of these defined-contribution plans (€24 million at December 31, 2015).

#### 19.1.3 Multi-employer plans

Employees of some Group companies are affiliated to multi-employer pension plans.

Under multi-employer plans, risks are pooled to the extent that the plan is funded by a single contribution rate determined for all affiliated companies and applicable to all employees.

Multi-employer plans are particularly common in the Netherlands, where employees are normally required to participate in a compulsory industry-wide plan. These plans cover a significant number of employers, thereby limiting the impact of potential default by an affiliated company. In the event of default, the vested rights are maintained in a special compartment and are not transferred to the other members. Refinancing plans may be set up to ensure the funds are balanced.

The ENGIE Group accounts for multi-employer plans as defined-contribution plans.

An expense of €69 million was recognized in 2016 in respect of multi-employer pension plans (€71 million at December 31, 2015).

### 19.1.4 Other pension plans

Most other Group companies also grant their employees retirement benefits. In terms of financing, pension plans within the Group are almost equally split between defined-benefit and defined-contribution plans.

The Group's main pension plans outside France, Belgium and the Netherlands concern:

- United Kingdom: the large majority of defined-benefit pension plans is now closed to new entrants and future benefits no longer vest under these plans. All entities run a defined-contribution scheme. The pension obligations of International Power's subsidiaries in the United Kingdom are covered by the special Electricity Supply Pension Scheme (ESPS). The assets of this defined-benefit scheme are invested in separate funds. Since June 1, 2008, the scheme has been closed and a defined-contribution plan was set up for new entrants;
- Germany: the Group's German subsidiaries have closed their defined-benefit plans to new entrants and now offer defined-contribution plans;
- Brazil: ENGIE Brasil Energia operates its own pension scheme. This scheme has been split into two parts, one for the (closed) defined-benefit plan, and the other for the defined-contribution plan that has been available to new entrants since the beginning of 2005.

## 19.2 Description of other post-employment benefit obligations and other long-term benefits

### 19.2.1 Other benefits granted to current and former EGI sector employees

Other benefits granted to EGI sector employees are:

Post-employment benefits:

- reduced energy prices;
- end-of-career indemnities;
- bonus leave;
- death capital benefits.

Long-term benefits:

- allowances for occupational accidents and illnesses;
- temporary and permanent disability allowances;
- long-service awards.

The Group's main obligations are described below.

#### 19.2.1.1 Reduced energy prices

Under Article 28 of the national statute for electricity and gas industry personnel, all employees (current and former employees, provided they meet certain length-of-service conditions) are entitled to benefits in kind which take the form of reduced energy prices known as "employee rates".

This benefit entitles employees to electricity and gas supplies at a reduced price. For retired employees, this provision represents a post-employment defined benefit. Retired employees are only entitled to the reduced rate if they have completed at least 15 years' service within EGI sector companies.

In accordance with the agreements signed with EDF in 1951, ENGIE provides gas to all current and former employees of ENGIE and EDF, while EDF supplies electricity to these same beneficiaries. ENGIE pays (or benefits from) the balancing contribution payable in respect of its employees as a result of energy exchanges between the two utilities.

The obligation to provide energy at a reduced price to current and former employees is measured as the difference between the energy sale price and the preferential rates granted.

The provision set aside in respect of reduced energy prices amounts to €3.0 billion at December 31, 2016. The duration of the obligation is 21 years.

#### 19.2.1.2 End-of-career indemnities

Retiring employees (or their dependents in the event of death during active service) are entitled to end-of-career indemnities which increase in line with the length of service within the EGI sector.

#### 19.2.1.3 Compensation for occupational accidents and illnesses

EGI sector employees are entitled to compensation for accidents at work and occupational illnesses. These benefits cover all employees or the dependents of employees who die as a result of occupational accidents or illnesses, or injuries suffered on the way to work.

The amount of the obligation corresponds to the likely present value of the benefits to be paid to current beneficiaries, taking into account any reversionary annuities.

### 19.2.2 Other benefits granted to employees of the gas and electricity sector in Belgium

Electricity and gas sector companies also grant other employee benefits such as the reimbursement of medical expenses, electricity and gas price reductions, as well as length-of-service awards and early retirement schemes. These benefits are not prefunded, with the exception of the special "*allocation transitoire*" termination indemnity, considered as an end-of-career indemnity.

### 19.2.3 Other collective agreements

Most other Group companies also grant their staff post-employment benefits (early retirement plans, medical coverage, benefits in kind, etc.) and other long-term benefits such as jubilee and length-of-service awards.

## 19.3 Defined-benefit plans

### 19.3.1 Amounts presented in the statement of financial position and statement of comprehensive income

In accordance with IAS 19, the information presented in the statement of financial position relating to post-employment benefit obligations

and other long-term benefits results from the difference between the gross projected benefit obligation and the fair value of plan assets. A provision is recognized if this difference is positive (net obligation), while a prepaid benefit cost is recorded in the statement of financial position when the difference is negative, provided that the conditions for recognizing the prepaid benefit cost are met.

Changes in provisions for post-employment benefits and other long-term benefits, plan assets and reimbursement rights recognized in the statement of financial position are as follows:

<i>In millions of euros</i>	<b>Provisions</b>	<b>Plan assets</b>	<b>Reimbursement rights</b>
<b>AT DECEMBER 31, 2014</b>	<b>(6,232)</b>	<b>41</b>	<b>176</b>
Exchange rate differences	13	-	-
Changes in scope of consolidation and other	45	(48)	-
Actuarial gains and losses	448	38	(11)
Periodic pension cost	(458)	15	3
Asset ceiling	(41)	-	-
Contributions/benefits paid	441	16	-
<b>AT DECEMBER 31, 2015</b>	<b>(5,785)</b>	<b>62</b>	<b>167</b>
Exchange rate differences	(51)	(1)	-
Changes in scope of consolidation and other	46	(12)	(43)
Actuarial gains and losses	(663)	(7)	2
Periodic pension cost	(430)	(49)	3
Asset ceiling	41	-	-
Contributions/benefits paid	420	76	1
<b>AT DECEMBER 31, 2016</b>	<b>(6,422)</b>	<b>68</b>	<b>130</b>

Plan assets and reimbursement rights are presented in the statement of financial position under "Other non-current assets" or "Other current assets".

The cost recognized for the period in the income statement amounted to €478 million in 2016 (€442 million in 2015). The components of this defined-benefit cost in the period are set out in Note 19.3.4 "Components of the net periodic pension cost".

The Eurozone represents 95% of the Group's net obligation at December 31, 2016 (compared to 94% at December 31, 2015).

Cumulative actuarial gains and losses recognized in equity amounted to €3,469 million at December 31, 2016, compared to €2,730 million at December 31, 2015.

Net actuarial differences arising in the period and presented on a separate line in the statement of comprehensive income represented a net actuarial loss totaling €670 million in 2016 and a net actuarial gain of €446 million in 2015.

## 19.3.2 Change in benefit obligations and plan assets

The table below shows the amount of the Group's projected benefit obligations and plan assets, changes in these items during the periods presented, and their reconciliation with the amounts reported in the statement of financial position:

	Dec. 31, 2016				Dec. 31, 2015			
	Pension benefit obligations <sup>(1)</sup>	Other post-employment benefit obligations <sup>(2)</sup>	Long-term benefit obligations <sup>(3)</sup>	Total obligations	Pension benefit obligations <sup>(1)</sup>	Other post-employment benefit obligations <sup>(2)</sup>	Long-term benefit obligations <sup>(3)</sup>	Total
<i>In millions of euros</i>								
<b>A - CHANGE IN PROJECTED BENEFIT OBLIGATION</b>								
<b>Projected benefit obligation at January 1</b>	<b>(7,197)</b>	<b>(3,394)</b>	<b>(530)</b>	<b>(11,120)</b>	<b>(7,580)</b>	<b>(3,393)</b>	<b>(564)</b>	<b>(11,537)</b>
Service cost	(234)	(50)	(45)	(329)	(267)	(64)	(46)	(376)
Interest expense	(208)	(84)	(11)	(303)	(196)	(70)	(9)	(276)
Contributions paid	(14)	-	-	(14)	(13)	-	-	(13)
Amendments	8	-	-	8	8	16	-	24
Changes in scope of consolidation	(6)	(3)	-	(10)	2	(1)	-	1
Curtailments/settlements	1	-	-	1	19	-	-	19
Non-recurring items	-	-	-	-	(2)	(6)	-	(7)
Financial actuarial gains and losses	(825)	(261)	(15)	(1,102)	292	294	33	619
Demographic actuarial gains and losses	106	(51)	(2)	52	140	(280)	9	(131)
Benefits paid	434	113	46	594	373	109	48	530
Other (of which translation adjustments)	(8)	(1)	-	(8)	25	-	-	25
<b>Projected benefit obligation at December 31</b>	<b>A (7,945)</b>	<b>(3,731)</b>	<b>(556)</b>	<b>(12,232)</b>	<b>(7,197)</b>	<b>(3,394)</b>	<b>(530)</b>	<b>(11,120)</b>
<b>B - CHANGE IN FAIR VALUE OF PLAN ASSETS</b>								
<b>Fair value of plan assets at January 1</b>	<b>5,445</b>	<b>1</b>	<b>-</b>	<b>5,446</b>	<b>5,349</b>	<b>3</b>	<b>-</b>	<b>5,351</b>
Interest income on plan assets	162	-	-	162	148	-	-	148
Financial actuarial gains and losses	361	-	-	361	40	-	-	40
Contributions received	267	-	-	267	271	17	-	288
Changes in scope of consolidation	1	-	-	1	(1)	-	-	(1)
Settlements	-	-	-	-	(15)	(1)	-	(17)
Benefits paid	(351)	-	-	(351)	(332)	(17)	-	(349)
Other (of which translation adjustments)	33	-	-	33	(14)	-	-	(14)
<b>Fair value of plan assets at December 31</b>	<b>B 5,919</b>	<b>1</b>	<b>-</b>	<b>5,920</b>	<b>5,445</b>	<b>1</b>	<b>-</b>	<b>5,446</b>
<b>C - FUNDED STATUS</b>	<b>A+B (2,026)</b>	<b>(3,730)</b>	<b>(556)</b>	<b>(6,311)</b>	<b>(1,752)</b>	<b>(3,393)</b>	<b>(530)</b>	<b>(5,674)</b>
Asset ceiling	(42)	-	-	(42)	(48)	-	-	(48)
<b>NET BENEFIT OBLIGATION</b>	<b>(2,068)</b>	<b>(3,730)</b>	<b>(556)</b>	<b>(6,354)</b>	<b>(1,800)</b>	<b>(3,393)</b>	<b>(530)</b>	<b>(5,722)</b>
<b>ACCRUED BENEFIT LIABILITY</b>	<b>(2,136)</b>	<b>(3,731)</b>	<b>(556)</b>	<b>(6,422)</b>	<b>(1,862)</b>	<b>(3,393)</b>	<b>(530)</b>	<b>(5,785)</b>
<b>PREPAID BENEFIT COST</b>	<b>68</b>	<b>-</b>	<b>-</b>	<b>68</b>	<b>62</b>	<b>-</b>	<b>-</b>	<b>62</b>

(1) Pensions and retirement bonuses.

(2) Reduced energy prices, healthcare, gratuities and other post-employment benefits.

(3) Length-of-service awards and other long-term benefits.

### 19.3.3 Change in reimbursement rights

Changes in the fair value of reimbursement rights relating to plan assets managed by Contassur are as follows:

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
<b>Fair value at January 1</b>	<b>167</b>	<b>176</b>
Interest income on plan assets	3	3
Financial actuarial gains and losses	2	(11)
Actual return	5	(9)
Curtailments/settlements	-	-
Employer contributions	15	16
Employee contributions	-	1
Benefits paid	(14)	(17)
Other	(43)	-
<b>FAIR VALUE AT DECEMBER 31</b>	<b>130</b>	<b>167</b>

### 19.3.4 Components of the net periodic pension cost

The net periodic cost recognized in respect of defined-benefit obligations for the years ended December 31, 2016 and 2015 breaks down as follows:

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
Current service cost	329	376
Net interest expense	141	128
Actuarial gains and losses <sup>(1)</sup>	17	(42)
Plan amendments	(8)	(24)
Gains or losses on pension plan curtailments, terminations and settlements	(1)	(2)
Non-recurring items	-	7
<b>TOTAL</b>	<b>478</b>	<b>442</b>
<i>o/w recorded in current operating income after share in net income of entities accounted for using the equity method</i>	337	314
<i>o/w recorded in net financial income/(loss)</i>	141	128

(1) On long-term benefit obligation.

### 19.3.5 Funding policy and strategy

When defined-benefit plans are funded, the related plan assets are invested in pension funds and/or with insurance companies, depending on the investment practices specific to the country concerned. The investment strategies underlying these defined-benefit plans are aimed at striking the right balance between return on investment and acceptable levels of risk.

The objectives of these strategies are twofold: to maintain sufficient liquidity to cover pension and other benefit payments; and as part of risk

management, to achieve a long-term rate of return higher than the discount rate or, where appropriate, at least equal to future required returns.

When plan assets are invested in pension funds, investment decisions are the responsibility of the fund management concerned. For French companies, where plan assets are invested with an insurance company, the latter manages the investment portfolio for unit-linked policies or euro-denominated policies. These diversified funds are actively managed by reference to composite indexes and adapted to the risk and long-term profile of the liabilities.

The funding of these obligations at December 31 for each of the periods presented can be analyzed as follows:

<i>In millions of euros</i>	Projected benefit obligation	Fair value of plan assets	Asset ceiling	Total net obligation
Underfunded plans	(6,593)	5,078	(42)	(1,557)
Overfunded plans	(804)	842	-	38
Unfunded plans	(4,835)	-	-	(4,835)
<b>AT DECEMBER 31, 2016</b>	<b>(12,232)</b>	<b>5,920</b>	<b>(42)</b>	<b>(6,354)</b>
Underfunded plans	(5,777)	4,469	(48)	(1,356)
Overfunded plans	(923)	977	-	55
Unfunded plans	(4,421)	-	-	(4,421)
<b>AT DECEMBER 31, 2015</b>	<b>(11,120)</b>	<b>5,446</b>	<b>(48)</b>	<b>(5,722)</b>

The allocation of plan assets by principal asset category can be analyzed as follows:

<i>In %</i>	Dec. 31, 2016	Dec. 31, 2015
Equity investments	29	31
Sovereign bond investments	17	16
Corporate bond investments	31	34
Money market securities	10	8
Real estate	4	4
Other assets	9	7
<b>TOTAL</b>	<b>100</b>	<b>100</b>

All plan assets were quoted on an active market at December 31, 2016.

The actual return on assets of EGI sector companies stood at 3.8% in 2016.

The actual return on plan assets of Belgian entities amounted to approximately 3% in Group insurance and 5% in pension funds.

The allocation of plan assets categories by geographic area of investment can be analyzed as follows:

<i>In %</i>	Europe	North America	Latin America	Asia Oceania	Rest of the World	Total
Equity investments	60	25	1	12	2	100
Sovereign bond investments	70	2	28	-	-	100
Corporate bond investments	79	14	2	4	1	100
Money market securities	70	1	4	24	-	100
Real estate	93	-	3	4	-	100
Other assets	61	8	19	6	6	100

### 19.3.6 Actuarial assumptions

Actuarial assumptions are determined individually by country and company in conjunction with independent actuaries. Weighted discount rates for the main actuarial assumptions are presented below:

		Pension benefit obligations		Other post-employment benefit obligations		Long-term benefit obligations		Total benefit obligations	
		2016	2015	2016	2015	2016	2015	2016	2015
Discount rate	Eurozone	1.7%	2.5%	2.0%	2.6%	1.5%	2.2%	1.8%	2.3%
	UK Zone	2.7%	3.9%	-	-	-	-	-	-
Inflation rate	Eurozone	1.8%	1.7%	1.8%	1.7%	1.8%	1.7%	1.8%	1.7%
	UK Zone	3.3%	3.1%	-	-	-	-	-	-



### 19.3.6.1 Discount and inflation rate

The discount rate applied is determined based on the yield, at the date of the calculation, on top-rated corporate bonds with maturities mirroring the term of the plan.

The rates were determined for each monetary area based on data for AA corporate bonds yields. For Eurozone, data (from Bloomberg) are extrapolated on the basis of government bond yields for long maturities.

According to the Group's estimates, a 100-basis-point increase or decrease in the discount rate would result in a change of approximately 15% in the projected benefit obligation.

The inflation rates were determined for each monetary area. A 100-basis-point increase or decrease in the inflation rate (with an unchanged discount rate) would result in a change of approximately 15% in the projected benefit obligation.

### 19.3.6.2 Other assumptions

The increase in the rate of medical costs (including inflation) was estimated at 2.7%.

A 100-basis-point change in the assumed increase in medical costs would have the following impacts:

<i>In millions of euros</i>	<b>100 basis point increase</b>	<b>100 basis point decrease</b>
Impact on expenses	1	(1)
Impact on pension obligations	9	(8)

### 19.3.7 Estimated employer contributions payable in 2017 under defined-benefit plans

The Group expects to pay around €179 million in contributions into its defined-benefit plans in 2017, including €88 million for EGI sector companies. Annual contributions in respect of EGI sector companies will be made by reference to rights vested in the year, taking into account the funding level for each entity in order to even out contributions over the medium term.

### 19.4 Defined-contribution plans

In 2016, the Group recorded a €137 million expense in respect of amounts paid into Group defined-contribution plans (€134 million in 2015). These contributions are recorded under "Personnel costs" in the consolidated income statement.

**NOTE 20** Exploration-production activities**20.1** Exploration-production assets

Exploration-production assets break down into the following three categories: exploration-production licenses, presented under “Intangible assets” in the statement of financial position, fields under development, shown under “Assets in development phase”, and fields

in production, shown under “Assets in production phase”, which are included in “Property, plant and equipment” in the statement of financial position.

<i>In millions of euros</i>	Licenses	Assets in- development phase	Assets in- production phase	Total
<b>A. GROSS AMOUNT</b>				
<b>At December 31, 2014</b>	<b>1,106</b>	<b>1,406</b>	<b>8,555</b>	<b>11,067</b>
Change in scope of consolidation	(174)	-	(10)	(185)
Acquisitions	37	951	128	1,115
Disposals	(124)	(198)	-	(322)
Translation adjustments	105	105	(155)	54
Other	60	(106)	126	81
<b>At December 31, 2015</b>	<b>1,009</b>	<b>2,158</b>	<b>8,643</b>	<b>11,810</b>
Change in scope of consolidation	-	-	-	-
Acquisitions	1	998	97	1,095
Disposals	-	(11)	(203)	(215)
Translation adjustments	6	(48)	101	60
Other	24	(502)	569	91
<b>AT DECEMBER 31, 2016</b>	<b>1,040</b>	<b>2,593</b>	<b>9,208</b>	<b>12,841</b>
<b>B. ACCUMULATED AMORTIZATION, DEPRECIATION AND IMPAIRMENT LOSSES</b>				
<b>At December 31, 2014</b>	<b>(438)</b>	<b>(4)</b>	<b>(4,847)</b>	<b>(5,289)</b>
Change in scope of consolidation	174	-	10	185
Amortization, depreciation	-	-	(664)	(664)
Impairment losses	(349)	(1,146)	(1,041)	(2,536)
Disposals	88	-	-	88
Translation adjustments	(48)	(26)	77	3
Other	-	-	-	-
<b>At December 31, 2015</b>	<b>(573)</b>	<b>(1,176)</b>	<b>(6,464)</b>	<b>(8,213)</b>
Change in scope of consolidation	-	-	-	-
Amortization, depreciation	-	-	(534)	(534)
Impairment losses	(35)	(110)	(12)	(157)
Disposals	-	-	154	154
Translation adjustments	(1)	61	(31)	30
Other	(71)	419	(240)	108
<b>AT DECEMBER 31, 2016</b>	<b>(680)</b>	<b>(806)</b>	<b>(7,126)</b>	<b>(8,612)</b>
<b>C. CARRYING AMOUNT</b>				
<b>At December 31, 2015</b>	<b>437</b>	<b>982</b>	<b>2,179</b>	<b>3,597</b>
<b>AT DECEMBER 31, 2016</b>	<b>360</b>	<b>1,787</b>	<b>2,082</b>	<b>4,229</b>

Acquisitions in 2016 notably include developments carried out over the year on the Touat field in Algeria, the Jangkrik field in Indonesia and the Cygnus field in the United Kingdom. Disposals mainly include the disposal of a portfolio of production fields in Germany.

Acquisitions in 2015 notably include developments carried out over the year on the Cygnus field in the United Kingdom, the Jangkrik field in

Indonesia and the Touat field in Algeria. Disposals mainly include the disposal of an 11.67% interest in the Jangkrik field in Indonesia.

Impairment losses recorded at December 31, 2016 and December 31, 2015 are described in Note 8.2 “Impairment losses”.

## 20.2 Capitalized exploration costs

The following table provides a breakdown of the net change in capitalized exploration costs:

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
<b>At January 1</b>	<b>359</b>	<b>430</b>
Capitalized exploration costs for the year	65	129
Amounts recognized in expenses for the period	(92)	(145)
Other	(110)	(54)
<b>AT DECEMBER 31</b>	<b>222</b>	<b>359</b>

Capitalized exploration costs are reported in the statement of financial position within "Other assets".

## 20.3 Investments during the period

Investments for the exploration-production business amounted to €940 million and €1,027 million, respectively, in 2016 and 2015. Investments are included in "Acquisitions of property, plant and equipment and intangible assets" in the statement of cash flows.

## NOTE 21 Finance leases

### 21.1 Finance leases for which ENGIE acts as lessee

The carrying amounts of property, plant and equipment held under finance leases are broken down into different categories depending on the type of asset concerned.

The main finance lease agreements entered into by the Group primarily concern power plants in the Latin America segment (mostly ENGIE Energía Perú – Peru) and Cofely's cogeneration plants.

The undiscounted and present values of future minimum lease payments break down as follows:

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>		<b>Dec. 31, 2015</b>	
	<b>Undiscounted value</b>	<b>Present value</b>	<b>Undiscounted value</b>	<b>Present value</b>
Year 1	158	153	102	99
Years 2 to 5 inclusive	539	493	292	259
Beyond year 5	32	22	275	253
<b>TOTAL</b>	<b>728</b>	<b>668</b>	<b>669</b>	<b>611</b>

The following table provides a reconciliation of liabilities under finance leases as reported in the statement of financial position (see Note 15.2.1 "Borrowings and debt") with undiscounted future minimum lease payments by maturity:

<i>In millions of euros</i>	<b>Total</b>	<b>Year 1</b>	<b>Years 2 to 5 inclusive</b>	<b>Beyond year 5</b>
Liabilities under finance leases	670	150	492	28
Impact of discounting future repayments of principal and interest	58	8	47	4
<b>UNDISCOUNTED FUTURE MINIMUM LEASE PAYMENTS</b>	<b>728</b>	<b>158</b>	<b>539</b>	<b>32</b>

## 21.2 Finance leases for which ENGIE acts as lessor

These leases fall mainly within the scope of IFRIC 4 guidance on the interpretation of IAS 17. They concern (i) energy purchase and sale contracts where the contract conveys an exclusive right to use a

production asset; and (ii) certain contracts with industrial customers relating to assets held by the Group.

The Group has recognized finance lease receivables, notably for cogeneration plants for Wapda and NTDC (Uch Pakistan), Bowin (Glow Thailand) and Lanxess (Electrabel Belgium).

<i>In millions of euros</i>	Dec. 31, 2016	Dec. 31, 2015
Undiscounted future minimum lease payments	1,116	1,167
Unguaranteed residual value accruing to the lessor	46	42
<b>TOTAL GROSS INVESTMENT IN THE LEASE</b>	<b>1,163</b>	<b>1,209</b>
<b>Unearned financial income</b>	<b>166</b>	<b>172</b>
<b>NET INVESTMENT IN THE LEASE (STATEMENT OF FINANCIAL POSITION)</b>	<b>997</b>	<b>1,037</b>
<i>o/w present value of future minimum lease payments</i>	962	1,007
<i>o/w present value of unguaranteed residual value</i>	35	30

Amounts recognized in the statement of financial position in connection with finance leases are detailed in Note 15.1.2 "Loans and receivables at amortized cost".

Undiscounted future minimum lease payments receivable under finance leases can be analyzed as follows:

<i>In millions of euros</i>	Dec. 31, 2016	Dec. 31, 2015
Year 1	115	108
Years 2 to 5 inclusive	450	444
Beyond year 5	552	616
<b>TOTAL</b>	<b>1,116</b>	<b>1,167</b>

## NOTE 22 Operating leases

### 22.1 Operating leases for which ENGIE acts as lessee

The Group has entered into operating leases mainly in connection with LNG tankers, and miscellaneous buildings and fittings.

Operating lease income and expenses for 2016 and 2015 can be analyzed as follows:

<i>In millions of euros</i>	Dec. 31, 2016	Dec. 31, 2015
Minimum lease payments	(864)	(886)
Contingent lease payments	(15)	(18)
Sub-letting income	-	76
Sub-letting expenses	(29)	(27)
Other operating lease expenses	(181)	(238)
<b>TOTAL</b>	<b>(1,089)</b>	<b>(1,093)</b>

The present values of future minimum lease payments under non-cancelable operating leases can be analyzed as follows:

<i>In millions of euros</i>	Dec. 31, 2016	Dec. 31, 2015
Year 1	611	620
Years 2 to 5 inclusive	1,694	1,398
Beyond year 5	1,339	1,281
<b>TOTAL</b>	<b>3,644</b>	<b>3,300</b>

## 22.2 Operating leases for which ENGIE acts as lessor

These leases fall mainly within the scope of IFRIC 4 guidance on the interpretation of IAS 17. They primarily concern power plants operated in the Africa/Asia segment.

Operating lease income for 2016 and 2015 can be analyzed as follows:

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
Minimum lease payments	388	556
Contingent lease payments	24	76
<b>TOTAL</b>	<b>412</b>	<b>632</b>

Lease income is recognized in revenues.

The present values of future minimum lease payments receivable under non-cancelable operating leases can be analyzed as follows:

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
Year 1	335	403
Years 2 to 5 inclusive	264	694
Beyond year 5	-	27
<b>TOTAL</b>	<b>598</b>	<b>1,125</b>

## NOTE 23 Share-based payments

Expenses recognized in respect of share-based payments break down as follows:

<i>In millions of euros</i>	<b>Note</b>	<b>Expense for the year</b>	
		<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
Employee share issues <sup>(1)</sup>	23.2	2	15
Bonus/performance share plans	23.3	36	34
Other Group companies' plans		22	1
<b>TOTAL</b>		<b>60</b>	<b>50</b>

(1) Including Share Appreciation Rights set up within the scope of employee share issues in certain countries.

## 23.1 Stock option plans <sup>(1)</sup>

No new ENGIE stock option grants were approved by the Group's Board of Directors in either 2016 or 2015.

At December 31, 2016, the last stock option plan in force is a stock purchase plans that has already vested, with no further expenses recognized. The characteristics of this plan are as follows:

Plan	Date of authorizing General Shareholders' Meeting	Vesting date	Adjusted exercise price (in euros)	Number of beneficiaries per plan	Number of options granted to members of the Executive Committee	Outstanding options at Dec. 31, 2015	Options cancelled or expired	Out-standing options at Dec. 31, 2016	Expiration date	Residual life
11/12/2008	07/16/2008	11/12/2012	32.7	3,753	2,615,000	5,969,064	5,969,064	-	11/11/2016	-
11/10/2009	<sup>(1)</sup> 05/04/2009	11/10/2013	29.4	4,036	-	4,808,015	32,586	4,775,429	11/09/2017	0.9
<b>TOTAL</b>					<b>2,615,000</b>	<b>10,777,079</b>	<b>6,001,650</b>	<b>4,775,429</b>		

(1) Plans exercisable at December 31, 2016.

The stock subscription plan set up in 2008 expired in 2016, and 6 million options were cancelled.

## 23.2 Employee share issues

### 23.2.1 Link 2014

ENGIE did not issue any new shares to employees in 2016.

The only impact of employee share issues on 2016 income relate to cash-settled Share Appreciation Rights, resulting from the fair value of

warrants hedging the liability towards employees issued as part of the LINK 2014 subscription plan. This charge amounted to €1 million in 2016.

(1) The terms and conditions of plans set up in the past are described in previous Registration Documents prepared by GDF SUEZ.

## 23.3 Bonus shares and performance shares

### 23.3.1 New awards in 2016

#### ENGIE Performance Share plan of December 16, 2016

On December 14, 2016, the Board of Directors approved the allocation of 5 million performance shares to members of the Group's executive and senior management, breaking down into three tranches:

- performance shares vesting on March 14, 2020, subject to a further one-year lock-up period;
- performance shares vesting on March 14, 2020, without a lock-up period; and

- performance shares vesting on March 14, 2021, without a lock-up period.

In addition to a condition requiring employees to be employed with the Group at the vesting date, each tranche is made up of instruments subject to three different conditions:

- a market performance condition relating to ENGIE's total shareholder return compared to that of a reference panel of six companies, as assessed between November 2016 and January 2020;
- two internal performance conditions relating to Group net recurring income Group share and ROCE in 2018 and 2019.

As part of this plan, performance shares without conditions were also awarded to the winners of the Innovation and Incubation programs (32,950 shares allocated).

### 23.3.2 Fair value of bonus share plans with or without performance conditions

The following assumptions were used to calculate the fair value of the new plans awarded by ENGIE in 2016:

Allocation date	Vesting date	End of the lock-up period	Price at the award date	Expected dividend	Financing cost for the employee	Non-transferability cost	Market-related performance condition	Fair value per unit
December 16, 2016	March 14, 2020	March 14, 2021	12.03	0.7	5.2%	0.42	yes	8.10
December 16, 2016	March 14, 2020	March 14, 2020	12.03	0.7	5.2%	-	yes	8.52
December 16, 2016	March 14, 2021	March 14, 2021	12.03	0.7	5.2%	-	yes	7.91
<b>Weighted fair value of the December 16, 2016 plan</b>								<b>8.44</b>

### 23.3.3 Review of internal performance conditions applicable to the plans

In addition to the condition of continuing employment within the Group, eligibility for certain bonus share and performance share plans is subject to an internal performance condition. When this condition is not fully met, the number of bonus shares granted to employees is reduced in

accordance with the plans' regulations, leading to a decrease in the total expense recognized in relation to the plans in accordance with IFRS 2.

Performance conditions are reviewed at each reporting date. No volume reduction was recorded in 2016 due to a failure to meet performance criteria.

### 23.3.4 Free share plans with or without performance conditions in force at December 31, 2016, and impact on income

The expense recorded during the year on plans in effect was as follows:

<i>(In millions of euros)</i>	Expense for the year	
	Dec. 31, 2016	Dec. 31, 2015
Bonus share plans	5	17
Performance share plans	31	17
<i>of which expense for the year</i>	31	28
<i>of which reversal for performance conditions not achieved</i>	-	(11)
<b>TOTAL</b>	<b>36</b>	<b>34</b>

## NOTE 24 Related party transactions

This note describes material transactions between the Group and related parties.

Compensation payable to key management personnel is disclosed in Note 25 "Executive compensation".

Transactions with joint ventures and associates are described in Note 3 "Investments in entities accounted for using the equity method".

Only material transactions are described below.

### 24.1 Relations with the French State and with entities owned or partly owned by the French State

#### 24.1.1 Relations with the French State

Until January 10, 2017, the French State owned 32.76% of ENGIE and appointed five representatives to the Group's 19-member Board of Directors. At this date, the French State sold 4.1% of ENGIE by way of a private placement to institutional investors. As a result, the French State now owns 28.65% of ENGIE and 31.98% of the Group's voting rights.

The French State holds a golden share aimed at protecting France's critical interests and ensuring the continuity and safeguarding of supplies in the energy sector. The golden share is granted to the French State indefinitely and entitles it to veto decisions taken by ENGIE if it considers they could harm France's interests.

Public service engagements in the energy sector are defined by the law of January 3, 2003.

On November 6, 2015, the French State and ENGIE renewed the public service contract which sets out how such engagements are implemented, the Group's public service obligations and the conditions for rate regulation in France:

- as part of its public service obligations, the Group reaffirmed its commitments in terms of security of supply, quality of customer relations, solidarity and assistance to low-income customers, sustainable development and protection of the environment, as well as in terms of research;

- regarding the conditions for rate regulation in France, the contract confirms the overall regulatory framework for setting and changing natural gas tariffs in France, according to the Decree of December 18, 2009, which notably forecasts rate changes based on costs incurred, while also defining the transitional framework following the elimination of regulated natural gas tariffs for business customers.

Transmission rates on the GRTgaz transportation network and the gas distribution network in France, as well as rates for accessing the French LNG terminals, are all regulated.

#### 24.1.2 Relations with EDF

Following the creation on July 1, 2004 of the French gas and electricity distribution network operator (EDF Gaz de France Distribution), Gaz de France SA and EDF entered into an agreement on April 18, 2005 setting out their relationship as regards the distribution business. The December 7, 2006 law on the energy sector reorganized the natural gas and electricity distribution networks. Enedis SA (previously ERDF SA), a subsidiary of EDF SA, and GRDF SA, a subsidiary of ENGIE SA, were created on January 1, 2007 and January 1, 2008, respectively, and act in accordance with the agreement previously signed by the two incumbent operators.

### 24.2 Relations with the CNIEG (Caisse Nationale des Industries Électriques et Gazières)

The Group's relations with the CNIEG, which manages all old-age, death and disability benefits for active and retired employees of the Group who belong to the special EGI pension plan, employees of EDF and Non-Nationalized Companies (*Entreprises Non Nationalisées – ENN*), are described in Note 19 "Post-employment benefits and other long-term benefits".



## NOTE 25 Executive compensation

Executive compensation presented below includes compensation of the members of the Group's Executive Committee and Board of Directors. The Executive Committee had 12 members in 2016 compared to 21 in 2015.

Their compensation breaks down as follows:

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
Short-term benefits	18	26
Post-employment benefits	6	5
Shared-based payments	5	1
Termination benefits	11	-
<b>TOTAL</b>	<b>40</b>	<b>33</b>

## NOTE 26 Working capital requirements, other assets and other liabilities

### 26.1 Composition of change in working capital requirements

<i>In millions of euros</i>	<b>Change in working capital requirements at Dec. 31, 2016</b>	<b>Change in working capital requirements at Dec. 31, 2015</b>
Inventories	510	903
Trade and other receivables, net	(740)	2,105
Trade and other payables, net	703	(1,981)
Tax and employee-related receivables/payables	219	169
Margin calls and derivative instruments hedging commodities relating to trading activities	671	498
Other	6	(530)
<b>TOTAL</b>	<b>1,369</b>	<b>1,163</b>

### 26.2 Inventories

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
Inventories of natural gas, net	1,169	1,547
Inventories of uranium	581	585
CO <sub>2</sub> emission rights, green certificates and certificates of energy efficiency commitment, net	384	413
Inventories of commodities other than gas and other inventories, net	1,522	1,661
<b>TOTAL</b>	<b>3,656</b>	<b>4,207</b>

### 26.3 Other assets and other liabilities

Other current assets (€10,692 million) and other non-current assets (€431 million) mainly comprise tax receivables. Other non-current assets also include at December 31, 2016 a receivable towards EDF

Belgium in respect of nuclear provisions amounting to €69 million (€61 million at December 31, 2015).

Other current liabilities (€15,702 million) and other non-current liabilities (€1,403 million) mainly include tax and employee-related liabilities.

## NOTE 27 Legal and anti-trust proceedings

The Group is party to a number of legal and anti-trust proceedings with third parties or with legal and/or administrative authorities (including tax authorities) in the normal course of its business.

Provisions recorded in respect of these proceedings totaled €1,133 million at December 31, 2016 (€663 million at December 31, 2015).

The main legal and arbitration proceedings presented hereafter are recognized as liabilities or give rise to contingent assets or liabilities.

In the normal course of its business, the Group is also involved in a number of disputes and investigations before state courts, arbitral tribunals or regulatory authorities. The disputes and investigations that could have a material impact on the Group are presented below.

### 27.1 North America

#### 27.1.1 Investigation by the FERC (PJM Interconnection)

On December 8, 2015, the Division of Investigations of the Federal Energy Regulatory Commission (FERC) notified GDF SUEZ Energy Marketing NA Inc. (GSEMNA) and GDF SUEZ Energy North America, Inc. (GSENA) of their preliminary findings with regard to a possible breach of the FERC's rules concerning "lost opportunity cost credits" accrued by GSEMNA with PJM Interconnection between February 2011 and September 2013. On March 18, 2016, the Group responded formally to the FERC's preliminary findings, explaining why the Group believed it had acted properly and lawfully. On December 2, 2016, the FERC publicly issued a notice of alleged violations. By decision dated February 1, 2017, the FERC approved the stipulation and consent agreement of November 29-30, 2016 whereby GSEMNA agreed to settle in an amount of USD 81.8 million, without admitting the alleged violations. This matter is now closed.

### 27.2 Latin America

#### 27.2.1 Concessions in Buenos Aires and Santa Fe

In 2003, ENGIE and its joint shareholders, water distribution concession operators in Buenos Aires and Santa Fe, initiated two arbitration proceedings against the Argentinean State before the International Center for Settlement of Investment Disputes (ICSID). The purpose of these proceedings is to obtain compensation for the loss in value of investments made since the start of the concession, in accordance with the France-Argentine Bilateral Investment Protection Treaties.

On April 9, 2015, the ICSID ordered the Argentinean State to pay USD 405 million in respect of termination of the Buenos Aires water distribution and treatment concession contracts, and on December 4, 2015, to pay USD 211 million in respect of termination of the Santa Fe concession contracts. The Argentinean State is seeking annulment of these awards. As a reminder, prior to the stock market listing of SUEZ Environnement Company (now SUEZ), ENGIE and SUEZ (formerly SUEZ Environnement) entered into an agreement providing for the economic transfer to SUEZ of the rights and obligations relating to the ownership

interest held by ENGIE in Aguas Argentinas and Aguas Provinciales de Santa Fe.

### 27.3 Benelux

#### 27.3.1 Nuclear contributions

On November 30, 2015, the Belgian State, ENGIE and Electrabel entered into an agreement relating to the extension of the operating lives of the Doel 1 and Doel 2 reactors and the payment of nuclear contributions in respect of 2015 and 2016. The agreement also covers the suspension and, in due course, termination of the various proceedings against past nuclear contributions. It came into effect after the enactment of the law of December 25, 2016 on nuclear contributions for the Doel 3 and 4 and Tihange 2 and 3 reactors.

#### 27.3.2 Resumption and extension of operations at the nuclear reactors

Various associations have brought actions before the Constitutional Court, the Council of State and the ordinary courts against the laws and administrative decisions authorizing the extension of operations at the Doel 1 and 2 and Tihange 1 reactors. Some of these proceedings are still pending. In addition, some German local authorities and various organizations have challenged the authorization to restart operations at the Tihange 2 reactor. These actions are also pending.

#### 27.3.3 Nuclear capacity swap with E.ON

On November 26, 2014, E.On, via its subsidiary PreussenElektra GmbH submitted a request for arbitration to the ICC International Court of Arbitration against Electrabel. E.On is seeking (i) the payment by Electrabel of a portion of the German nuclear contribution in the amount of approximately €100 million plus interest and (ii) the repayment of the Belgian nuclear contribution paid by E.On in the amount of approximately €199 million plus interest.

Electrabel disputes these claims and has filed counterclaims seeking: (i) the payment of the full amount invoiced by Electrabel for the Belgian nuclear contribution in the amount of approximately €120 million plus interest and (ii) the repayment of the German nuclear contribution paid by Electrabel in the amount of approximately €189 million plus interest. The case was heard in the week of December 12, 2016.

#### 27.3.4 Tax on facilities

The Belgian Energy Authority has claimed tax on unused or under-used facilities from Electrabel for the period between 2006 and 2015. Electrabel initially challenged these taxes via an administrative claim, and then by bringing an action before the Brussels Court of First Instance and the Brussels Appeal Court. The Belgian State and Electrabel have now reached an agreement to end all the disputes between them in this matter. The agreement will end proceedings relating to taxes paid, given the substantially factual nature of the dispute between the parties, and it also provides for the repeal of or amendment to the law to prevent such disputes in the future. The law was enacted on December 25, 2016.

### 27.3.5 Claim by the Dutch tax authorities

Based on a disputable interpretation of a statutory modification that came into force in 2007, the Dutch tax authorities refuse the deductibility of a portion of the interest paid on financing contracted for the acquisition of investments made in the Netherlands since 2000. At the end of March 2016, the Dutch tax authorities rejected the claim lodged by ENGIE Energie Nederland Holding BV against the tax assessment for the 2007 fiscal year. On May 5, 2016, an appeal was filed against this decision. The total amount of tax and default interest assessed at December 31, 2011 amounted to €227 million. Following the Dutch Tax Authorities' rejection of the administrative claim against the 2007 tax assessment, action was brought before the Arnhem Court of First Instance in June 2016.

## 27.4 France

### 27.4.1 La Compagnie du Vent

Since 2011, ENGIE has been involved in a number of disputes with Jean-Michel Germa, founder of La Compagnie du Vent (LCV) and SOPER, minority shareholder of LCV, the main one being the action brought by SOPER on January 18, 2013 seeking payment by ENGIE of about €250 million in compensation for alleged breach of the agreement and the shareholders' agreement signed in 2007. This dispute is currently pending before the Créteil Commercial Court and the initial submissions were exchanged in July 2016. In principle, the case will be heard in May/June 2017.

### 27.4.2 Practices in the gas and electricity supply markets

On April 15, 2014, Direct Energie lodged a complaint with the competition authorities against ENGIE for alleged abuse of a dominant position on the gas and electricity supply markets, as well as a request for protective interim measures. The competition authority delivered its decision as regards the interim protective measures on September 9, 2014. ENGIE appealed the decision. However, the Appeal Court substantially upheld the competition authority's decision, which has now become final and binding. On the merits of the case, the competition authority notified its allegations on July 20, 2016, to which ENGIE replied on October 20, 2016. The proceedings are ongoing.

On March 27, 2015, the competition authorities informed ENGIE that a claim of alleged abuse of a dominant position by ENGIE on the gas and electricity supply markets had been referred to them by UFC Que Choisir, a French consumer group. The proceedings are ongoing.

On October 26, 2015, the competition authorities informed ENGIE that another claim of alleged abuse of a dominant position by ENGIE on the gas and electricity supply markets had been referred to them by Direct Energie, as well as a new request for protective interim measures. By decision of May 2, 2016, the competition authority ordered ENGIE, as a protective interim measure and pending a decision on the merits, to comply with certain protective interim measures. Direct Energie challenged this decision before the Paris Appeal Court, which, on July 28, 2016 dismissed Direct Energie's claim. Direct Energie has appealed the decision before the Court of Cassation. The investigation is still underway.

### 27.4.3 Withholding tax

In their tax deficiency notice dated December 22, 2008, the French tax authorities questioned the tax treatment of the non-recourse sale by

SUEZ (now ENGIE) of a withholding tax (*précompte*) receivable in 2005 for an amount of €995 million. In May 2016, the French tax authorities issued an assessment notice for part of the resulting corporate income tax, in an amount of €89.6 million. ENGIE paid this sum and filed a claim in August 2016.

Regarding the dispute over the *précompte* itself, on February 1, 2016, the *Conseil d'État* dismissed the appeal before the Court of Cassation seeking the repayment of the *précompte* in respect of the 1999, 2000, and 2001 fiscal years. The Cergy-Pontoise Administrative Court adopted an identical position to that of the Paris Court of Appeal for the amounts claimed by SUEZ (now ENGIE) in respect of the 2002/2003 and 2004 fiscal years. ENGIE SA has appealed this decision.

Furthermore, after ENGIE and several French groups lodged a complaint, on April 28, 2016, the European Commission issued a reasoned opinion to the French State as part of infringement proceedings, setting out its view that the *Conseil d'État* did not comply with European Union law when handing down decisions in disputes regarding the *précompte*, such as those involving ENGIE. On December 8, 2016, the European Commission decided to refer the matter to the Court of Justice of the European Union on the grounds of France's failure to comply.

### 27.4.4 Regulated natural gas tariffs

On June 24, 2013, ANODE, the French national energy retailers association (*Association nationale des opérateurs détaillants en énergie*) filed an appeal before the *Conseil d'État* seeking annulment of Decree No. 2013-400 of May 16, 2013 amending Decree No. 2009-1603 of December 18, 2009 relating to regulated natural gas tariffs.

ANODE contends in substance that the regulated natural gas tariff framework is inconsistent with the objectives of Directive 2009/73/EC concerning common rules for the internal market in natural gas, and Article 106.1 of the Treaty on the Functioning of the European Union. On December 15, 2014, the *Conseil d'État* ordered a stay of proceedings pending the Court of Justice of the European Union's preliminary ruling on these matters. The Court of Justice of the European Union delivered its ruling on September 7, 2016 and the *Conseil d'État* now has to rule on the merits.

## 27.5 Europe excluding France & Benelux

### 27.5.1 Spain – Punica

In the Punica case (investigation into the awarding of contracts), five Cofely España employees as well as the company itself were placed under investigation by the examining judge in charge of the case. The criminal investigation is in progress.

### 27.5.2 Hungary – CIRDI arbitration

On April 4, 2016, ENGIE, GDF International and ENGIE International Holdings filed a request for arbitration before the International Center for Settlement of Investment Disputes (ICSID). In essence, the Group accused the Hungarian State of not fulfilling its obligations under the Energy Charter Treaty by taking various fiscal and regulatory measures that breached the principle of fair and equitable treatment and the ban on forceful expropriation, and is requesting compensation for the damage it has suffered. This request for arbitration follows a referral submitted on February 25, 2015. Arbitration proceedings before the ICSID usually last between two and three years.

### 27.5.3 Italy – Maestrale

On December 5, 2012, International Power Consolidated Holdings Ltd (IPCHL) sold a number of its wind farm subsidiaries operating in Sardinia and Sicily to ERG Renew SpA (ERG). In the early 2000s and before they belonged to the Group, these subsidiaries benefited from subsidies granted under Italian law No. 488/1192. In 2007, the public prosecutor seized the wind farm assets on the suspicion that a fraud had been committed in relation to the granting of the subsidies. Following a request by IPCHL, the seizure was lifted in 2010 subject to the latter providing a guarantee of €31.6 million pending a decision on the merits.

On November 4, 2014, the Italian authorities formally revoked the subsidies in question and requested that ERG repay them immediately, in spite of the amount already provided by IPCHL as a guarantee.

On March 21, 2016, ERG filed a request for arbitration against IPCHL with the ICC International Court of Arbitration, seeking a guarantee from IPCHL on the amounts claimed by the Italian authorities. A settlement agreement was reached on December 19, 2016, thus ending the arbitration proceedings.

### 27.5.4 Italy - Vado Ligure

On March 11, 2014, the court of Savona seized and closed down the VL3 and VL4 coal-fired production units at the Vado Ligure thermal power plant belonging to Tirreno Power S.p.A. (TP), a company which is 50%-owned by the ENGIE Group. This decision was taken as part of a criminal investigation against the present and former executive managers of TP into environmental infringements and public health risks. The investigation was closed on July 20, 2016. The preliminary hearing to determine whether or not to refer the matter back to the Court of Savona to deal with the merits is not expected to begin before fall 2017.

## 27.6 Infrastructures Europe

### 27.6.1 Access to gas infrastructures

On May 22, 2008, the European Commission announced its decision to initiate formal proceedings against Gaz de France for a suspected breach of European Union rules pertaining to abuse of dominant position and restrictive business practices. The proceedings relate to a combination of long-term transport capacity reservation and a network of import agreements, as well as potential underinvestment in transport and import infrastructure capacity.

On October 21, 2009, the Group submitted proposed commitments aimed at facilitating access to and competition on the French natural gas market. On December 3, 2009, the Commission adopted a decision that rendered these commitments legally binding. This decision by the Commission put an end to the proceedings initiated in May 2008. The commitments (which are valid until 2024 and as far as 2029 in certain cases) are being fulfilled under the supervision of a trustee approved by the European Commission.

### 27.6.2 Commissioning

In the dispute between GRDF and various gas suppliers, in a decision dated June 2, 2016, the Paris Appeal Court (i) recalled that the risk of unpaid compensation for the “transmission” part of the agreement with the end customer should be borne by the grid manager and not the gas supplier; (ii) held that the compensation for customer management services provided by the supplier on behalf of the grid manager should be fair and commensurate with the grid manager’s cost savings and (iii) ordered GRDF to bring its transmission agreements into compliance with these principles. GRDF appealed the decision handed down by the Court of Appeal before the Court of Cassation.

Regarding the customer management services carried out on behalf of the grid manager in the electricity sector (in this case ERDF, now ENEDIS), following proceedings brought by ENGIE, in a decision of July 13, 2016, the *Conseil d’État* also ruled that the same principle whereby the grid manager pays compensation to the supplier should apply. In the same decision, the *Conseil d’État* denied the Energy Regulatory Commission (*Commission de Régulation de l’Énergie* - CRE) the right to set a customer threshold beyond which the compensation would not be payable, which has hitherto prevented ENGIE from receiving any compensation.

On January 12, 2017, the CRE announced that a public consultation would be held in the first quarter of 2017 on the arrangements for paying compensation to natural gas and electricity suppliers for customer management services provided to the grid manager in respect of single contract customers. The CRE has also said that it plans to take a position on these matters in the second quarter of 2017.

### 27.6.3 Fos Cavaou

On January 17, 2012, Fosmax LNG, a subsidiary of Elengy, submitted a request for arbitration to the ICC International Court of Arbitration against the STS consortium.

The dispute involved the construction of an LNG terminal owned by Fosmax LNG, built by STS under a fixed lump-sum turnkey contract entered into on May 17, 2004, which included construction work and supplies.

On February 13, 2015, the arbitration court delivered its award and Fosmax LNG accordingly paid STS net compensation (including interest) of €70 million before tax on April 30, 2015. On February 18, 2015, Fosmax LNG brought an action before the *Conseil d’État* seeking annulment of this decision and then on August 18, 2015 brought an appeal before the Paris Appeal Court for annulment of the award and nullity of the enforcement order. The *Conseil d’État* referred the case to the *Tribunal des Conflits* on December 3, 2015, which settled the conflict of jurisdiction in its decision of April 11, 2016 in which it confirmed the jurisdiction of the *Conseil d’État*.

In a decision dated November 9, 2016, the *Conseil d’État* partially annulled the arbitral award of February 13, 2015, considering that Fosmax LNG was entitled to put the work out to public contract and referred the parties back to arbitration on this point. Fosmax LNG intends to send formal notice to STS requesting a refund of the sum of €36 million corresponding to the unduly paid portion of the award. If no refund is forthcoming, Fosmax LNG will initiate new arbitration proceedings.

## 27.7 Other

### 27.7.1 Luxembourg – State aid investigation

On September 19, 2016, the European Commission announced its decision to open an investigation into whether or not two private rulings granted by the Luxembourg State in 2008 and 2010 covering two similar transactions between several of the Group's Luxembourg subsidiaries constitute State aid. Both Luxembourg and ENGIE have challenged the decision to open an investigation, pending the Commission's final decision.

### 27.7.2 United Kingdom – State aid investigation regarding Gibraltar

On October 7, 2016, the European Commission announced its decision to open a state aid investigation against the United Kingdom with regard to Gibraltar's tax system. The decision covers Gibraltar's tax ruling practices and cited 165 tax rulings, which if obtained, could constitute State aid. One of the rulings was obtained by a subsidiary of International Power Ltd in 2011 as part of the dismantling of a facility in Gibraltar. ENGIE contested this decision on November 25, 2016, pending the Commission's final decision.

## NOTE 28 Subsequent events

### Memorandum of understanding concerning the acquisition of the entire share capital of Elengy by GRTgaz

On January 16, 2017, the Group, Société d'Infrastructures Gazières ("SIG", held by CNP Assurances and Caisse des Dépôts et Consignations) and GRTgaz signed a preliminary memorandum of understanding to pursue negotiations to allow GRTgaz (the French natural gas transmission operator, owned at 74.7% by ENGIE and 24.9% by SIG) to acquire the entire share capital of Elengy (a wholly owned subsidiary of ENGIE operating LNG terminals in France).

As part of the transaction, which would have no impact on the current ownership structure of GRTgaz, SIG would subscribe to a capital increase by GRTgaz to the extent of its interest in the company (i.e., around €200 million), thereby reducing the Group's net debt by the same amount.

### Disposal of the portfolio of thermal merchant power plants in the United States

On February 7, 2017, the Group closed the sale of its portfolio of thermal merchant power plants in the United States (see Note 4.1.1). The Group received consideration of USD 3,294 million (i.e., €3,085 million) at that date, corresponding to the sale price of the portfolio.

At the reporting date, the disposal gain is estimated at €557 million, of which €525 million corresponds to the reclassification from other comprehensive income to the income statement of translation adjustments and net investment hedges relating to the portfolio. The transaction also reduced the Group's net debt by an estimated €3,080 million.

## NOTE 29 Fees paid to the statutory auditors and to members of their networks

Pursuant to Article 222-8 of the Regulation of the French Financial Markets Authority (AMF), the following table presents information on the fees paid by ENGIE SA, its fully consolidated subsidiaries and joint operations to each of the auditors in charge of auditing the annual and consolidated financial statements of ENGIE Group.

The Shareholders' Meeting of ENGIE SA of April 28, 2014 decided to renew the term of office of Deloitte and EY as Statutory Auditors for a six year period covering the period 2014-2019.

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>			
	<b>EY</b>		<b>Deloitte</b>	
	<b>Amount</b>	<b>%</b>	<b>Amount</b>	<b>%</b>
<b>Statutory audit, attest engagements and review of consolidated and parent company financial statements</b>	<b>9.5</b>	<b>85.0%</b>	<b>12.7</b>	<b>77.7%</b>
• ENGIE SA	2.5	22.1%	2.3	14.4%
• Fully consolidated subsidiaries and joint operations	7.0	63.0%	10.4	63.4%
<b>Non-audit services</b>	<b>1.7</b>	<b>15.0%</b>	<b>3.6</b>	<b>22.3%</b>
• ENGIE SA	0.7	6.5%	0.5	3.2%
• Fully consolidated subsidiaries and joint operations	1.0	8.5%	3.1	19.1%
<i>Of which services related to regulatory requirements</i>	<i>0.1</i>	<i>0.9%</i>	<i>0.2</i>	<i>1.2%</i>
<i>Of which other audit services</i>	<i>0.8</i>	<i>7.4%</i>	<i>2.2</i>	<i>13.0%</i>
<i>Of which tax</i>	<i>0.7</i>	<i>6.1%</i>	<i>1.0</i>	<i>5.8%</i>
<b>TOTAL</b>	<b>11.2</b>	<b>100%</b>	<b>16.3</b>	<b>100%</b>

## NOTE 30 Information regarding Luxembourg and dutch companies exempted from the requirements to publish annual financial statements

Some companies in the Benelux, GEM & LNG and Other segments do not publish annual financial statements pursuant to domestic provisions in Luxembourg law (Article 70 of the Law of December 19, 2002) and Dutch law (Article 403 of the Civil Code) relating to the exemption from the requirement to publish audited annual financial statements.

The companies exempted are: ENGIE Energie Nederland NV, ENGIE Energie Nederland Holding BV, ENGIE Nederland Retail BV, ENGIE United Consumers Energie BV, Epon Eemscentrale III BV, Epon

Eemscentrale IV BV, Epon Eemscentrale V BV, Epon Eemscentrale VI BV, Epon Eemscentrale VII BV, Epon Eemscentrale VIII BV, Epon International BV, Epon Power Engineering BV, ENGIE Portfolio Management BV, IPM Energy Services BV, IPM Eagle Victoria BV, Electrabel Invest Luxembourg, ENGIE Corp Luxembourg SARL, ENGIE Treasury Management SARL and ENGIE Invest International SA.

## 6.3 Statutory Auditors' Report on the consolidated financial statements

*This is a free translation into English of the statutory auditors' report on the consolidated financial statements issued in French and it is provided solely for the convenience of English-speaking users. The statutory auditors' report includes information specifically required by French law in such reports, whether modified or not. This information is presented below the audit opinion on the consolidated financial statements and includes an explanatory paragraph discussing the auditors' assessments of certain significant accounting and auditing matters. These assessments were considered for the purpose of issuing an audit opinion on the consolidated financial statements taken as a whole and not to provide separate assurance on individual account balances, transactions or disclosures. This report also includes information relating to the specific verification of information given in the ENGIE management report. This report should be read in conjunction with and construed in accordance with French law and professional auditing standards applicable in France.*

To the Shareholders,

In compliance with the assignment entrusted to us by your shareholder's general meeting, we hereby report to you, for the year ended December 31, 2016, on:

- the audit of the accompanying consolidated financial statements of ENGIE;
- the justification of our assessments;
- the specific verification required by law.

These consolidated financial statements have been approved by the Board of Directors. Our role is to express an opinion on these consolidated financial statements based on our audit.

### 1. Opinion on the consolidated financial statements

We conducted our audit in accordance with professional standards applicable in France; those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit includes performing procedures, using sample testing techniques or other selection methods, to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. An audit also includes evaluating the appropriateness of the accounting policies used and the reasonableness of accounting estimates made, as well as the overall presentation of the consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

In our opinion, the consolidated financial statements give a true and fair view of the assets and liabilities and of the financial position of the Group as at December 31, 2016 and of the results of its operations for the year then ended, in accordance with International Financial Reporting Standards as adopted by the European Union.

### 2. Justification of assessments

In accordance with the requirements of article L. 823-9 of the French commercial code (*Code de commerce*) relating to the justification of our assessments, we bring to your attention the following matters:

#### Accounting estimates

As described in note 1.3 "Use of estimates and judgment" to the consolidated financial statements, your Group is required to make estimates and assumptions when preparing its consolidated financial

statements, and the actual future results of the related transactions may differ from these estimates. They have been prepared in a context of prolonged downturn in energy markets whose consequences make it difficult to forecast economic mid-term perspectives.

It is in this context, that we have made our own assessments, notably on the following significant accounting estimates:

- Measurement of the recoverable amount of goodwill, and of tangible and intangible assets

We have examined the methods used to perform impairment tests, which led your Group to record impairment losses of €4,273 million as disclosed in note 8.2 to the consolidated financial statements.

We have examined the data and key assumptions used for the determination of the recoverable amount, assessed the sensitivity of the measurements to these assumptions, as well as the procedure for approving these estimates by management. We have also reviewed the calculations made by the Group and verified that notes 1.3.1.2, 8.2 and 12 to the consolidated financial statements provide appropriate disclosure.

- Evaluation of the provisions for managing the back-end nuclear fuel cycle and for the dismantling of nuclear production facilities.

We have reviewed the bases on which these provisions have been recorded, assessed the sensitivity of the measurements to the technical assumptions and the industrial scenarios, notably the scenario retained for managing radioactive fuel as well as cost assumptions, the timetable of operations and the discount rate. We have verified that notes 1.3.1.3 and 18 to the consolidated financial statements provide appropriate disclosures.

- Estimate of revenues not yet metered (so called "un-metered revenues").

The Group estimates revenue related to electricity and gas sales to customer segments whose energy consumption is metered during the accounting period based on consumption estimates, in line with the volume of energy allocated by the grid managers over the same period and estimates of average selling prices. Our work consisted in assessing the methods and assumptions used to calculate these estimates and verifying that note 1.3.1.6 to the consolidated financial statements provides appropriate disclosure.

- Evaluation of the provisions for litigation.

We have assessed the bases on which these provisions have been recorded and verified that notes 18 and 27 to the consolidated financial statements provide appropriate disclosure.

#### Accounting policies and methods

We have verified that note 1 to the consolidated financial statements provides appropriate disclosure in this respect.

These assessments were made as part of our audit of the consolidated financial statements taken as a whole, and therefore contributed to the opinion we formed which is expressed in the first part of this report.

#### 3. Specific verification

As required by law, we have also verified in accordance with professional standards applicable in France, the information relating to the Group presented in the management report.

We have no matters to report as to its fair presentation and its consistency with the consolidated financial statements.

Neuilly-sur-Seine and Paris-La Défense, March 10, 2017

The Statutory Auditors

**Deloitte & Associés**

Véronique Laurent

**Ernst & Young et Autres**

Pascal Macioce



## 6.4 Parent company financial statements

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NB: Amounts in tables are generally expressed in millions of euros. In certain cases, rounding may cause non-material discrepancies in the lines and columns showing totals and changes.

## 6.4.1 Parent company financial statements

### Balance sheet – Assets

<i>In millions of euros</i>	Note	Dec. 31, 2016		Dec. 31, 2015	
		Gross	Depreciation, amortization and impairment	Net	Net
<b>NON-CURRENT ASSETS</b>					
Intangible assets	C 1-2	1,442	1,022	420	702
Property, plant and equipment	C 1-2	1,071	653	418	407
<b>Financial fixed assets</b>	<b>C 4</b>				
Equity investments		69,393	2,953	66,440	64,994
Other financial fixed assets		773	454	319	335
<b>TOTAL NON-CURRENT ASSETS</b>	<b>I</b>	<b>72,679</b>	<b>5,082</b>	<b>67,597</b>	<b>66,438</b>
<b>CURRENT ASSETS</b>					
<b>Inventories</b>	<b>C 5</b>				
Gas reserves		700	-	700	996
Energy savings certificates		119	-	119	136
Other		20	-	20	0
<b>Advances and downpayments given on orders</b>		<b>13</b>	<b>-</b>	<b>13</b>	<b>3</b>
<b>Operating receivables</b>	<b>C 6-7</b>				
Trade and other receivables		3,990	299	3,691	2,868
Other operating receivables		652	-	652	699
<b>Miscellaneous receivables</b>	<b>C 7</b>				
Current accounts with subsidiaries		3,077	-	3,077	6,245
Other miscellaneous receivables		1,329	15	1,314	850
<b>Marketable securities</b>	<b>C 7-8</b>	<b>1,685</b>	<b>115</b>	<b>1,570</b>	<b>2,580</b>
<b>Cash and cash equivalents</b>		<b>428</b>		<b>428</b>	<b>333</b>
<b>TOTAL CURRENT ASSETS</b>	<b>II</b>	<b>12,013</b>	<b>429</b>	<b>11,584</b>	<b>14,710</b>
<b>ACCRUALS</b>	<b>III C 9</b>	<b>732</b>	<b>-</b>	<b>732</b>	<b>917</b>
<b>UNREALIZED FOREIGN EXCHANGE LOSSES</b>	<b>IV</b>	<b>645</b>	<b>-</b>	<b>645</b>	<b>881</b>
<b>TOTAL ASSETS</b>	<b>(I TO IV)</b>	<b>86,069</b>	<b>5,511</b>	<b>80,558</b>	<b>82,946</b>

## Balance sheet – Equity and liabilities

<i>In millions of euros</i>	Note	Dec. 31, 2016	Dec. 31, 2015
<b>EQUITY</b>			
<b>SHAREHOLDERS' EQUITY</b>	<b>C 10</b>		
Share capital		2,435	2,435
Additional paid-in capital		32,505	32,505
Revaluation adjustments		42	42
Legal reserve		244	243
Other reserves		295	276
Retained earnings		2,691	4,837
Net income		448	268
Interim dividend		(1,198)	(1,196)
Tax-driven provisions and investment subsidies	C 12	514	493
	<b>I</b>	<b>37,976</b>	<b>39,903</b>
<b>OTHER EQUITY</b>	<b>II C 11</b>	<b>8</b>	<b>7</b>
	<b>I + II</b>	<b>37,984</b>	<b>39,910</b>
<b>PROVISIONS FOR CONTINGENCIES AND LOSSES</b>	<b>III C 12</b>	<b>2,487</b>	<b>2,730</b>
<b>LIABILITIES</b>			
<b>Borrowings and debt</b>	<b>C 13-14-15</b>		
<b>Borrowings</b>		<b>30,155</b>	<b>31,552</b>
<b>Amounts payable to equity investments</b>		<b>0</b>	<b>0</b>
<b>Current accounts with subsidiaries</b>		<b>50</b>	<b>56</b>
Other borrowings and debt		503	780
		<b>30,708</b>	<b>32,388</b>
<b>Advances and downpayments received on orders</b>		<b>5</b>	<b>1</b>
<b>Trade and other payables</b>		<b>6,076</b>	<b>4,765</b>
<b>Tax and employee-related liabilities</b>		<b>1,079</b>	<b>828</b>
<b>Other liabilities</b>		<b>1,355</b>	<b>1,434</b>
	<b>IV</b>	<b>39,223</b>	<b>39,416</b>
<b>ACCRUALS</b>	<b>V C 9</b>	<b>312</b>	<b>173</b>
<b>UNREALIZED FOREIGN EXCHANGE GAINS</b>	<b>VI</b>	<b>552</b>	<b>717</b>
<b>TOTAL EQUITY AND LIABILITIES</b>	<b>(I TO VI)</b>	<b>80,558</b>	<b>82,946</b>

## Income statement

<i>In millions of euros</i>	Note	Dec. 31, 2016	Dec. 31, 2015
Energy sales		15,776	17,832
Other production sold		2,163	2,059
<b>Revenues</b>	<b>C 16</b>	<b>17,939</b>	<b>19,891</b>
Production taken to inventory		0	0
Production for own use		11	17
<b>Total production</b>		<b>17,950</b>	<b>19,908</b>
Energy purchases and change in gas reserves		(9,303)	(13,358)
Other purchases		(2,238)	(31)
Other external charges		(6,757)	(6,433)
<b>Value added</b>		<b>(348)</b>	<b>86</b>
Taxes and duties net of subsidies received		41	(21)
Personnel costs	C 16	(588)	(605)
<b>Gross operating loss</b>		<b>(895)</b>	<b>(540)</b>
Net additions to depreciation, amortization and impairment	C 16	(168)	(144)
Net additions to provisions	C 16	45	115
Other operating income and expenses		(234)	(175)
<b>Net operating loss</b>		<b>(1,252)</b>	<b>(744)</b>
<b>Net financial income</b>	<b>C 17</b>	<b>1,294</b>	<b>1,089</b>
<b>Net recurring income</b>		<b>42</b>	<b>345</b>
<b>Non-recurring items</b>	<b>C 18</b>	<b>(266)</b>	<b>(617)</b>
<b>Income tax</b>	<b>C 19</b>	<b>672</b>	<b>540</b>
<b>NET INCOME</b>		<b>448</b>	<b>268</b>

## Cash flow statement

<i>In millions of euros</i>		<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
<b>1. Cash flow from operations</b>	<b>1</b>	<b>616</b>	<b>702</b>
Change in inventories	2a	(293)	(642)
Change in trade receivables (net of trade receivables with a credit balance)	2b	812	(1,591)
Change in trade payables	2c	(1,073)	932
Change in other items	2d	242	(422)
<b>2. Change in working capital requirements (2a+2b+2c+2d)</b>	<b>2</b>	<b>(312)</b>	<b>(1,723)</b>
<b>Cash flow from operating activities</b>	<b>(1 - 2) I</b>	<b>928</b>	<b>2,425</b>
<b>II - Investing activities</b>			
<b>1. Cash flow used in investing activities</b>			
Property, plant and equipment and intangible assets		234	176
Financial fixed assets		1,461	1,336
Change in amounts payable on investments			
	<b>1</b>	<b>1,695</b>	<b>1,512</b>
<b>2. Cash flow from investing activities</b>			
Third-party contributions		-	2
Net proceeds from asset disposals		484	460
Decrease in financial fixed assets		20	642
	<b>2</b>	<b>504</b>	<b>1,104</b>
<b>Cash flow from investing activities</b>	<b>(1 - 2) II</b>	<b>1,191</b>	<b>408</b>
<b>III - Cash flow after operating and investing activities</b>	<b>(I - II) III</b>	<b>(263)</b>	<b>2,017</b>
<b>IV - Financing activities</b>			
<b>1. Capital increases and decreases</b>			
<b>2. Dividends and interim dividends paid to shareholders<sup>(1)</sup></b>			
<b>3. Financing raised on capital markets</b>			
Bond issues		-	3,348
Other short- and medium-term borrowings and credit facilities		1,743	729
	<b>3</b>	<b>1,743</b>	<b>4,077</b>
<b>4. Repayments and redemptions</b>			
Bonds and short- and medium-term credit facilities		(2,851)	(1,811)
	<b>4</b>	<b>(2,851)</b>	<b>(1,811)</b>
<b>Cash flow used in financing activities</b>	<b>(1 + 2 + 3 - 4) IV</b>	<b>(3,505)</b>	<b>(126)</b>
<b>V - Change in cash and cash equivalents</b>	<b>(III + IV) V</b>	<b>(3,768)</b>	<b>1,891</b>

(1) The €2,397 million figure corresponds to the balance of the 2015 dividend (€1,198 million) and an interim dividend in respect of 2016 (€1,198 million).

## 6.4.2 Notes to the parent company financial statements

### A. Significant events during the year

No significant items have occurred since the closing of the accounts at December 31, 2016.

### B. Summary of significant accounting policies

The 2016 financial statements have been drawn up in euros in compliance with the general principles prescribed by the French chart of accounts, as set out in Regulations No. 2014-03 and No. 2015-06 issued by the French accounting standards-setter (*Autorité des Normes Comptables* – ANC), and with the valuation methods described below.

Financial transactions involving equity investments, securities and the related receivables, especially impairment charges or reversals, are included in non-recurring items rather than financial items. In accordance with Article 121-3 of the French chart of accounts, ENGIE SA considers that although this classification diverges from French accounting standards, it gives a more faithful view of the income statement because all items of income and expenses relating to equity investments can be shown together with capital gains or losses on disposals under non-recurring items.

#### Use of estimates and judgment

The preparation of financial statements requires ENGIE SA to use estimates and assumptions that affect the amounts reported in the financial statements or in the notes thereto. This mainly concerns the measurement of equity investments, revenue from delivered unbilled natural gas and electricity (“energy in the meter”), measurement of derivative financial instruments not quoted on an active market, provisions for contingencies, and provisions and off-balance sheet commitments relating to employee benefits.

The economic and financial crisis led ENGIE SA to step up its risk oversight procedures and factor in a risk assessment process when pricing its financial instruments and equity investments. The Company has taken the crisis and the significant market volatility into account in its business plans and in the various discount rates used to perform impairment tests and calculate provisions.

The financial statements reflect management’s best estimates of these amounts, based on information available at the end of the reporting period.

#### Shareholders’ equity

##### Additional paid-in capital

External costs directly attributable to capital increases are deducted from additional paid-in capital. Other costs are expensed as incurred.

##### Merger premium

External expenses directly attributable to the merger between Gaz de France SA and SUEZ SA in 2008 are deducted from the merger premium.

##### Revaluation adjustments

This caption results from the legal revaluations of non-amortizable assets not operated under concessions carried out in 1959 and 1976.

#### Tax-driven provisions

##### Accelerated depreciation and amortization

Accelerated depreciation is recognized whenever an asset’s useful life (which is used in accounting for the depreciation of property, plant and equipment) differs from that used for tax purposes or when a different depreciation method is used.

##### Provision for price increases

The provision for price increases was introduced by Article 39-1-5 of the French Tax Code (*Code général des impôts*) to allow companies to temporarily deduct a portion of profits used for inventory replenishment from their tax base in the event of sharp price increases.

#### Provisions for contingencies and losses

A provision is recognized when the Company has a legal or constructive obligation resulting from a past event which is expected to result in an outflow of resources embodying economic benefits that can be measured reliably.

The provision represents the best estimate of the amount required to settle the present obligation at the end of the reporting period.

##### Provisions for rehabilitating land on which former gas production plants were located

A provision for site rehabilitation and cleanup costs for former gas production plants is set aside whenever the Company has a commitment to a third party, such as a binding agreement to sell such an asset. These provisions are assessed on an asset-by-asset basis and reflect the best estimate of the costs required to complete the rehabilitation work, based on current information relating to technical knowledge and regulatory requirements.

Movements in these provisions are shown under operating items.

##### Provision for employee bonus share awards and stock option plans

The provision for employee bonus share awards is recognized on a straight-line basis over the vesting period. The provision ultimately covers the disposal loss equal to the book value of treasury stock granted free of consideration to employees. Movements in this provision and any related costs are shown in personnel costs.

For stock options, a provision is set aside whenever the share price at the end of the reporting period is higher than the exercise price of the options granted. The provision is set aside on a straight-line basis over the vesting period, and ultimately covers the disposal loss equal to the purchase cost of the shares, less the exercise price paid by employees.

#### Intangible assets

This caption mainly comprises the purchase cost or production cost of software, amortized over its estimated useful life. A useful life of between five and seven years is generally used to calculate software amortization.

Other development costs are capitalized provided they meet specific criteria, particularly as regards the pattern in which the intangible asset is expected to generate future economic benefits.

Research costs are expensed in the year in which they are incurred.

## Property, plant and equipment

All items of property, plant and equipment are carried at purchase cost or production cost, including ancillary expenses, with the exception of assets acquired prior to December 31, 1976, which are shown at their revalued amount at that date.

Almost all items of property, plant and equipment are depreciated on a straight-line basis.

Assets are depreciated over their useful lives, based on the period over which they are expected to be used. The useful lives for the main asset classes are as follows:

- buildings: 20 to 60 years;
- other: 3 to 15 years.

Borrowing costs incurred in financing an asset are recognized as an expense and amortized over the financing period.

## Components

When the components of a given asset cannot be used separately, the overall asset is recognized. If one or more components have different useful lives at the outset, each component is recognized and depreciated separately.

## Financial fixed assets

### Equity investments

Equity investments represent long-term investments providing ENGIE SA with control or significant influence over the issuer, or helping it to establish business relations with the issuer.

Newly-acquired equity investments are recognized at purchase price plus directly attributable transaction fees.

Investments which ENGIE SA intends to hold on a long-term basis are written down if their value in use has fallen below their book value. Value in use is assessed by reference to (i) the intrinsic value, which corresponds to net assets plus unrealized gains, or (ii) the yield value, which corresponds to the average of the last 20 stock market prices of the year, or (iii) discounted cash flows or discounted dividends, taking into account any currency hedges.

### Technical loss

In accordance with Article 9 of ANC Regulation No. 2015-06, the technical loss arising on a merger is allocated to the underlying assets, which, in this case, are equity investments.

The portion of the loss allocated to an underlying asset is written down if the value of the asset falls below its net book value plus the portion of the loss allocated to it. The writedown is first allocated to the portion of the loss.

In the event of a disposal, the portion of the loss relating to the assets sold is reversed through income.

Investments which ENGIE SA has decided to sell are written down if their book value is lower than their estimated sale price. If sale negotiations are ongoing at the end of the reporting period, the best estimate is used to determine the sale price.

### Amounts receivable from equity investments

This caption consists of loans granted by ENGIE SA to equity investments.

They are recognized at face value. In line with the treatment adopted for equity investments, these amounts are written down if their value in use falls below their face amount.

Provisions for contingencies may be booked if the Company considers that the cost of its commitment exceeds the value of the assets held.

### Other financial fixed assets

This caption includes mainly investments other than equity investments that ENGIE SA intends to hold on a long-term basis but which do not meet the definition of equity investments.

A writedown may be taken against other financial fixed assets in accordance with the criteria described above for equity investments.

### Liquidity agreement and treasury stock

The Company has entered into a liquidity agreement with an investment services provider. Under this agreement, the investment services provider agrees to buy and sell ENGIE SA shares to organize the market for and ensure the liquidity of the share on the Paris and Brussels stock markets.

The amounts paid to the investment services provider are included in "Other long-term investments". An impairment loss is recognized against the shares when their average price for the month in which the accounts are closed is lower than their book value.

## Inventories

### Natural gas reserves

Gas injected into underground reservoirs is included in inventories. It is measured at average purchase cost including domestic and international freight costs upon entering the transportation network regardless of its source, and including any regasification costs. Outflows are measured on a monthly basis using the weighted average unit cost method.

An impairment loss is recognized when the net realizable value of inventories, representing the selling price less costs directly and indirectly attributable to distribution, is lower than weighted average cost.

### Energy savings certificates (ESC)

Energy Savings Certificates (ESC) are accounted for by ENGIE SA using the "energy savings" model: energy sales generate energy savings obligations, which are settled by:

- energy savings that qualify for certificates;
- the purchase of certificates; or
- payment to the *Trésor public* of the amount provided for in Article L. 221-4 of the French Energy Code (*Code de l'énergie*).

Inventory inflows: certificates obtained from the French State in exchange for qualifying energy savings are recorded at production cost in inventories. Certificates purchased are recorded at their purchase cost and are valued using the weighted average cost method.

Inventory outflows: certificates are derecognized as and when energy sales generate energy savings obligations, which are equivalent to one unit of energy consumed, and/or upon disposal. Capital gains and losses on disposal are recognized in operating income.

At December 31, 2016:

- an asset (inventories) is recognized when energy savings obligations are lower than energy savings. Inventories correspond to certificates that have been acquired, obtained or are in the process of being obtained, and that will cover future energy savings obligations. They will subsequently be consumed when energy sales are made, which generate energy savings obligations, or on disposal;
- a liability is recognized when energy savings obligations are higher than energy savings and corresponds to the cost of measures required to settle the obligations related to energy sales made. The liability will subsequently be settled by energy savings that qualify for certificates.

### Operating receivables

This caption includes all receivables arising on the sale of goods, and other receivables arising in the ordinary course of operations.

#### Energy delivered but not billed

Receivables also include unbilled revenues for energy delivered, regardless of whether or not the meters have been read.

This caption concerns customers not billed monthly (mainly residential customers) and customers whose billing period is not aligned with the consumption period of a given month.

The amounts receivable in respect of delivered unbilled gas and electricity ("energy in the meter") are calculated using a direct method taking into account estimated customer consumption based on the most recent customer bill or unbilled reading, in line with the allocation of the distribution grid manager over the same period. Energy in the meter is measured at the average energy price. The average price used takes account of the category of customer and the age of the delivered unbilled "gas in the meter". The estimated portion of unbilled revenue at the reporting date is sensitive to the average price and volume assumptions used.

Customers (mainly residential customers) can opt to pay on a monthly basis. In this case, the Company recognizes a monthly advance and a bill is issued at the anniversary date of the contract giving rise to the payment (or refund) of any difference between the amount billed and the advance payments already received.

Unbilled revenues in respect of delivered unbilled natural gas are netted against the advances already collected by the Company from customers billed monthly.

### Impairment of trade receivables

Bad debt risk is analyzed on a case-by-case basis for the Company's largest customers. Receivables from other customers are written down using rates which increase in line with the age of the related receivables. The potential bad debt risk arising on amounts receivable in respect of delivered unbilled natural gas is also taken into account.

### Other operating receivables

Other operating receivables include the current account with ENGIE Finance, as well as margin calls. Items for which there is a risk of non-collection are written down.

### Foreign currency transactions

Income and expenses denominated in foreign currencies are recorded at their equivalent value in euros at the transaction date.

Foreign currency receivables, payables and cash and cash equivalents are converted at the exchange rate prevailing at year-end.

Translation differences are taken to income when they arise on cash and cash equivalents, or to the balance sheet under unrealized foreign exchange gains or losses when they arise on receivables and payables. A provision is set aside for unrealized losses after taking account of any associated hedging instruments.

### Marketable securities

Marketable securities are shown on the balance sheet at cost.

When the market value of securities at December 31 is lower than their book value, a writedown is recognized for the difference. For listed securities, market value is determined based on the market price at the end of the reporting period.

### Subordinated perpetual notes

Subordinated perpetual notes issued by the Company in euros and currency are recognized in accordance with Opinion No. 28 issued by the French association of public accountants (*Ordre des experts-comptables*) in July 1994, taking into account their specific characteristics.

Accordingly, they are classified as debt as their redemption is not perpetual.

### Bond redemption premiums and issue costs

In accordance with the benchmark treatment prescribed by the French National Accounting Board (*Conseil National de la Comptabilité – CNC*), bond issue costs are recognized on a straight-line basis over the life of the instruments. These issue costs mainly consist of advertising expenses (for public issues) and fees due to financial intermediaries.

Bonds carrying a redemption premium are recognized in liabilities for their total amount including redemption premiums. The matching entry for these premiums is recorded in assets under accruals, and amortized over the life of the bonds pro rata to interest.



## Pensions and other employee benefit obligations

### Companies belonging to the electricity and gas industries sector

ENGIE SA employees qualify for the disability, pension and death benefits available under the special plan for companies belonging to the electricity and gas industries sector (see Note 21).

### Accounting treatment

ENGIE SA recognizes provisions under liabilities solely for benefits granted to employees whose rights have already begun to vest (annuities for occupational accidents and illnesses, temporary incapacity or disability benefits), or benefits due during the employee's working life (long-service awards and exceptional end-of-career vacation).

As part of the 2008 merger between Suez and Gaz de France with retroactive effect from January 1, 2008, provisions for pensions and other employee benefits (pensions, retirement indemnities and healthcare) carried by Suez SA at December 31, 2007 were transferred to ENGIE SA.

In accordance with Opinion No. 2005-C of the CNC's Emerging Issues Taskforce and with the method applied by ENGIE SA and described above, no further amounts will be set aside to these provisions in respect of rights newly vested by employees or the unwinding of discounting adjustments on the provisions transferred within the scope of the merger. These provisions are written back in line with the settlement of the corresponding obligations.

No provisions are set aside in liabilities for other commitments. These are disclosed in Note 21 on off-balance sheet commitments.

### Basis of measurement and actuarial assumptions

Benefit obligations are measured using the projected unit credit method. The present value of the obligations of ENGIE SA is calculated by allocating vested benefits to periods of service under the plan's benefit formula. When an employee's service in later years leads to a materially higher level of benefits than in earlier years, the Group allocates the benefits on a straight-line basis.

Future payments in respect of these benefits are calculated based on assumptions as to salary increases, retirement age, mortality and employee turnover. The rate used to discount future benefit payments is determined by reference to the yield on investment grade corporate bonds based on maturities consistent with the benefit obligation.

## Financial instruments

To hedge and manage its currency, interest rate and commodity price risk, ENGIE SA uses financial instruments disclosed in off-balance sheet commitments.

In the case of contracts that qualify as hedging instruments and are traded on an organized market or over the counter, gains or losses are taken to income symmetrically with the gain or loss on the hedged items.

Changes in the fair market value of contracts that do not qualify as hedging instruments and are traded on an organized market are taken to income. A provision is set aside for unrealized losses on instruments traded over the counter that do not qualify as hedging instruments.

If the hedged item ceases to exist, the contract is unwound and any gains or losses taken to income.

ENGIE SA uses internal models representative of market practices to value financial derivative instruments that are not listed on financial markets.

## Income tax

Since January 1, 1988, ENGIE SA has been part of the tax consolidation regime introduced by Article 68 of Law No. 87-1060 of December 30, 1987. ENGIE SA is head of a tax consolidation group within the meaning of Articles 223 A *et seq.* of the French Tax Code (*Code général des impôts*).

The contribution of subsidiaries in the tax consolidation group to the Group's income tax expense equals the amount of tax for which they would have been liable if they had not been members of the tax consolidation group.

The impacts of tax consolidation are recorded under the income tax expense of ENGIE SA, as parent company.

ENGIE SA also records a provision for any tax savings generated by subsidiaries' tax losses. These savings initially benefit ENGIE SA as parent company, and are recovered by the subsidiaries once they return to profit (hence the provision booked).

Article 66 of Amending Finance Law No. 2012-1510 of December 29, 2012 introduced a tax credit aimed at boosting employment and competitiveness in France (*Crédit d'impôt pour la compétitivité et l'emploi* – CICE). This tax credit is recognized as a reduction of income tax expense.

## C. Comparability of periods presented

At the time of the merger between Gaz de France and Suez in 2008, a technical merger loss of €285 million was recorded in intangible assets. The loss was allocated off-the-books to equity investments held.

Upon first-time application of Regulation No. 2015-06 of November 23, 2015, this technical loss was reclassified to financial fixed assets on the basis of the initial off-the-books allocation. (See note on financial fixed assets.)

## D. Subsequent events

Pursuant to the Group's asset disposal program for the period 2016-2018, on January 16, 2017 ENGIE SA, Société d'Infrastructure Gazières ("SIG", held by CNP Assurances and Caisse des Dépôts et Consignations) and GRTgaz signed a preliminary memorandum of understanding to pursue negotiations to allow GRTgaz (the French natural gas transmission operator, owned at 74.7% by ENGIE SA and 24.9% by SIG) to acquire the entire share capital of Elengy (a 99.99%-owned subsidiary of ENGIE SA operating LNG terminals in France). As part of the transaction, which would have no impact on the current ownership structure of GRTgaz, SIG would subscribe to a capital increase made by GRTgaz in proportion to its percentage holding.

## E. Additional information regarding the balance sheet and income statement

**NOTE 1** Intangible assets and property, plant and equipment

Changes in the gross value of these assets can be analyzed as follows:

<i>In millions of euros</i>	Dec. 31, 2015	Increases	Decreases	Reclassifications	Dec. 31, 2016
<b>Intangible assets</b>	<b>1,568</b>	<b>204</b>	<b>(15)</b>	<b>(315)</b>	<b>1,442</b>
Software	834	-	(15)	110	929
Technical loss <sup>(1)</sup>	285	-	-	(285)	0
Other	323	42	-	-	365
Intangible assets in progress	126	162	-	(140)	148
<b>Property, plant and equipment</b>	<b>1,020</b>	<b>40</b>	<b>(17)</b>	<b>28</b>	<b>1,071</b>
Land	37	-	(2)	-	35
Buildings	523	3	(15)	8	519
Plant and equipment	205	1	-	38	244
General plant and equipment, and miscellaneous fixtures and fittings	178	-	-	5	183
Other	34	1	-	2	37
Property, plant and equipment in progress <sup>(2)</sup>	43	35	-	(25)	53
<b>Advances and downpayments</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TOTAL</b>	<b>2,588</b>	<b>244</b>	<b>(32)</b>	<b>(287)</b>	<b>2,513</b>

(1) In accordance with Regulation No. 2015-06, the technical loss has been reclassified to the underlying assets to which it relates, mainly equity investments in SUEZ and Electrabel.

(2) Intangible assets in progress essentially concern IT projects.

**NOTE 2** Depreciation, amortization and impairment of intangible assets and property, plant and equipment

Changes in depreciation and amortization were as follows:

<i>In millions of euros</i>	Dec. 31, 2015	Increases	Decreases	Dec. 31, 2016
<b>Intangible assets</b>	<b>692</b>	<b>122</b>	<b>(6)</b>	<b>808</b>
Software	592	105	(6)	691
Technical loss	-	-	-	-
Other	100	17	-	117
<b>Property, plant and equipment</b>	<b>606</b>	<b>45</b>	<b>(13)</b>	<b>638</b>
Land	-	-	-	-
Buildings	374	17	(12)	379
Plant and equipment	104	10	(1)	113
General plant and equipment, and miscellaneous fixtures and fittings	102	15	-	117
Other	26	3	-	29
Property, plant and equipment in progress	-	-	-	-
<b>TOTAL</b>	<b>1,298</b>	<b>167</b>	<b>(19)</b>	<b>1,446</b>

Changes in impairment were as follows:

<i>In millions of euros</i>	Dec. 31, 2015	Additions	Reversals	Dec. 31, 2016
Intangible assets	174	52	(12)	214
Property, plant and equipment	7	17	(9)	15
<b>TOTAL</b>	<b>181</b>	<b>69</b>	<b>(21)</b>	<b>229</b>

Movements in depreciation, amortization and impairment can be broken down as follows:

<i>In millions of euros</i>	Dec. 31, 2016	Dec. 31, 2015
<b>Depreciation, amortization and impairment</b>	<b>153</b>	<b>140</b>
Straight-line method	150	138
Declining-balance method	1	2
Concession termination amortization	2	0
<b>Exceptional depreciation and amortization</b>	<b>15</b>	<b>13</b>
<b>Reversals</b>	<b>(1)</b>	<b>-</b>

#### THE NET VALUE OF INTANGIBLE ASSETS AND PROPERTY, PLANT AND EQUIPMENT IS AS FOLLOWS

<i>In millions of euros</i>	Gross value	Accumulated amortization/ depreciation	Impairment	Net at Dec. 31, 2016	Net at Dec. 31, 2015
<b>Intangible assets</b>	<b>1,442</b>	<b>(808)</b>	<b>(214)</b>	<b>420</b>	<b>702</b>
Software	929	(691)	-	238	242
Technical loss <sup>(1)</sup>	-	-	-	0	285
Other	365	(117)	(214)	34	49
Intangible assets in progress	148	-	-	148	126
<b>Property, plant and equipment</b>	<b>1,071</b>	<b>(638)</b>	<b>(15)</b>	<b>418</b>	<b>407</b>
Land	35	-	(1)	34	36
Buildings	519	(379)	(14)	126	144
Plant and equipment	244	(113)	-	131	100
General plant and equipment, and miscellaneous fixtures and fittings	183	(117)	-	66	76
Other	37	(29)	-	8	8
Property, plant and equipment in progress	53	-	-	53	43
<b>Advances and downpayments</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>TOTAL</b>	<b>2,513</b>	<b>(1,446)</b>	<b>(229)</b>	<b>838</b>	<b>1,109</b>

(1) Reclassification of the technical loss allocated to equity investments following the 2008 merger between Suez and Gaz de France.

### NOTE 3 Finance leases

If ENGIE SA were the outright owner of buildings and other property, plant and equipment currently held under finance leases, these assets would be reported as follows:

<i>In millions of euros</i>	Gross value	Additions for the period	Net value	Accumulated depreciation
Buildings	92	(4)	49	43
Other property, plant and equipment	-	-	-	-

Contractual commitments are as follows:

<i>In millions of euros</i>	Lease payments					Purchase option price
	Paid in 2016	Outstanding	1 year or less	Due in 1 to 5 years	Due in more than 5 years	
Buildings	3	1	2	-	-	-
Other property, plant and equipment	-	-	-	-	-	-

Virtually all property lease agreements provide for a purchase option exercisable at a symbolic price of one euro.

**NOTE 4** Financial fixed assets**Note 4 A** Gross values

Changes in the gross value of these assets can be analyzed as follows:

<i>In millions of euros</i>	<b>Dec. 31, 2015</b>	<b>Increases</b>	<b>Decreases</b>	<b>Other</b>	<b>Dec. 31, 2016</b>
<b>Equity investments</b>	<b>67,920</b>	<b>1,230</b>	<b>(42)</b>	<b>285</b>	<b>69,393</b>
Consolidated equity investments	67,582	1,165	-	38	68,785
Equity investments – Consolidated technical loss <sup>(1)</sup>	-	-	-	285	285
Non-consolidated equity investments	338	65	(42)	(38)	323
<b>Other financial fixed assets</b>	<b>759</b>	<b>1,751</b>	<b>(1,737)</b>	<b>-</b>	<b>773</b>
Other long-term investments	31	436	(424)	-	43
Amounts receivable from equity investments	673	39	(31)	-	681
Loans	15	14	(14)	-	15
Other financial fixed assets	40	1,262	(1,268)	-	34
<b>TOTAL</b>	<b>68,679</b>	<b>2,981</b>	<b>(1,779)</b>	<b>285</b>	<b>70,166</b>

(1) Technical loss arising on the 2008 merger of Suez with Gaz de France, previously classified in intangible assets.

Movements in treasury stock are detailed in Note 10 A.

Equity investments and amounts receivable from these investments are detailed in Note 23.

The year-on-year change in equity investments at December 31, 2016 is essentially attributable to subscriptions to capital increases carried out by:

- COGAC (€1 billion);
- ENGIE China Investment Company (€62 million);
- ENGIE Management Company (€55 million);
- ENGIE Rassembleurs d'Énergies (€35 million);
- SUEZ formerly SUEZ Environnement (€30 million);
- ENGIE New Ventures (€17 million).

**Note 4 B** Impairment

<i>In millions of euros</i>	<b>Dec. 31, 2015</b>	<b>Additions</b>	<b>Reversals</b>	<b>Other</b>	<b>Dec. 31, 2016</b>
Consolidated equity investments	2,655	198	(258)	33	2,628
Consolidated equity investments – technical loss <sup>(1)</sup>	-	93	-	-	93
Non-consolidated equity investments	271	1	(7)	(33)	232
Other long-term investments	-	4	-	-	4
Amounts receivable from equity investments	423	34	(8)	-	449
Other	1	-	-	-	1
<b>TOTAL</b>	<b>3,350</b>	<b>330</b>	<b>(273)</b>	<b>-</b>	<b>3,407</b>

(1) Technical loss arising on the 2008 merger of Suez with Gaz de France.

The change in impairment mainly reflects:

- provisions for impairment against equity investments:
  - NNB Development (€111 million);
  - SUEZ (formerly SUEZ Environnement) technical loss (€93 million);
  - ENGIE Management Company (€41 million);
- ENGIE IT (€27 million);
- ENGIE China Investment Company (€14 million);
- reversals of impairment provisions against equity investments:
  - COGAC (€200 million), due to the sharp improvement in its results.

## Note 4 C Net value

<i>In millions of euros</i>	Gross value at Dec. 31, 2016	Impairment	Net value at Dec. 31, 2016	Net value at Dec. 31, 2015
<b>Equity investments</b>	<b>69,393</b>	<b>(2,953)</b>	<b>66,440</b>	<b>64,994</b>
Consolidated equity investments	68,785	(2,628)	66,157	64,927
Consolidated equity investments – technical loss <sup>(1)</sup>	285	(93)	192	
Non-consolidated equity investments	323	(232)	91	67
<b>Other financial fixed assets</b>	<b>773</b>	<b>(454)</b>	<b>319</b>	<b>335</b>
Other long-term investments	43	(4)	39	31
Amounts receivable from equity investments	681	(449)	232	250
Loans	15	(1)	14	14
Other financial fixed assets	34	-	34	40
<b>TOTAL</b>	<b>70,166</b>	<b>(3,407)</b>	<b>66,759</b>	<b>65,329</b>

(1) Technical loss arising on the 2008 merger of Suez with Gaz de France.

<i>In millions of euros</i>	% interest	Carrying amount	Valuation method
<b>Dec. 31, 2016</b>			
Electrabel (incl. technical loss)	99.13%	34,148	Value-in-use – DCF/DDM
GRDF	100.00%	8,405	Value-in-use – DCF
ENGIE Finance	100.00%	5,567	Intrinsic value
GDFI	100.00%	3,972	Value-in-use – DCF/DDM
ENGIE Energy Services (incl. technical loss)	100.00%	2,933	Value-in-use – DCF/DDM
Storengy	100.00%	2,666	Value-in-use – DCF
SUEZ formerly SUEZ Environnement I – technical (incl. technical loss)	32.57%	2,483	Yield value
COGAC	100.00%	2,034	Value-in-use – DCF/DDM
GRTgaz	75.00%	1,850	Value-in-use – DCF
Genfina	100.00%	1,274	Intrinsic value
Other		1,108	
<b>TOTAL</b>		<b>66,440</b>	

The value in use of the equity investments set out in the table above is assessed by reference to:

- for financial vehicles, the intrinsic value, which corresponds to net assets plus unrealized gains;
- for listed companies (including SUEZ), the average yield value, which corresponds to the average of the last 20 stock market prices of the year;
- for subsidiaries that directly or indirectly conduct operating activities, discounted cash flows or discounted dividends.

The projections on which these values are based were drawn from the 2017 budget and from the 2018-2019 medium-term business plan, as approved by the Group's Executive Committee and the Board of Directors, and on extrapolated cash flows beyond that time frame. The projections are drawn up on the basis of macroeconomic assumptions (inflation, exchange rates and growth rates) and price assumptions resulting from the Group's reference scenario for 2016-2040. The price assumptions featured in the Group's reference scenario were approved by the Group's Executive Committee in December 2016. They were determined on the basis of the following inputs:

- forward market prices over the short term for fuel (coal, oil and gas), CO2 and electricity on different markets;
- beyond this period, medium- and long-term energy prices were determined based on macroeconomic assumptions and fundamental supply and demand equilibrium models, the results of which are regularly compared against forecasts prepared by external energy sector specialists. Long-term projections for CO2 prices are those presented in the "Canfin, Grandjean et Mestrallet" report published in July 2016. More specifically, medium- and long-term electricity prices were determined by the Group using electricity demand forecasting models, medium- and long-term forecasts of fuel and CO2 prices, and expected trends in installed capacity and in the technology mix of the production assets within each power generation system.

In the specific case of Electrabel, whose carrying amount accounts for more than half of Engie SA's investment portfolio, the key assumptions used to assess its value in use concern:

- changes in the regulatory environment in every country in which Electrabel operates, and in particular the Belgian regulatory framework governing the operating life of existing nuclear reactors and the level of royalties and nuclear contributions paid to the Belgian State;
- changes in demand for gas and electricity;
- changes in the price of electricity;
- changes in exchange rates; and
- discount rates.

Electrabel owns, either directly or through equity investments in or outside Europe, the following main operating activities:

- Power generation and sales activities, including:
  - nuclear power plants in Belgium;
  - thermal power plants, mainly in Belgium, the Netherlands, Italy, Greece, Spain, Portugal, Poland, the United Kingdom, Australia, Thailand, Singapore, Brazil, Puerto Rico, Chile, Mexico, Peru, the Middle East and Pakistan;
  - renewable power generation plants, mainly in Belgium, the Netherlands, Italy, Spain, Portugal, Poland, Germany, the United Kingdom, Brazil, Canada, Chile, Mexico, Peru and France, using SHEM's and CNR's hydropower plants;
- Natural gas and power generation activities in Belgium, the Netherlands, Italy, Spain, Portugal, Poland, the United Kingdom, Australia, Thailand and Singapore;
- Management and optimization of portfolios of physical and contractual assets.

## NOTE 5 Inventories

<i>In millions of euros</i>	Gross value at Dec. 31, 2015	Increases	Decreases	Gross value at Dec. 31, 2016
Natural gas reserves	996	676	972	700
Energy savings certificates	136	102	119	119
Other	-	20	-	20
<b>TOTAL</b>	<b>1,132</b>	<b>798</b>	<b>1,091</b>	<b>839</b>

### Note 5 A Natural gas reserves

Gas reserves at end-December 2016 were a considerable €297 million lower than at end-December 2015.

The year-on-year change was due to a decrease in the average injection price from €22.0 per MWh in 2015 to €18.6 per MWh in

2016, following the fall in prices of long-term contracts and spot purchases.

### Note 5 B Energy savings certificates

National energy savings targets for the third three-year period from January 1, 2015 to December 31, 2017 have risen sharply and have been fixed at 700 TWh for all energy suppliers for the period. Pursuant to Decree No. 2014-1668, ENGIE SA's annual target is determined by applying the following coefficients to its sales: 0,153 kWh cumac\*/kWh sold for natural gas and 0,238 for electricity.

An additional ESC obligation of 150 TWh for the 2016-2017 period has been introduced by Article 30 of the energy transition for green

growth act (*Loi relative à la transition énergétique pour la croissance verte* – LTECV) in order to help households affected by fuel poverty ("fuel poverty" ESCs). The new obligation is divided up among energy suppliers on a pro rata basis according to their current energy savings obligations.

\* cumac means updated cumulative kilowatt-hours (kWh) annualized over the lifespan of the equipment.

**NOTE 6** Maturity of receivables

<i>In millions of euros</i>	Gross amount at Dec. 31, 2016	Due		
		End-2017	Between 2018 and 2021	2022 and beyond
<b>Non-current assets</b>	<b>1,059</b>	<b>22</b>	<b>91</b>	<b>946</b>
Amounts receivable from equity investments	681	21	87	573
Loans	15	1	4	10
Liquidity agreement	297	-	-	297
Other financial fixed assets	66	-	-	66
<b>Current assets</b>	<b>9,060</b>	<b>9,021</b>	<b>25</b>	<b>14</b>
Trade and other receivables	3,990	3,960	29	-
Current accounts with subsidiaries	3,077	3,077	-	-
Other operating receivables	652	652	-	-
Other receivables	1,329	1,319	(4)	14
<b>Advances and downpayments made on orders</b>	<b>13</b>	<b>13</b>	<b>-</b>	<b>-</b>
<b>TOTAL</b>	<b>10,119</b>	<b>9,043</b>	<b>116</b>	<b>960</b>

**NOTE 7** Impairment of current assets

<i>In millions of euros</i>	Dec. 31, 2015	Additions	Reversals	Dec. 31, 2016
Operating receivables	294	113	(108)	299
Miscellaneous receivables	21	-	(6)	15
Marketable securities	32	83	-	115
<b>TOTAL</b>	<b>347</b>	<b>196</b>	<b>(114)</b>	<b>429</b>

**NOTE 8** Marketable securities

<i>In millions of euros</i>	Gross value at Dec. 31, 2016	Impairment	Net value at Dec. 31, 2016	Net value at Dec. 31, 2015
Treasury shares held to cover bonus share plans	749	(115)	634	790
Money-market funds	675	-	675	1,574
Term deposits	261	-	261	216
<b>TOTAL</b>	<b>1,685</b>	<b>(115)</b>	<b>1,570</b>	<b>2,580</b>

Treasury shares are held to cover bonus share plans granted to employees. Shares not yet allocated to future share plans totaled €323 million at December 31, 2016. Since the average share price over the last twenty trading days of the year was lower than the purchase price, an impairment loss of €115 million was recognized.

Shares allocated to a plan totaled €426 million at December 31, 2016. These shares are measured at cost and impairment provisions are recognized in liabilities (see Note 12 B2).

The carrying amount of other marketable securities was €936 million compared with a market value of €937 million.

**NOTE 9** Accruals

Unrealized foreign exchange gains and losses arise upon the translation at the year-end exchange rate of payables denominated in a currency other than the euro and derivative financial instruments intended to hedge currency risk on debt and/or commodity purchases and sales.

**Assets**

<i>In millions of euros</i>	<b>Dec. 31, 2015</b>	<b>Increases</b>	<b>Decreases</b>	<b>Dec. 31, 2016</b>
Loan redemption premiums	153	-	(21)	132
Deferred loan issuance costs	79	-	(16)	63
Financial instruments	685	511	(659)	537
<b>TOTAL</b>	<b>917</b>	<b>511</b>	<b>(696)</b>	<b>732</b>

Financial instruments comprise:

- foreign exchange differences matching the unrealized foreign exchange gains arising on debt hedging instruments;
- premiums on options intended to hedge commodity risk and/or currency risk on debt.

**Liabilities**

<i>In millions of euros</i>	<b>Dec. 31, 2015</b>	<b>Increases</b>	<b>Decreases</b>	<b>Dec. 31, 2016</b>
Options contracts	33	321	(216)	138
Financial instruments	140	174	(140)	174
<b>TOTAL</b>	<b>173</b>	<b>495</b>	<b>(356)</b>	<b>312</b>

Financial instruments

A contingency and loss provision is recognized in respect of unrealized foreign exchange losses on contracts that do not qualify for hedge accounting (see Note 12 B5).

**NOTE 10** Shareholders' equity**Note 10 A** Share capital – shares issued and outstanding

Share capital is fully paid up. Each €1 share carries a single voting right.

**Share capital**

Shares comprising the share capital at January 1, 2016	2,435,285,011
<b>Total number of shares comprising the share capital</b>	<b>2,435,285,011</b>

In 2016, a total of 32,106,259 shares were purchased and 31,106,259 shares were sold under the liquidity agreement, generating a net capital gain of €1.4 million. At December 31, 2016, ENGIE SA held

1,000,000 treasury shares under the liquidity agreement. At December 31, 2016, ENGIE SA held 37,522,838 shares in connection with bonus share awards (see Note 10 C).



## Note 10 B Change in shareholders' equity

*In millions of euros*

<b>Shareholders' equity at December 31, 2015</b>	<b>39,903</b>
Dividends and interim dividends paid	(2,397)
Change of method at January 1, 2016 in accordance with ANC Regulation No. 2014-03 on accounting for ESC	-
Tax-driven provisions	22
Income	448
<b>Shareholders' equity at December 31, 2016</b>	<b>37,976</b>

In 2016, ENGIE SA paid:

- a dividend of €0.50 per share (net of the interim dividend paid in 2015) in respect of 2015, representing a total amount of €1,198 million, less the treasury shares held at the dividend payment date (€19 million).

The total 2015 dividend was €1.0 per share, representing a total payout of €2,414 million;

- an interim dividend of €0.50 per share in respect of 2016, representing a total amount of €1,198 million.

## Note 10 C Employee bonus share awards and stock option plans

### Bonus share policy and stock option policy

Bonus share awards are intended to involve all employees more closely in the Group's growth and performance. They are awarded to employees upon a decision of the Board of Directors, in accordance with decisions taken by the Shareholders' Meeting, subject to a minimum seniority of two years and a number of performance conditions.

The stock option policy aims to closely involve executive and senior management, as well as high-potential managers, in the future development of the Company and in creating shareholder value. Conditions for the award of options and the list of beneficiaries are approved by the Board of Directors in accordance with authorizations granted at Shareholders' Meetings. Certain stock option awards have been replaced by bonus share awards, made available to more employees than were previously eligible for stock options. In 2016, ENGIE SA granted 5,430,090 bonus shares to ENGIE Group employees. No stock options were granted during the year. In 2016, ENGIE SA delivered 2,827,485 shares to Group employees.

Based on all existing share plans, the number of beneficiaries and staff turnover assumptions, at December 31, 2016 ENGIE SA considered that it had an obligation to deliver 19,151,991 shares, including 4,775,429 shares on the exercise of stock options.

In view of the shares delivered in 2016, the Company holds 37,522,838 shares to cover its bonus share obligations at December 31, 2016, representing a net book value of €634 million. The market value of these shares at end-2016 was €439 million.

Details of bonus share and stock option plans in force	Number of shares awarded	Number of shares delivered	Per share value	Expense (in millions of euros)	
				2016	2015
<b>Bonus shares awarded</b>					
ENGIE Plan of August 24, 2010 <sup>(1)</sup>	-	-	25.62	-	0.7
ENGIE Plan of January 13, 2011 <sup>(1)</sup>	-	-	25.70	-	0.2
ENGIE Plan of June 22, 2011	-	-	25.37	-	5.7
ENGIE Plan of December 6, 2011 <sup>(1)</sup>	-	-	25.34	-	(62.5)
ENGIE Plan of February 29, 2012 <sup>(1)</sup>	-	-	25.34	-	0.1
ENGIE Plan of October 30, 2012	2,072,485	2,072,485	25.34	-	38.0
ENGIE Plan of December 6, 2012	882,067	667,767	25.21	(66.7)	23.8
ENGIE Plan of February 27, 2013	46,813	42,859	25.34	-	0.5
ENGIE Plan of December 11, 2013	2,569,322	-	24.99	19.3	18.9
ENGIE Plan of February 26, 2014	87,102	44,374	24.93	0.4	0.9
ENGIE Plan of December 10, 2014	3,108,734	-	24.53	22.8	21.1
Link A Bond Plan of December 10, 2014	110,117	-	19.93	0.4	0.4
ENGIE Plan of February 25, 2015	136,606	-	24.53	1.4	1.1
ORS Plan of December 10, 2015	80,062	-	19.93	0.3	0.3
ENGIE Plan of December 16, 2015	3,078,468	-	22.41	20.1	0.7
ENGIE Plan of February 24, 2016	124,328	-	22.26	1.0	-
ENGIE Plan of December 14, 2016	4,903,711	-	19.93	1.4	-
<b>TOTAL</b>	<b>17,199,815</b>	<b>2,827,485</b>		<b>0.4</b>	<b>49.9</b>

(1) Plans for which shares have been partially or totally delivered.

Stock options granted	Number of stock options granted	Exercise value	Expense	
			2016	2015
ENGIE Plan of November 10, 2009	4,776,549	29.44	-	-

## NOTE 11 Other equity

In millions of euros	Dec. 31, 2016	Dec. 31, 2015
Value of concession assets – Concession grantors' rights	8	7
<b>TOTAL</b>	<b>8</b>	<b>7</b>

## NOTE 12 Provisions

### Note 12 A Tax-driven provisions and investment subsidies

In millions of euros	Dec. 31, 2015	Additions taken through the income statement	Reversals taken through the income statement	Dec. 31, 2016
<b>Tax-driven provisions</b>	<b>491</b>	<b>227</b>	<b>(206)</b>	<b>512</b>
Accelerated depreciation and amortization	357	227	(187)	397
Provision for price increases	134	-	(19)	115
Provision for investments	-	-	-	-
<b>Investment subsidies</b>	<b>2</b>	<b>-</b>	<b>-</b>	<b>2</b>
<b>TOTAL</b>	<b>493</b>	<b>227</b>	<b>(206)</b>	<b>514</b>

## Note 12 B Provisions for contingencies and losses

<i>In millions of euros</i>	Dec. 31, 2015	Additions	Reversals (used provisions)	Reversals (surplus provisions)	Other	Dec. 31, 2016
Provisions for site rehabilitation (Note 12 B1)	16	8	(6)	2	-	20
Provisions relating to employees (Note 12 B2)	296	71	(119)	-	-	248
Provisions for taxes- (Note 12 B3)	107	-	(85)	-	-	22
Provisions for tax consolidation (Note 12 B4)	1,497	93	(264)	-	-	1,326
Vendor warranties	15	-	(15)	-	-	0
Risks arising on subsidiaries	20	-	(3)	-	-	17
Other provisions for contingencies and losses (Note 12 B5)	779	500	(425)	-	-	854
<b>TOTAL</b>	<b>2,730</b>	<b>672</b>	<b>(917)</b>	<b>2</b>	<b>-</b>	<b>2,487</b>

### Note 12 B1 Provisions for site rehabilitation

Provisions for site rehabilitation totaled €20 million at December 31, 2016 versus €16 million at end-2015. They chiefly relate to the rehabilitation of sites on which gas production plants were located and mainly cover safety requirements at the sites (ground water, air pollution, etc.) based on their current use.

In 2015, ENGIE SA implemented a five-year national property asset disposal program (*Plan National de Cessions immobilières – PNC*) covering 236 non-strategic sites.

Whenever a binding agreement is entered into to sell an asset, a provision for dismantling costs is recognized under liabilities with a matching entry to dismantling assets depreciated over their residual life.

<i>In millions of euros</i>	Dec. 31, 2015	Additions	Reversals (used provisions)	Matching entry to dismantling assets	Reclassifications	Dec. 31, 2016
Provisions for site rehabilitation (excluding PNC assets)	5	8	(1)	-	-	12
Provisions for site rehabilitation (including PNC assets)	11	-	(5)	2	-	8
<b>TOTAL</b>	<b>16</b>	<b>8</b>	<b>(6)</b>	<b>2</b>	<b>-</b>	<b>20</b>

At December 31, 2016, provisions for site rehabilitation (PNC sites) broke down as follows:

- provisions with a matching entry to dismantling assets: €4 million;
- provisions for the prior year: €4 million.

provisions in respect of rights newly vested or the unwinding of discounting adjustments.

These provisions represented a total amount of €111 million at December 31, 2016. Note 21 D analyzes changes in these provisions in the periods presented.

The full amount of end-of-career indemnities is partially covered by insurance funds; the shortfall amounted to €27 million at December 31, 2016.

### Note 12 B2 Provisions relating to employees

#### Provisions for employee benefits

Pension obligations are covered by insurance funds. At end-2016, the corresponding provisions amounted to €7 million.

Other post-employment benefits amounted to €20 million.

Provisions have been set aside for the full amount of disability benefits and allowances for occupational accidents, illnesses of active employees at year-end, long-service awards and asbestos risk, representing a total amount of €84 million.

The provisions for pensions and other employee benefit obligations carried by SUEZ SA at the time of the 2008 merger are written back as and when the corresponding liabilities for which they were set aside at end-2007 are extinguished. No further amounts are set aside to these

#### Provisions for employee bonus share awards and stock option plans (see Note 10 C)

At December 31, 2016, provisions for employee bonus share awards and stock option plans amounted to €135 million (end-2015: €182 million).

In 2016, ENGIE SA set aside a further €68 million to this provision to cover rights vested by employees. It also wrote back €115 million of the provision following the expiration of certain bonus share plans.

In addition to presence in the Group at the vesting date, eligibility for certain bonus share and performance share plans is subject to an internal performance condition. When this condition is not fully met, the number of bonus shares granted to employees is reduced in accordance with the plans' regulations.

### Note 12 B3 Provisions for taxes

Provisions for taxes totaled €22 million at December 31, 2016 (€107 million at December 31, 2015), and chiefly relate to the acquisition of the transmission network in 2002. The provisions were to be written back over a period of 14 years. At December 31, 2016, the provision had been written back in full.

### Note 12 B4 Provisions for tax consolidation

ENGIE SA has chosen to file consolidated tax returns. As a result, it sets aside a provision reflecting its obligation to transfer back to subsidiaries any tax losses utilized.

At December 31, 2007, the capital gain on the disposal of the gas distribution activity had no impact on tax, since GRDF was part of the tax consolidation group. Since 2008, the subsidiary's statutory financial statements show tax savings relating to the amortizable component of the capital gain arising on the disposal of the gas distribution business. This excess amortization is canceled out at the level of the tax consolidation group. In accordance with the tax consolidation agreements signed with its subsidiaries, ENGIE SA recognized a provision for tax consolidation with respect to GRDF for a definitive amount of €1,938 million, based on the amortizable component. In

2016, the Company wrote back an amount of €105 million (€116 million in 2015), corresponding to the neutralization of the excess amortization on the amortizable component arising in the year.

An amount of €111 million was written back in 2016 relating to the decrease in the corporate income tax rate as of 2020 in accordance with the 2017 Finance Law.

Provisions for tax consolidation amounted to €1,326 million at end-2016, including €879.5 million relating to the amortizable component of GRDF's intangible assets.

### Note 12 B5 Other provisions for contingencies and losses

This item mainly includes provisions for contingencies arising on other third parties, provisions for disputes, and provisions for currency and interest rate risk. Movements in these provisions chiefly impact non-recurring and financial items.

Provisions for other contingencies and losses totaled €854 million at December 31, 2016 versus €779 million at end-2015.

The remaining balance at end-2016 chiefly concerns provisions for contract losses (€345 million), litigation (€189 million), financial instruments (€104 million), foreign exchange losses (€102 millions) and interest rate risk (€54 million).

## NOTE 13 Borrowings and debt

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
<b>Borrowings</b>	<b>30,155</b>	<b>31,552</b>
Hybrid bonds	3,700	3,759
Bonds	18,948	21,282
Other loans	7,507	6,511
<b>Amounts payable to equity investments</b>	<b>0</b>	<b>0</b>
<b>Current accounts and loans with subsidiaries</b>	<b>50</b>	<b>56</b>
<b>Other borrowings and debt</b>	<b>503</b>	<b>780</b>
Deposits received from customers	33	32
Tax consolidation	3	190
Current portion of interest due	429	513
Bank overdrafts	4	14
Miscellaneous	34	31
<b>TOTAL</b>	<b>30,708</b>	<b>32,388</b>

The decrease in borrowings and debt in 2016 chiefly reflects:

- a net €2,335 million decrease in bonds following redemptions at maturity totaling €2,043 million and a €291 million currency impact,

offset by an increase in Negotiable European Commercial Paper (NEUCP) and US commercial paper totaling €1 billion;

- a €169 million change in the tax consolidation current account.

**NOTE 14** Maturities of borrowings, debt and payables

<i>In millions of euros</i>	Dec. 31, 2016	Due		
		End-2017	Between 2018 and 2021	2022 and beyond
<b>Borrowings and debt</b>	<b>30,708</b>	<b>10,022</b>	<b>9,790</b>	<b>10,896</b>
Hybrid bonds	3,700	-	2,700	1,000
Bonds	18,948	3,156	6,288	9,504
Other loans	7,507	6,330	785	392
Amounts payable to equity investments	-	-	-	-
Current accounts and loans with subsidiaries	50	50	-	-
Other borrowings and debt	503	486	17	-
<b>Trade and other payables</b>	<b>6,076</b>	<b>6,076</b>	-	-
<b>Tax and employee-related liabilities</b>	<b>1,079</b>	<b>1,079</b>	-	-
<b>Other liabilities</b>	<b>1,355</b>	<b>1,355</b>	-	-
Advances from customers	235	235	-	-
Other	1,120	1,120	-	-
<b>Advances and downpayments received on orders</b>	<b>5</b>	<b>5</b>	-	-
<b>TOTAL</b>	<b>39,223</b>	<b>18,537</b>	<b>9,790</b>	<b>10,896</b>

## Note 14 A Breakdown of hybrid bonds

	Dec. 31, 2016	Issue date	Interest repricing date	Interest	Listing
<b>Public issues</b>					
• in millions of euros	600	07/2013	07/2018	3.875%	Paris
• in millions of euros	750	07/2013	07/2021	4.750%	Paris
• in millions of euros	1,000	06/2014	06/2019	3.000%	Paris
• in millions of euros	1,000	06/2014	06/2024	3.875%	Paris
• in millions of pounds sterling	300	07/2013	01/2019	4.625%	Paris

## Note 14 B Breakdown of bonds

	Dec. 31, 2016	Issue date	Expiration date	Interest	Listing
<b>Public issues</b>					
• In millions of euros	687	02/2003	02/2018	5.125%	Paris/Luxembourg
• In millions of euros	834	10/2008	01/2019	6.875%	Luxembourg
• In millions of euros	1,000	01/2009	01/2021	6.375%	Luxembourg
• In millions of euros	718	10/2010	10/2022	3.500%	Paris
• In millions of euros	564	10/2010	10/2017	2.750%	Paris
• In millions of euros	300	03/2011	03/2111	5.950%	Paris
• In millions of euros	424	11/2011	01/2020	3.125%	Paris
• In millions of euros	909	06/2012	02/2023	3.000%	Paris
• In millions of euros	729	06/2012	06/2018	2.250%	Paris
• In millions of euros	750	07/2012	07/2017	1.500%	Paris
• In millions of euros	458	07/2012	07/2022	2.625%	Paris
• In millions of euros	1,200	05/2014	05/2020	1.375%	Paris
• In millions of euros	1,300	05/2014	05/2026	2.375%	Paris
• In millions of euros	500	03/2015	03/2017	0.000%	Paris
• In millions of euros	750	03/2015	03/2022	0.500%	Paris
• In millions of euros	750	03/2015	03/2026	1.000%	Paris
• In millions of euros	500	03/2015	03/2035	1.500%	Paris
• In millions of pounds sterling	500	10/2008	10/2028	7.000%	Luxembourg
• In millions of pounds sterling	309	02/2009	02/2021	6.125%	Luxembourg
• In millions of pounds sterling	700	10/2010	10/2060	5.000%	Paris
• In millions of pounds sterling	400	11/2011	10/2060	5.000%	Paris
• In millions of Swiss francs	300	10/2011	10/2017	1.500%	Zurich
• In millions of Swiss francs	275	10/2012	10/2020	1.125%	Zurich
• In millions of Swiss francs	175	10/2012	10/2024	1.625%	Zurich
• In millions of dollars	750	10/2012	10/2017	1.625%	None
• In millions of dollars	750	10/2012	10/2022	2.875%	None
<b>Private placements</b>					
• In millions of yen	15,000	12/2008	12/2023	3.180%	None
• In millions of euros	150	10/2011	10/2018	3.046%	Paris
• In millions of euros	100	10/2011	10/2023	CMS10yr+0.505%	Paris
• In millions of euros	400	07/2012	01/2020	2.500%	None
• In millions of yen	10,000	07/2012	07/2022	1.260%	Paris
• In millions of euros	100	03/2013	03/2033	3.375%	None
• In millions of euros	200	04/2013	04/2020	Eur3M+0.58%	Paris
• In millions of euros	81	04/2013	04/2038	3.703%	None
• In millions of dollars	50	04/2013	04/2033	3.750%	Paris
• In millions of Norwegian krone	500	04/2013	04/2024	4.020%	Paris
• In millions of euros	50	10/2015	10/2027	1.764%	Paris
• In millions of euros	50	10/2015	10/2027	1.764%	Paris
• In millions of euros	100	11/2015	11/2045	2.750%	Paris
• In millions of euros	50	11/2015	11/2045	2.750%	Paris
• In millions of Australian dollars	115	11/2015	11/2025	4.235%	Paris
• In millions of dollars	50	11/2015	11/2021	2.681%	Paris
• In millions of yen	20,000	09/2015	01/2024	0.535%	Paris
• In millions of euros	350	12/2015	12/2017	Eur3M+0.22%	Paris

### Note 14 C Other borrowings and amounts payable to equity investments

At December 31, 2016, other borrowings comprised mainly NEUCP (€4,657 million, including €1,943 million at floating rates and €2,714 million at fixed rates) and US commercial paper at fixed rates (USD 1,764 million, equivalent value of €1,673 million). These borrowings all fall due in less than one year.

ENGIE SA also had a credit facility on which €892 million had been drawn and a USD 300 million bank loan (equivalent value of €285 million).

### Note 14 D Other borrowings and debt

Other borrowings and debt (accrued interest on borrowings and debt, deposits received from customers, bank overdrafts, bank facilities, etc.) are chiefly denominated in euros.

## NOTE 15 Analysis of borrowings and debt by currency and interest rate

### Note 15 A Analysis by interest rate

In millions of euros	After hedging		Before hedging	
	Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015
<b>Floating rate</b>				
Bonds	5,716	5,258	650	650
Amounts payable to equity investments	-	-	-	-
Other loans	5,115	4,129	2,727	2,231
Current accounts with subsidiaries	50	56	50	56
Other borrowings and debt	503	780	503	780
<b>Fixed rate</b>				
Hybrid bonds	3,700	3,759	3,700	3,759
Bonds	13,232	16,024	18,298	20,632
Amounts payable to equity investments	-	-	-	-
Other loans	2,392	2,382	4,780	4,280
<b>TOTAL</b>	<b>30,708</b>	<b>32,388</b>	<b>30,708</b>	<b>32,388</b>

### Note 15 B Analysis by currency

In millions of euros	After hedging		Before hedging	
	Dec. 31, 2016	Dec. 31, 2015	Dec. 31, 2016	Dec. 31, 2015
<b>In euros</b>				
Hybrid bonds	3,350	3,350	3,350	3,350
Bonds	18,948	21,282	14,003	16,046
Amounts payable to equity investments	-	-	-	-
Other loans	7,507	6,511	5,549	4,711
Current accounts with subsidiaries	50	56	50	56
Other borrowings and debt	503	780	503	780
<b>In foreign currency</b>				
Hybrid bonds	350	409	350	409
Bonds	-	-	4,945	5,236
Amounts payable to equity investments	-	-	-	-
Other loans	-	-	1,958	1,800
Other borrowings and debt	-	-	-	-
<b>TOTAL</b>	<b>30,708</b>	<b>32,388</b>	<b>30,708</b>	<b>32,388</b>

**NOTE 16** Operating income

## Note 16 A Breakdown of revenues

**REVENUES BY REGION**

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
Energy sales		
• France	9,147	10,137
• International	6,629	7,695
Works, research and services provided	1,638	1,520
Revenues from non-core activities and other	525	539
<b>TOTAL</b>	<b>17,939</b>	<b>19,891</b>

The decrease in total revenues stemmed from a decrease in energy revenues related to the general fall in average selling prices offset by higher sales volumes and a positive weather effect.

**REVENUES BY BUSINESS ACTIVITY**

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
Energy sales		
• Natural gas	12,948	16,045
• Electricity	2,828	1,787
Other production sold		
• Works, research and services provided	1,638	1,520
• Revenues from non-core activities and other	525	539
<b>TOTAL</b>	<b>17,939</b>	<b>19,891</b>

## Note 16 B Personnel costs

**CHANGE IN HEADCOUNT BY CATEGORY**

<i>In number of employees</i>	<b>Dec. 31, 2015</b>	<b>Change</b>	<b>Dec. 31, 2016</b>
Operating staff	342	(23)	319
Senior technicians and supervisory staff	1,966	(316)	1,650
Managerial-grade staff	2,972	63	3,035
<b>TOTAL</b>	<b>5,280</b>	<b>(276)</b>	<b>5,004</b>

The average number of employees was 5,182 in 2016 and 5,461 in 2015.

Personnel costs break down as follows:

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
Wages and salaries	332	343
Payroll expenses	171	161
Profit sharing	24	26
Other	61	75
<b>TOTAL</b>	<b>588</b>	<b>605</b>

**Employee profit sharing**

An employee profit-sharing agreement based on performance criteria was set up in compliance with the legal conditions prescribed by

Order 86-1134 of October 21, 1986. These profit-sharing mechanisms are treated as personnel costs.



## Note 16 C Net additions to provisions

<i>In millions of euros</i>	<b>Dec. 31, 2016</b>	<b>Dec. 31, 2015</b>
Provision for capital renewal and replacement liabilities regarding concessions	-	(12)
Provision for site rehabilitation	7	(4)
Provisions relating to employees	(1)	(14)
Other contingency and loss provisions for operating items	(51)	(85)
<b>TOTAL</b>	<b>(45)</b>	<b>(115)</b>

## NOTE 17 Financial income and expense

<i>In millions of euros</i>	<b>2016 Expenses</b>	<b>2016 Income</b>	<b>2016 Net</b>	<b>2015 Net</b>
Other interest income and expenses	(1,208)	587	(621)	(785)
Interest on current accounts and amounts receivable from equity investments	-	37	37	41
Foreign exchange gains/(losses)	(1,214)	1,217	3	(146)
Dividends received	-	2,043	2,043	2,055
Movements in provisions for financial items	(174)	6	(168)	(76)
<b>TOTAL</b>	<b>(2,596)</b>	<b>3,890</b>	<b>1,294</b>	<b>1,089</b>

## NOTE 18 Non-recurring items

<i>In millions of euros</i>	<b>2016 Expenses</b>	<b>2016 Income</b>	<b>2016 Net</b>	<b>2015 Net</b>
Disposals of property, plant and equipment and intangible assets	(8)	8	-	48
Disposals of financial fixed assets	(476)	475	(1)	1
Provision for price increases	-	18	18	19
Accelerated depreciation and amortization	(227)	188	(39)	(23)
Movements in provisions relating to equity investments <sup>(1)</sup>	(330)	273	(57)	(517)
Other	(274)	87	(187)	(145)
<b>TOTAL</b>	<b>(1,315)</b>	<b>1,049</b>	<b>(266)</b>	<b>(617)</b>

(1) See Note 4 B for more information.

"Other" mainly includes a provision for litigation, impairment of a contractual intangible asset, and various expenses incurred in restructuring transactions, including those related to the national property asset disposal program (PNC).

**NOTE 19** Tax position**Note 19 A** Tax consolidation

The current option to file consolidated tax returns initially elected by Gaz de France SA, which became known as GDF SUEZ SA in 2008 and ENGIE SA in 2015, is automatically renewed every five years.

**Note 19 B** Income tax

The income tax rate in 2016 was 34.43%, including the 3.3% social contribution.

In millions of euros	2016			2015		
	Income before tax	Income tax*	Net income/(loss)	Income before tax	Income tax*	Net income/(loss)
<b>Income tax due by ENGIE SA for the period (excluding tax consolidation group) <sup>(1)</sup></b>		<b>0 <sup>(1)</sup></b>			<b>0 <sup>(1)</sup></b>	
• o/w Tax on recurring income	42	0	42	345	0	345
• o/w Tax on non-recurring income	(266)	0	(266)	(617)	0	(617)
<b>Income tax expense (income tax payable by subsidiaries/provision for transfer of tax savings to entities in the tax consolidation group) <sup>(2)</sup></b>		<b>672</b>	<b>672</b>		<b>540<sup>(2)</sup></b>	<b>540</b>
• o/w Income tax relating to subsidiaries within the tax consolidation group		405			350	
• o/w Net change in provisions for income tax		256			101	
• o/w Other		11			89	
<b>TOTAL</b>	<b>(224)</b>	<b>672</b>	<b>448</b>	<b>(272)</b>	<b>540</b>	<b>268</b>

\* A positive figure signifies a tax benefit.

(1) In 2016 and 2015, ENGIE SA generated a tax loss on an individual company level. Dividends received from equity investments are eligible for "parent/subsidiary" tax treatment and are therefore exempt. Tax on recurring income includes €3 million relating to the CICE tax credit (Crédit impôt compétitivité pour l'emploi). In 2015, the CICE tax credit amounted to €3 million. In 2016, this amount helped finance R&D projects, in particular to finance pilots and demonstrators relating to the energy transition.

(2) The income tax benefit amounted to €672 million in 2016 versus an income tax benefit of €540 million in 2015, chiefly reflecting:

- savings resulting from tax consolidation (€405 million in 2016 versus €350 million in 2015), attributable to the difference between: the tax credit relating to the tax consolidation group amounting to €1.8 million in 2016 versus €16.9 million in 2015, and the €403 million contribution to Group income tax due to ENGIE SA from subsidiaries reporting a profit (€333 million in 2015);
- a net reversal of €256 million from the income tax provision in 2016 compared with a reversal of €101 million in 2015, chiefly reflecting: €45.2 million in net additions in respect of the utilization of tax losses by consolidated subsidiaries of ENGIE SA versus €82.4 million in net additions in 2015,
  - €216.6 million in reversals of provisions relating to the excess amortization during the period of the amortizable component of the capital gain generated on the sale of gas distribution activities in 2007 (including €111 million in tax rate effects).
  - This amount includes a €111.5 million provision reversal related to the decrease in the corporate income tax rate to 28.92% as of 2020,
  - €82.9 million in reversals of provisions set aside to cover the tax impact of recognizing the capital gain on the purchase of the transmission network in 2002 over a period of 14 years. At December 31, 2016, the provision had been fully reversed;
- other miscellaneous items representing a net tax credit of €11 million in 2016, including:
  - €74 million in respect of additional income tax contribution payments, at a rate of 3% (primarily on dividends paid),
  - €77 million on the remeasurement of research and CICE tax credits at December 31, 2016,
  - €14 million in respect of the final Group corporate income tax for 2015.

## Note 19 C Deferred tax

Future tax liabilities as shown in the table below result from temporary differences between the treatment of income and expenses for tax and accounting purposes.

Future tax rates take into account the decrease in rate from 34.43% to 28.92% as of 2020.

<i>In millions of euros</i>	2016		2015
<b>Deferred tax liabilities</b>	<b>34.43%</b>	<b>28.92%</b>	
• Unrecognized deductible expenses	646	-	890
• Untaxed income recognized	102	166	305
<b>Deferred tax assets</b>	<b>34.43%</b>	<b>28.92%</b>	
• Temporary non-deductible expenses recognized	553	321	922
• Unrecognized taxable income	510	39	714
<b>Net deferred tax base</b>	<b>225</b>	<b>284</b>	<b>442</b>
• Theoretical impact of deferred tax	78	82	152

## Note 19 D Withholding tax

In their tax deficiency notice dated December 22, 2008, the French tax authorities questioned the tax treatment of the non-recourse sale by SUEZ SA (now ENGIE) of a withholding tax (*précompte*) receivable in 2005 for an amount of €995 million. In May 2016, the French tax authorities issued an assessment notice for part of the resulting corporate income tax, in an amount of €89.6 million. ENGIE SA paid this sum and filed a claim in August 2016.

Regarding the dispute over the *précompte* itself, on February 1, 2016, the *Conseil d'État* dismissed the appeal before the Court of Cassation seeking the repayment of the *précompte* in respect of the 1999, 2000, and 2001 fiscal years. The Cergy-Pontoise Administrative Court adopted

an identical position to that of the Paris Court of Appeal for the amounts claimed by SUEZ (now ENGIE SA) in respect of the 2002/2003 and 2004 fiscal years. ENGIE SA has appealed this decision.

Furthermore, after ENGIE SA and several French groups lodged a complaint, on April 28, 2016, the European Commission issued a reasoned opinion to the French State as part of infringement proceedings, setting out its view that the *Conseil d'État* did not comply with EU law when handing down decisions in disputes regarding the *précompte*, such as those involving ENGIE SA. On December 8, 2016, the European Commission decided to refer the matter to the Court of Justice of the European Union on the grounds of France's failure to comply.

## NOTE 20 Off-balance sheet commitments (excluding employee benefit obligations)

### Note 20 A Financial commitments

The ENGIE Group's Finance Division is responsible for managing all financial risks (interest rate, currency, liquidity and credit risks).

#### 1. Liquidity risk

The Group's financing policy is based on:

- centralizing external financing;
- diversifying sources of financing between credit institutions and capital markets;
- achieving a balanced debt repayment profile.

The centralization of financing needs and cash flow surpluses for the Group is provided by its financing vehicles (long-term and short-term) and its cash pooling vehicles.

Short-term cash requirements and cash surpluses for Europe are managed by dedicated financial vehicles in France (ENGIE Finance) and Luxembourg (ENGIE Treasury Management). These vehicles centralize virtually all of the cash requirements and surpluses of companies controlled by the Group, ensuring that counterparty risk and investment strategies are managed consistently.

The Group seeks to diversify its long-term sources of financing by carrying out public or private bond issues within the scope of its Euro Medium Term Notes program. It also issues Negotiable European Commercial Paper (NEUCP) as well as commercial paper in the United States.

Long-term capital markets are accessed chiefly by ENGIE SA in connection with the Group's new bond issues, and in connection with commercial paper.

As commercial paper is relatively inexpensive and highly liquid, it is used by the Group in a cyclical or structural fashion to finance its short-term cash requirements. However, outstanding commercial paper is backed by confirmed bank lines of credit so that the Group could continue to finance its activities if access to this financing source were to dry up.

The Group's liquidity is based on maintaining cash and cash equivalents and access to confirmed credit facilities. ENGIE SA can therefore access facilities readily convertible into cash, enabling it to meet its cash requirements in the ordinary course of business or to serve as a bridge to finance external growth operations:

- ENGIE SA has credit facilities with various banks under which €13,442 million remains undrawn. These facilities include two syndicated credit lines, respectively for €5,500 million and €5,000 million, maturing in November 2021 and March 2021. At

December 31, 2016, ENGIE SA had drawn €892 million on these facilities.

These facilities are not subject to any covenants or credit rating requirements;

- ENGIE SA also has access to short-term debt markets through short-term debt issues: US commercial paper for USD 4,500 million (of which USD 1,764 million had been drawn at end-2016), and NEUCP for €5,000 million (€4,657 million drawn at end-2016).

#### 2. Counterparty risk

ENGIE SA is exposed to counterparty risk arising on its operating and financing activities.

To manage counterparty risk arising on operating activities, the Group has put in place monitoring procedures adapted to the characteristics of the counterparties concerned (private corporations, individuals, public authorities). Customers representing a major counterparty for the Company are covered by procedures applicable to the financial activities described below, thereby providing broad-ranging oversight of the corresponding counterparty risk.

For its financing activities, ENGIE SA has put in place procedures for managing and monitoring risk based on (i) the accreditation of counterparties according to external credit ratings, objective market data (credit default swaps, market capitalization) and financial structure, and (ii) risk exposure limits. ENGIE SA also draws on a structured legal framework based on master agreements (including netting clauses) and collateralization contracts (margin calls) to reduce its exposure to counterparty risk. The oversight procedure for managing counterparty risk arising from financing activities is managed by a middle office that operates independently of the Group's Treasury department and reports to the Finance Division.

#### 3. Interest rate risk

Based on its net debt position, ENGIE SA has adopted a policy for optimizing borrowing costs using a combination of financial instruments (interest swaps and options) according to market conditions.

ENGIE SA takes care to ensure that the difference between its floating-rate debt and its cash surpluses invested at a floating rate has a low degree of exposure to adverse changes in short-term interest rates.

Positions are managed centrally and are reviewed each quarter or whenever any new financing is raised. Management must approve in advance any transaction that causes the interest rate mix to change significantly.

<i>In millions of euros</i>	Notional amount Dec. 31, 2016					Fair value	Notional amount Dec. 31, 2015
	Due in 1 year or less	Due in 1 to 5 years	Due in 6 to 10 years	Due after 10 years	Total		
<b>INTEREST RATE SWAP</b>							
Fixed-rate borrower/floating-rate lender	4,686	1,612	3,040	638	9,976	(1,155)	8,350
Floating-rate borrower/fixed-rate lender	2,395	3,059	4,729	1,038	11,221	1,187	14,984
<b>SALE OF SWAPTION</b>							
Fixed-rate borrower/floating-rate lender	-	-	-	-	-	-	-
<b>PURCHASE OF CAP</b>							
Fixed-rate borrower/floating-rate lender	-	1,000	-	-	1,000	-	1,000
<b>PURCHASE OF FRA</b>							
Fixed-rate borrower/floating-rate lender	-	-	-	-	-	-	-
<b>TOTAL EUR</b>	<b>7,081</b>	<b>5,671</b>	<b>7,769</b>	<b>1,676</b>	<b>22,197</b>	<b>32</b>	<b>24,334</b>
<b>INTEREST RATE SWAP</b>							
Fixed-rate borrower/floating-rate lender	-	-	-	-	-	-	286
<b>TOTAL NOK</b>	-	-	-	-	-	-	<b>286</b>
<b>INTEREST RATE SWAP</b>							
Fixed-rate borrower/floating-rate lender	-	778	-	-	778	2	908
<b>TOTAL USD</b>	-	<b>778</b>	-	-	<b>778</b>	<b>2</b>	<b>908</b>
<b>TOTAL</b>	<b>7,081</b>	<b>6,449</b>	<b>7,769</b>	<b>1,676</b>	<b>22,975</b>	<b>34</b>	<b>25,528</b>

<i>In millions of euros</i>	Notional amount Dec. 31, 2016					Fair value	Notional amount Dec. 31, 2015
	Due in 1 year or less	Due in 1 to 5 years	Due in 6 to 10 years	Due after 10 years	Total		
<b>CURRENCY SWAP</b>							
Fixed-rate borrower/fixed-rate lender	-	342	-	1,929	2,271	(212)	3,094
Fixed-rate borrower/floating-rate lender	-	-	-	-	-	-	-
<b>TOTAL GBP</b>	-	<b>342</b>	-	<b>1,929</b>	<b>2,271</b>	<b>(212)</b>	<b>3,094</b>
<b>CURRENCY SWAP</b>							
Floating-rate borrower/fixed-rate lender	-	-	229	-	229	(14)	1,135
Fixed-rate borrower/fixed-rate lender	-	-	149	-	149	5	1,750
<b>TOTAL JPY</b>			<b>378</b>	-	<b>378</b>	<b>(9)</b>	<b>2,885</b>
<b>CURRENCY SWAP</b>							
Fixed-rate borrower/fixed-rate lender	246	-	-	-	246	32	227
Floating-rate borrower/fixed-rate lender	-	227	144	-	371	73	342
<b>TOTAL CHF</b>	<b>246</b>	<b>227</b>	<b>144</b>		<b>617</b>	<b>105</b>	<b>569</b>
<b>CURRENCY SWAP</b>							
Fixed-rate borrower/fixed-rate lender	580	46	-	38	664	126	611
Fixed-rate borrower/floating-rate lender	-	274	-	-	274	14	252
Floating-rate borrower/floating-rate lender	-	183	-	-	183	5	224
Floating-rate borrower/fixed-rate lender	-	-	580	-	580	116	532
<b>TOTAL USD</b>	<b>580</b>	<b>503</b>	<b>580</b>	<b>38</b>	<b>1,701</b>	<b>210</b>	<b>1,619</b>
Currency swap							
Fixed-rate borrower/fixed-rate lender	-	-	67	-	67	(14)	7
<b>TOTAL NOK</b>	-	-	<b>67</b>	-	<b>67</b>	<b>(14)</b>	<b>7</b>
Currency swap							
Fixed-rate borrower/fixed-rate lender	-	-	75	-	75	-	51
<b>TOTAL AUD</b>	-	-	<b>75</b>	-	<b>75</b>	-	<b>51</b>
<b>TOTAL</b>	<b>826</b>	<b>1,072</b>	<b>1,244</b>	<b>1,967</b>	<b>5,109</b>	<b>80</b>	<b>8,225</b>

Interest rate hedges outstanding at December 31, 2016 are described below:

- ENGIE SA entered into short-term swaps (maturing in less than six months) to hedge the interest rate risk on its short-term cash management transactions (NEUCP issues). These are floating-rate borrower (Eonia)/fixed-rate lender swaps with a notional amount of €2,731 million at December 31, 2016;
- ENGIE SA uses floating-rate borrower swaps when issuing bonds unless management decides otherwise. Interest rate risk is subsequently managed centrally through the use of interest rate swaps and options with due reference to market conditions;
- As part of the Group's interest rate risk management policy, in 2009 ENGIE SA set up macro-hedges fixing the interest rate on the Group's USD debt. The nominal amount totaled USD 820 million at end-2016.

#### 4. Currency risk

ENGIE SA is exposed to currency risk, particularly including:

- (i) commercial transactions involving the purchase and sale of natural gas, since several gas purchase and sale contracts are indexed to the price of oil derivatives, mostly listed in US dollars;

- (ii) specific transactional risks related to investment, merger-acquisition or disposal projects.

The exposure to currency risk on these transactions is managed and monitored as follows:

- pass-through mechanisms are applied in determining sale prices for eligible customers, and regulated rates;
- the margin on fixed-price sale contracts or contracts indexed by financial swaps is hedged.

There is a time lag between the impact of fluctuations in the US dollar on procurement costs and their repercussion onto sales prices, reflecting mainly the effect of rolling averages and the inventory stocking/run-down cycle.

To manage its exposure to fluctuations in exchange rates, ENGIE SA uses forward currency purchase or sale contracts to hedge its gas purchases and its financing activities.

To limit the impact of translation risk on certain amounts receivable from equity investments and on future foreign currency purchases, and to hedge the net asset risk arising on consolidation, ENGIE SA has taken new positions or reinforced existing positions in forward currency transactions that allow it to cancel out or minimize translation adjustments on deposits and loans or other future operations.

At December 31, 2016, commitments under these contracts were as follows:

In millions of euros	Fixed portion of commitments Dec. 31, 2016			Euro equivalent Dec. 31, 2016	Exchange rate fluctuations Dec. 31, 2016	Fixed portion of commitments Dec. 31, 2015
	2017	2018	2019 and beyond			
<b>Forward contracts</b>						
<b>Long positions</b>						
• AUD	-	-	-	-	-	-
• CHF	-	-	-	-	-	-
• EUR	49	5	1	52	(3)	179
• GBP	159	3	-	160	(2)	730
• NOK	1,124	-	-	1,120	4	115
• MXN	-	-	-	-	(4)	2
• HUF	11	-	-	11	-	14
• RON	-	-	-	-	-	-
• USD	5,424	735	583	6,792	50	4,143
• CZK	-	-	-	-	-	-
<b>Short positions</b>						
• AUD	-	-	-	-	-	-
• CHF	379	-	-	378	(1)	717
• EUR	47	5	1	55	2	212
• GBP	243	-	-	242	(1)	2,361
• HUF	79	-	-	79	-	92
• MXN	-	-	-	-	-	49
• NOK	1,120	-	-	1,124	4	115
• RON	-	-	-	-	-	-
• USD	8,728	25	-	8,933	180	674
• CZK	-	-	-	-	-	-

At December 31, 2016, commitments under these contracts were as follows:

In millions of euros	Fixed portion of commitments Dec. 31, 2016			Euro equivalent Dec. 31, 2016	Exchange rate fluctuations Dec. 31, 2016	Fixed portion of commitments Dec. 31, 2015
	Maturity					
Options	2017	2018	2019 and beyond			
<b>Short positions</b>						
• USD						459

## 5. Other financial commitments given

In millions of euros	Total Dec. 31, 2016	Maturity		
		End-2017	Between- 2018 and 2021	2021 and beyond
<b>MARKET-RELATED COMMITMENTS</b>				
Performance and other guarantees	4,915	63	28	4,824
Performance and other guarantees given on behalf of subsidiaries	3,103	274	83	2,746
<b>FINANCING COMMITMENTS</b>				
Personal sureties given	449	64	191	194
Guarantees and endorsements given to subsidiaries	4,526	782	2,354	1,390
Collateral given	-	-	-	-
Credit lines	65	-	-	65
<b>OTHER COMMITMENTS GIVEN</b>				
Contractual guarantees for sales of businesses	5,416	443	590	4,383
Operating lease commitments	-	-	-	-
Finance lease commitments	3	1	2	-
Commitments relating to LNG tankers	-	-	-	-

Market-related commitments totaling €8,018 million at end-2016 comprise performance and other guarantees given by ENGIE SA with respect to operating contracts, both on its own behalf and on behalf of its subsidiaries.

Personal sureties totaling €449 million relate mainly to payment guarantees granted to counterparties of ENGIE SA.

Guarantees and endorsements to subsidiaries totaling €4,526 million correspond to payment guarantees granted by ENGIE SA to third parties on behalf of its subsidiaries.

Commitments given with regard to credit lines relate mainly to credit lines granted to ENGIE SA subsidiaries. A total of €125 million had been drawn on these credit lines at December 31, 2016 out of an initial amount of €190 million, with a total of €65 million still available.

Contractual guarantees for sales of businesses totaling €5,416 million relate mainly to commitments given on the disposals of:

- Nalco (US water business), for which ENGIE SA is counter-guarantor until 2017 in the event of default by the sellers, Léo Holding and Nalco International SAS;
- ENGIE Exploration & Production (EPI), following the sale of the 30% minority interest to CIC in 2011, for an amount of up to €3,321 million expiring in 2026;
- 10% of train 1 of the Atlantic LNG facility in Trinidad and Tobago, for an amount of up to €896 million expiring in 2026;
- EFOG (North Sea oil fields), for which ENGIE SA acts as guarantor towards Elf Exploration UK Limited further to the December 2011 sale

of its 22.5% interest. The guarantee is valid for a seven-year period for tax disputes.

Finance lease commitments are detailed in Note 3.

Other commitments have been given in respect of performance and completion guarantees:

- to Naperville Property Trust (acting on behalf of NCC Solar Company), banks and investors. These guarantees cover all payment obligations, notably for outstanding rent (€82 million) until 2023 under the lease agreement for the premises occupied by Nalco, an entity based in Naperville which was sold in 2003 and whose head office is still in Naperville. The lease was taken over by Léo Holding following the sale of Nalco (Léo Holding was acquired by GDF SUEZ Energy North America from SUEZ North America and ENGIE guaranteed its subsidiary for any related consequences). ENGIE SA received an equivalent counter-guarantee from Ondeo Nalco, which remains liable to the Group and the lessor for all obligations under the lease. ENGIE SA was also granted a guarantee from Ecolab Inc., Nalco's new parent company;
- to the Hong Kong authorities, in respect of contracts awarded to Sita (which became SUEZ Environnement and then SUEZ), which counter-guaranteed ENGIE SA for the same amounts. These contracts relate to:
  - the operation of the Nent landfill in partnership with the Newworld and Guandong groups until 2063;
  - the operation of various landfill sites, including Went and NWNT until 2033 and Pillar Point until 2036, initially in partnership with Swire Pacific Ltd. Since Swire Pacific sold its

interest in its joint subsidiary in December 2009 to SUEZ Environnement – which now owns the entire share capital of the venture – these guarantees were reissued by ENGIE SA. However, if a guarantee is called in respect of the period during which the subsidiary was under joint control, Swire has pledged an indemnity ensuring that ultimate responsibility is split 50-50 between the two groups;

- to two Scottish companies, Ayr Environmental Services and Caledonian Environmental Services, for contracts for the construction of wastewater purification and sludge treatment plants awarded to the Degrémont SA/AMEC Capital Projects Ltd. group of construction companies;
- to the Lord Mayor, Aldermen and Burgesses of Cork, in respect of a contract for the construction and operation until 2024 of the Cork City wastewater purification plant awarded to a consortium comprising two ENGIE SA subsidiaries, Vinci subsidiary Dumez GTM, PJ Hegarty & Sons and Electrical & Pump Services. Each consortium member and Vinci agreed to counter-guarantee ENGIE SA;
- in 2008, SUEZ Environnement (which became SUEZ in 2016) undertook to counter-guarantee all of the guarantees given by ENGIE SA for the Environment business that it had not yet counter-guaranteed;

- as part of the spin-off of water and wastewater activities in 2000, a performance guarantee expiring in 2028 was granted by ENGIE SA in the context of its transfer of local public service franchise contracts to Lyonnaise des Eaux. There were some 116 such contracts at end-2016;
- in Exploration-Production activities, it is customary for the parent company to provide local authorities with unlimited guarantees covering the obligations and environmental risks of subsidiaries and ENGIE SA has provided numerous such guarantees in accordance with the practices of the sector.

In addition, following Société d'Infrastructures (Gazières SIG) July 2011 acquisition of a 25% stake in GRTgaz, ENGIE SA agreed to stand as guarantor for a period of 20 years and in proportion to its shareholding, against all losses incurred due to inaccurate representations regarding the non-pollution of the land owned or exploited by GRTgaz and the cost of the resulting clean-up work payable by GRTgaz not covered by the tariffs.

## 6. Other financial commitments received

<i>In millions of euros</i>	Total at Dec. 31, 2016	Maturity		
		End-2017	Between- 2018 and 2021	2022 and beyond
<b>MARKET-RELATED COMMITMENTS</b>				
Guarantees received	-	-	-	-
<b>FINANCING COMMITMENTS</b>				
Undrawn credit facilities	12,550	1,050	10,935	565
Other financing commitments received	-	-	-	-
Other financing commitments received in relation to subsidiaries	-	-	-	-
<b>OTHER COMMITMENTS RECEIVED</b>				
Counter-guarantees for personal sureties	1,040	25	15	1,000
Counter-guarantees for trading commitments	-	-	-	-
Operating lease commitments	-	-	-	-
Finance lease commitments	3	1	1	-
Commitments relating to LNG tankers	-	-	-	-

ENGIE SA has negotiated two revolving lines of credit: (i) a €5.5 billion line secured in May 2005 whose maturity has been extended from 2012 to November 2021, and (ii) a €5 billion line secured in April 2014, whose maturity has been extended from 2019 to March 2021. The lending

banks are able to opt out of the syndicate on an individual basis in the event of a change in the Company's controlling shareholder.

Counter-guarantees given on personal sureties concern guarantees received from members of GIE ENGIE Alliance.

## 7. Securities commitments

Put option granted by ENGIE SA on 41.01% of La Compagnie du Vent shares, currently held by SOPER.



## Note 20 B Commodity-related commitments

### 1. Natural gas and electricity commitments

Gas supplies in Europe are still based primarily on long-term "take-or-pay" contracts. These long-term commitments make it possible to finance costly production and transmission infrastructures. Under these contracts, the seller makes a long-term commitment to serve the buyer, subject to a commitment by the latter to buy minimum quantities regardless of whether or not it takes delivery of them. These commitments are combined with backup measures (force majeure) and flexible volume arrangements, making it possible to manage any uncertainties (primarily weather conditions) affecting demand as well as any technical contingencies that may arise.

These types of contracts can run up to 25 years and are used by ENGIE SA to meet the demands of its customers for natural gas in the medium and long term.

The contracts provide for reciprocal commitments regarding specified quantities of gas:

- a commitment by ENGIE SA to purchase quantities of gas above a minimum threshold;
- a commitment by suppliers to provide these quantities at competitive prices.

The appeal of these contracts is provided by indexed price formulas and price adjustment mechanisms. ENGIE SA makes the bulk of its purchases under such contracts.

At December 31, 2016, ENGIE SA had commitments to purchase a minimum of 399 terawatt-hours (TWh) within one year, 1,863 TWh between two and five years, and 2,250 TWh after five years.

ENGIE SA also entered into forward purchases and sales of natural gas, primarily at maturities of less than one year, as part of its trading activities. These consist of purchases and sales on short-term markets and offers featuring engineered prices for other operators.

At December 31, 2016, commitments given by ENGIE SA totaled 185 TWh under forward sale contracts.

To meet its commitments to take delivery of specified volumes, ENGIE SA has entered into long-term contracts to reserve land and sea transmission capacities.

At December 31, 2016, commitments given by ENGIE SA totaled 82 TWh under forward electricity purchase contracts and 50 TWh under forward electricity sale contracts. As part of its CO<sub>2</sub> brokerage activities, ENGIE SA has also entered into the same volume of purchases of CO<sub>2</sub> emissions allowances for 13 million metric tons of CO<sub>2</sub>.

### 2. Commodity derivatives

Commodity derivatives (natural gas, oil and electricity) consist mainly of swaps, futures and options set up to manage price risk within the scope of the trading activities of ENGIE SA. These instruments are traded with third parties by the Company's specialized subsidiary, ENGIE Global Markets.

These derivatives are contracted to manage risks arising on:

- price engineering transactions designed to meet the growing demand among customers for tight controls on gas and electricity price risk. These products are primarily intended to guarantee a commercial margin regardless of trends in the commodity indexes included in the prices offered to customers, even when they differ from the commodity indexes to which ENGIE SA purchases are pegged. Options (calls and puts) are set up to guarantee maximum and minimum prices;
- measures taken to optimize procurement costs. Energy procurement costs, assets used in electricity production and reservations of available transmission and storage capacity not required to supply customers are systematically valued on the market.

The exposure to commodity price risk on these commercial transactions is managed and monitored as follows:

- pass-through mechanisms are applied in determining (i) sale prices for eligible customers, and (ii) regulated rates;
- the margin on fixed-price sale contracts or contracts indexed by financial swaps is hedged.

There is a time lag between the impact of changes in commodity prices on procurement costs and their repercussion onto sales prices, reflecting mainly the effect of rolling averages and the inventory stocking/run-down cycle.

	Notional amount Dec. 31, 2016			in millions of euros	Fair value Dec. 31, 2016 in millions of euros	Notional amount Dec. 31, 2015 in GWh
	in GWh by maturity					
	x < 1 year	1 year < x < 2 years	x > 2 years			
<b>Swaps (long positions)</b>						
Natural gas	1,634,364	336,556	56,308	38,420	4,748	1,557,389
Oil-based products	203,197	97,218	30,659	11,871	367	308,124
Electricity	3,218	6,210	3,067	440	60	-
CER EUA – CO <sub>2</sub>	23,472	-	-	-	-	-
<b>Swaps (short positions)</b>						
Natural gas	(1,677,135)	(396,708)	(60,544)	(38,147)	(5,054)	(1,687,469)
Oil-based products	(127,724)	(30,283)	(11,937)	(5,179)	(338)	(184,670)
Electricity	(1,837)	(1,030)	(106)	(112)	(14)	-
CER EUA – CO <sub>2</sub>	(896)	-	-	-	-	-
<b>Options (long positions)</b>						
Natural gas	-	-	-	-	-	-
Oil-based products	-	-	-	-	-	-
Electricity	-	-	-	-	-	-
<b>Options (short positions)</b>						
Natural gas	(601)	-	-	-	(757)	(803)
Oil-based products	-	-	-	-	-	-
Electricity	-	-	-	-	-	-
<b>Forwards (long positions)</b>						
Natural gas	22,031	19,416	19,303	931	118	18,455
Oil-based products	-	-	-	-	-	-
Electricity	50,375	24,086	7,626	2,728	484	-
CER EUA – CO <sub>2</sub>	3,557,791	4,802,981	4,258,124	9	-	-
<b>Forwards (short positions)</b>						
Natural gas	(71,604)	(15,004)	(18,389)	(713)	(111)	(36,025)
Oil-based products	-	-	-	-	-	-
Electricity	(40,825)	(5,760)	(3,262)	(1,624)	(78)	-
CER EUA – CO <sub>2</sub>	(281,900)	(281,900)	-	-	-	-

## Note 20 C Insurance of eligible risks

ENGIE SA systematically transfers all material risks based on an identification of risks eligible for insurance – particularly relating to Company assets and damages caused to third parties. Insurance policies offer extensive coverage in order to limit the financial impact of any claims on the Group's accounts.

To ensure a consistent approach, insurance policies are managed at Group level. As a result, new projects developed by subsidiaries can be incorporated within existing policies to enable the parent company to fully assume its role for its majority-owned subsidiaries.

## Note 20 D Legal and anti-trust proceedings

### 1. Concessions in Buenos Aires and Santa Fe

In 2003, ENGIE SA and its joint shareholders, water distribution concession operators in Buenos Aires and Santa Fe, initiated two arbitration proceedings against the Argentinean State before the International Center for Settlement of Investment Disputes (ICSID). The purpose of these proceedings is to obtain compensation for the loss in value of investments made since the start of the concession, in accordance with the France-Argentine Bilateral Investment Protection Treaties.

On April 9, 2015, the ICSID ordered the Argentinean State to pay USD 405 million in respect of termination of the Buenos Aires water distribution and treatment concession contracts, and on December 4, 2015, to pay USD 211 million in respect of termination of the Santa Fe concession contracts. The Argentinean State is seeking annulment of these awards. As a reminder, prior to the stock market listing of SUEZ Environnement Company (now SUEZ), ENGIE SA and SUEZ (formerly SUEZ Environnement) entered into an agreement providing for the economic transfer to SUEZ of the rights and obligations relating to the ownership interest held by ENGIE SA in Aguas Argentinas and Aguas Provinciales de Santa Fe.

### 2. Regulated natural gas tariffs

On June 24, 2013, ANODE, the French national energy retailers association (*Association Nationale des Opérateurs Détaillants en Énergie*) filed an appeal before the *Conseil d'État* seeking annulment of Decree No. 2013-400 of May 16, 2013 amending Decree No. 2009-1603 of December 18, 2009 relating to regulated natural gas tariffs.

ANODE contends in substance that the regulated natural gas tariff framework is inconsistent with the objectives of Directive 2009/73/EC concerning common rules for the internal market in natural gas, and Article 106.1 of the Treaty on the Functioning of the European Union. On December 15, 2014, the *Conseil d'État* ordered a stay of proceedings pending the Court of Justice of the European Union's preliminary ruling on these matters. The Court of Justice of the European Union delivered its ruling on September 7, 2016 and the *Conseil d'État* now has to rule on the merits.

### 3. La Compagnie du Vent

Since 2011, ENGIE SA has been involved in a number of disputes with Jean-Michel Germa, founder of La Compagnie du Vent (LCV) and SOPER, minority shareholder of LCV, the main one being the action brought by SOPER on January 18, 2013 seeking payment by ENGIE SA of about €250 million in compensation for alleged breach of the agreement and the shareholders' agreement signed in 2007. This dispute is currently pending before the Créteil Commercial Court and the initial submissions were exchanged in July 2016. In principle, the case will be heard in May/June 2017.

### 4. Competition and industry concentration

On May 22, 2008, the European Commission announced its decision to initiate formal proceedings against Gaz de France for a suspected breach of EU rules pertaining to abuse of dominant position and restrictive business practices. The proceedings relate to a combination of long-term transport capacity reservation and a network of import agreements, as well as potential underinvestment in transport and import infrastructure capacity.

On October 21, 2009, ENGIE SA submitted proposed commitments aimed at facilitating access to and competition on the French natural gas market. On December 3, 2009, the Commission adopted a decision that rendered these commitments legally binding. This decision by the Commission put an end to the proceedings initiated in May 2008. The commitments (which are valid until 2024 and as far as 2029 in certain cases) are being fulfilled under the supervision of a trustee approved by the European Commission.

### 5. Gas and electricity supply markets in France

On April 15, 2014, Direct Energie lodged a complaint with the competition authorities against ENGIE SA for alleged abuse of a dominant position on the gas and electricity supply markets, as well as a request for protective interim measures. The competition authority delivered its decision as regards the interim protective measures on September 9, 2014. ENGIE SA appealed the decision. However, the Appeal Court substantially upheld the competition authority's decision, which has now become final and binding. On the merits of the case, the competition authority notified its allegations on July 20, 2016, to which ENGIE SA replied on October 20, 2016. The proceedings are ongoing.

On March 27, 2015, the competition authorities informed ENGIE SA that a claim of alleged abuse of a dominant position by ENGIE on the gas and electricity supply markets had been referred to them by UFC Que Choisir, a French consumer group. The proceedings are ongoing.

On October 26, 2015, the competition authorities informed ENGIE SA that another claim of alleged abuse of a dominant position by ENGIE SA on the gas and electricity supply markets had been referred to them by Direct Energie, as well as a new request for protective interim measures. By decision of May 2, 2016, the competition authority ordered ENGIE SA, as a protective interim measure and pending a decision on the merits, to comply with certain protective interim measures. Direct Energie challenged this decision before the Paris Appeal Court, which, on July 28, 2016 dismissed Direct Energie's claim. Direct Energie has appealed the decision before the Court of Cassation. The investigation is still underway.

## 6. Commissioning

In the dispute between GRDF and various gas suppliers, in a decision dated June 2, 2016, the Paris Appeal Court (i) recalled that the risk of unpaid compensation for the “transmission” part of the agreement with the end customer should be borne by the grid manager and not the gas supplier; (ii) held that the compensation for customer management services provided by the supplier on behalf of the grid manager should be fair and commensurate with the grid manager’s cost savings and (iii) ordered GRDF to bring its transmission agreements into compliance with these principles. GRDF appealed the decision handed down by the Court of Appeal before the Court of Cassation.

Regarding the customer management services carried out on behalf of the grid manager in the electricity sector (in this case ERDF, now ENEDIS), following proceedings brought by ENGIE SA, in a decision of July 13, 2016, the *Conseil d’État* also ruled that the same principle whereby the grid manager pays compensation to the supplier should apply. In the same decision, the *Conseil d’État* denied the Energy Regulatory Commission (*Commission de Régulation de l’Énergie* – CRE) the right to set a customer threshold beyond which the compensation

would not be payable, which has hitherto prevented ENGIE SA from receiving any compensation.

On January 12, 2017, the CRE announced that a public consultation would be held in the first quarter of 2017 on the arrangements for paying compensation to natural gas and electricity suppliers for customer management services provided to the grid manager in respect of single contract customers. The CRE has also said that it plans to take a position on these matters in the second quarter of 2017.

## 7. Hungary – CIRDI arbitration

On April 4, 2016, ENGIE SA, GDF International and ENGIE International Holdings filed a request for arbitration before the International Center for Settlement of Investment Disputes (ICSID). In essence, the Group accused the Hungarian State of not fulfilling its obligations under the Energy Charter Treaty by taking various fiscal and regulatory measures that breached the principle of fair and equitable treatment and the ban on forceful expropriation, and is requesting compensation for the damage it has suffered. This request for arbitration follows a referral submitted on February 25, 2015. Arbitration proceedings before the ICSID usually last between two and three years.

## NOTE 21 Pensions and other employee benefit obligations

### OVERVIEW OF OBLIGATIONS

In millions of euros

	Dec. 31, 2016 <sup>(1)</sup>	Dec. 31, 2015
<b>PENSIONS</b>	<b>2,527</b>	<b>2,360</b>
• EGI sector plan	2,211	2,047
• Other plans	316	313
<b>OTHER RETIREMENT AND POST-EMPLOYMENT BENEFITS</b>	<b>366</b>	<b>372</b>
• Reduced energy and water prices	213	231
• End-of-career indemnities	56	53
• Immediate bereavement benefits	54	49
• Other <sup>(2)</sup>	43	39
<b>OTHER EMPLOYEE BENEFIT OBLIGATIONS</b>	<b>93</b>	<b>89</b>
• Disability benefits and other	85	82
• Long-service awards	8	7
<b>TOTAL</b>	<b>2,986</b>	<b>2,821</b>

(1) Including €111 million covered by a provision in the parent company financial statements (see Note 21 D).

(2) Indemnities for the partial reimbursement of educational expenses, exceptional end-of-career vacation and the former Suez supplementary healthcare plan.

### ACTUARIAL ASSUMPTIONS

The actuarial assumptions were determined together with independent actuaries. Weighted discount rates for the main actuarial assumptions are presented below:

	Pension benefit obligations		Other post-employment benefit obligations		Long-term benefit obligations		Total benefit obligations	
	2016	2015	2016	2015	2016	2015	2016	2015
Discount rate	2.1%	2.6%	2.1%	2.6%	1.7%	2.2%	2.1%	2.6%
Inflation rate	1.8%	1.7%	1.8%	1.7%	1.8%	1.7%	1.8%	1.7%
Average remaining working years of participating employees	19 years	16 years	19 years	16 years	12 years	16 years	18 years	16 years

According to the Group’s estimates, a 1% increase or decrease in the discount rate would result in a change of 16% in the projected benefit obligation.

## Note 21 A Pensions

The main defined-benefit plans operated by ENGIE SA comprise:

- pensions falling within the scope of the special plan for companies belonging to the electricity and gas industries sector ("EGI");
- pension plans taken over following the merger of Suez SA into ENGIE SA:
  - the 1953 supplementary pension plan, closed since December 31, 1988;
  - plans operated by the former Compagnie de Suez (annuity plans based on end-of-career salaries);
  - supplementary pension plans for senior managers operated by all water companies (annuity plans based on end-of-career salaries).

### Pension plan for electricity and gas utilities

Salaried employees and retirees of EGI sector companies have been fully affiliated to the *Caisse Nationale des Industries Électriques et Gazières* (CNIEG) since January 1, 2005. The CNIEG is a private welfare body placed under the joint responsibility of the ministries in charge of social security and the budget. The conditions for calculating benefit entitlements under the EGI plan are set out in the national statute for EGI sector employees (Decree of June 22, 1946) and determined by the government. By law, companies cannot amend any of these conditions.

Unregulated past specific benefits (at December 31, 2004) are funded by EGI sector entities to the extent defined by Decree No. 2005-322 of April 5, 2005. For ENGIE SA, this funding obligation represents 3.25% of the past specific benefit obligations of all EGI sector companies.

The specific benefits vested under the plan since January 1, 2005 are wholly financed by EGI sector companies in proportion to their respective share of the electricity and gas market as measured in terms of total payroll costs.

#### 1. Financial obligations of ENGIE SA

Pursuant to the Law of August 9, 2004 on electricity and gas public services and electricity and gas utilities, as from January 1, 2005 ENGIE SA has the following financial obligations:

- to pay the CNIEG its share of the contributions due under statutory pension plans. These contributions are then paid over by the CNIEG to the CNAV and to the mandatory supplementary pension plans AGIRC and ARRCO;
- to pay the CNIEG its contribution to financing the benefits paid in excess of rights under statutory pension plans not funded by the CTA levy;
- to pay the CNIEG its share in exceptional flat-rate contributions in full and final discharge of its liabilities due to the CNAV, AGIRC and ARRCO and not financed by the CTA levy;
- to pay the CNIEG its share of the administrative expenses incurred by the CNIEG as well as compensation with respect to other statutory pension plans and benefits relating to disability, death, work accidents and occupational illnesses;
- as a gas and electricity supplier (and carrier, where applicable), to collect and pay over to the CNIEG the CTA levies.

Pensions and disability annuities are recalculated as of January 1, 2009 on the basis of the retail price index (excluding tobacco).

#### 2. Calculation of pension obligations

ENGIE SA's pension obligations are calculated using a yield-to-maturity method in line with ANC Recommendation 2013-02 of November 7, 2013. The method used is known as the projected unit credit method and is based on assumptions regarding:

- end-of-career salaries (based on seniority, salaries and career promotions);
- retirement age, based on specific criteria applicable to EGI sector employees (length of service, number of children for female employees);
- changes in the population of retired employees, based on mortality tables drawn up by INSEE and an employee turnover rate based on behavioral statistics for EGI sector employees;
- payments of benefits to surviving spouses, based on the life expectancy of employees and their spouses, and the percentage of married employees among EGI sector personnel.

The obligations are calculated as follows:

- based on the rights vested at the measurement date, under both the EGI plan and statutory pension plans;
- for all active and retired employees in the EGI sector, and all employees and eligible beneficiaries for former Suez plans;
- actuarial gains and losses are recognized immediately.

## Note 21 B Other employee benefit obligations

Benefits payable to active and retired employees of EGI sector companies (excluding pensions) are described below:

- post-employment benefits:
  - reduced energy prices;
  - end-of-career indemnities;
  - exceptional end-of-career vacation;
  - immediate bereavement benefits;
  - partial reimbursement of educational expenses;
- long-term benefits:
  - allowances for occupational accidents and illnesses;
  - temporary and permanent disability allowances;
  - long-service awards;
  - asbestos benefit.

Retired employees of Suez SA are eligible for post-employment benefits consisting of a cash contribution to the costs of their water supply and complementary healthcare insurance.

The obligation is calculated using the projected unit credit method.

The Group's main obligations are described below.

#### 1. Reduced energy prices

Under Article 28 of the national statute for EGI sector personnel, all current and former employees are entitled to benefits in kind which take the form of energy. This benefit entitles employees to electricity and gas supplies at a reduced price.

The amount of the obligation regarding gas supplied to ENGIE SA and EDF employees corresponds to the likely present value of the power (kWh) supplied to the employees or their dependents during the retirement phase, assessed based on the unit cost of the energy. The amount of the obligation also takes account of the likely value of the price of the energy exchange agreement with EDF.

## 2. End-of-career indemnities

As of July 1, 2008, retiring employees (or their dependents in the event of death during active service) are entitled to end-of-career indemnities which increase in line with the length-of-service within the EGI sector.

## 3. Allowances for occupational accidents and illnesses

Like other employees under the standard pension plan, EGI sector employees are entitled to compensation for accidents at work and other occupational illnesses. These benefits cover all employees or the dependents of employees who die as a result of occupational accidents or illnesses, or injuries suffered on the way to work.

The amount of the obligation corresponds to the likely present value of the benefits to be paid to current beneficiaries, taking into account any reversionary annuities.

## Note 21 C Change in present value of benefit obligations

In millions of euros	EGI sector plan		Other plans		Other post-employment benefits		Long-term benefits		Total	
	2016	2015	2016	2015	2016	2015	2016	2015	2016	2015
<b>Present value of benefit obligation at January 1</b>	<b>2,047</b>	<b>2,213</b>	<b>314</b>	<b>304</b>	<b>372</b>	<b>536</b>	<b>89</b>	<b>102</b>	<b>2,822</b>	<b>3,155</b>
Service cost	35	39	1	2	7	8	11	11	54	60
Interest cost	51	45	6	4	9	11	2	2	68	62
Actuarial gains and losses on the obligation	160	(169)	25	21	(14)	(167)	(1)	(17)	170	(332)
Benefits paid under all plans (funded and unfunded) <sup>(1)</sup>	(81)	(77)	(30)	(18)	(6)	(3)	(8)	(8)	(125)	(106)
Other	(1)	(4)	-	-	(2)	(13)	-	(1)	(3)	(18)
<b>Present value of benefit obligation at December 31</b>	<b>2,211</b>	<b>2,047</b>	<b>316</b>	<b>313</b>	<b>366</b>	<b>372</b>	<b>93</b>	<b>89</b>	<b>2,986</b>	<b>2,821</b>

(1) The aggregate impact on income of benefits paid under all plans totaled €125 million in 2016 versus €106 million in 2015.

## Note 21 D Provisions

At year-end, ENGIE SA sets aside provisions in respect of allowances for occupational accidents and illnesses, and temporary and permanent disability benefits for active employees, as well as for benefits due during employees' active working lives (long-service awards and exceptional end-of-career vacation). Provisions for pensions and other employee benefit obligations transferred by Suez SA at the time of the 2008 merger are also recognized by ENGIE SA in liabilities. These provisions are written back as and when the

corresponding liabilities for which they were set aside at end-2007 are extinguished. No further amounts are set aside to these provisions in respect of rights newly vested or the unwinding of discounting adjustments.

At December 31, 2016, ENGIE SA booked provisions of €111 million compared to €112 million at end-2015, representing a decrease of €1 million in employee-related provisions.

### CHANGES IN PROVISIONS FOR EMPLOYEE BENEFIT OBLIGATIONS

<i>In millions of euros</i>	Pensions <sup>(1)</sup>		Other post-employment benefit obligations <sup>(2)</sup>		Long-term benefits <sup>(3)</sup>		Total	
	2016	2015	2016	2015	2016	2015	2016	2015
<b>Provision at January 1</b>	<b>7</b>	<b>7</b>	<b>22</b>	<b>26</b>	<b>83</b>	<b>93</b>	<b>112</b>	<b>126</b>
Pension cost (benefit) for the period	-	-	2		11	(2)	13	(2)
<i>o/w Service cost</i>	-	-	1	1	11	11	12	12
<i>o/w Interest cost</i>	-	-	-	-	2	2	2	2
<i>o/w Actuarial gains and losses on the obligation</i>	-	-	1	(1)	-	(13)	1	(14)
<i>o/w Other</i>	-	-	-	-	(2)	(2)	(2)	(2)
Benefits paid under all plans (funded and unfunded)	(0)	(0)	(5)	(4)	(8)	(8)	(14)	(12)
<b>Provision at December 31</b>	<b>7</b>	<b>7</b>	<b>19</b>	<b>22</b>	<b>86</b>	<b>83</b>	<b>111</b>	<b>112</b>

(1) Excluding EGI sector companies in both 2016 and 2015.

(2) Exceptional end-of-career vacation (€14 million), complementary health insurance for retired Suez employees (€4 million) and water bonus (€2 million).

(3) Allowances for occupational accidents and illness (€56 million), temporary and permanent disability allowances (€18 million), asbestos (€2 million) and long-service awards (€8 million).

## Note 21 E Insurance contracts

ENGIE SA has taken out insurance contracts with several insurance firms to cover its obligations in respect of pensions and end-of-career indemnities. An amount of €61 million was paid to these insurance firms in 2016.

The value of these insurance contracts stood at €1,925 million at December 31, 2016 (€1,922 million at December 31, 2015).

## Note 21 F Change in the fair value of plan assets

<i>In millions of euros</i>	Pensions				Other post-employment benefits	
	2016		2015		2016	2015
	EGI sector plan	Other plans	EGI sector plan	Other plans	EGI sector plan	EGI sector plan
<b>Fair value of plan assets at January 1</b>	<b>1,693</b>	<b>198</b>	<b>1,690</b>	<b>188</b>	<b>30</b>	<b>31</b>
Expected return on plan assets	43	3	34	2	-	1
Premiums net of handling fees	-	23	-	10	-	-
Actuarial gains and losses on plan assets	19	2	37	13	(2)	1
Benefits paid out of plan assets	(59)	(25)	(68)	(15)	-	(3)
<b>Fair value of plan assets at December 31</b>	<b>1,696</b>	<b>201</b>	<b>1,693</b>	<b>198</b>	<b>28</b>	<b>30</b>

### RETURN ON PLAN ASSETS

	Pensions				Other post-employment benefits	
	2016		2015		2016	2015
	EGI sector plan	Other plans	EGI sector plan	Other plans	EGI sector plan	EGI sector plan
Actual return on plan assets	3.8%	2.9%	4.3%	3.3%	3.7%	5.1%

The expected return on plan assets for 2016 is 1.97% in respect of pensions and 1.61% in respect of other obligations.

The allocation of plan assets by principal asset category can be analyzed as follows:

	2016		2015	
	EGI sector plan	Other plans	EGI sector plan	Other plans
Equities	31%	10%	35%	10%
Bonds	51%	81%	52%	81%
Other (including money market securities)	18%	9%	13%	9%
	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

Collective life insurance policies contracted with insurers to cover employee-related liabilities under the EGI sector plan are unit-linked. These contracts are available to ENGIE SA and to Group subsidiaries belonging to the "Group employee benefits management agreement". A small portion of these contracts may be invested in financial instruments issued by ENGIE SA, mainly equities.

Based on unit-linked contracts attributable to ENGIE SA, the portion of plan assets invested in financial instruments issued by ENGIE SA amounted to €4.5 million at December 31, 2016, representing less than 1% of the total value of the fund at that date. Plan assets are not invested in properties occupied by ENGIE SA or in other assets used by ENGIE SA.

## Note 21 G Supplementary defined-contribution plan

Employees eligible for the EGI plan also benefit from an additional defined-contribution plan set up in 2009. Employer contributions paid in respect of this scheme totaled €6 million in 2016 and €6 million in 2015.



## NOTE 22 Information concerning related parties

All material transactions between ENGIE SA and related parties were carried out on an arm's length basis. Accordingly, no disclosures are required pursuant to the amending decree of Article R. 123-198-11 of March 9, 2009.

### Relations with the French State

Until January 10, 2017, the French State owned 32.76% of ENGIE SA, giving it the right to appoint five representatives to the Group's 19-member Board of Directors. On that date, the State sold 4.1% of ENGIE SA under a private placement to institutional investors, reducing its interest to 28.65% of the capital and 31.98% of the voting rights.

The French State holds a golden share aimed at protecting France's critical interests and ensuring the continuity and safeguarding of supplies in the energy sector. The golden share is granted to the French State indefinitely and entitles it to veto decisions taken by ENGIE SA if it considers they could harm France's interests.

Public service engagements in the energy sector are defined by the law of January 3, 2003.

On November 6, 2015, the French State and ENGIE SA renewed the public service contract which sets out how such engagements are implemented, the Group's public service obligations and the conditions for rate regulation in France:

- as part of its public service obligations, the Group reaffirmed its commitments in terms of the safeguarding of supplies, the quality of customer relations, solidarity and assistance to low-income customers, sustainable development and protection of the environment, as well as in terms of research;
- regarding the conditions for rate regulation in France, the contract confirms the overall regulatory framework for setting and changing natural gas tariffs in France, according to the Decree of December 18, 2009, which notably forecasts rate changes based on costs incurred, while also defining the transitional framework following the elimination of regulated natural gas tariffs for business customers.

Transmission rates on the GRTgaz transportation network and the gas distribution network in France, as well as rates for accessing the French LNG terminals, are all regulated.

### Relations with EDF

Following the creation on July 1, 2004 of the French gas and electricity distribution network operator (EDF Gaz de France Distribution), Gaz de France SA and EDF entered into an agreement on April 18, 2005 setting out their relationship as regards the distribution business. The December 7, 2006 law on the energy sector reorganized the natural gas and electricity distribution networks, which were previously run by the incumbent operators. As part of this, Enedis SA (formerly ERDF SA), a subsidiary of EDF SA, and GRDF SA, a subsidiary of ENGIE SA, were created on January 1, 2007 and January 1, 2008, respectively, and act in accordance with the agreement previously signed by the two operators.

### Relations with the CNIEG (Caisse Nationale des Industries Électriques et Gazières)

The Group's relations with the CNIEG, which manages all old-age, death and disability benefits for active and retired employees of ENGIE SA who belong to the special EGI pension plan, employees of EDF and Non-Nationalized Companies (*Entreprises Non Nationalisées – ENN*), are described in Note 21, "Pensions and other employee benefit obligations".

**NOTE 23** Subsidiaries and investments

<i>In millions of euros</i>	Share capital as per latest available balance sheet	Other equity as per latest available balance sheet	% capital held at Dec. 31, 2016
Name			
<b>A - Detailed information concerning subsidiaries and investments whose gross value exceeds 1% of ENGIE SA capital (i.e., €24,352,850)</b>			
<b>1. Subsidiaries (more than 50%-owned by ENGIE SA)</b>			
Aguas Provinciales de Santa Fe <sup>(1)</sup>	4	(168)	64.19%
Celizan	-	-	100.00%
Cogac	1,287	373	100.00%
Ecometering	22	(17)	99.00%
Electrabel	4,640	16,436	99.13%
Elengy	109	418	100.00%
ENGIE Alliance	100	(51)	64.00%
ENGIE China Invest Company	85	15	100.00%
ENGIE Energy Services	699	653	100.00%
ENGIE Finance	5,460	466	100.00%
ENGIE IT	45	(32)	100.00%
ENGIE Management Company	63	(44)	100.00%
ENGIE New Ventures	49	14	100.00%
ENGIE Rassembleurs d'Énergies	50	(3)	100.00%
GDF International	3,972	418	100.00%
Genfina	1,750	(476)	100.00%
GRDF	1,801	3,563	100.00%
GRTgaz	538	3,235	75.00%
La Compagnie du Vent	17	134	59.00%
NNB Development Company	38	8	100.00%
SFIG	55	6	98.61%
Sopranor	-	5	99.90%
Storengy	345	1,444	100.00%
<b>2. Equity investments (less than 50%-owned by ENGIE SA)</b>			
Aguas Argentinas	10	(530)	48.20%
SUEZ (formerly SUEZ Environnement)	2,171	4,966	32.57%
<b>B - Information concerning other subsidiaries and investments</b>			
<b>1. Subsidiaries not included in section A</b>			
French companies	-	-	-
Other <sup>(1)</sup>	-	-	-
<b>2. Equity investments not included in section A</b>			
French companies	-	-	-
Other <sup>(1)</sup>	-	-	-
<b>3. Other long-term investments not included in section A</b>			
French companies	-	-	-
Other <sup>(1)</sup>	-	-	-

(1) Amounts in local currency (millions of units).

(2) Provisional, unaudited amounts.

Transactions with related companies mainly involve loans, advances and changes in current accounts with subsidiaries.

Book value of shares held at Dec. 31, 2016		Loans and advances granted by ENGIE SA	Sureties and endorsements given by ENGIE SA	Revenues for the latest available period	Net income (+) or loss (-) for the latest available period	Dividends received by ENGIE SA during the period	Year-end of last available period <sup>(2)</sup>
Gross	Provisions						
39	(39)	99	-	-	(65)	-	12/2015
31	(31)	-	-	-	-	-	12/2016
2,434	(400)	-	-	-	360	-	12/2016
38	(34)	-	-	17	(1)	-	12/2016
34,148	-	-	-	10,575	(1,361)	-	12/2015
516	-	125	-	198	102	97	12/2016
62	-	-	1,000	-	(51)	-	12/2016
85	(14)	-	-	-	(7)	-	12/2016
2,933	-	-	-	2,076	107	740	12/2016
5,567	-	3,070	-	852	319	-	12/2016
78	(63)	-	-	397	(37)	-	12/2016
115	(93)	-	-	165	(44)	-	12/2016
72	-	-	-	-	(5)	-	12/2016
50	(2)	-	-	-	(1)	-	12/2016
3,972	-	107	-	1	194	-	12/2016
2,627	(1,353)	-	-	-	19	-	12/2016
8,405	-	-	-	3,621	302	519	12/2016
1,850	-	-	-	1,897	290	255	12/2016
428	(308)	-	-	51	19	-	12/2016
141	(111)	-	-	-	(125)	-	12/2016
57	-	-	-	26	1	10	12/2016
245	(240)	-	-	-	-	-	12/2016
2,666	-	-	-	883	87	263	12/2016
<b>145</b>	<b>(145)</b>	<b>305</b>	<b>-</b>	<b>-</b>	<b>(237)</b>	<b>-</b>	<b>12/2015</b>
2,576	(93)	-	-	36	208	119	12/2015
65	(20)	46	-	-	-	-	
8	-	-	-	-	-	-	
64	(10)	-	-	-	-	41	
-	-	-	-	-	-	-	
17	-	-	-	-	-	-	
-	-	-	-	-	-	-	

## NOTE 24 Compensation due to members of the board of directors and executive committee

Total compensation (gross salary, bonuses, profit-sharing incentives and benefits in kind, including related employer contributions) paid to the executive corporate officers, and members of the executive Committee

came to €22 million for 2016. Post-employment benefits accruing to these same people totaled €21 million at December 31, 2016.

Members of the Board of Directors elected by the Shareholders' Meeting received €0.8 million in attendance fees for 2016.

### 6.4.3 Total and partial transfers of assets, subsidiaries, and equity investments requiring statutory disclosure

#### TOTAL AND PARTIAL TRANSFERS OF ASSETS

<i>In euros</i>	% at Dec. 31, 2015	% at Dec. 31, 2016	Reclassification within the Group	Sale outside the Group	Net book value of shares held	Business sector
<b>SUBSIDIARIES <sup>(1)</sup></b>						
Blomhof	100	0	X		9,031,067	Holding company
SFAP	100	0		X	3,081,375	Other borrowings and debt
<b>EQUITY INVESTMENTS <sup>(2)</sup></b>						
Ideel	10	0		X	30,000	Research and development

(1) More than 50%-owned by ENGIE SA.

(2) Less than 50%-owned by ENGIE SA.

#### TOTAL AND PARTIAL PURCHASES OF ASSETS

<i>In euros</i>	% at Dec. 31, 2015	% at Dec. 31, 2016	Reclassification within the Group	Acquisition outside the Group	Net book value of shares held	Business sector
<b>SUBSIDIARIES <sup>(1)</sup></b>						
<b>EQUITY INVESTMENTS <sup>(2)</sup></b>						

(1) More than 50%-owned by ENGIE SA.

(2) Less than 50%-owned by ENGIE SA.

## 6.4.4 Five-year financial summary

	2016	2015	2014	2013	2012
<b>Capital at year-end</b>					
Share capital ( <i>in euros</i> )	2,435,285,011	2,435,285,011	2,435,285,011	2,412,824,089	2,412,824,089
Number of ordinary shares issued and outstanding	2,435,285,011	2,435,285,011	2,435,285,011	2,412,824,089	2,412,824,089
Maximum number of shares to be issued:					
• by converting bonds	-	-	-	-	-
• by exercising stock options	-	-	20,823,223	10,083,705	15,803,200
<b>Results of operations for the year (<i>in millions of euros</i>)</b>	-	-			
Revenues, excluding VAT	17,939	19,891	24,562	28,608	27,915
Income before tax, employee profit-sharing, depreciation, amortization, provisions and transfer of concession termination amortization	245	391	390	424	749
Income tax (negative figures = benefit)	(672)	(540)	(378)	(768)	(542)
Employee profit-sharing and incentive payments for the year	-	-	-	-	-
Income after tax, employee profit-sharing, depreciation, amortization, provisions and transfer of concession termination amortization	448	268	411	663	890
Total dividends paid (including on treasury shares)	2,416	2,414	2,402	3,576	3,503
<b>Earnings per share (<i>in euros</i>)</b>					
Earnings per share after tax and employee profit-sharing but before depreciation, amortization, provisions and transfer of concession termination amortization	0.38	0.38	0.32	0.49	0.54
Earnings per share after tax, employee profit-sharing, depreciation, amortization, provisions and transfer of concession termination amortization	0.18	0.11	0.17	0.27	0.37
Dividend per share <sup>(1)</sup>	1.00	1.00	1.00	1.50	1.50
<b>Headcount</b>					
Average number of employees during the year	5,182	5,461	5,879	6,367	6,641
Total payroll	332	343	357	377	374
Total employee benefit obligations paid (social security taxes and contributions to pension plans, welfare plans, etc.)	256	262	330	396	363

(1) Shareholders at the AGM held to approve the 2016 financial statements will be asked to approve a dividend of €1 per share, representing a total amount of €2,397 million, based on the number of outstanding shares at December 31, 2016. The dividend per share will be increased by 10% for all shares held by the same person for more than two years as of December 31, 2016 provided they are still held on the dividend payment date.

## 6.5 Statutory Auditors' report on the parent company financial statements

*This is a free translation into English of the statutory auditors' report on the financial statements issued in French and it is provided solely for the convenience of English-speaking users. The statutory auditors' report includes information specifically required by French law in such reports, whether modified or not. This information is presented below the audit opinion on the financial statements and includes an explanatory paragraph discussing the auditors' assessments of certain significant accounting and auditing matters. These assessments were considered for the purpose of issuing an audit opinion on the financial statements taken as a whole and not to provide separate assurance on individual account balances, transactions or disclosures. This report also includes information relating to the specific verification of information given in the management report and in the documents addressed to the shareholders. This report should be read in conjunction with and construed in accordance with French law and professional auditing standards applicable in France.*

To the Shareholders,

In compliance with the assignment entrusted to us by your Annual General Meeting, we hereby report to you, for the year ended December 31, 2016, on:

- the audit of the accompanying financial statements of ENGIE;
- the justification of our assessments;
- the specific verifications and information required by law.

These financial statements have been approved by the Board of Directors. Our role is to express an opinion on these financial statements based on our audit.

### 1. Opinion on the financial statements

We conducted our audit in accordance with professional standards applicable in France; those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit involves performing procedures, using sampling techniques or other methods of selection, to obtain audit evidence about the amounts and disclosures in the financial statements. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made, as well as the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

In our opinion, the financial statements give a true and fair view of the assets and liabilities and of the financial position of the company as at December 31, 2016 and of the results of its operations for the year then ended in accordance with French accounting principles.

Without qualifying our opinion, we draw your attention to Note C to the financial statements which sets out the consequences of the first-time application of ANC (France's national accounting standards body) Regulation No. 2015-06 on merger loss accounted for as an intangible asset.

### 2. Justification of our assessments

The accounting estimates have been prepared in a context of prolonged downturn in energy markets whose consequences make it difficult to forecast economic mid-term perspectives. In this context as described in note B to the financial statements and in accordance with the requirements of article L. 823-9 of the French Commercial Code (*Code de commerce*) relating to the justification of our assessments, we bring to your attention the following matters:

- As stated in note B to the financial statements, the book value of equity investments which your company intends to hold on a long-term basis is written down to its value in use if the latter is lower. As part as our assessment of the significant estimates used to prepare the financial statements, we have examined the data and key assumptions used for the determination of the values in use, assessed the sensitivity of the measurements to these assumptions as well as the procedure for approving these estimates by management. We have also reviewed the calculations made by your company and verified that note 4C to the financial statements provides appropriate disclosure.
- Regarding electricity and gas sales to customer segments whose energy consumption is metered during the accounting period, your company makes revue projections based on consumption estimates in line with the volume of energy allocated by the grid managers over the same period and estimates of average selling prices. Our work consisted in assessing the methods and assumptions used to calculate these estimates and verifying that note B to the financial statements provides appropriate disclosure.

These assessments were made as part of our audit of the financial statements taken as a whole, and therefore contributed to the opinion we formed which is expressed in the first part of this report.

### 3. Specific verifications and information

We have also performed, in accordance with professional standards applicable in France, the specific verifications required by French law.

We have no matters to report as to the fair presentation and the consistency with the financial statements of the information given in the management report of the Board of Directors and in the documents addressed to the shareholders with respect to the financial position and the financial statements.

Concerning the information given in accordance with the requirements of article L. 225-102-1 of the French Commercial Code (*Code de*

*commerce*) relating to remunerations and benefits received by the directors and any other commitments made in their favour, we have verified its consistency with the financial statements, or with the underlying information used to prepare these financial statements and, where applicable, with the information obtained by your company from companies controlling your company or controlled by it. Based on this work, we attest the accuracy and fair presentation of this information.

In accordance with French law, we have verified that the required information concerning the purchase of investments and controlling interests and the identity of the shareholders or holders of the voting rights has been properly disclosed in the management report.

Neuilly-sur-Seine and Paris-La Défense, March 10, 2017

The statutory auditors *French original signed by*

**DELOITTE & ASSOCIES**

Véronique Laurent

**ERNST & YOUNG et Autres**

Pascal Macioce

# 06

## Financial information

6.5 Statutory Auditors' report on the parent company financial statements



# 07

## Additional information

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## 7.1 Specific statutory provisions and bylaws

The main provisions of the law, the Company's bylaws and the Board's internal regulations are set out below. These documents are available on its website: [engie.com](http://engie.com) and at the Company's head office.

### 7.1.1 Issuer's corporate purpose

The Company's purpose is the management and development of its current and future assets, in all countries, by all means and especially to:

- prospect, produce, process, import, export, buy, transmit, store, distribute, supply and market combustible gas, electricity and all other energy;
- trade in gas, electricity and all other energy;
- supply services related to the aforementioned activities;
- carry out the public service missions assigned to it under current law and regulations, in particular the Energy Code, the Electricity and Gas Nationalization Act No. 46-628 of April 8, 1946, the Gas and Electricity Markets and the Public Service of Energy Act No. 2003-8 of January 3, 2003, the Public Service of Electricity, Gas and Electrical and Gas Companies Act No. 2004-803 of August 9, 2004;
- study, design and implement all projects and all public or private works on behalf of all local authorities and individuals; prepare and enter into all agreements, contracts and transactions related to the implementation of the said projects and works;
- participate directly or indirectly in all operations or activities of any kind that may be connected to one of the aforementioned objects or that are likely to further the development of the company's assets, including research and engineering activities, by setting up new companies or undertakings, by contribution, subscription or purchase of securities or rights with respect to entities, by acquiring interests or holdings, in any form whatsoever, in all existing or future undertakings or companies, via mergers, partnerships or any other form;
- create, acquire, rent, take in lease management all property, real estate and businesses, rent, install and operate all establishments, businesses, plants or workshops connected with one of the aforementioned objects;
- register, acquire, operate, grant or sell all processes, patents and patent licenses relating to the activities connected with one of the aforementioned objects;
- obtain, acquire, rent and operate, mainly via subsidiaries and holdings, all concessions and undertakings relating to the supply of drinking water to towns or water to industry, to the evacuation and purification of waste water, to drainage and wastewater treatment operations, to irrigation and transport, to protection and pondage structures as well as to all sales and service activities to public authorities and individuals in the development of towns and the management of the environment;
- and in general to carry out all industrial, commercial, financial, personal property or real estate operations and activities of any kind, including services, in particular insurance intermediation, acting as an agent or delegated agent in a complementary, independent or research position; these operations and activities being directly or indirectly related, in whole or in part, to any one of the aforementioned objects, to any similar, complementary or related objects and to those that may further the development of the Company's business.

### 7.1.2 Corporate governance bodies

Regarding the composition and operations of corporate governance bodies, see Section 4 "Corporate Governance."

#### Board of directors

ENGIE is managed by a Board of Directors.

The Board has an Internal Regulations document that specifies its operating procedures.

The Board's Internal Regulations and the Directors' Charter are intended for every Director, every permanent representative of a member of the Board that is a legal entity, every non-voting Director, the representative of the Central Works Council or the body acting in lieu, the Government Commissioner, and, more generally, any person taking part in or attending Board meetings, either on a one-time basis or on every occasion.

#### *Appointment of Directors*

The Company is managed by a Board of Directors comprising no more than twenty-two members, in accordance with Articles L. 225-17, L. 225-23 and L. 225-27 of the French Commercial Code.

Directors are appointed by the General Shareholders' Meeting, subject to special rules applicable to Directors proposed by or representing the French State, Directors representing employees and the Director representing employee shareholders.

Directors proposed by and representing the French State are appointed in accordance with Articles 4 and 6 of Order No. 2014-948 of August 20, 2014 relating to the governance of, and capital transactions in, partly state-owned enterprises. Directors representing employees and the Director representing employee shareholders are appointed in accordance with Articles L. 225-27 *et seq.* and L. 225-23 of the French Commercial Code and the bylaws.

Under Article 4 of the Order, the State may appoint a representative to the governing bodies of companies in which it holds over 10% of the share capital. In addition, Article 6 of the Order provides that one or more seats on the Board of Directors, in a number proportionate to its shareholding, are reserved for members proposed by the State.

### ***Rights and responsibilities of the Directors***

The Board represents all shareholders, regardless of its composition and the origin of its members.

Directors must act at all times in the Company's corporate interest. They must carry out their duties independently, fairly and professionally. They must seek, in all circumstances, to maintain their independence of analysis, judgment, decision and action. They must refrain from being influenced by any information that is not related to the Company's interest, and must warn the Board of any information of which they become aware that seems to them likely to affect the Company's interests.

Directors have an obligation of absolute confidentiality with regard to the information provided to them within the framework of their duties, or discussed at Board meetings. They undertake to maintain the confidentiality of any disclosed information. In particular, the discussions themselves, the minutes recording the terms of such discussions and the reports and documents sent to the Board are confidential and may not be circulated. In the event of a proven breach of a confidentiality obligation by one of the Directors, the Chairman of the Board shall consider the action to be taken, possibly before the courts, with regard to such breach.

Directors undertake to devote the necessary time and attention to their duties. They must stay informed of the activities and the specifics of the Company, its issues and values, including by talking with principal officers. They must assiduously and diligently attend Board meetings. They must attend Shareholders' Meetings.

They must seek to obtain the information they consider essential in order to deliberate on the Board with full knowledge of the facts within suitable time limits and must seek to update the knowledge that they deem to be useful and may request that the Company provide them with the training they need to perform their duties properly.

Directors contribute to the collegial administration and efficacy of the proceedings of the Board and of any specialized committees set up within the Board. They make recommendations that they feel may improve the operating procedures of the Board, particularly during the Board's periodic evaluation.

They agree, along with the other members of the Board of Directors, to ensure that their supervisory duties are accomplished with efficiency and without any obstacles. In particular, they shall ensure that procedures are put in place in the Company to verify compliance with laws and regulations, both in letter and in spirit.

They ensure that the positions adopted by the Board, in particular relating to the approval of the financial statements, the budget, resolutions to be put to the Annual Shareholders' Meeting as well as to important matters relating to the companies' operations, are the subject of formal decisions that are properly substantiated and recorded in the minutes of the Board's meetings.

The rights and responsibilities of the Directors are described in detail in the Directors' Charter appended to the Internal Regulations of the Board of Directors and published in full on the Group's website.

### ***Term of office of Directors***

All Directors serve a four-year term. The terms of office of Directors elected by the General Shareholders' Meeting expire at the close of the General Shareholders' Meeting convened in the year during which the term expires to approve the financial statements for the previous year.

The replacement of Directors appointed by the General Shareholders' Meeting whose positions have become vacant during the term of office, due to death or the resignation of one or more Directors' seats, is subject to the laws and regulations in force. Note that these measures may not be applied in the event of the vacancy, for any reason, of the seat of a Director elected by the employees or of the seat of the Director representing the employee shareholders.

### ***Chairman and Vice-Chairmen***

The Board of Directors elects a chairman and one or more vice-chairmen from among its members.

In accordance with Article 16 of the bylaws, meetings of the Board of Directors must be chaired by the Chairman or, in the Chairman's absence, by one of the Vice-Chairmen, or else by the Deputy Chief Executive Officer, if he or she is a Director, or by a Director chosen by the Board at the beginning of the meeting.

### ***Directors representing employees and employee shareholders***

The Directors representing the employees and employee shareholders have the same status, powers and responsibilities as the other Directors.

The terms of office of Directors elected by employees expire either at the end of the Ordinary Shareholders' Meeting called to approve the financial statements for the previous year and held after the announcement of the results of the election organized by the Company under the conditions set out in Article 13.3.1 of the bylaws, or in the event of the termination of their employment contract or in the event of removal from office under the terms provided for in the applicable law or regulations or for other reasons provided for by law for Directors appointed by the Shareholders' Meeting.

In the event of a vacancy of a seat of a Director elected by the employees, the vacant seat is filled pursuant to the provisions of Article L. 225-34 of the French Commercial Code.

With the exception of the rules relating to co-optation, which do not apply to him/her, the termination of office of a Director representing employee shareholders shall be subject to the same rules as those applicable to other Directors. Moreover, his/her term of office shall end automatically in the event of loss of (i) his/her capacity as employee of the company or companies or consortia affiliated to it within the meaning of Article L. 225-180 of the French Commercial Code or (ii) his/her capacity as shareholder of the Company, individually or via a company mutual fund, unless, in the latter case, he/she brings his/her situation into compliance within a three-month period.

In the event of the vacancy of the seat of a Director representing employee shareholders for any reason, the candidates to replace such a Director shall be appointed in accordance with Article 13.3 of the bylaws at the latest prior to the next Shareholders' Meeting or, if that meeting is held less than four months after the position has become vacant, then prior to the next Shareholders' Meeting after that. The Board of Directors may validly meet and deliberate up to the date of such an appointment.

### Government Commissioner

In accordance with Article L. 111-70 of the French Energy Code, the Minister of Energy appoints a Government Commissioner to the Company who attends meetings of the Board of Directors and its committees in an advisory capacity and may present his/her observations to any Shareholders' Meeting.

### General Management

Subject to the powers expressly granted by law to Shareholders' Meetings, powers that it grants specifically to the Board of Directors and within the scope of the Company's corporate purpose, as well as those mentioned in Articles 13 to 15 of Act No. 2004-803 of August 9, 2004, either the Chairman of the Board of Directors or another natural person appointed by the Board of Directors and holding the title of Chief Executive Officer shall be responsible for the general management of the Company.

ENGIE chose to separate the functions of Chairman of the Board of Directors and Chief Executive Officer.

The Chairman of the Board of Directors organizes and directs the work of the Board, and reports on this to the General Shareholders' Meeting. He/she ensures the smooth running of the Company's corporate bodies and in particular sees that the Directors are able to perform their duties.

The Chief Executive Officer is vested with the broadest powers to act in the Company's name in all circumstances. He/she exercises his/her powers within the scope of the Company's corporate purpose and subject to the powers expressly granted by law to Shareholders' Meetings and to the Board of Directors.

Information on the duties of General Management is provided in Section 4.4 "General Management" and the Chairman's report in Section 4.1.

### Decisions of the Board of Directors

The Board meets when it is convened by the Chairman of the Board of Directors, who sets the meeting's venue and agenda. Any Director who wishes to discuss any matter with the Board that is not on the agenda must notify the Chairman prior to the meeting; the Chairman is then responsible for informing the Board.

When the Board of Directors has not met for over two months, at least one-third of the members of the Board may request that the Chairman call a meeting on a specific agenda.

The Chairman may take the initiative of organizing meetings of the Board of Directors by videoconference, by web conference, or by any other

means of telecommunication, within the limits and subject to the conditions set under the current law and regulations and, where applicable, the Internal Regulations.

Resolutions of the Board of Directors are adopted under the conditions of quorum and majority provided by law. In the event of a tie, the meeting Chairman shall have the casting vote.

### Regulated agreements

Any agreement made directly or through an intermediary between ENGIE and a member of the Board of Directors, its Chief Executive Officer, its Deputy Chief Executive Officer or a shareholder holding more than 10% of the voting rights, or if the shareholder is a company, the company controlling it within the meaning of Article L. 233-3 of the French Commercial Code, must be submitted to the Board of Directors for prior approval. This authorization is also required for agreements involving ENGIE in which one of the persons mentioned in the preceding paragraph is indirectly involved, and to agreements between ENGIE and another company, if one of the Directors, the Chief Executive Officer or one of the Deputy Chief Executive Officers of the company is an owner, partner with unlimited liability, legal manager, Director, member of the Supervisory Board or, in general, a manager of the company concerned.

Without prejudice to the formalities of prior authorization and control laid down by law and the bylaws, the Company's Directors must promptly disclose to the Chairman any agreement entered into by the Company and in which they are directly or indirectly involved.

The above provisions shall not apply to agreements relating to current transactions concluded under normal conditions, nor to the agreements between two companies of which one directly or indirectly holds all of the capital of the other minus, where applicable, the minimum number of shares required to satisfy the requirements of section 1832 of the French Civil Code or sections L. 225-1 and L. 226-1 of the French Commercial Code.

### Compensation of Directors

The General Shareholders' Meeting determines the annual general amount of directors' attendance fees allocated to the Board of Directors which, on recommendation of the Appointments and Compensation Committee, allocates the said compensation between its members by deduction from the annual budget for directors' attendance fees.

The Company reimburses Directors for expenses incurred in the performance of their duties upon presentation of substantiating documents.

## 7.1.3 Rights, privileges and restrictions attached to shares

### Voting rights (Articles 10, 11, 12 and 20 of the bylaws)

Unless otherwise provided for by law, each shareholder has as many voting rights and may cast as many votes at meetings as he or she holds shares, which are fully paid up. Effective April 2, 2016, in accordance with Article L. 225-123 of the French Commercial Code, all registered and fully paid-up shares registered in the name of the same beneficiary for at least two years are automatically entitled to a double voting right (see Section 5.1.1.3 "Voting rights").

The shares are indivisible with regard to the Company. Where the shares are subject to a right of usufruct, voting rights attached to shares belong to the beneficial owner of the shares in the case of Ordinary Shareholders' Meetings, and to the bare owner in the case of Extraordinary Shareholders' Meetings.

Any time it is necessary to own several shares in order to exercise any right whatsoever, the owners of isolated shares or an insufficient number of shares may exercise such a right provided that they combine or, as the case may be, buy or sell the necessary shares or rights.

Any shareholder may cast a vote by proxy in accordance with the terms and conditions provided for by the law and regulations in all Meetings. The owners of securities mentioned in the seventh paragraph of Article L. 228-1 of the French Commercial Code may be represented, in accordance with the conditions provided for by law, by a registered intermediary. Any shareholder may cast a vote by proxy in accordance with the terms and conditions provided for by the law and regulations. The shareholders may, in accordance with the terms and conditions provided for by the law and regulations, send their postal proxy form either as a printed form or, further to a decision of the Board of Directors published in the notice of meeting and the notice to attend the meeting, by electronic transmission.

### Dividends (Article 26.2 of the bylaws)

Any shareholder who can, at the end of a fiscal year, provide proof of registration for at least two years and continuation thereof on the dividend payment date for the fiscal year in question, shall receive a 10% increase in the dividend for the shares so registered, over the

dividend paid on other shares. This increase will be capped at 0.5% of the share capital for a single shareholder.

The provisions of Article 26.2 shall apply for the first time to the payment of the dividend to be distributed for the year ended December 31, 2016, determined by the Annual Shareholders' Meeting to be held in 2017.

### Golden share (Article 6 of the bylaws)

In accordance with the French Energy Code and Decree No. 2007-1790 of December 20, 2007, the share capital includes a golden share resulting from the conversion of one ordinary share, which is held by the French State and is aimed at protecting France's critical interests in the energy sector and ensuring the continuity and safeguarding of energy supplies (see Section 5.2.4 "Golden share").

In accordance with the French Energy Code and Act No. 2014-384 of March 29, 2014, the French State is required to hold a minimum equity stake or minimum number of voting rights (see Section 5.1.1.3 "Voting rights").

## 7.1.4 Change in rights attached to shares

Except where otherwise specified by law, the rights attached to the Company's shares may be modified only by the Extraordinary Shareholders' Meeting, subject to the special terms relating to the French State's golden share under Article 6 of the bylaws (see also Section 5.2.4 "Golden share").

In accordance with the applicable law and regulations, any amendment of the bylaws that defines the rights attached to ENGIE shares must be approved by a two-thirds majority at the Extraordinary Shareholders' Meeting. All increases in the commitments of the shareholders must be unanimously approved by all shareholders.

## 7.1.5 Shareholders' Meetings

### Notice to attend Meetings (Articles 20, 21 and 22 of the bylaws)

Ordinary and Extraordinary Shareholders' Meetings and, where applicable, Special Shareholders' Meetings, are called, meet and deliberate in accordance with the conditions provided for by law. The party issuing the notice convening the meeting also draws up the meeting agenda. However, one or more shareholders may, in accordance with the conditions provided for by law, request that draft resolutions be entered on the agenda.

The meeting may take place at the Company's head office or at any other location stated in the notice.

Meetings are chaired by the Chairman of the Board of Directors or, in his absence, by the Vice-Chairman of the Board of Directors, the Deputy Chief Executive Officer if he or she is also director, or, in the absence of the Deputy Chief Executive Officer, by a Director specially authorized by the Board for this purpose. Otherwise, the Meeting elects its own Chairman.

The two members of the General Shareholders' Meeting present who accept the duties thereof and who hold the greatest number of votes act as vote tellers. The officers of the meeting appoint the Secretary, who may be chosen from outside the shareholders.

An attendance sheet is kept in accordance with the conditions provided for by law. Minutes of meetings are drawn up and copies thereof are issued and certified in accordance with the conditions provided for by law.

### Attendance at Meetings (Article 20 of the bylaws)

All shareholders have the right to attend the meetings provided their shares are paid in full.

The right to attend meetings or to be represented therein is subject to the registration of the securities in the shareholder's name by midnight (CET) of the second business day prior to the meeting, either in the registered securities' accounts held by the Company or in bearer securities' accounts held by the authorized intermediary.

The Board of Directors may, if it deems necessary, send to the shareholders individualized admission cards in each shareholder's name and require them to be presented in order to gain access to the Shareholders' Meeting.

If the Board of Directors so decides at the time of calling the meeting, the shareholders may participate in the meeting by videoconference or by any telecommunication or remote transmission means, including via the Internet, that permits their identification in accordance with the terms and conditions set under current regulations. Where applicable, this decision shall be announced in the notice convening the meeting published in the *Bulletin des Annonces Légales Obligatoires* (Bulletin of Mandatory Legal Announcements or BALO).



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## 7.1.6 Provisions relating to the disclosure of interests

### Duty of disclosure upon crossing thresholds (Article 9 of the bylaws)

In addition to the thresholds provided for under Article L. 233-7 of the French Commercial Code, any natural person or legal entity acting alone or in concert, who happens to hold a share of the capital, voting rights or securities, directly or indirectly, that may be converted in the future to capital of the Company – equal or in excess of 0.5% – must inform the Company thereof by recorded delivery letter with acknowledgment of receipt, within five (5) trading days of crossing the said 0.5% threshold, by specifying his/her/its identity, as well as that of the natural persons or legal entities acting in concert therewith, and by specifying the total number of shares, voting rights or share equivalents providing future access to capital that he/she/it owns directly or indirectly or else in concert. This duty of disclosure relates also to the possession of each additional share of 0.5% of the capital or voting rights or share equivalents providing access in time to the capital of the Company. It is noted that thresholds to be declared under this paragraph shall be determined pursuant to the provisions of Articles L. 233-7 and L. 233-9 of the French Commercial Code and current regulations. This same duty of disclosure applies in accordance with the same time limits, in the event of crossing under the 0.5% threshold or a multiple thereof.

The intermediary registered as a holder of shares pursuant to the seventh paragraph of Article L. 228-1 of the French Commercial Code is bound, without prejudice to the obligations of shareholders, to make the declarations provided for in this Article, for all shares for which he/she/it is registered in account.

Pursuant to the provisions of Article L. 233-7 of the French Commercial Code, in the event of any breach of the foregoing provisions, one or more shareholders holding more than 0.5% of the capital or voting rights may request that the penalties provided for in the first two paragraphs of Article L. 233-14 of the French Commercial Code be applied.

### Identification of bearer securities (Article 9 of the bylaws)

In order to identify bearer securities, the Company may, in accordance with the law and regulations and subject to the penalties provided for under the French Commercial Code, ask the central depository that manages the issue account of its securities for information that allows identification of holders of Company securities that grant, immediately or in the future, the right to vote at its Shareholders' Meetings and, in particular, the quantity of securities held by each of them.

If they are registered securities that may be converted immediately or in the future to capital, the intermediary registered in accordance with the conditions provided for under the French Commercial Code must reveal the identity of owners of the said securities on simple request from the Company or its agent, which may be presented at any time.

The breach by holders of securities or intermediaries of their duty to disclose the information provided for above may, in accordance with the conditions provided for by law, entail the suspension or loss of voting rights and the right to the payment of dividends attached to the shares.

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## 7.1.7 Changes in share capital

The share capital may be increased, reduced or amortized in accordance with the conditions provided for by law, subject to the special provisions relating to the French State's stake and its golden share pursuant to Article 6 of the bylaws (see also Section 7.1.3 "Rights, privileges and restrictions attached to shares").

## 7.2 Legal and arbitration proceedings – Competition and industry concentrations (update)

In the course of its operations, the Group is engaged in a certain number of legal disputes and arbitration procedures, and is also subject to investigations and procedures under competition law. The principal investigations and procedures are described in Note 27 in Chapter 6.2 – “Consolidated financial statements.”

For the disputes concerning practices in the natural gas and electricity supply markets mentioned in note 27.4.2 of the consolidated financial statements, refer to the press release dated March 22, 2017 on the decisions of competition Authority.

## 7.3 Documents available to the public

The documents relating to ENGIE that must be made available to the public (bylaws, reports, historical financial information on ENGIE, as well as on the Group subsidiaries included or mentioned in this Registration Document and those relating to each of the two years prior to the filing of this Registration Document) may be consulted at the Corporate

headquarters for as long as this Registration Document remains valid. These documents may also be obtained in electronic format from the ENGIE website and some of them may be obtained from the AMF website ([amf-france.org](http://amf-france.org)).

### 7.3.1 Corporate information policy

#### Ana Busto

Executive Vice-President in charge of Brand and Communications of the ENGIE group

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Address: 1 place Samuel de Champlain - 92400 Courbevoie - France

Website: [engie.com](http://engie.com)

The ENGIE Registration Document is translated into English. In case of contradiction, the original French version shall prevail.

In addition to this Registration Document filed with the AMF, the Group publishes integrated report annually.

### 7.3.2 Financial reporting schedule

Publication of annual earnings 2016	March 2, 2017
Publication of Q1 results 2017	May 5, 2017
Annual Shareholders' Meeting	May 12, 2017
Publication of the 2017 half-year results	July 28, 2017

## 7.4 Party responsible for the Registration Document

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### 7.4.1 Party responsible for the Registration Document

Isabelle Kocher, Chief Executive Officer

### 7.4.2 Declaration by the party responsible for the Registration Document containing the Annual Financial Report

"I hereby certify, after having taken all reasonable measures to this effect, that the information contained in this Registration Document is, to my knowledge, in accordance with the facts and makes no omission likely to affect its import.

I hereby certify that, to the best of my knowledge, the financial statements have been prepared in accordance with the applicable accounting standards and give a true and fair view of the assets and liabilities, financial position and profit or loss of the Company and all the undertakings included in the consolidation, and that the management report, whose items are mentioned in Appendix B of this Registration Document, presents a fair review of the development and performance of the business and financial position of the Company and all the undertakings included in the consolidation as well as a description of the main risks and uncertainties to which they are exposed.

I have received a completion letter from the Statutory Auditors stating that they have audited the information relating to the financial position and financial statements contained in this Registration Document, which they have read in its entirety. This letter contains no comments."

Courbevoie, March 22, 2017

The Chief Executive Officer

Isabelle Kocher



## 7.5 Statutory Auditors

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### 7.5.1 Statutory Auditors

#### Deloitte & Associés

Represented by Véronique Laurent.

185 avenue Charles-de-Gaulle, 92524 Neuilly-sur-Seine Cedex

Deloitte & Associés has been a Statutory Auditor for the Company since July 16, 2008. Its term of office was renewed at the Combined Shareholders' Meeting of April 28, 2014 for a period of six years and will expire at the close of the 2020 Ordinary Shareholders' Meeting held to approve the financial statements for the fiscal year ending December 31, 2019.

#### Ernst & Young et Autres

Represented by Pascal Macioce.

1/2 place des Saisons, 92400 Courbevoie – Paris La Défense 1

Ernst & Young et Autres has been a Statutory Auditor for the Company since January 1, 2002. Its term of office was renewed at the Combined Shareholders' Meeting of April 28, 2014 for a period of six years and will expire at the close of the 2020 Ordinary Shareholders' Meeting held to approve the financial statements for the fiscal year ending December 31, 2019.

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### 7.5.2 Alternate Statutory Auditors

#### AUDITEX (for Ernst & Young et Autres)

1/2 place des Saisons, 92400 Courbevoie – Paris La Défense 1

Auditex has been an alternate Statutory Auditor for the Company since January 1, 2002. Its term of office was renewed at the Combined Shareholders' Meeting of April 28, 2014 for a period of six years and will expire at the close of the 2020 Ordinary Shareholders' Meeting held to approve the financial statements for the fiscal year ending December 31, 2019.

#### BEAS (for Deloitte & Associés)

195 avenue Charles-de-Gaulle, 92200 Neuilly-sur-Seine

BEAS has been an alternate Statutory Auditor for the Company since July 16, 2008. Its term of office was renewed at the Combined Shareholders' Meeting of April 28, 2014 for a period of six years and will expire at the close of the 2020 Ordinary Shareholders' Meeting held to approve the financial statements for the fiscal year ending December 31, 2019.



**Additional information**  
7.5 Statutory Auditors



# Appendix A – Lexicon

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## Conversion Table

1 kWh	0.09 m <sup>3</sup> of natural gas (i.e. 1 m <sup>3</sup> of gas = 11 kWh)
1 GWh	91,000 m <sup>3</sup> of natural gas
1 TWh or 1 billion kWh	91 million m <sup>3</sup>
1 billion m <sup>3</sup> of gas	6.2 million barrels of oil equivalent (Mboe)

The units of conversion mentioned above are those routinely used by professionals in the energy sector. In this document they are provided solely for information purposes.

## Units of Measurement

A	Ampere
Bar	Unit of measurement of fluid pressure, particularly for natural gas (1 bar = 105 Pascal)
BOE	Barrel of oil equivalent (1 barrel = 159 liters)
G	Giga (1 billion)
GBq	Giga becquerel
Gm <sup>3</sup>	Giga m <sup>3</sup> (1 billion cubic meters)
GW	Gigawatt (1 billion watts)
GWh	Gigawatt-hour (1 million kilowatt-hours)
GWheeq	GWh electric equivalent
J	Joule
k	Kilo (one thousand)
kW	Kilowatt (one thousand watts)
kWh	Kilowatt-hour (one thousand watt-hours)
m	Meter
m <sup>2</sup>	Square meter
m <sup>3</sup>	Cubic meter
M	Mega (one million)
Mboe	Million barrels oil equivalent
Mtpa	Million metric tons <i>per annum</i>
MW	Megawatt (one million watts)
MWp	Megawatt-peak (unit of measurement for the power of solar photovoltaic installations)
MWe	Megawatt electric
MWh	Megawatt-hour (one thousand kilowatt-hours)
T	Tera (one thousand billion)
TBq	Terabecquerel
t/h	Metric tons per hour
TWh	Terawatt-hour (1 billion kilowatt-hours)
V	Volt
W	Watt
Wh	Watt-hour

## Short forms and acronyms

ACP	<i>Autorité de Contrôle Prudentiel des établissements bancaires</i> (French prudential control authority for banking institutions)
AGM	Combined Shareholders' Meeting
AMF	<i>Autorité des Marchés Financiers</i> (French Financial Markets Authority)
BtoB	Business to Business
BtoC	Business to Consumer
BtoT	Business to Territories
BU	Business Unit
Capex	Capital expenditure
CER	Certified Emission Reduction – see Glossary
CNIL	<i>Commission Nationale de l'Informatique et des Libertés</i> (French national data protection and privacy commission)
CO <sub>2</sub>	Carbon dioxide
CRE	<i>Commission de Régulation de l'Énergie</i> (French energy regulator) – see Glossary
CSR	Corporate Social Responsibility
EBITDA	Earnings before Interest, Taxes, Depreciation and Amortization
EGI	Electric and Gas Industries – see Glossary
EM	Entities consolidated by the equity method
EMAS	Eco Management and Audit Scheme – see Glossary
EMTN	Euro Medium Term Notes
E&P	Exploration & Production of hydrocarbon
ERM	Enterprise Risk Management
EU	European Union
EUA	European Union Allowance
EWC	European Works Council
FC	Full Consolidation
FLNG	Floating Liquefied Natural Gas
FSRU	Floating LNG storage and regasification unit
GES	Gas Exchange Point Greenhouse Gas – see Glossary
GIE	<i>Groupement d'intérêt économique</i> - Economic Interest Group (EIG)
HR	Human Resources
IAS	International Accounting Standards, drawn up internationally by the IASB until 2002
IASB	International Accounting Standards Board
IFRS	International Financial Reporting Standards, drawn up internationally by the IASB since 2002
INCOME	Internal Control Management & Efficiency (ENGIE program)
IoT	Internet of things
IPP	Independent Power Producer – see Glossary
ISO	International Organization for Standardization – see Glossary
ISP	Investment Services Provider – see Glossary
LNG	Liquefied Natural Gas – see Glossary
LPG	Liquefied Petroleum Gas – see Glossary
NGO	Non-governmental organization
NGV	Natural Gas Vehicle – see Glossary
NOx	Nitrogen oxide
NRE	New and renewable energy sources: wind, solar, hydro, etc.
OECD	Organization for Economic Cooperation and Development
Opex	Operating expenses
PC	Proportional Consolidation
PEG	<i>Plan d'Épargne Groupe</i> , Group Employee Savings Plan
PPA	Power Purchase Agreement (often long-term)
RAB	Regulated Asset Base – see Glossary
R&D	Research and Development



## Appendix A – Lexicon

Short forms and acronyms

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ROCE	Return on capital employed
ROE	Return on equity
SME	Small and medium-sized enterprises
SO <sub>2</sub>	Sulfur dioxide
SRV	Shuttle Regasification Vessel (LNG carrier fitted with onboard regasifiers that can connect to an underwater buoy. This enables the regasified LNG to be directly injected into a pipeline network).
TMO	<i>Taux mensuel obligataire</i> – a monthly bond yield measured on the basis of the gross yield-to-maturity on fixed-rate bonds with at least 7 years to maturity issued on the French market in a given month.
TPA-d	Third Party Access to the distribution network – see Glossary
TSR	Total Shareholder Return – see Glossary
UCITS	Undertakings for Collective Investment in Transferable Securities (mutual funds)
VaR	Value at Risk – see Glossary
VPP	Virtual Power Plant – see Glossary

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# Glossary

2P reserves	Proven and probable reserves: estimate of the hydrocarbon quantities (crude oil, natural gas and natural gas liquids) that can be extracted in the future, based on existing deposits and with a probability of at least 50% according to geological and technical data. Extraction must meet economic criteria that take into account future price changes, the appreciation of hydrocarbons and exchange rates.
Afep-Medef Code	Code of corporate governance for listed companies (in France), in the version published by Afep-Medef in November 2016.
Balancing area	The set of entry points, delivery points and a trading point of gas within which the consignor must achieve a balance.
Biogas	All gases, such as methane and carbon dioxide, resulting from the fermentation of organic waste in a depleted air environment such as landfills and wastewater treatment plants. Such fermentation is the result of a natural or controlled bacterial activity. As such, biogas is classified as a renewable energy source.
Biomass	Mass of non-fossil organic matter of biological origin. Part of these stocks may be used as an energy source.
Branch	Transmission installation ensuring delivery between the transmission grid and one or more delivery points, and aimed exclusively or primarily at supplying a customer or a distribution network. Connections are components of the network.
Certified Emission Reduction (CER)	Certificate issued to industries that have invested in developing countries to reduce greenhouse gas emissions there. CERs cannot be directly traded, but may be used in place of CO <sub>2</sub> quotas, with one CER equal to one quota.
Chartering	A contract whereby a ship owner (the owner) commits to make a vessel available to a third-party (the charterer) in exchange for the payment of a sum (the freight charge). Several kinds of charters exist: <ul style="list-style-type: none"> <li>• demise charter: the vessel is delivered without any crew, fuel, or provisions;</li> <li>• voyage charter: the owner commits to transfer a cargo from one port to another at an agreed price;</li> <li>• time charter: the owner provides the charterer with the vessel for a specific time period (up to 20 years) together with crew, in return for a monthly fee based on tonnage.</li> </ul>
Cogeneration	A technique that uses a single fuel, which may be natural gas, to simultaneously produce thermal energy (steam or overheated water or a mixture of air and combustion products) and electricity.
Combined cycle plant	A power plant comprising a gas turbine generator whose exhaust gases power a steam boiler. The steam produced in the boiler drives a turbo-generator.
<i>Commission de Régulation de l'Électricité et du Gaz – CREG (Belgium)</i>	The Belgian Gas and Electricity Regulation Commission is an independent body that advises public authorities on the organization and operation of the deregulated electricity and gas markets. CREG also monitors and supervises the enforcement of related laws and regulations.  A General Council, composed of federal and regional government representatives, representatives of labor organizations, employers and the middle classes, environmental associations and producers, distributors and consumers, supervises this body's operations.
<i>Commission de Régulation de l'Énergie – (French energy regulator)</i>	The French Energy Regulation Commission is an independent administrative authority. It was created by the Act of February 10, 2000 to regulate electricity and its scope was extended to include the gas sector with the Act of January 3, 2003. Its main mission is to ensure the effective, transparent and non-discriminatory implementation of access to electricity and gas infrastructures.  More generally, its role is to ensure that the gas and electricity markets operate properly.
Compression station	Industrial facility that compresses natural gas to optimize the flow of fluids in the pipes.
Connection structures	All the structures that connect a consumption site or distribution network to the transmission grid. Connection structures are made up of one or more distribution lines and one or more substations.
Cushion gas	Quantity of gas stored underground that cannot be fully retrieved after it has been injected.
Dark spread	Gross margin of a coal plant, equal to the difference between the sale price of electricity and the purchase price of the fuel needed to produce it. The “dark spread” must cover the aggregate of other costs (including operation, maintenance, cost of capital and financial charges).
Desalination	A process used to reduce the salt concentration of sea water in order to make it fit for human or animal consumption as well as for other uses, especially industrial uses.
Developed proven reserves	Proven reserves that can be produced from existing facilities.
Distribution	Distribution networks are groups of physical structures consisting mainly of medium or low-pressure pipes. They route natural gas to consumers who are not directly connected to the main network or to a regional transmission network.



## Appendix A - Lexicon

### Glossary

EBITDA at Risk	<p>EBITDA at Risk measures the potential loss of EBITDA, at a given probability, under the impact of various prices and volatilities over a given time horizon. This indicator is especially well-suited for measuring market risks for portfolio management activities.</p> <p>If the time horizon provided is one calendar year, and the confidence interval is 95%, an EBITDA at Risk of €100 million indicates that there is a 5% probability of losing more than €100 million in EBITDA between January 1 and December 31 due to fluctuations in commodities prices.</p>
Eco Management and Audit Scheme (EMAS)	Based on ISO 14001 certification and an environmental statement certified by European auditors accredited and published by the European Commission.
Electric and Gas Industries (EGI)	All the companies that produce, transmit or distribute electricity or gas in France and which meet the requirements of the Nationalization Act of April 8, 1946. The EGI sector includes all companies with employees that fall under the status of EGI employees
Energy trading	Trading of physical or financial contracts on the short-term energy markets (over-the-counter markets and stock exchanges).
Exploration	All methods put to use to discover new hydrocarbon deposits.
Facilities Management	All the outsourced service and utility management services that accompany the supply of energy to an industrial client. These services concern the management of the client's environment. They include guard services, waste and hygiene, operation and maintenance of technical equipment, project management for construction work, management of safety equipment and telephone and reception services.
Gas Exchange Point	Virtual hub attached to a balancing area where a consignor can sell gas to another consignor.
Gas hub	Point of entry (connection point of a gas transmission network supplied from several sources. It enables operators to exchange gas physically between these sources and end users).
Gas pipeline	A pipeline that conveys fuel gas.
Green electricity	Certified electricity produced from renewable energy sources.
Greenhouse Gases (GHG)	Atmospheric gas that contributes to the retention of solar heat. Industries, automobiles, heating systems, livestock farming and other activities produce gases, some of which heighten the greenhouse effect. The greenhouse gas build-up produced by human activity is one of the causes of global warming and its impacts on the ecosystem.
Independent Power Producer (IPP)	<p>An electricity production company independent of public sector control.</p> <p>IPPs are classified exclusively on the basis of the projects developed outside the country of origin.</p>
Investment Services Provider (ISP)	Investment services provider approved by the Committee of European Bank Supervisors to transmit and process market orders.
ISO 14001	An international standard that verifies a company's organizational procedures and methods, as well as the effective implementation of environmental policy and objectives.
ISO 9001	<p>An international standard establishing quality criteria for work procedures.</p> <p>It applies to product design, control of the production and the manufacturing process and the quality control of the end product.</p>
ISO (International Standards Organization)	Organization that defines reference systems (industrial standards used as benchmarks).
Liquefied Natural Gas (LNG)	Natural gas put into the liquid phase by lowering its temperature to -162°C, which makes it possible to reduce its volume by a factor of 600.
Liquefied Petroleum Gas (LPG)	Light hydrocarbons that are gaseous under normal temperature and pressure conditions and maintained in a liquid state by raising the pressure or lowering the temperature.
LNG tanker	A ship that transports liquefied natural gas (LNG) cooled to -163°C in its holds.
LNG terminal	Industrial facility that receives, unloads, stores, regasifies LNG and sends natural gas in the gaseous state to the transmission grid. Harbor facility with additional facilities, intended to receive ships that transport liquefied natural gas (LNG).
Load-matching	Term referring to the discrepancy between the actual conditions of a customer's gas consumption and those corresponding to standard purchases over the year of their average daily consumption. Variations (daily, weekly or seasonal) in consumption are generally covered by underground storage, to which customers and their suppliers may have access, either directly (in countries where third-party access to the facilities – regulated or negotiated – is provided) or via a load-matching service (as in the US).
Main network	<p>All the high-pressure and large-diameter structures for transmitting natural gas that link the interconnection points with neighboring transmission grids, storage facilities and LNG terminals.</p> <p>These structures are connected to regional networks as well as certain industrial consumers and distribution networks.</p>
Marketer	Seller of energy to third parties (end customer, distributor, etc.).
Natural Gas for Vehicles (NGV)	Entirely composed of natural gas, NGV is primarily used in urban transportation and waste treatment vehicles.
Natural gas liquefaction	Transformation of natural gas from gaseous form to liquid form to be transported by ship and/or stored.



Proven reserves	Estimates of crude oil, natural and liquid gas quantities based on geological and technical data with the reasonable assurance that these quantities will be extracted in coming years from existing deposits. Extraction must meet economic criteria that take into account future price changes, the appreciation of hydrocarbons and exchange rates.
Public-Private Partnership (PPP)	The PPP is a contractual arrangement whereby the public sector authority assigns certain tasks to a private operator and specifies objectives. The public sector partner defines the service objectives for the private operator, while retaining ownership of the infrastructure and regulatory control. Local authorities are increasingly resorting to PPP agreements in managing their water services.
Pumping station	Power plant or facility that operates by moving water between reservoirs at different elevations. When electricity prices are low, typically overnight, electricity from the grid system is used to pump water into a raised reservoir and then at times of peak demand, when electricity prices are higher, the water is released back into the lower reservoir through a turbine.
Regional network	All the high-pressure and large-diameter structures that link the interconnection points with neighboring transmission grids, storage facilities and LNG terminals. Regional networks, distribution networks and certain industrial consumers are connected to them.
Regulated Asset Base (RAB)	The regulated asset base is the economic value, recognized by the regulator, of assets utilized by an operator of regulated infrastructures.
Rights in kind of licensors	The “Rights in kind of licensor” line item is an item specifically pertaining to companies that are utility operators. It offsets “fixed assets held under concession” on the balance sheet. Its valuation expresses the operator’s obligation at the end of the contract to assign to the licensor, at no cost, the fixed assets assigned to the licensed utilities, such that at the end of a given contract, the value of the “Rights in kind of licensor” is equal to the carrying amount of fixed assets that are to be returned to the licensor.
Spark spread	Gross margin of a natural gas plant, equal to the difference between the sale price of electricity and the purchase price of the fuel needed to produce it. The “spark spread” must cover all other costs (including operation, maintenance, cost of capital and financial costs).
Spot market	A market for the short-term purchase and sale of energy (for the day or up to three years).
Storage	Facility that allows natural gas to be stored in the summer when consumption is at its lowest and to take natural gas out of storage in winter when consumption is higher. Gas storage is an industrial facility, mainly underground, that enables natural gas suppliers to have a natural gas reserve.
Stress test	Test performed in order to assess resistance to a disaster scenario.
Take-or-Pay	Long-term contract where the producer guarantees the supply of gas to an operator and the operator guarantees payment, regardless of whether or not the operator takes delivery.
Thermal power plant	Facility in which the chemical energy contained in solid, liquid, or gaseous fossil fuel is transformed exclusively into electricity using boilers and steam turbines.
Third Party Access to the distribution network	The recognized right of each user (eligible customer, distributor, producer) to access a transmission or distribution network in return for payment for access rights.
Well head	All the connections, valves, pipes, manometers, thermometers, etc. installed at the production well top.
Tolling	Contract for the transformation of a fuel (e.g., natural gas) into electricity on behalf of a third party.
Total Shareholder Return (TSR)	Return of a share over a given period that includes dividends paid and capital gains realized.
Transmission	Transmission networks are groups of structures consisting of high-pressure pipes. They convey natural gas to industrial consumers who are directly connected and to distribution networks.
Transmission capacity	The highest permissible continuous load of the transmission equipment with respect to the stability of its operating parameters and voltage drop.
Treasury stock	Shares of the Company purchased by the latter, by virtue of authorization given by the General Shareholders’ Meeting. These shares do not have voting rights attached.



## Appendix A – Lexicon

### Glossary

Treasury stock (in subsidiaries)	Shares of a company owned by subsidiaries controlled by the Company. They do not carry voting rights.
Underground storage	Use of porous geological formations, natural or artificial cavities (saline or aquifer) to store liquid or gaseous hydrocarbons.
Undeveloped proven reserves	Proven reserves that require new wells to be drilled on virgin territory, or significant extra investment in existing facilities, such as a compression unit.
Value at Risk (VaR)	<p>Value-at-Risk is a global indicator that measures the portfolio's exposure to risks of price fluctuations and market volatility. It indicates maximum potential loss that should only be exceeded with a given probability over a given time horizon. This indicator is especially well-suited for measuring market risks for trading activities.</p> <p>For example, for a one-day time horizon and 99% confidence interval, a VaR of €5 million indicates that there is a 1% probability of losing more than €5 million a day, i.e., two to three times a year.</p>
Virtual Power Plant (VPP)	Virtual production capacity. This is a system that makes a production capacity band available to a third party, in exchange for remuneration, without the third party owning a share in an asset or being the asset operator.
Working volume	Gas available in underground storage and capable of being tapped.



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## Appendix B – Comparison Tables

Comparison table with Regulation (EC) 809/2004

# Comparison table with Regulation (EC) 809/2004

This Registration Document includes all the items required by Appendix 1 of Regulation (EC) 809/2004, as presented in the table below:

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## Appendix B – Comparison Tables

Comparison table with Regulation (EC) 809/2004

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<b>Information required under Appendix 1 of Regulation (EC) 809/2004</b>	<b>Section of the Registration Document</b>	<b>Page</b>
24. Documents accessible to the public	7.3 Documents accessible to the public	381
25. Information on holdings	6.2 Consolidated financial statements – Note 3 (Investments in entities accounted for using the equity method)	228

## Corporate, environmental and social information

This Registration Document includes all items required under Article R.225-105-1 of the French Commercial Code, as presented in the following table:

<b>Items required</b>	<b>Section of the Registration Document</b>	<b>Page</b>	
<b>Social Information</b>			
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	Recruitment and dismissals	3.2.1.1 Mobility for Development 3.2.7 Social data	60 67
		Compensation and changes in compensation	3.2 Social Information 3.2.4 Employee savings plans and employee shareholding 3.2.7 Social data 6.2 Consolidated financial statements – Note 25
	Work organization	Work time organization	3.2.7 Social data 67
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Social relations	The organization of social dialog, including procedures for informing and consulting staff, and negotiating therewith.	3.2.3 Social commitment: Building a company committed to corporate citizenship, diversity and solidarity 62	
	Summary of collective bargaining agreements	3.2.3 Social commitment: Building a company committed to corporate citizenship, diversity and solidarity 62	
Health and safety	Occupational health and safety conditions	3.2.6 Health and safety policy 65	
	Summary of collective bargaining agreements with trade unions or staff representatives on matters of occupational health and safety	3.2.6 Health and safety policy 65	
	Occupational accidents, including their frequency and severity, and occupational illnesses	3.2.7 Social data 67	
Training	Policies implemented for training	3.2.1.3 Developing employee skills and employability through training 60	
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Corporate, environmental and social information

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	Elimination of discrimination in matters of employment and occupation	3.2.5.2 Group collective bargaining agreements 3.1 Ethics and compliance	65 58
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	Effective abolition of child labor	3.2.5.2 Group collective bargaining agreements 3.1 Ethics and compliance	65 58
<b>Environmental information</b>			
General environmental policy	The organization of the Company to take into account environmental issues and, where appropriate, environmental evaluation or certification procedures	3.3.2 The environmental management system	82
	Training and information for employees on environmental protection	Apart from training in the use of technical tools in the field, the environment is not the subject of specific training but is rather integrated into other training courses such as those in the health and safety area.	
	Resources allocated to the prevention of environmental risks and pollution	3.3.4.9 Active prevention of environmental risks	89
	Amount of provisions and guarantees for environmental risks, provided that such information is not likely to cause serious prejudice to the Company in an ongoing dispute	6.2 Consolidated financial statements – Note 18 (Provisions)	301
		3.3.4.4 Nuclear energy	89
3.3.4.9 Active prevention of environmental risks 3.3.4.11 Land use		90	
Pollution and waste management	Measures for the prevention, reduction or repair of discharges into air, water and soil seriously affecting the environment	3.3.4.6 Waste	88
	Consideration of noise and all other forms of pollution specific to an activity	3.3.4.10 Noise and odors	90
Circular economy	Waste prevention and management	3.3.4.6 Waste	88
	Measures for the prevention, recycling, reuse, other forms of recovery and disposal of waste	3.3.4.1 Climate change	84
		3.3.4.6 Waste	88
	Actions against food waste	3.3.4.6 Waste	88
	Sustainable use of resources	3.3.4.5 Water	87
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	Energy consumption, measures taken to improve energy efficiency and the use of renewable energy	3.3.4.2 Renewable energy 3.3.4.3 Energy efficiency	86 86
	Land use	3.3.4.11 Land use	90
Climate change	Greenhouse gas emissions	3.3.4.1 Climate change	84
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Protection of biodiversity	Measures taken to conserve or enhance biodiversity	3.3.4.8 Management of biodiversity	89
<b>Corporate social commitments</b>			
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	The importance of subcontracting and consideration given to suppliers and subcontractors' social and environmental responsibility policies	3.4.4 Purchases, subcontracting and suppliers	92
	Actions taken to prevent corruption	3.1 Ethics and compliance	58
Fairness of commercial practices	Measures taken to promote the health and safety of consumers	3.1 Ethics and compliance	58
	Other actions taken as part of this Item 3 to promote human rights	3.1 Ethics and compliance	58



## Information relating to the management report

This Registration Document includes all items of the management report that are required under current laws and regulations.

The following table presents items from the ENGIE Management Report as at December 31, 2016:

<b>Legislative or regulatory reference</b>	<b>Items required</b>	<b>Section of the Registration Document</b>	<b>Page</b>
<b>I – Activity</b>			
L. 232-1-II of the French Commercial Code	Company's situation over the past fiscal year	6.1.1 Management report	182
		6.2 Consolidated financial statements	197
	Foreseeable developments and future outlook	6.1.1.2 Outlook	183
	Significant events, which have occurred between the date the fiscal year ended and the date on which the Management Report was drawn up	6.2 Consolidated financial statements – Note 28 (Subsequent events)	323
	Research and development activities	1.5 Innovation, research and development policy	37
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R. 225-102, para. 1 of the French Commercial Code	Activities of the Company and its subsidiaries over the past fiscal year	1.1.1. General presentation	6
		1.1.3. Organization	7
		1.2 Key figures	12
		1.1.4. Strategic priorities	9
		1.3 Description of the Group's activities	14
L. 233-6, para. 2 of the French Commercial Code	Activities and results of the Company and its subsidiaries by business line	6.1.1.3 Consolidated revenue and earnings trends	183
		6.1.1.4 Reportable segment business trends	185
L. 225-100, para. 3 (1 <sup>st</sup> sentence) and para. 5 of the French Commercial Code	Information relating to business trends, results and financial situation of the Company and the Group (particularly debt situation)	6.1.1 Management report	182
		6.1.2.1 Borrowing conditions and financial structure applicable to the issuer	196
L. 225-100-2, para. 1 of the French Commercial Code			
L. 225-100, para. 4 and 6 of the French Commercial Code	Description of the main risks and uncertainties and indications as to the use of financial instruments, for the Company and the Group	2 Risk factors	41
		6.2 Consolidated financial statements – Note 16 (Risks arising from financial instruments)	286
L. 225-100-2, para. 2 and 4 of the French Commercial Code			
L. 441-6-1 of the French Commercial Code	Information on terms of payment with suppliers	6.1.1.8 Parent company financial statements	195
D. 441-4 of the French Commercial Code			
<b>II – Financial information</b>			
L. 233-13 of the French Commercial Code	Breakdown of and changes in shareholding structure	5.2.2 Breakdown of share capital	179
		5.2.3 Disclosure thresholds	179
		5.2.4 Golden share	179
	Names of controlled companies with a stake in the Company's treasury stock and proportion of capital thereby held	N/A	
L. 233-6, para. 1 of the French Commercial Code	Significant equity stakes over the fiscal year in companies with their head office in France	6.2 Consolidated financial statements – Note 4 (Main changes in Group structure)	237
R. 225-102, para. 2 of the French Commercial Code	Table showing the Company's results for each of the last five fiscal years	6.4.4. Five-year financial summary of the Company	371
L. 225-211 of the French Commercial Code	Purchase and sale by the Company of its own shares	5.1.5 Stock repurchase	172
		6.2 Consolidated financial statements – Note 17 (Equity)	298
L. 225-102, para. 1	Employees' stake in share capital	5.2.2 Breakdown of share capital	179
L. 225-180 of the French Commercial Code		3.2.4 Employee savings plans and employee shareholding	64

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L. 225-102, para. 2 of the French Commercial Code	Equity acquired by employees in an employee buyout	N/A	
L. 225-100, para. 7 of the French Commercial Code	Table summarizing current authorizations granted by the Shareholders' Meeting for capital increases	5.1.3 Authorizations and their utilization related to share capital and share equivalents	167
R. 228-90 and R. 228-91 of the French Commercial Code	Any adjustments for share equivalents in the event of share buybacks or financial transactions	N/A	
<b>III – Legal and tax information</b>			
Article 243 (a) of the French Tax Code	Amount of dividends distributed for the previous three fiscal years	5.2.5. Dividend distribution policy	180
L. 464-2, I, para. 5 of the French Commercial Code	Injunctions or financial sanctions for anti-trust practices	6.2 Consolidated financial statements - Note 27 (Legal and anti-trust proceedings)	320
		2.3.3. Legal risks	50
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L. 225-100-3 of the French Commercial Code	Information potentially impacting a tender offer	3.2.4 Employee savings plans and employee shareholding	64
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R. 225-104 of the French Commercial Code	Social Information	3.2 Social Information	60
<b>IV – Information relating to corporate officers</b>			
L. 225-102-1, para. 1 and 3 of the French Commercial Code	List of all terms of office and functions carried out in any company by each corporate officer over the fiscal year	4.1.1.3 Information about Directors in office	103
L. 225-102-1, para. 4 of the French Commercial Code	Compensation and benefits of any kind paid to each corporate officer by the Company, the companies that it controls and its holding company over the fiscal year	4.6 Compensation and benefits paid to members of corporate governance bodies	133
		4.6.1 Compensation of executive corporate officers	133
L. 225-185, para. 4 of the French Commercial Code	In the event that stock options are awarded, details of information upon which the Board of Directors based their decision: <ul style="list-style-type: none"> <li>• either to prohibit Directors from exercising their options before leaving office; or</li> <li>• or to oblige them to hold all or part of the shares resulting from options already exercised until they leave office.</li> </ul>	4.6.5.1 Availability of performance shares and shares resulting from the exercise of stock options	154
L. 621-18-2 of the French Monetary and Financial Code Article 223-26 of the AMF General Regulations	Information on transactions by directors and related parties involving the Company's shares	4.6.10. Summary of transactions disclosed by executive management and corporate officers in fiscal 2016	163



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Information relating to the Annual Financial Report

Legislative or regulatory reference	Items required	Section of the Registration Document	Page
L. 225-197-1, II, para. 4 of the French Commercial Code	In the event that bonus shares are awarded, details of information upon which the Board of Directors based their decision: <ul style="list-style-type: none"> <li>• either to prohibit Directors from selling shares awarded to them free of charge before leaving office;</li> <li>• or to establish the quantity of such shares that they are obliged to hold until they leave office.</li> </ul>	4.6.5.1 Availability of performance shares and shares resulting from the exercise of stock options	154
<b>V - Environmental and HR information</b>			
L. 225-102-1, para. 5 and R. 225-105 of the French Commercial Code	Environmental information	2.4 Industrial risks 2.2.3 Impact of climate 3.3 Environmental information	52 47 81
L. 225-102-2 of the French Commercial Code	Specific information for companies operating at least one site classified as "high threshold" Seveso	2.4.1 Industrial facilities and Seveso sites 3.3 Environmental information	52 81
L. 225-102-1, para. 4 and R. 225-104 of the French Commercial Code	Social Information	3.2 Social Information	60

## Information relating to the Annual Financial Report

This Registration Document includes all items of the Annual Financial Report, as mentioned in Articles L. 451-1-2 of the French Monetary and Financial Code and as required by Article 222-3 of the AMF's general regulations.

The following table summarizes items in the Annual Financial Report:

Items required	Section of the Registration Document	Page
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Statutory Auditors' report on the consolidated financial statements	6.3 Statutory Auditors' report on the consolidated financial statements	325
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Report of the Chairman of the Board on the terms and conditions governing the preparation and organization of the work of the Board of Directors and the internal control procedures implemented by the Company	4.1 Report by the Chairman of the Board of Directors on corporate governance and internal control and risk management procedures	100
Statutory Auditors' report, prepared in compliance with Article L. 225-235 of the French Commercial Code, on the report prepared by the Chairman of the Board of Directors of ENGIE	4.3 Statutory Auditors' report, prepared in accordance with Article L. 225-235 of the French Commercial Code, on the report prepared by the Chairman of the Board of Directors of ENGIE	127

## Information relating to the report by the Chairman of the Board of Directors on corporate governance and internal control and risk management procedures

This Registration Document contains all the items of the Chairman's report on corporate governance and internal control and risk management procedures required by Article L. 225-37 of the French Commercial Code, as shown in the table below:

Items required	Section of the Registration Document	Page
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Conditions of preparation and organization of the Board's work	4.1.3 Board of Directors: Powers – Operating procedures – Activities	115
Internal control and risk management procedures	4.1.7 Internal control and risk management procedures implemented by the Company	121
Limits imposed by the Board of Directors on the powers of the Chief Executive Officer	4.1.3 Board of Directors: Powers – Operating procedures – Activities	115
Financial risks associated with climate change and measures taken to reduce them	2.2.3 Impact of climate	47
	3.3.4.1 Climate change	84
Provisions of the corporate governance code may be consulted	4.1.6 Corporate Governance Code	120
Specific procedures relating to shareholders' participation in the Shareholders' Meeting	4.1.8 Provisions in the bylaws regarding the participation of shareholders at Shareholders' Meetings	126
Principles and rules for determining the compensation of corporate officers	4.1.6 Corporate Governance Code	120
Publication of information pursuant to Article L. 225-100-3	3.2.4 Employee savings plans and employee shareholding	64
	4.1.1 Board of Directors: Composition – Terms of office – Information – Independence	100
	4.1.3 Board of Directors: Powers – Operating procedures – Activities	115
	4.6 Compensation and benefits paid to members of corporate governance and management bodies	133
	5.1.3 Authorizations and their utilization related to share capital and share equivalents	167
	5.2.2 Breakdown of share capital	179
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7.1 Specific statutory provisions and bylaws	376	



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Disclosures regarding the report prepared in accordance with Article L. 225-37-2 of the French Commercial Code

# Disclosures regarding the report prepared in accordance with Article L. 225-37-2 of the French Commercial Code

This Registration Document includes the items required under Article L.225-37-2 of the French Commercial Code regarding the principles and criteria for determining, breaking down and allocating total compensation and benefits of any kind due to executive corporate officers.

<b>Items required</b>	<b>Section of the Registration Document</b>	<b>Page</b>
L. 225-37-2 du Code de commerce	4.6.1.9 Board of Directors' report prepared pursuant to Article L.225-37-2 of the French Commercial Code, relating to the principles and criteria for determining, structuring and awarding the fixed, variable and non-recurring components of total compensation and benefits in kind attributable to the executive corporate officers commensurate with their office	149

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