

# Profile & Performance 2015

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Segment and entity accounting data corresponds to the contribution made to the Group’s consolidated accounts.

In this document, “EDF” refers to parent company Électricité de France SA; “EDF Group” or “the Group” refers to EDF and its subsidiaries and shareholdings.

The CO<sub>2</sub> emissions reported are direct emissions excluding the life cycle analysis of generating plant and fuel.

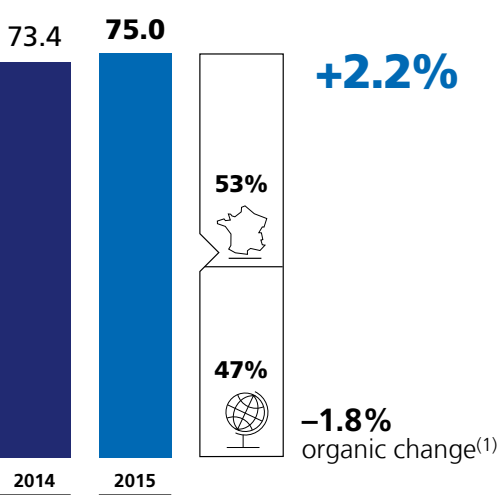
The assessment of EDF’s greenhouse gas emissions covers EDF’s direct and indirect emissions (scopes 1, 2 and 3 of the Greenhouse Gas Protocol Initiative).

# PROFILE & PERFORMANCE

## 2015

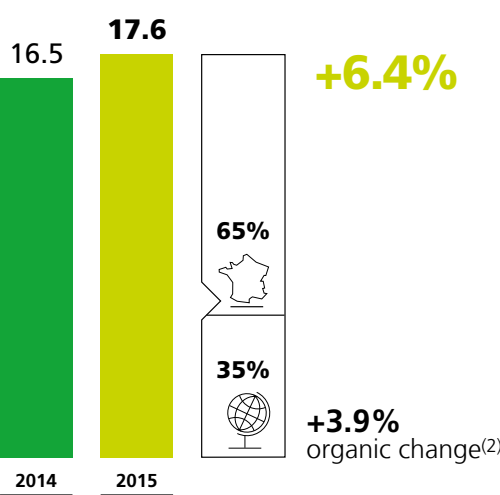
# Financial and non-financial KPIs

Sales in billions of euros



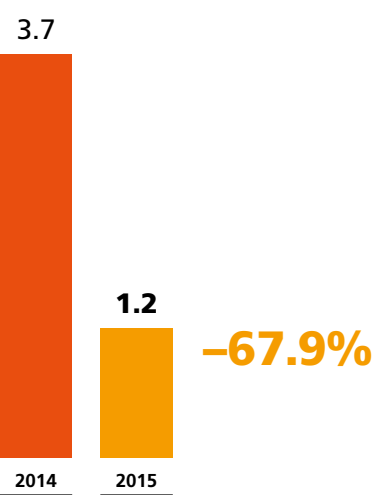
(1) Organic change at constant scope and exchange rates.

EBITDA<sup>(1)</sup> in billions of euros

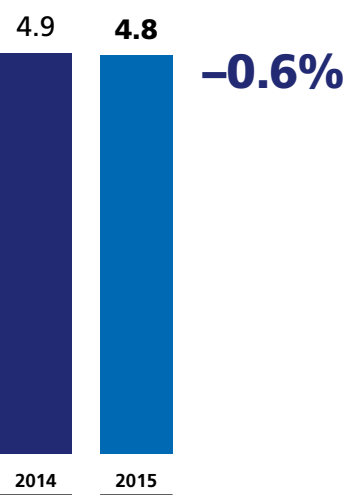


(1) EBITDA excluding the impact of the adjustment in regulated tariffs for the period from 23 July 2012 to 31 July 2013 following the decision of France's Council of State on 11 April 2014.  
(2) Organic change at constant scope and exchange rates. Excluding tariff catch-up in 2012.

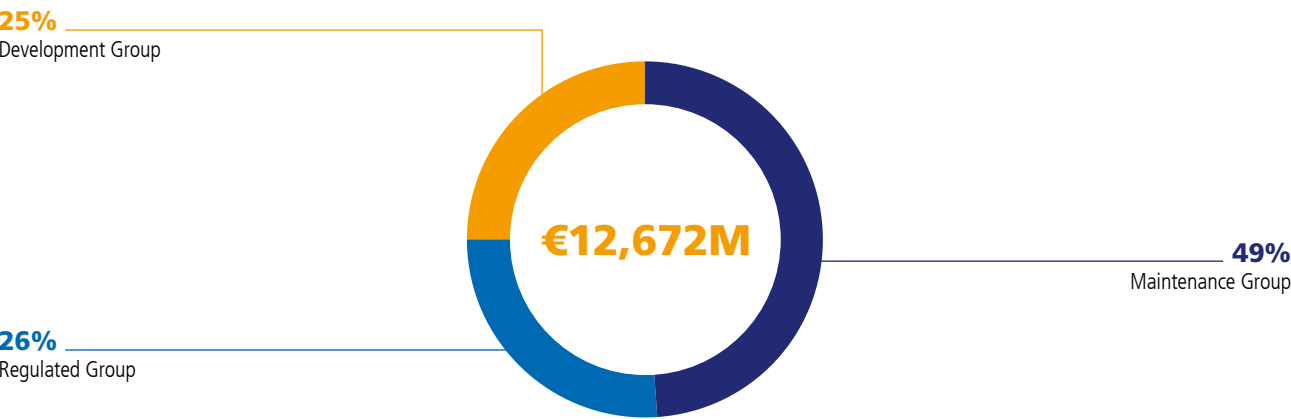
Net income (Group share) in billions of euros



Net income excluding non-recurring items in billions of euros



2015 net investments<sup>(1)</sup> in millions of euros



(1) Net investments including Linky and new developments net of disposals.

Net financial debt/EBITDA



Dividend in euros

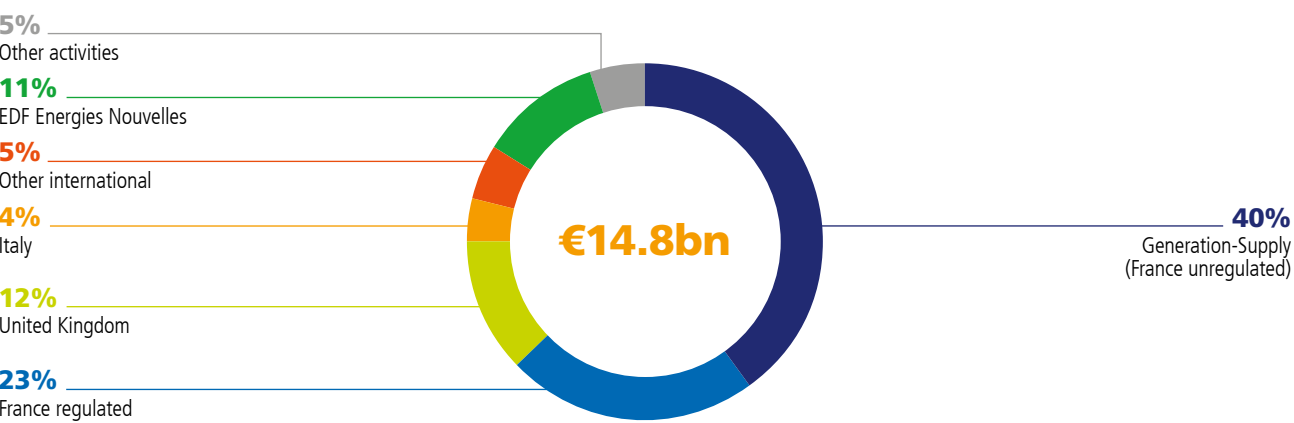


A dividend of €1.10 per share will be proposed to the Shareholders' Meeting to be held on 12 May 2016, representing a 56% payout ratio of net income excluding non-recurring items<sup>(1)</sup>. Subject to approval of the Shareholders' Meeting, each shareholder will be given the possibility of opting for payment of the final dividend in the form of new EDF shares.

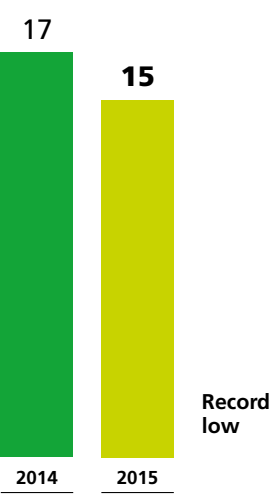
(1) Adjusted to take account of hybrid securities recognised in equity and the impact of Cigéo.

# Financial and non-financial KPIs

## 2015 gross operating investments<sup>(1)</sup>



## EDF<sup>(1)</sup> CO<sub>2</sub> emissions in g/kWh

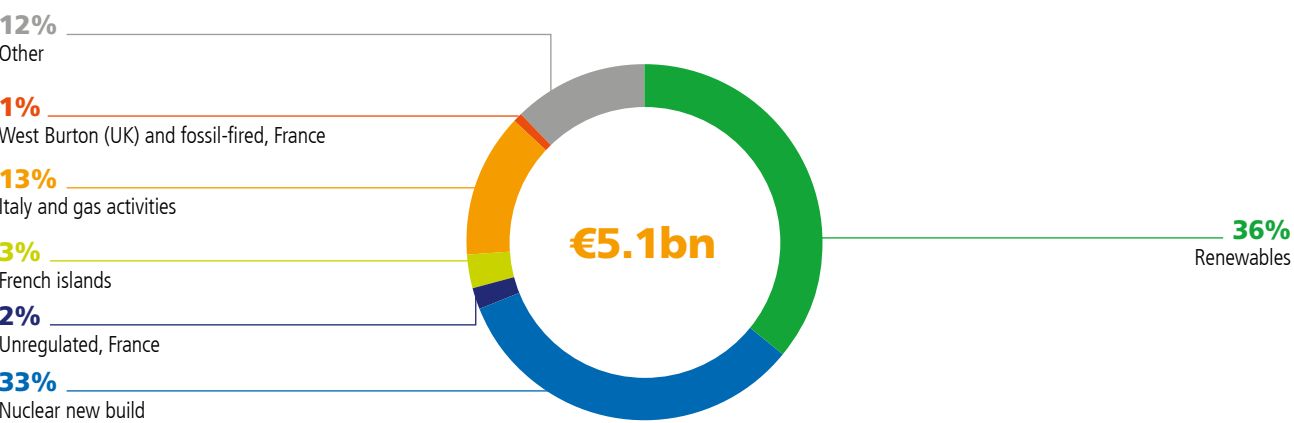


## EDF nuclear output in TWh



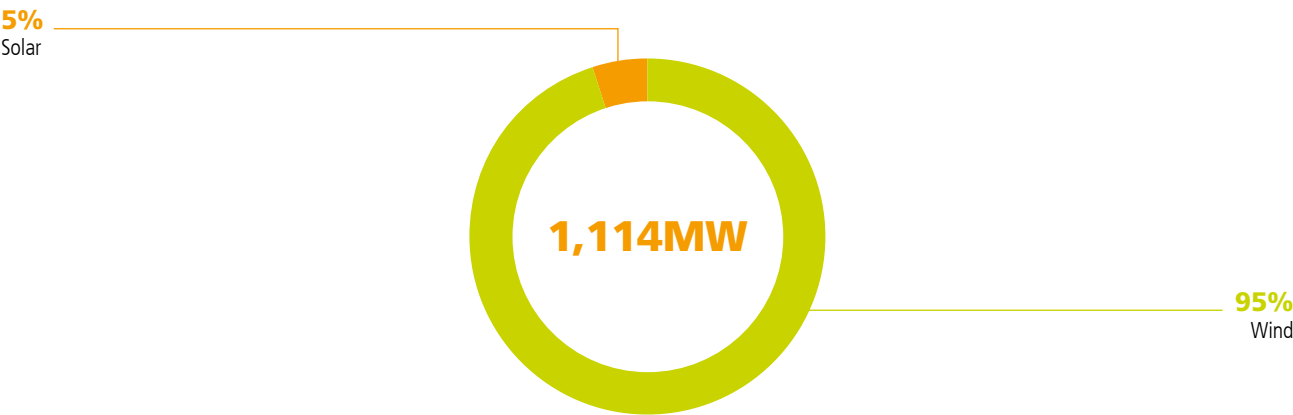
(1) For mainland France and island energy systems.

## Gross operating investments for development<sup>(1)</sup>



## Net renewable capacity commissioned in 2015

Developed by EDF Energies Nouvelles, EDF Luminus and EDF Energy

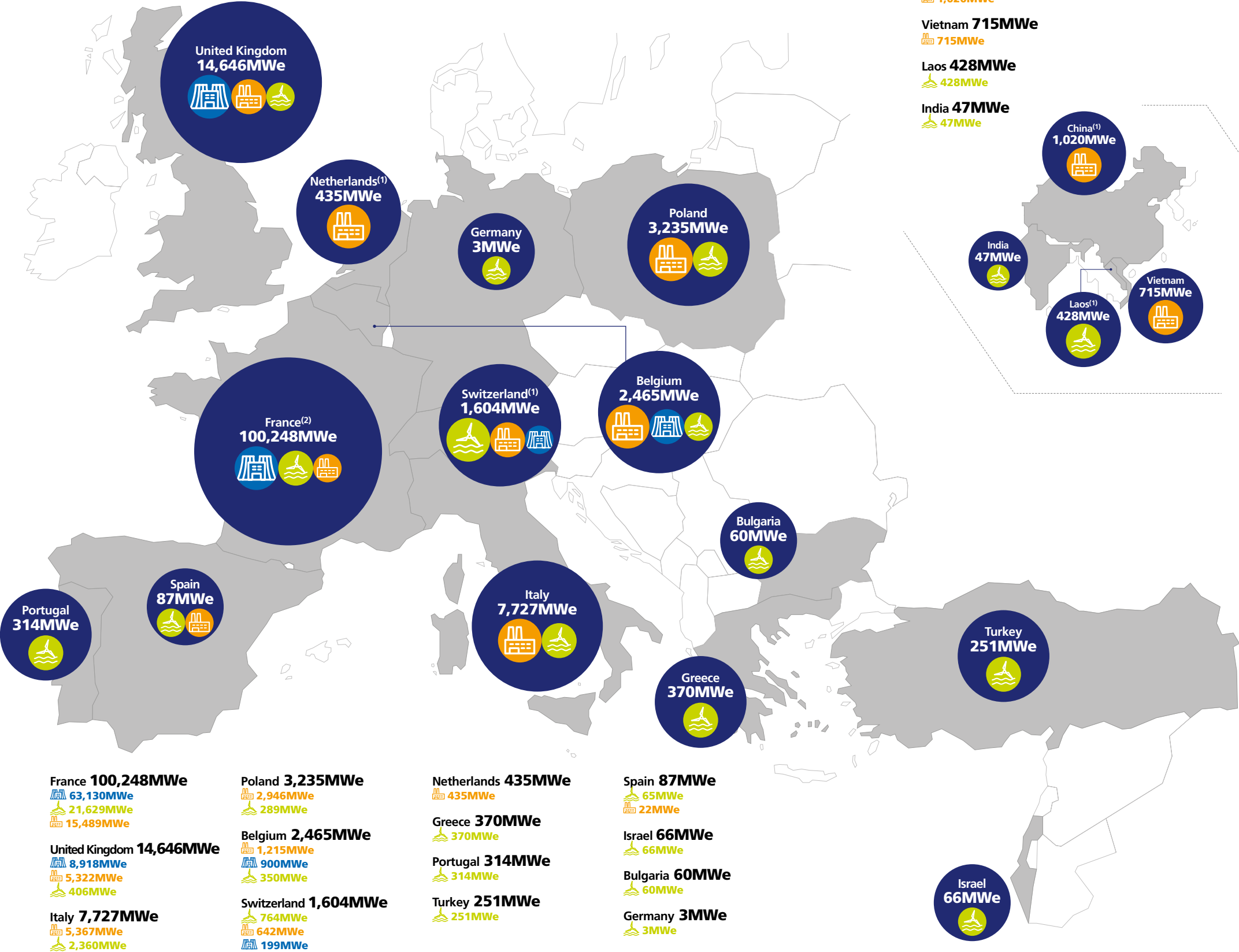


(1) Net investments including Linky and new developments.

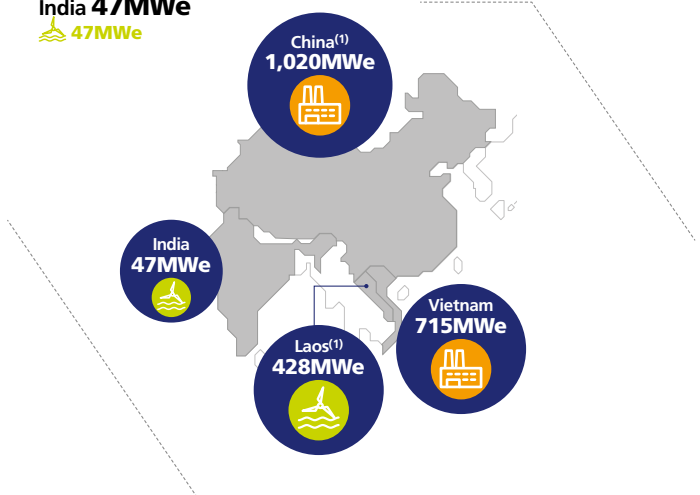
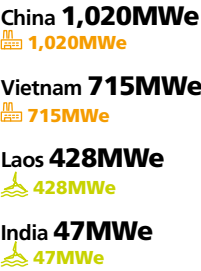
# EDF GROUP'S INSTALLED CAPACITY *IN 2015*

Fully consolidated companies except for companies accounted for by the equity method (SZPC, SanMenXIA, Sloe, Alpiq, NTPC, CNEG), based on the percentage stake.

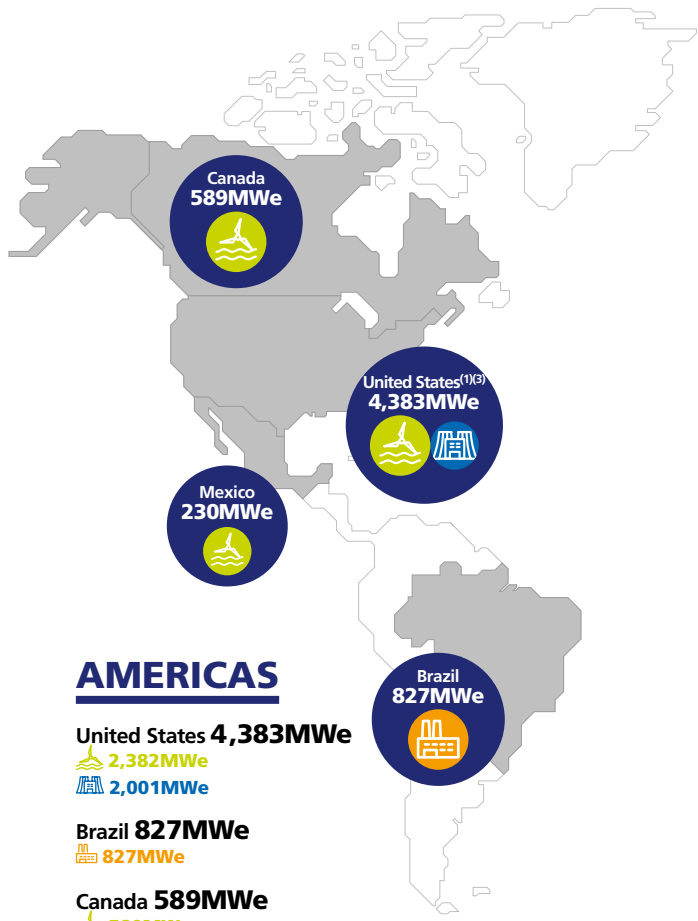
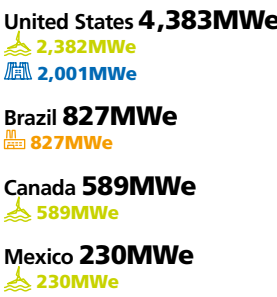
## EUROPE



## ASIA



## AMERICAS



## AFRICA



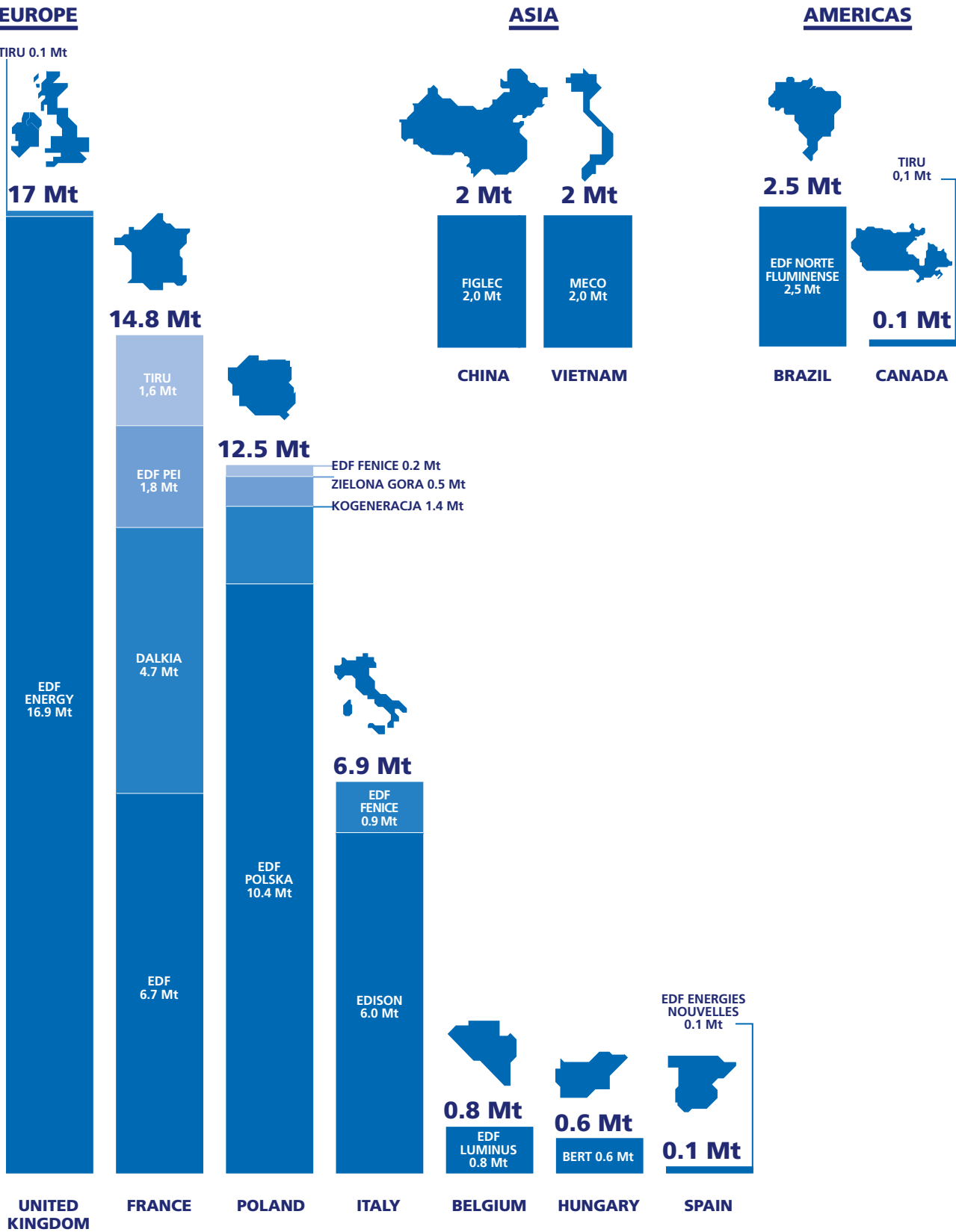
(1) Including one or more companies accounted for by the equity method.  
(2) Including small hydropower plants (Shema, Fhym, Cerga).  
(3) Including 20MW of energy storage (Renewables).



# CO<sub>2</sub> EMISSIONS *IN 2015*

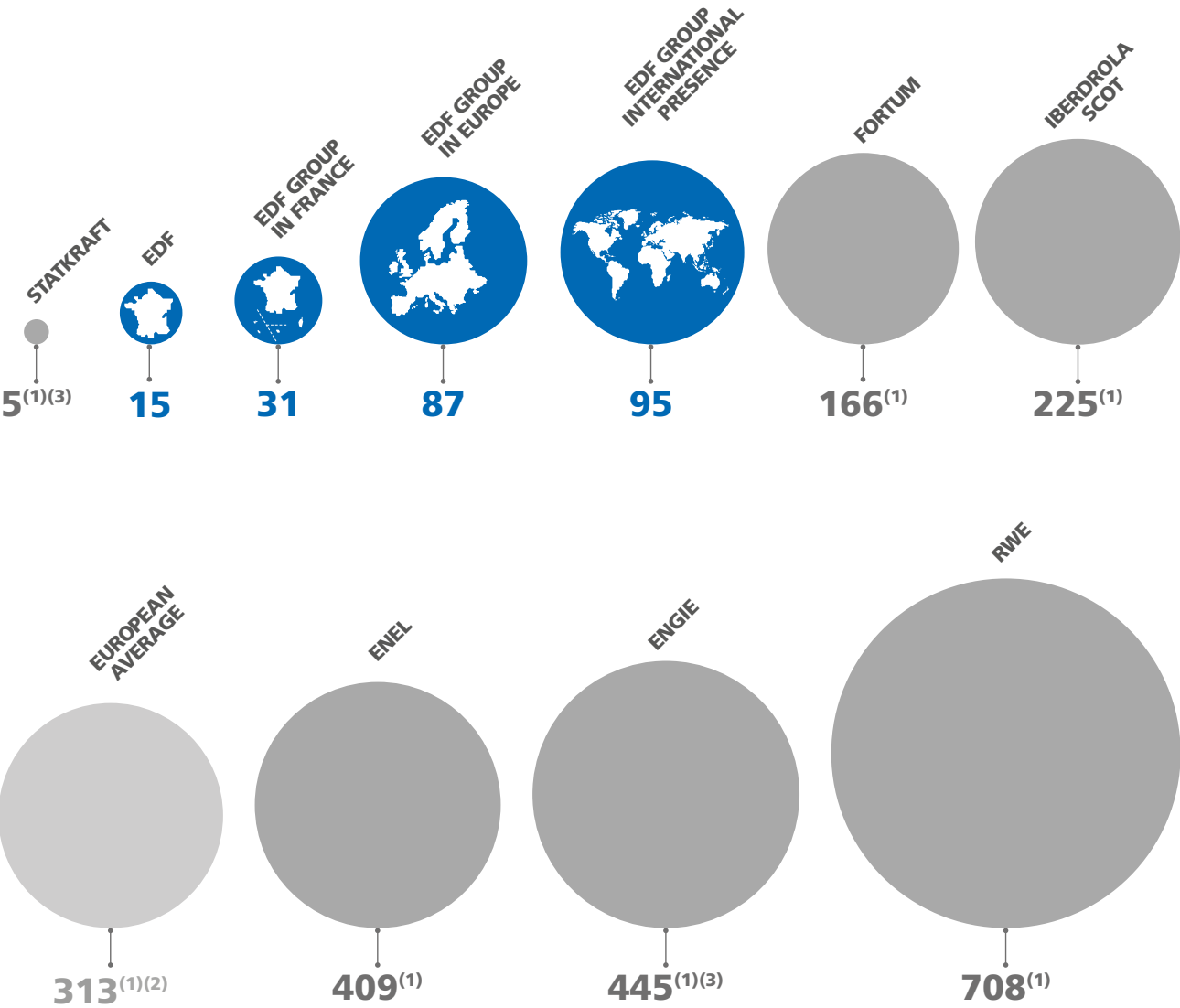
Fully consolidated companies. The following companies were excluded from the scope of this map due to their very low emissions (0.04 Mt): D  m  sz, EDF Fenice in Spain, EDF Trading's CCGT plant.

## DIRECT CO<sub>2</sub> EMISSIONS OF EDF GROUP COMPANIES (Mt)



## COMPARISON OF SPECIFIC CO<sub>2</sub> EMISSIONS OF EDF GROUP AND A PANEL OF ELECTRICITY UTILITIES (g/kWh)

**THE GROUP GOES UNDER THE 100g/kWh MARK**  
The reduction of EDF's emissions in France was confirmed. In 2015, EDF Group's CO<sub>2</sub> emissions passed under the 100g/kWh mark. This performance results from measures taken at all Group entities: reduced emissions at EDF Energy, exit of the Laibin coal-fired power plant in China from the Group's scope, and a drop in EDF's emissions in France from 17g/kWh to 15g/kWh, confirming its historic reduction in emissions in 2014. Total specific CO<sub>2</sub> emissions, including companies accounted for by the equity method, are slightly higher than the European level of 88g/kWh but lower than the global figure of 93g/kWh. Differences are not material and do not change performance.



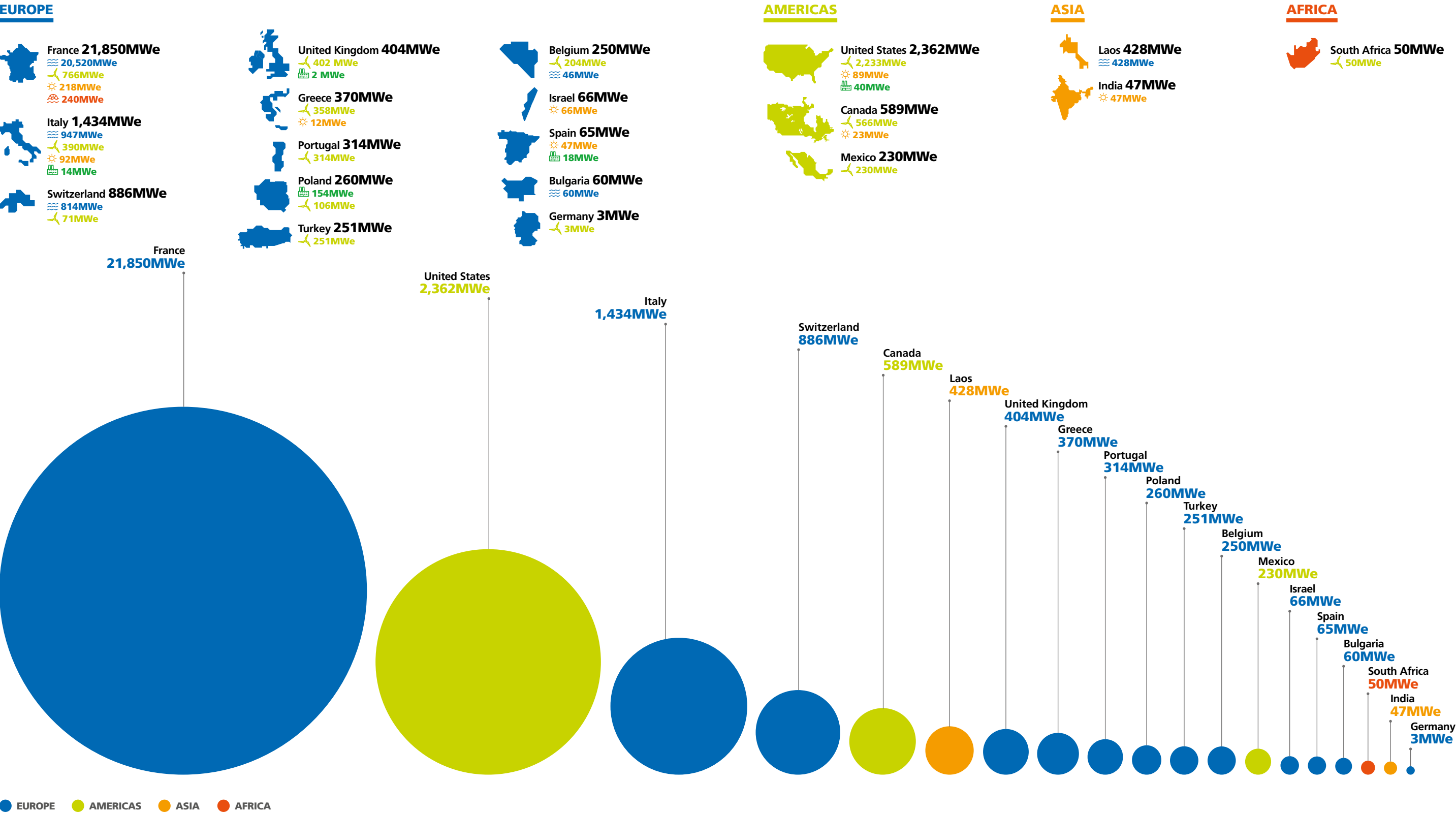
(1) CO<sub>2</sub> emissions per kWh of electricity or of electricity and heat, depending on the method.  
Sources: reference documents, annual reports, 2015 sustainability reports.  
(2) PWC report, Climate Change and Electricity, European Carbon Factor. Benchmarking of CO<sub>2</sub> emissions by Europe's largest electricity utilities (2014 data published in November 2015).  
(3) Specific greenhouse gas emissions in CO<sub>2</sub> equivalent (g CO<sub>2</sub>-eq/kWh).

# EDF GROUP'S NET RENEWABLE CAPACITY BY COUNTRY *IN 2015*

Proportionate consolidation method based on the percentage stake in Group companies (companies accounted for by the equity method, including Shema, Fhym and Cerga).



## BY CONTINENT AND BY COUNTRY









# EDF Group

€75 billion sales

€17.6 billion EBITDA

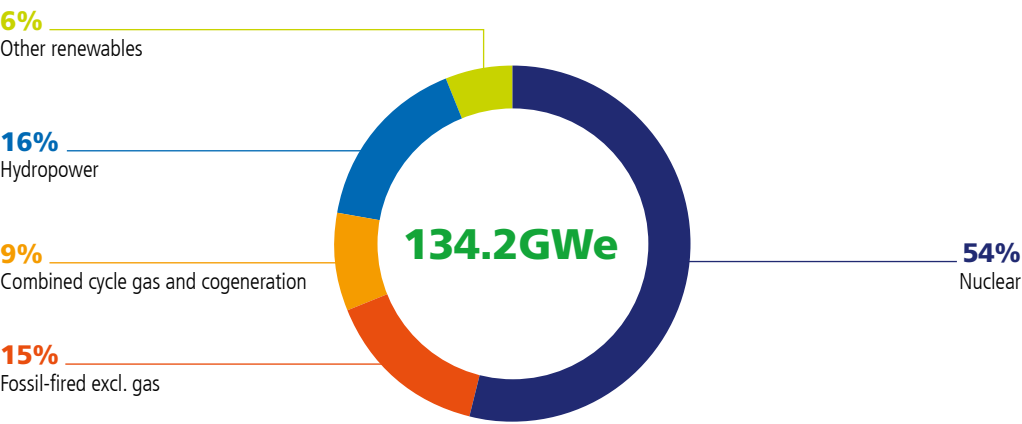
€12.7 billion<sup>(1)</sup> net investments

37.6 million customers

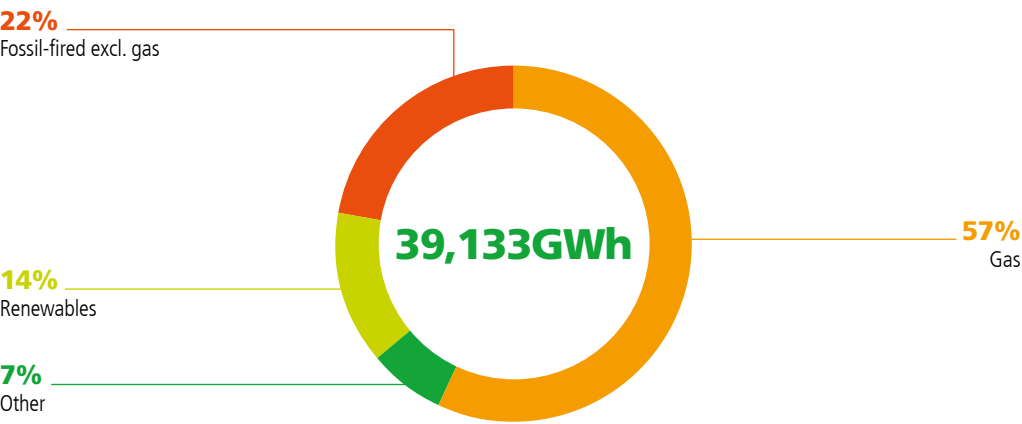
159,112 employees

87% carbon-free generation<sup>(2)</sup>

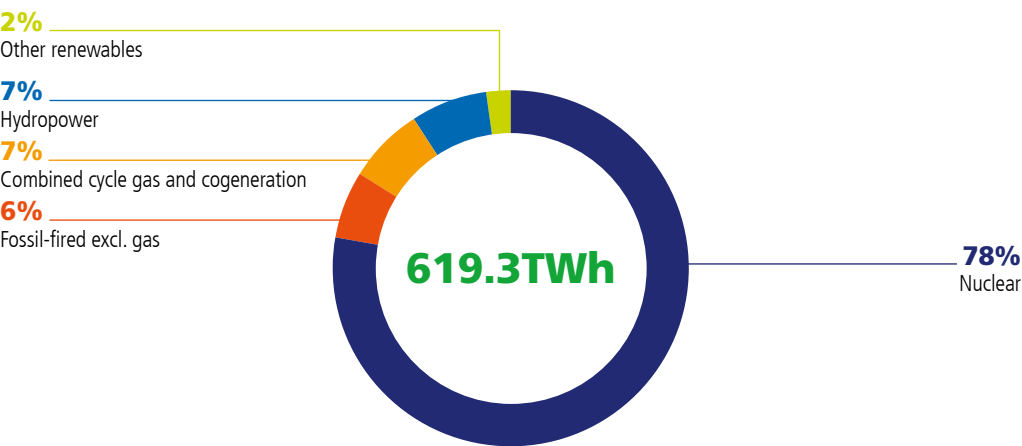
## Installed capacity



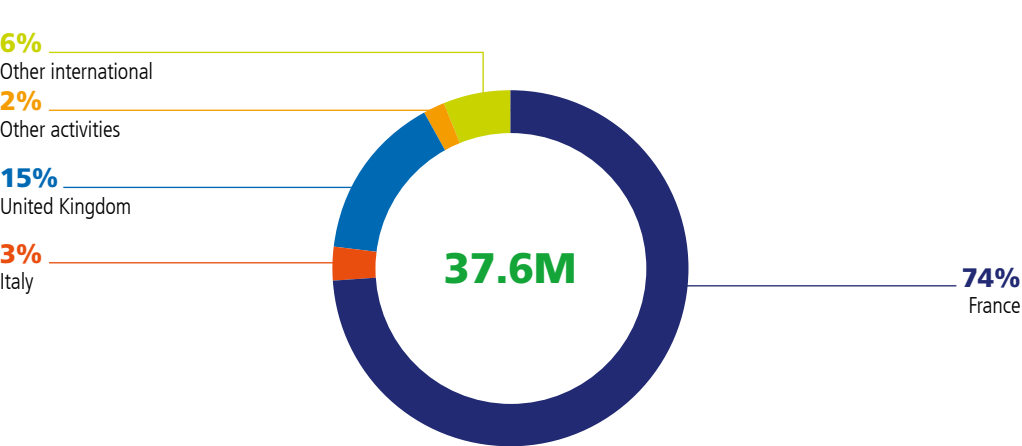
## Heat generation



## Electricity generation

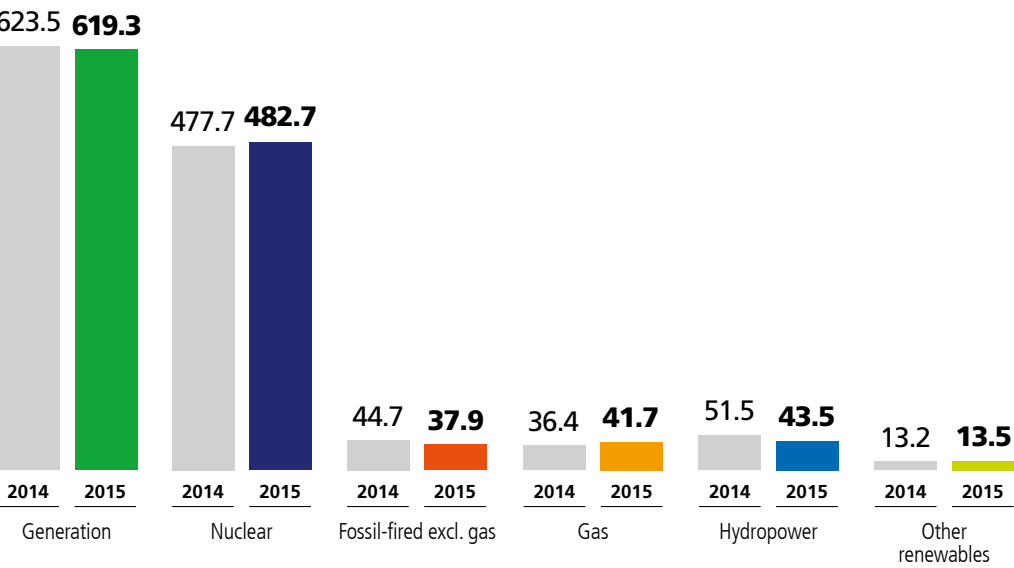


## EDF customers worldwide



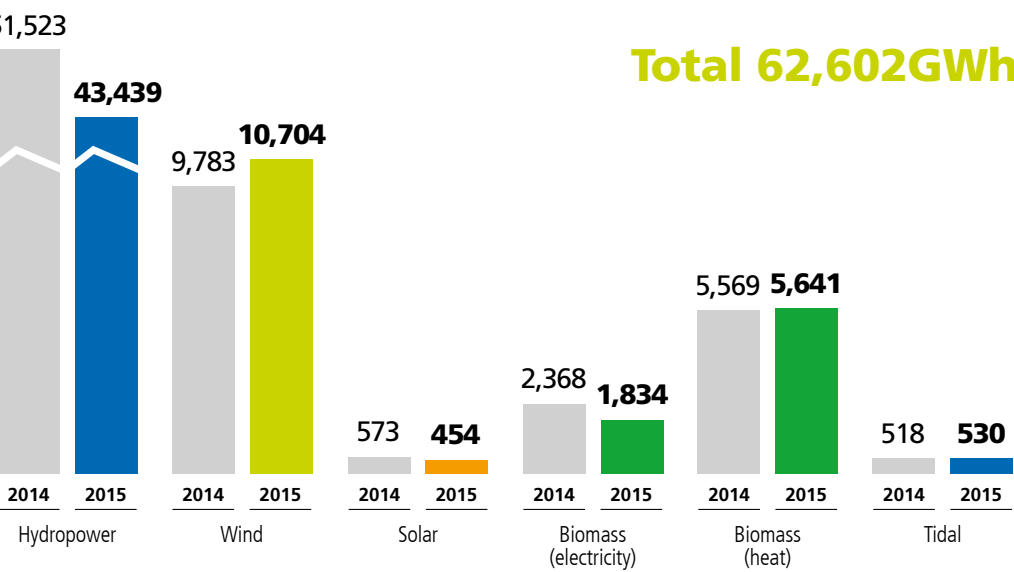
Consolidated data at 31 December 2015.  
(1) Net investments excluding Linky and excluding strategic operations.  
(2) Direct emissions, excluding the life cycle analysis of generating plant and fuel.

## EDF Group electricity generation in TWh



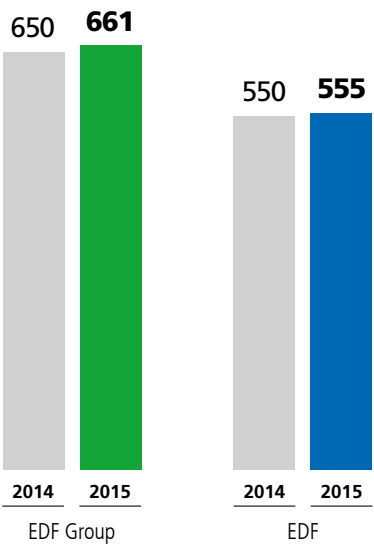
There was a slight reduction in electricity generation at Group level in 2015. The good availability of French and British nuclear plants led to a 1% increase in nuclear power output. This increase offset lower hydropower output (–16%) and a lower dispatch of fossil-fired plants (–15%).

## Generation by type of renewable energy in GWh

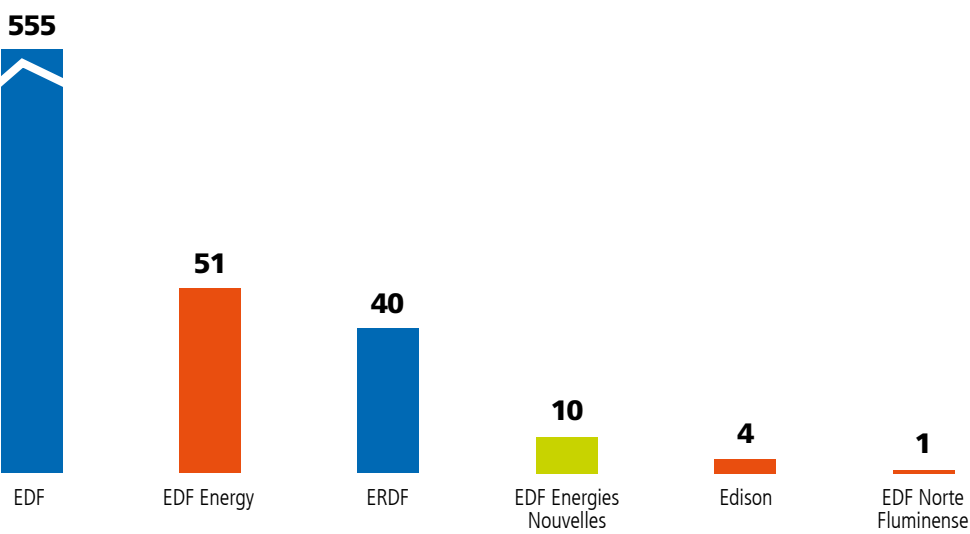


The decline in generation from renewables was due mainly to lower hydropower output (–8.1TWh) attributable to less favourable rainfall in France and Italy. The rise of almost 1TWh in wind farm generation was due to an increase in installed capacity (+1GW).

## Net research and development budget in millions of euros



## Breakdown of net research and development budget, EDF Group in millions of euros





FRANCE SEGMENT

# EDF

**€39.6 billion** sales  
+2.0% organic<sup>(1)</sup>  
**€11.5 billion** EBITDA stable<sup>(1)</sup>

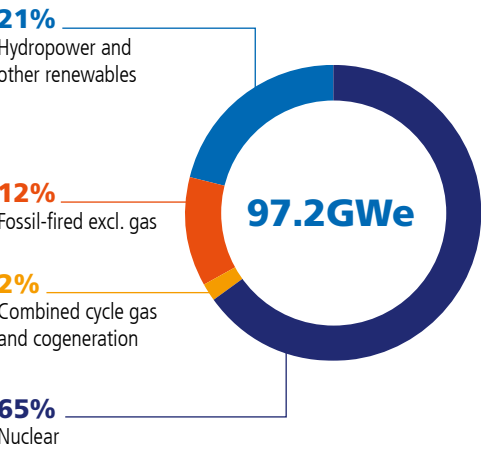
**27.8 million** customers  
**110,610** employees<sup>(2)</sup>

Generation and supply activities in France  
(Mainland France for generation activities )

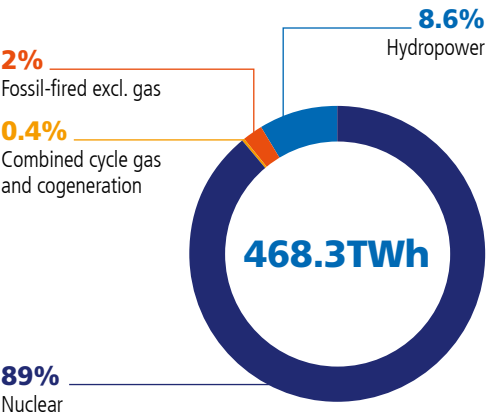
**€6.9 billion** EBITDA -4.4%<sup>(1)</sup>  
**€5.7 billion** net investments +2.0%

**98%** carbon-free generation

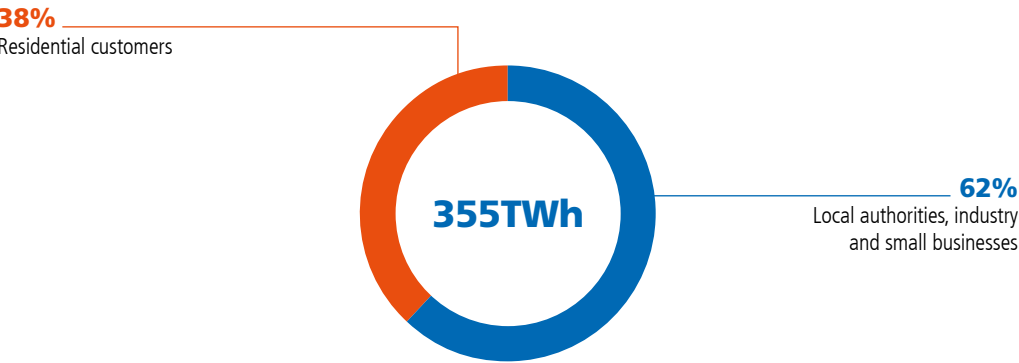
Installed capacity



EDF electricity generation



Sales to end-customers



Note: sales and EDITDA restated for the tariff catch-up for the period from 23 July 2012 to 31 July 2013 amounting to €731 million and on a constant scope basis, the portfolio of downstream gas activities having been transferred to the “Other activities” segment in 2014.

(1) Organic change at constant scope and exchange rates.  
(2) Total workforce (including employees under unlimited-term and fixed-term contracts).

Regulated activities in France

## ERDF\*

ELECTRICITY DISTRIBUTION  
(100% EDF)

ERDF's main objective is to operate and develop the public electricity distribution network, guaranteeing its security and safety, and overseeing the balance of electricity flows at all times. ERDF, a wholly owned EDF subsidiary in charge of the distribution business, has been operational since 1 January 2008.

**€3.8 billion** EBITDA +7.8%  
**€2.9 billion** net investment +6%  
**35.6 million** customers (supply points) in mainland France

\*In June 2016, ERDF became Enedis.

Equivalent outage time  
(excl. exceptional incidents)



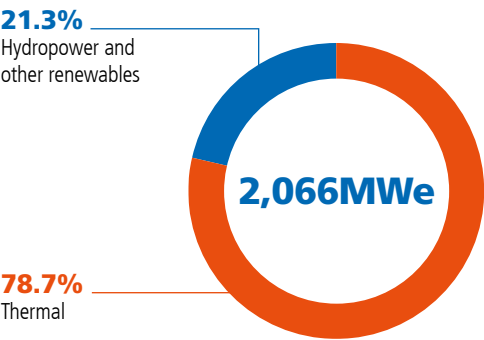
## Island energy system activities

ISLAND ENERGY SYSTEMS DIVISION  
PRODUCTION ÉLECTRIQUE INSULAIRE  
(ISLAND ELECTRICAL GENERATION) SUBSIDIARY

Island Energy Systems (SEI) cover the electrical systems operated by EDF that are not interconnected (or only marginally connected) to the mainland. EDF Production Énergétique Insulaire (PEI), a wholly owned subsidiary, is in charge of refurbishing thermal plants in Corsica, Reunion Island and the French West Indies.

**€747 million** EBITDA +5.1%  
**€430 million** net investments -1.8%  
**5.7TWh** generation<sup>(1)</sup>  
**21%** renewables in generation mix  
**1.1 million** customers

EDF fleet installed capacity  
(including SEI and PEI)



The 48MW reduction in installed thermal capacity in 2015 relative to 2014 is due to the commissioning of the final Pointe Jarry generators, offset by the total decommissioning of the Jarry Nord SEI generators and the decommissioning of combustion turbine 11 at Dégrad-des-Cannes (French Guiana).

(1) Data including EDF Production Électrique Insulaire (PEI), a wholly owned EDF Group subsidiary, in charge of refurbishing thermal plants in Corsica and France's overseas territories.

UNITED KINGDOM SEGMENT

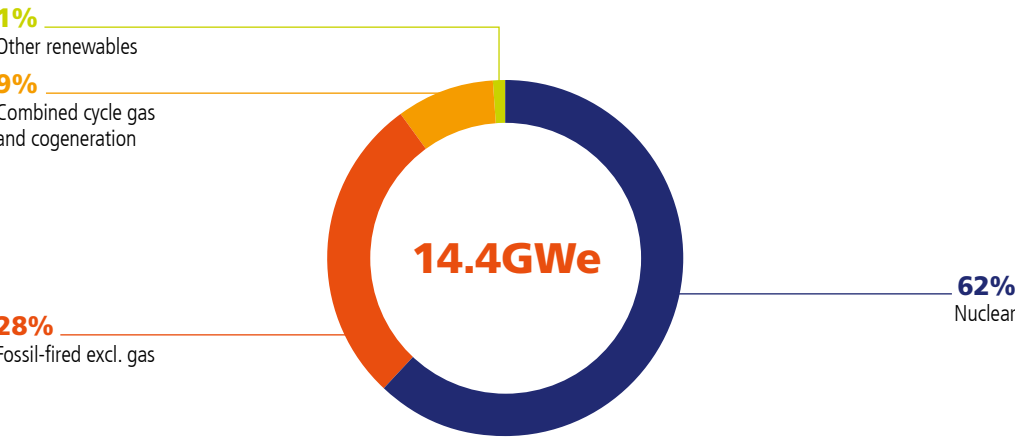
# EDF ENERGY

(100% EDF)

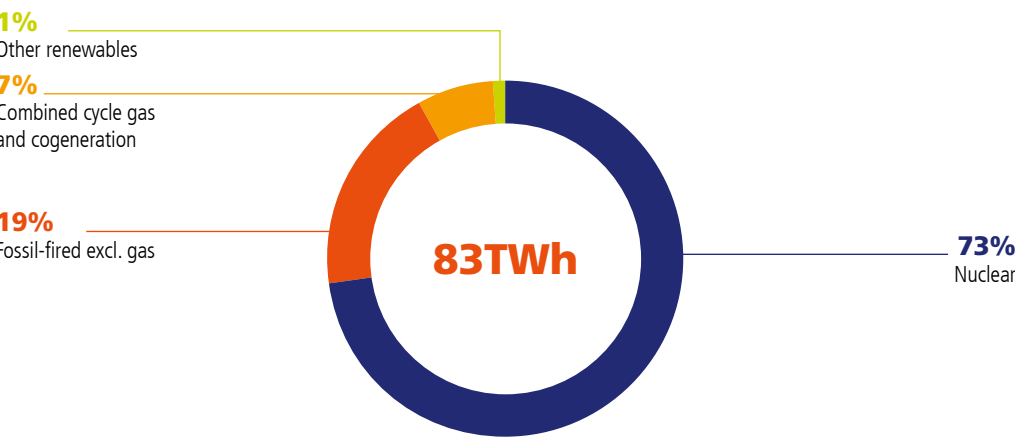
€11.6 billion sales  
–1.7% organic<sup>(1)</sup>  
€2.2 billion Group EBITDA  
+4.9% organic

5.3 million customers  
13,920 employees  
74% carbon-free generation

Installed capacity



Electricity generation



(1) Organic change at constant scope and exchange rates.

ITALY SEGMENT

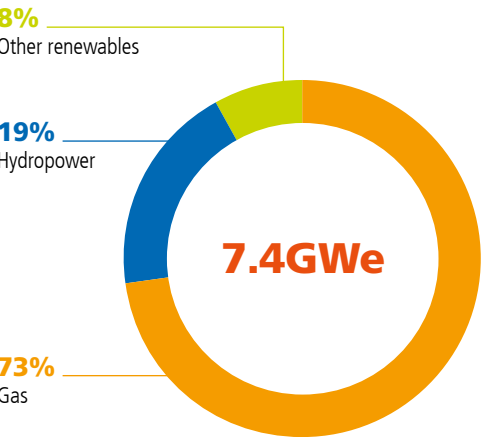
# EDISON – EDF FENICE

(97.40% EDF) (100% EDF)

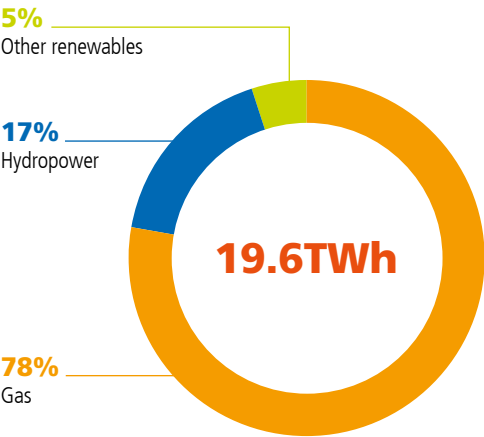
€11.7 billion sales  
–8.1% organic<sup>(1)</sup>  
€1.3 billion Group EBITDA  
+51.5% organic

1.1 million customers  
4,950 employees  
22.5% carbon-free generation

Installed capacity



Electricity generation



EDISON (EDF 97.40%)  
€11.3 billion sales  
€1.260 billion Group EBITDA  
Installed capacity 7.2GWe  
Generation 18.5TWh  
Employees 3,066

EDF FENICE (EDF 100%)  
€387 million sales  
€85 million EBITDA  
Installed capacity 0.2GWe  
Generation 1.1TWh  
Employees 1,884  
Operations in Italy, Spain, Poland and Russia.

(1) Organic change at constant scope and exchange rates.



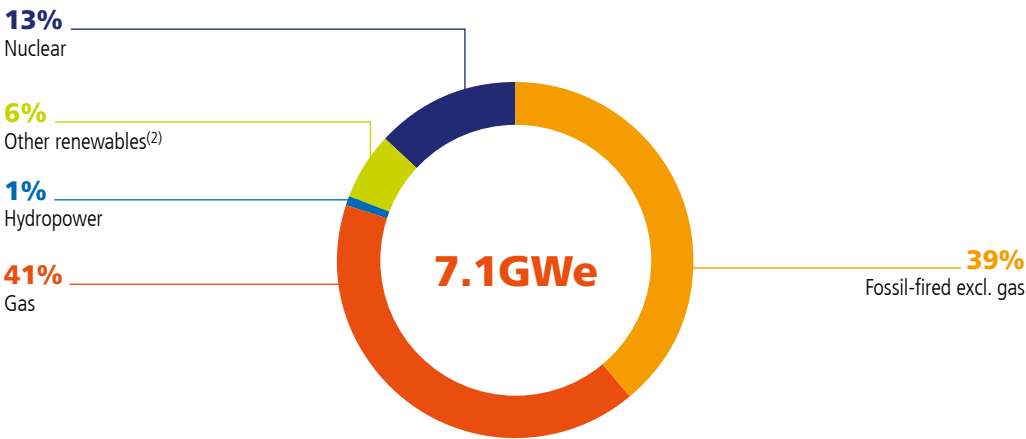
# Other International

SEGMENT

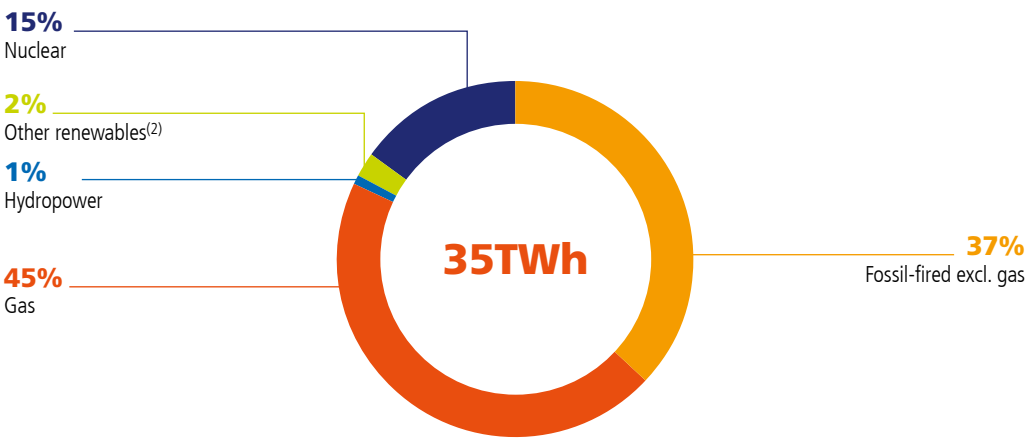
**€5.6 billion** sales  
–0.3% organic<sup>(1)</sup>  
**€0.6 billion** Group EBITDA  
contribution –3.5% organic<sup>(1)</sup>  
**18%** carbon-free generation

**2.5 million** customers  
**5,848** employees

## Installed capacity



## Electricity generation



These cover the activities of EDF International and other electricity and gas entities across continental Europe, the United States, Latin America and Asia.

(1) Organic change at constant scope and exchange rates.  
(2) Excluding EDF Energies Nouvelles data in "Other international".

## CONTINENTAL EUROPE

### POLAND

**EDF Polska (97.44%)**  
Installed capacity **2,568MWe**  
Generation **9.6TWh**  
Employees **2,241**

**Kogeneracja (49.55%)**  
Installed capacity **366MWe**  
Generation **0.97TWh**  
Employees **370**

**EDF Zielona Gora (48.75%)**  
Installed capacity **183MWe**  
Generation **1.2TWh**  
Employees **161**

### BELGIUM

**EDF Belgium (EDF 100%)**  
Through a nuclear cooperation agreement with Electrabel, EDF holds 50% of the Tihange 1 nuclear facility.  
Installed capacity **481MWe**  
Generation **3.7TWh**

**EDF Luminus (EDF 68.63%)**  
Installed capacity **1,954MWe**  
Generation **4.1TWh**  
Customers **1.84 million**  
Employees **1,583**

### THE NETHERLANDS

**SLOE Centrale BV (EDF 50%)**  
Accounted for by the equity method.  
Installed capacity **435MWe**

### HUNGARY

**EDF Démász (EDF 100%)**  
Distribution of **4TWh** to 740,000 customers, including 1,440GWh on the open market.  
Distribution of **4.3TWh** to 775,750 supply points.  
Employees **1,103**

### SWITZERLAND

**Alpiq (EDF 25%)**  
Via long-term swap contracts and stakes in the Châtelot, Émosson and Mauvoisin hydro facilities.  
Generation, networks, trading, sales and marketing, services in 20 European countries.  
Installed capacity **1,604MWe**  
**100.4TWh** sold in 2015

### SPAIN

**Elcogas (EDF 31.48%)**  
Operation of an innovative 320MWe gross capacity "clean coal" plant fuelled in integrated gasification combined cycle (IGCC) mode.

# Other International

SEGMENT

## AMERICAS

### UNITED STATES

**Constellation Energy Nuclear Group (EDF 49.99%)**

Accounted for by the equity method.

Five nuclear reactors on three sites.

Installed capacity **4,003MWe**

Generation **33.4TWh**

### BRAZIL

**EDF Norte Fluminense (EDF 100%)**

Installed capacity **827MWe**

Generation **6.5TWh**

Employees **103**

**Companhia Energética Sinop (CES) (EDF 51%)**

Development of a **400MW** hydroelectric project.

## ASIA

### CHINA

**Fuzhou Power Generation Company (FPC) (EDF 49%)**

Accounted for by the equity method.

Construction and operation of an ultra-supercritical coal-fired power plant in Jiangxi Province. Two 1,000MW units have been commissioned: the first on 29 December 2015 and the second in spring 2016.

**Datang Sanmenxia Power Generation Company (35%)**

Accounted for by the equity method.

Installed capacity **2 x 600MW**

Operation and maintenance of a supercritical coal-fired power plant.

**Taishan Nuclear Power JV Company (30%)**

Construction of two **1,750MW** EPRs in Guangdong Province.

**Shandong Zhonghua Power Company (19.60%)**

Accounted for by the equity method.

Installed capacity **3,060MW**

### VIETNAM

**MECO (EDF 56.25%)**

Operation of the Phu My 2.2 CCGT under a 20-year BOT contract.

Installed capacity **715MWe**

Generation **5.1TWh**

Employees **78**

### LAOS

**Nam Theun 2 Power Company (EDF 40%)**

Accounted for by the equity method.

Installed capacity **1,070MWe**

# Other activities

SEGMENT

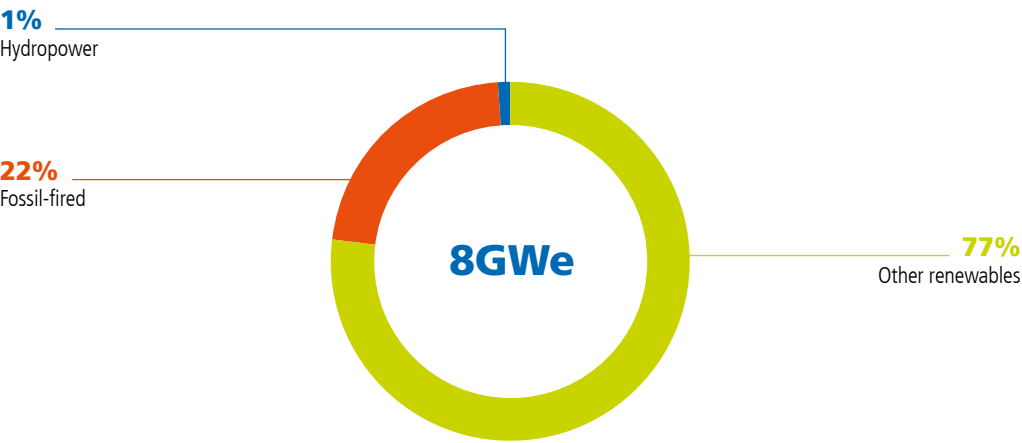
**€6.5 billion** sales  
+0.4% organic<sup>(1)</sup>

**€1.9 billion** Group EBITDA  
contribution +6,2%

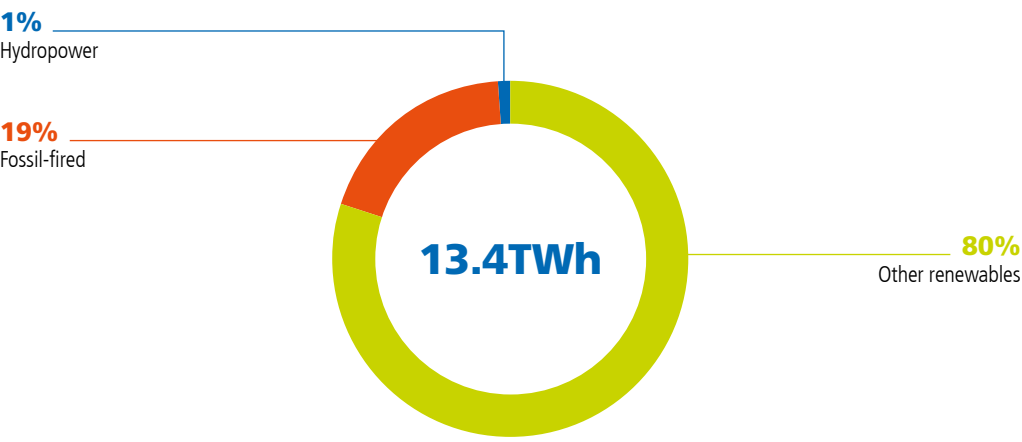
**81%** carbon-free generation

**0.6 million** customers  
**23,382** employees

## Installed capacity



## Electricity generation



The EDF Group has several subsidiaries specialising in the development of solutions based on renewables and services.

(1) Organic change at constant scope and exchange rates.



# Other activities

SEGMENT

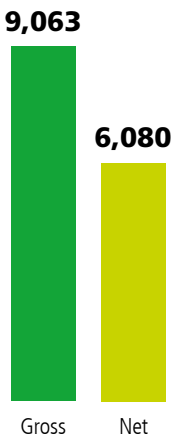
## EDF ENERGIES NOUVELLES

EDF Energies Nouvelles is a major player in electricity generation from renewables in its main areas of operation: North America, China, and western and southern Europe. The organic growth of EBITDA is attributable to an increase in generation, boosted by the strong growth of its installed capacity in 2015 (+1GW net compared with 2014).

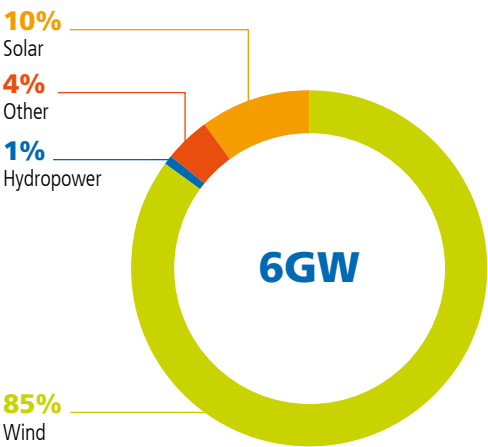
**€818 million** Group EBITDA contribution +10% organic<sup>(1)</sup>  
**6,080MWe** net installed capacity

**10TWh** net generation  
**3,029** employees

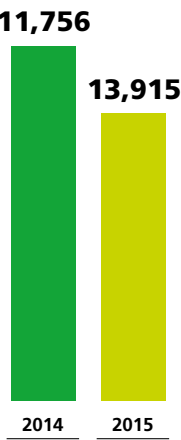
**Installed capacity** in MW  
At 31 December 2015



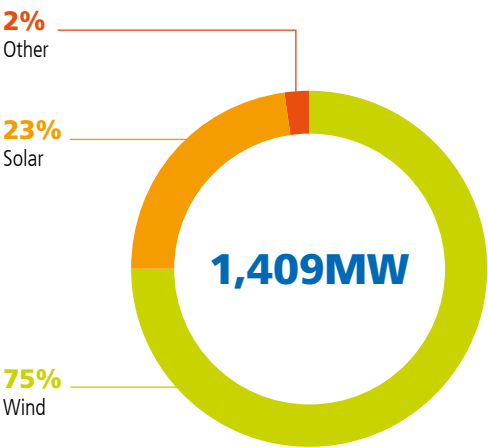
**Net installed capacity**



**Operation and maintenance capacity** in MW  
At 31 December 2015



**Gross capacity under construction**  
At 31 December 2015



(1) Organic change at constant scope and exchange rates.

## DALKIA (EDF 99.94%)

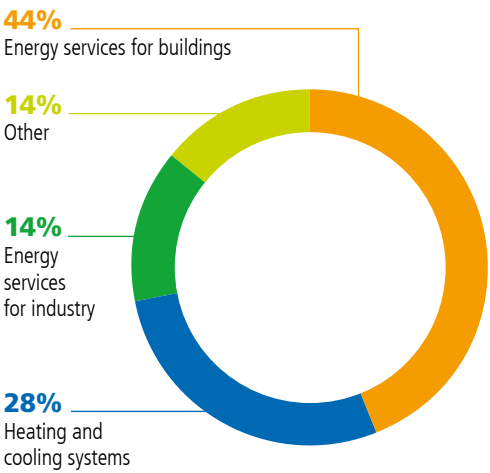
Dalkia's core business consists of optimising energy use. The company has gradually introduced a range of activities that improve the energy efficiency of regions and industrial customers: heating and cooling systems, thermal and multitechnical services for buildings and industrial

utilities, and installation and maintenance of generation equipment. Through its operations in the field of industrial utilities at 2,100 French manufacturing facilities, Dalkia manages 88,000 energy installations in France.

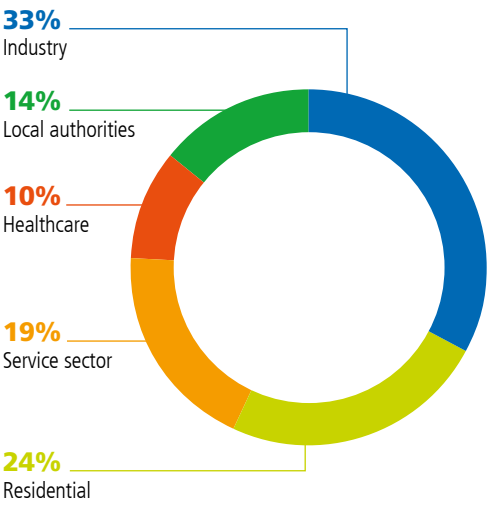
**€2.9 billion** sales -5.3%  
**€217 million** Group EBITDA contribution  
**1,851MWe** installed capacity  
**3.1TWh** generation  
**23.6GWth** installed capacity (heat)  
**21TWhth** heat generation

**33,700** customers (including 2,100 French manufacturing facilities)  
**12,954** employees

**Breakdown of sales by activity<sup>(1)</sup>**



**Breakdown of sales by customer type<sup>(1)</sup>**



(1) Dalkia Group data including subsidiaries Cesbron, CRAM, Optimal Solutions and Verdesis.

# Other activities

## SEGMENT

**TIRU** (EDF 51%)  
(Tiru's 2015 social data)

**€232 million** sales  
**105MWe** installed capacity  
(electricity)  
**0.23TWh**e generation  
(electricity)  
**0.8GWth** installed capacity  
(heat)  
**1TWth** generation (heat)

Tiru helped make a saving of 1.7 million barrels of oil, i.e. 727,000 tonnes of CO<sub>2</sub> emissions avoided. Tiru designs, builds and operates waste-to-energy and biomass facilities in France, the UK and

Sale of **2.63TWh** of electricity and steam, of which 50% green power  
**3 million** tonnes of waste recovered annually  
**1,096** employees

Canada (WtE plants; sorting, anaerobic digestion and composting facilities; solid recovered fuel production facilities; and materials recovery centres).

## ÉLECTRICITÉ DE STRASBOURG (EDF 88.64%)

**More than 14,000 km** of HV/LV network lines

The Électricité de Strasbourg Group is a regional multi-energy company that operates in three business lines: electricity distribution, sales and marketing of gas and electricity, and energy services. Its electricity distribution activities cover 409 municipalities and 80% of the population of France's Bas-Rhin region.

### Three other activities:

– **Energy services**  
Écotral is the ÉS Group's main provider of energy services.

**610,000** customers  
**1,132** employees

– **Deep geothermal energy**  
The ÉS Group is one of France's main players in deep geothermal energy. It holds a 40% interest in the ECOGI project.  
– **Biomass**  
Through its majority holding in ÉS Biomasse, the ÉS Group is financing, building and will operate a biomass cogeneration plant. From the end of 2016, the plant will generate 70GWh of electricity a year, together with 80GWh of heat that will supply one of Strasbourg's three main district heating systems.

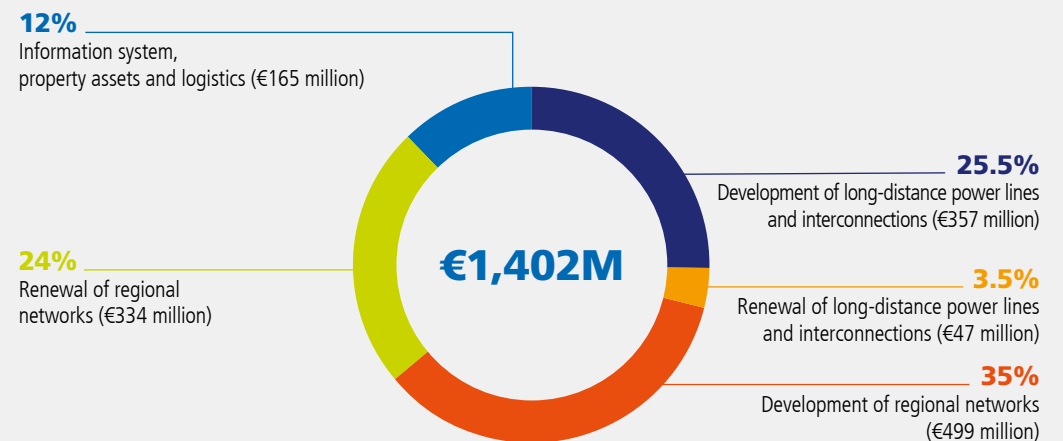
# RTE

ELECTRICITY TRANSMISSION (EDF 100%)  
Company accounted for by the equity method

**€4.6 billion** sales  
+3% organic  
**€1.9 billion** EBITDA +13%  
**€1.4 billion** investments

Equivalent outage time  
(excl. exceptional incidents)<sup>(1)</sup>  
**7 minutes 2 seconds**  
**More than 100,000 km**  
HV and VHV transmission lines  
**9,128** employees  
**2,710** electricity substations

## Breakdown of RTE investments in 2015



RTE has almost reached the end of its programme to reinforce its networks. Between now and completion of the programme in 2017, the company will have invested a total of €2.4 billion in network reinforcement, with average expenditure of around €160 million a year. The programme covers 45,000km of RTE's overhead line network. In 2015, equivalent outage time for RTE customers was 7 minutes 2 seconds. This result includes the impact of the heat wave from 30 June to 4 July 2015 that caused a great deal of damage to measuring transformers, leading to significant outage time for customers. These events, which on their own account for 5 minutes 44 seconds of the outage time, conceal the good results otherwise achieved.

(1) This result includes 5 minutes 44 seconds due to damage caused to measuring transformers by the heat wave from 30 June to 4 July.

# Main events

## NUCLEAR ENERGY

### On 29 January 2015, EDF announced new agreements signed with its long-term partners in China

As part of their strategic partnership, EDF and China General Nuclear Power Group (CGN) signed an agreement to share their experience of plant operation and engineering for existing nuclear fleets, with the aim of preserving the highest safety levels and maintaining

consistency between French and Chinese procedures and standards. EDF also signed an agreement with Huadian, a leading Chinese electric utility, paving the way for future cooperation on joint projects in China and other countries.

### On 3 September 2015, an optimised organisational structure and new timetable was announced for the Flamanville EPR project

Over several months, EDF and its partners conducted a comprehensive review of the Flamanville EPR project and its organisational structure with a view to improving industrial construction site management until commissioning has been completed. The new structure involves a complete review of the project organisation and working methods, centred around streamlined management reporting directly to Xavier Ursat, Group Senior Executive VP in charge of New Nuclear Projects and Engineering, and Jean-Bernard Lévy, EDF's

Chairman and CEO. Other features are the introduction of new bodies, to connect EDF with its partners, to provide close leadership, coordination and monitoring of the project; greater on-site accountability and stronger managerial presence as the construction phase comes to a close and test preparation gets under way; new contractual frameworks with key suppliers; and enhanced dialogue with the French Nuclear Safety Authority (ASN), particularly in respect of the new regulations on nuclear pressure equipment.

### On 21 October 2015, EDF and CGN signed a Strategic Investment Agreement involving their joint investment to build two reactors at Hinkley Point C

Conditions to allow the Hinkley Point C project to go ahead are in place. These are the signing of the Strategic Investment Agreement, all the agreements between EDF and the UK government being in a final agreed form, as are the contracts with the key suppliers. Under the Strategic Investment Agreement, EDF's share in Hinkley Point C will be 66.5% and CGN's will be 33.5%.

Without reducing this initial stake below 50%, EDF intends in due course to bring other investors into the project. EDF and CGN have also agreed the heads of terms of a wider UK partnership for the joint development of new nuclear power plants at Sizewell in Suffolk and Bradwell in Essex.

## RENEWABLE ENERGY

### GENERATION

#### Main EDF Energies Nouvelles sites commissioned

EDF Energies Nouvelles announced the commissioning of a number of projects. Its new wind farms are located in the United States (575MW), Canada (274MW), Poland

(58MW), South Africa (24.6MW) and France (44MW). EDF Energies Nouvelles has also acquired a 177MW wind farm project in Scotland.

#### On 25 February 2015, EDF Energies Nouvelles entered the Brazilian market

EDF Energies Nouvelles took its first steps into South America by setting up a local subsidiary in Brazil, EDF EN do Brasil. EDF Energies Nouvelles purchased a portfolio of wind energy development projects from Sowitec, one of the leading international renewable energy developers, with a total capacity of about

800MW. Located in one of the windiest areas of the state of Bahia, the portfolio includes an initial 70MW project due to be commissioned by year-end 2017, whose output will be sold under a 20-year Power Purchase Agreement (PPA) already signed with ANEEL.

#### On 26 November 2015, EDF Group reached a gigawatt of installed wind power in France

With the acquisition of two wind farms through its subsidiary EDF Energies Nouvelles, the Group reached the 1 gigawatt milestone for installed onshore wind power capacity in France. The wind farms, located in the departments of Meuse (Trois-Sources) and

Doubs (Lomont), have a total capacity of 44MW and have been in operation since 2007 and 2008. This confirms the Group's position as French number 2 in the sector, as well as its commitment to the country's energy transition.

### SUPPLY

#### On 20 October 2015, EDF Group initiated its contribution to the renewable energy ambition of the United States by signing a partnership with Procter & Gamble

EDF Renewable Energy entered into a partnership with Procter & Gamble to supply wind-powered electricity to all North American manufacturing sites for P&G laundry and household products, such as Febreze and Mr. Clean. This partnership serves

as a concrete demonstration of P&G for the "American Business Act on Climate Pledge", an initiative that brings together American businesses committed to taking action against climate change.



On 3 December 2015, EDF Energies Nouvelles signed an agreement to sell Google the electricity generated from a wind farm in the United States

EDF Energies Nouvelles announced that its North American subsidiary, EDF Renewable Energy, entered into a long-term Power Purchase Agreement (PPA) with Google Inc. The electricity will be produced by the 201MW

Great Western wind farm located in Oklahoma. The wind farm is expected to generate electricity for Google's data centre by December 2016.

On 3 December 2015, EDF launched two new offers for electricity guaranteed from renewable sources

EDF launched two new services to supply private individuals and small businesses with electricity based on the guarantee of origin<sup>(1)</sup> system, whereby the supplier injects into the electricity grid an amount of electricity generated by renewable energy sources

equivalent to the amount of electricity consumed by customers. These offers reflect EDF's commitment to energy transition and give customers the opportunity to take an active role.

On 10 December 2015, AXA chose EDF to supply electricity produced entirely from renewable sources

AXA took steps to support energy transition and fight climate change by choosing EDF's "renewable energy+" package. Over the next three years AXA will gradually switch the electricity consumption of all its sites in France, representing 45GWh per year, to renewable energy sources. With this package, AXA will

benefit from electricity generation from renewable sources equivalent to 100% of its consumption (45GWh), in line with its target to reduce its carbon footprint. That means that for 1MWh consumed, 1MWh of renewable electricity is produced in France.

FINANCING

On 8 October 2015, EDF raised \$1.25 billion through the largest-ever green bond in US dollars from a corporate issuer

The new \$1.25 billion green bond with a 10-year maturity and a 3.625% fixed coupon will support to EDF's investments in new renewable energy. The successful issuance met with high demand from investors managing

environmental, social and governance mandates, while providing the opportunity to diversify EDF's investor base further in the United States.

CUSTOMER SERVICES AND DIGITAL TRANSFORMATION

On 29 May 2015, EDF was certified by Afnor to guide its customers in performing their mandatory energy audit using digital solutions

This new EDF service is designed to help customers improve their energy efficiency, boost their performance and make them more competitive. Under France's DDADUE law<sup>(1)</sup>, companies with more than 250 employees and

sales exceeding €43 million were required to submit an energy audit report to the authorities before 5 December 2015. These energy audit reports must now be submitted every four years.

STRATEGIC DEALS

On 10 December 2015, EDF completed the sale of its stake in BERT

On 10 December 2015, EDF International (EDF) and EP Energy a.s., through its subsidiary company EP Hungary, completed the transaction for the sale of EDF's majority stake in Hungary-based Budapesti Erőmű Zrt. EP Energy acquired more than 95% of the shares in a company that owns three gas-fired cogeneration (combined heat and power)

plants: Kelenföld (with an installed capacity of 188MWe and 395MWth), Újpest (105MWe and 421MWth) and Kispest (113MWe and 366MWth). These cogeneration plants meet almost 60% of the demand for heat in Budapest and generate approximately 3% of Hungarian electricity.

On 21 December 2015, EDF completed the sale of its stake in ESTAG

EDF and Macquarie European Infrastructure Fund IV (MEIF4) completed on 21 December 2015 the transaction for the sale of EDF's minority stake of 25%

in Energie Steiermark AG to MEIF4. EDF announced on 10 July 2015 it had entered into an agreement with MEIF4.

(1) A "guarantee of origin" means an electronic document that has the function of providing proof that for each megawatt-hour of energy consumed, a given quantity of energy produced from renewable sources is injected into the electricity grid.

(1) DDADUE: various provisions to adapt legislation to European Union law (*diverses dispositions d'adaptation au droit de l'Union européenne*).







# A responsible industrial firm

## ELEVEN GROUP COMMITMENTS

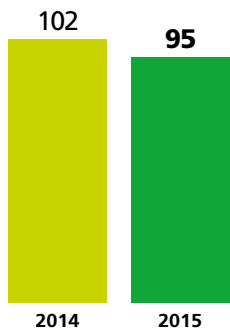
### MAINTAINING THE HIGHEST LEVELS OF SECURITY IN OUR INSTALLATIONS

The criteria of the international FTSE4Good index<sup>(1)</sup> for nuclear safety have been met

**MARCH 2012:** inclusion of EDF Group in the FTSE4Good index.  
**JULY 2015 AND JANUARY 2016:** reselection for the FTSE4Good index, following inclusion in March and September 2014 and March and September 2013.

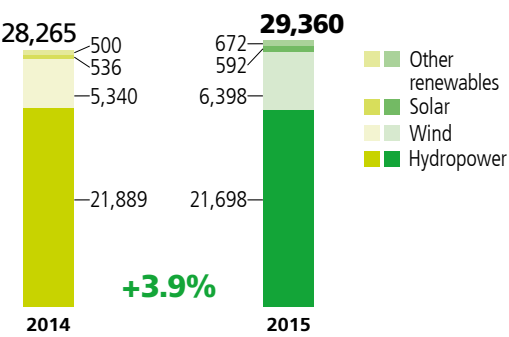
### REMAINING THE BEST MAJOR ENERGY PROVIDER IN THE DEVELOPMENT OF LOW-CARBON ENERGY

Keep direct CO<sub>2</sub> within the 150 g/kWh limit<sup>(2)</sup>



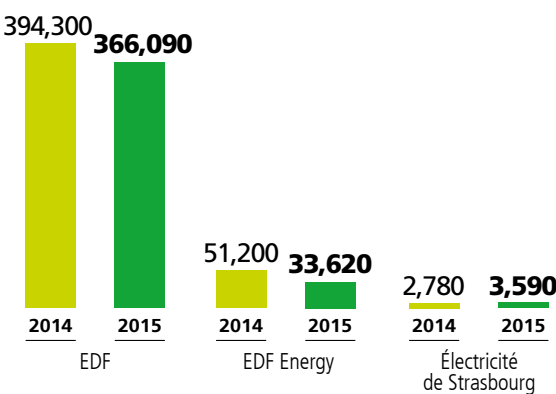
### INVESTING IN RENEWABLES AND INCREASING THEIR COMPETITIVENESS

EDF Group installed capacity from renewable energy sources, in MWe



### SIGNIFICANTLY CONTRIBUTING TO THE IMPROVEMENT OF ENERGY EFFICIENCY WITHIN HOUSEHOLDS

Number of households supported by Group companies<sup>(3)</sup> in terms of energy efficiency



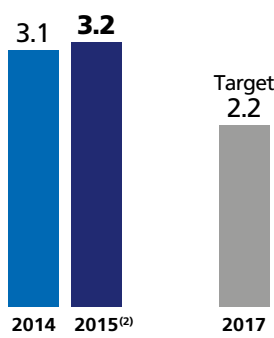
(1) The FTSE4Good Index Series was created by the FTSE (Financial Times Stock Exchange) Group and aims to promote investment in companies that comply with ambitious sustainable development goals. Since 2015, the two annual FTSE4Good assessments take place in June and December.  
(2) Direct CO<sub>2</sub> emissions excluding life cycle analysis of generating plant and fuel.  
(3) Companies within the scope of consolidation that sell energy to residential customers.

# A responsible employer

## ELEVEN GROUP COMMITMENTS

### RESOLUTELY REDUCING WORKPLACE ACCIDENTS AMONG OUR EMPLOYEES AND OUR SUBCONTRACTORS

Halve the lost-time accident frequency rate<sup>(1)</sup> for Group employees within five years



At constant consolidation scope, in 2015 the frequency rate continued the fall seen since 2012 (going from 4.4 to 2.9) and is in line with the target “between 2012 and 2017, EDF Group aims to halve the lost-time accident frequency rate”. Between 2012 and 2015, the rate has already been lowered by a third.

### PRESERVING THE PROFESSIONAL EXCELLENCE AND PERFORMANCE OF OUR EMPLOYEES THROUGH TRAINING AND PROMOTING DIVERSITY

A total of 30% of the pool of future top executives has to be women by 2015

2014: 24%      2015: 26%

The Group will continue its actions to increase the number of women in its talent pool.

Over 75% of Group employees receive at least one training session each year

2014: 85%      2015: 87%

### REFUSING TO TOLERATE ANY VIOLATION OF HUMAN RIGHTS, FRAUD OR CORRUPTION IN ANY OF OUR COMPANIES OR AMONG OUR SUPPLIERS

Thirteen companies will include an Ethics/SD clause in their long-term purchasing contracts<sup>(3)</sup> by 2015

#### TARGET MET BY END-2014

IN 2013	IN 2014	IN 2015
■ EDF	■ EDF Energies	■ Citelum
■ ERDF	■ Nouvelles	■ Dalkia
■ EDF Energy	■ EDF Trading	■ EDF Fenice
■ Edison	■ Électricité	
■ EDF Luminus	■ de Strasbourg	
■ EDF Polska	■ Tiru	
■ EDF Démász	■ Socodei	
■ EDF Norte		
■ Fluminense		

Thirteen companies will meet the requirements of the United Nations Global Compact Advanced level by 2017

#### IN 2015: THREE COMPANIES had Advanced level.

■ EDF (since 2012)    ■ Edison (since 2013)  
■ EDF Luminus (in 2015)

END-2015: 11 OTHER COMPANIES have signed the Global Compact.

SINCE 2012	SINCE 2014	SINCE 2015
■ ERDF	■ EDF Energy	■ Dalkia
	■ EDF Trading	
	■ EDF Démász	
	■ EDF Norte	
	■ Fluminense	
	■ Électricité	
	■ de Strasbourg	
	■ Socodei	

(1) Lost-time workplace accident rate per million hours worked.  
(2) The figure of 3.2 integrates the results of the entire Group, including subsidiaries bought during the year.  
(3) Except energy contracts on the spot market.



# A responsible partner

## ELEVEN GROUP COMMITMENTS

### PROMOTING TRANSPARENCY AND DIALOGUE ON SENSITIVE ISSUES

Eight companies will set up a formal space for stakeholder dialogue by 2015

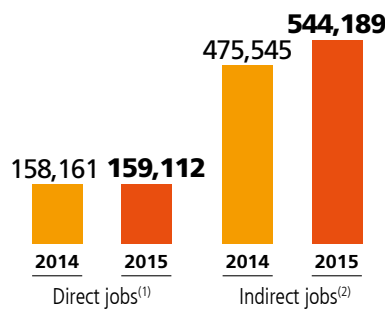
#### IN 2015: FOUR COMPANIES

- EDF: France Sustainable Development Council
- EDF Energy: Stakeholder Advisory Panel
- Edison: National Stakeholder Panel
- ERDF: Stakeholder Panel

Other Group companies worked on setting up new organisations for stakeholder dialogue, but they are not yet in place.

### CONTRIBUTING TO THE DEVELOPMENT OF LOCAL ECONOMIES THROUGH EMPLOYMENT

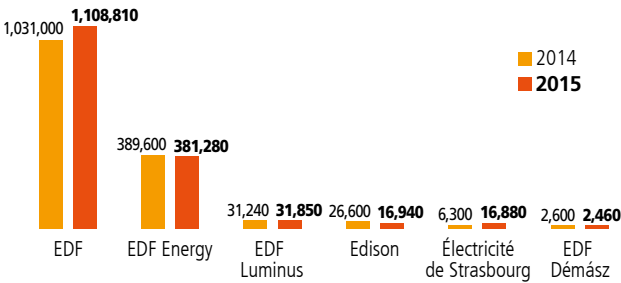
Number of direct jobs and indirect jobs generated by EDF Group business activities



(1) Consolidated Group data calculated in accordance with IFRS in place for each year. In 2014, the data for “full-time equivalents” (FTE), in accordance with international standards, came to 148,025.  
(2) The calculation of the indicator, excluding nuclear fuel cycle and uranium purchases, includes EDF, ERDF, EDF Energy, Edison, EDF Polska, EDF Luminus, EDF Energies Nouvelles, Électricité de Strasbourg and Tiru. Data is presented in FTE.  
(3) Energy consulting, energy payment plan negotiated, granting of financial aid, etc.

### PROACTIVELY FIGHTING FUEL POVERTY AND PROMOTING ACCESS TO ELECTRICITY

Number of actions<sup>(3)</sup> to support our customers in need carried out by Group companies supplying electricity



### PRESERVING WATER RESOURCES IN ALL OUR ACTIVITIES


Publication, starting in 2015, of the “water footprint” at Group level

#### 2015: 1.06 l/kWh

Since 2013, EDF has been working with the scientific community and with international bodies representing the coal, nuclear, hydrocarbon and renewable energy sectors to coordinate the development of a tool that can be used throughout the world to assess the impact of all energy sectors on water.

In 2015, coordination was transferred to the World Energy Council. While awaiting finalised, recognised tools, EDF is publishing a partial footprint with evaluation of the consumption of evaporated water in litres per kWh of electricity generated by the Group’s nuclear, fossil-fired and gas-fired plants.

# Sustainable development indicators

EDF has provided information on sustainable development since 2001. In 2007, the Group began the process of a gradual, voluntary check on the reliability of its social and environmental data by its Statutory Auditors. Since 2013, this work has been carried out in accordance with article L. 225-102-1 of the French Commercial Code. For 2015, the Statutory Auditors issued a report confirming that the data included the 42 corporate social responsibility (CSR) items required and was fairly presented, in accordance with the decree of 13 May 2013. In addition, in line with the Group’s commitment to transparency vis-à-vis its stakeholders, the Statutory Auditors issued an opinion indicating unconditional reasonable assurance for the CO<sub>2</sub> emissions due to electricity and heat generation and the gender and age indicators for the total workforce at the end of the year. Lastly, putting its approach into practice, the Group adopted a number of corporate social responsibility commitments in 2013, identified below by the symbol .

### METHODOLOGY

The reporting procedure for sustainable development indicators (economic, environmental and social) covers the entire EDF Group as defined by its financial consolidation. More specifically, the scope encompasses the EDF parent company and its fully consolidated subsidiaries, for which 100% of the values for social and environmental indicators are taken into account. Data relating to companies accounted for under the equity method is not included. In the rest of this document, other consolidation methods may be used and will be indicated.

The scope covered by the reporting process is defined on the basis of:

- the consolidation scope provided by Corporate Finance;
- criteria linked to relevance in terms of the environmental and social impact of subsidiary activities.



### FOR MORE INFORMATION

The Statutory Auditors’ report and further information about the reporting methodology are available in the Group’s reference document (3.4.2 “Methodological elements on the social and environmental data” and 3.6 “Assurance report of one of the Statutory Auditors”).

# Economic indicators

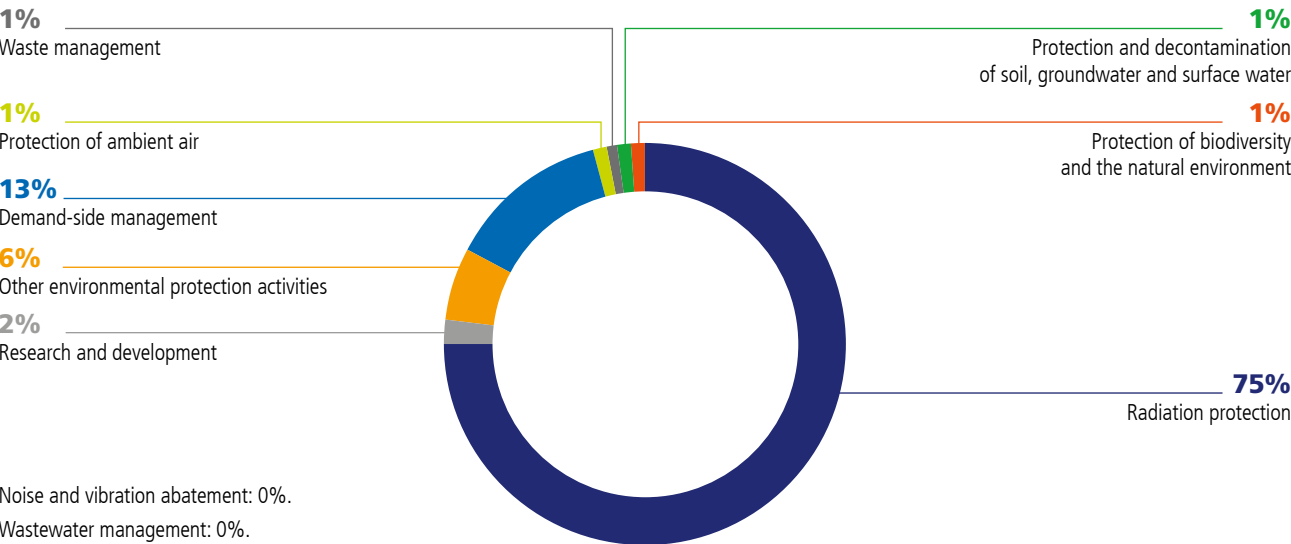
## ENVIRONMENTAL PROTECTION EXPENDITURE

Environmental protection expenditure is the additional identifiable expenditure aimed at preventing, reducing or repairing the potential or effective damage caused by the company's activities. This definition is based on the recommendation issued by the *Conseil national de la comptabilité* (the French national accounting council) on 21 October 2003, which, in turn, is based on the European recommendation of 30 May 2001.

In billions of euros	2015	2014
<b>EDF</b>	<b>3.6</b>	3.0
of which, provisions for environmental risks	<b>2.6</b>	1.9

Environmental protection expenditure is distributed across the 10 budget areas of the Eurostat classification issued by the European Commission's Directorate General for the Environment and its allocation can vary from year to year. In 2015, expenditure distribution rose for radiation protection and fell for demand-side management.

### Environmental protection expenditure allocation in 2015



# Environmental indicators

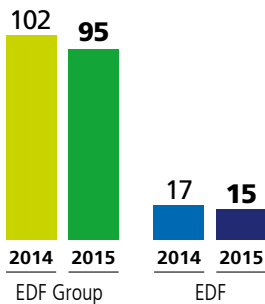
## GREENHOUSE GAS EMISSIONS<sup>(1)</sup>

Apart from carbon dioxide (CO<sub>2</sub>), which is the main greenhouse gas, fossil-fired power plants (coal, fuel oil and gas) release sulphur dioxide (SO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>) and sulphur hexafluoride (SF<sub>6</sub>) into the atmosphere.

### ! Group commitment

## CO<sub>2</sub> EMISSIONS

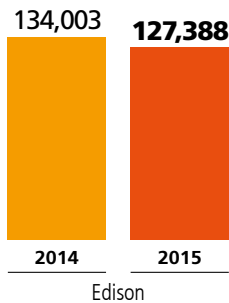
Emissions due to electricity and heat generation (in g/kWh)



In kilotonnes	2015	2014
<b>EDF Group</b>	<b>59,137</b>	64,332
<b>EDF</b>	<b>6,738</b>	8,047
<b>EDF Energy</b>	<b>16,078</b>	19,948
<b>Edison + EDF Fenice</b>	<b>7,079</b>	6,239

The decrease in Group CO<sub>2</sub>, in both specific and total terms, is mainly explained by the good performance of the nuclear fleets, which increased generation by 1% (up 5TWh), and the decrease in electricity and heat generation from the oil- and coal-fired thermal plants (down 6.8TWh, or 15%). The decrease in emissions was reduced for two reasons: lower hydropower generation (down 8TWh, or 16%) because of low rainfall; and increased use of gas-fired power plants (up 5TWh, or 15%).

Emissions associated with oil and gas activities (in tonnes)



The decline in CO<sub>2</sub> emissions is due to the fall in business activity for this segment in 2015.

The Group's short- and long-term commitments in favour of reducing direct CO<sub>2</sub> emissions:

- at Group level: keep direct CO<sub>2</sub> emissions as low as possible, and below 150g/kWh;
- in mainland France: halve specific CO<sub>2</sub> emissions in 2016 relative to 1990 (63g CO<sub>2</sub>/kWh);
- in island systems (Corsica and overseas departments): reduce emissions between 2005 and 2020;
- in the UK: reduce the carbon intensity of electricity generation to 250g CO<sub>2</sub>/kWh by 2020, and to less than 100g CO<sub>2</sub>/kWh by 2030. The 2020 target has already been reached.

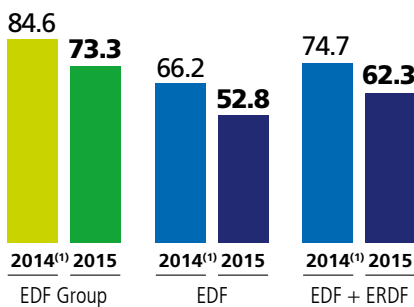
## SF<sub>6</sub> EMISSIONS

Sulphur hexafluoride (SF<sub>6</sub>) is a colourless, odourless, non-toxic and non-flammable gas. It is an excellent insulator for electrical equipment that as a result is widely used for the high- and medium-voltage circuit breakers of transmission and distribution networks. In large fossil-fired and hydro plants, the gas is found in circuit breakers and shielded (metal-clad) substations. SF<sub>6</sub> is one of the most potent greenhouse gases. Its global warming potential (GWP) is 23,500 rather than previous 22,800 (1 tonne of SF<sub>6</sub> released into the atmosphere is the equivalent of 23,500 tonnes of CO<sub>2</sub>).

(1) Excluding life cycle analysis of generating plant and fuel.

# Environmental indicators

SF<sub>6</sub> emissions (in kt CO<sub>2</sub> equivalent)

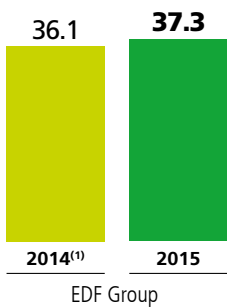


(1) Figures recalculated using current GWP.

The SF<sub>6</sub> emissions of EDF in France have fallen steadily over recent years (down 20% in 2015, 10% in 2014 and 13% in 2013), mainly due to ongoing works to modernise storage equipment. At Group level, the 2% drop in emissions between 2014 and 2015 is, other than the contribution of EDF, mainly due to Électricité de Strasbourg in France and EDF Luminus in Belgium improving control over accidental leaks.

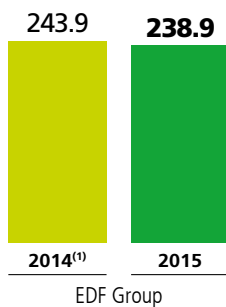
## OTHER GREENHOUSE GASES

CH<sub>4</sub> emissions (in kt CO<sub>2</sub> equivalent)



(1) 2014 figure recalculated on basis of GWP updated by the IPCC: 28 rather than previous 25.

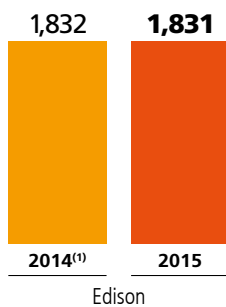
N<sub>2</sub>O emissions (in kt CO<sub>2</sub> equivalent)



(1) 2014 figure recalculated on basis of GWP updated by the IPCC: 265 rather than previous 298.

The 2% reduction in N<sub>2</sub>O emissions at Group level is due mainly to the decline in coal-fired generation and clean-up work at sites.

CH<sub>4</sub> emissions from gas network leaks (in t CO<sub>2</sub> equivalent)



(1) 2014 figure recalculated on basis of GWP updated by the IPCC: 28 rather than previous 25.

For the past several years, Edison has been implementing various measures to limit and avoid leaks from its gas distribution networks:

- introduction of cathodic protection systems to prevent corrosion of metal components. These systems are verified periodically;
- pipeline inspection using the pipe pigging (scraping) technique, consisting of sending a pig (with a diameter just over that of the pipe) to clean the wall and carry any dirt to the end of the pipe. This inspection is carried out every three or four years to identify any loss of metal on the interior surface of the pipeline and verify the pipe's good positioning;
- visual inspection by employees of the pipeline environment and use of leak detectors (valves, gauges, etc.);
- systematic inspection, with the detector, after any maintenance activity.

In all cases, in the event of deterioration or leakage, corrective action is implemented immediately.

## AEROSOL PRECURSORS

Apart from greenhouse gases, human activities also emit aerosols and aerosol precursors.

Aerosol precursors are gaseous substances that, as a result of various physical or chemical reactions, may lead to the formation of aerosols.

Aerosol precursors include:

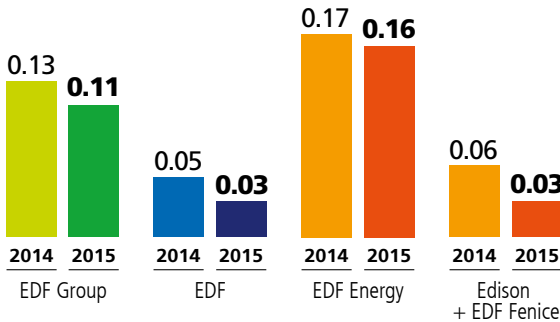
- sulphur dioxide (SO<sub>2</sub>), a combustion pollutant produced by the burning of any product containing sulphur, and notably coal and oil;
- to a lesser extent, nitrogen oxides (NO<sub>x</sub>).

EDF's efforts in this area are in keeping with the limits set out in the EU directive on National Emission Ceilings (2001/81/EC), which established emission ceilings effective from 2010 for the following pollutants in each member state: SO<sub>2</sub>, NO<sub>x</sub>, VOCs (volatile organic compounds) and NH<sub>3</sub> (ammonia).

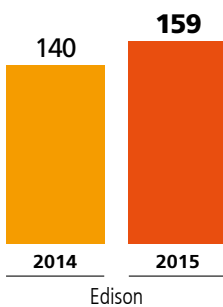
EDF's activities in mainland France and Corsica account for less than 5% (2.4%) of the national emission ceiling for NO<sub>x</sub> (810 kt) and less than 10% (3.5%) of the national emission ceiling for SO<sub>2</sub> (375 kt).

## ACIDIFICATION: SO<sub>2</sub> EMISSIONS

Emissions due to electricity and heat generation (in g/kWh)



Emissions associated with oil and gas activities (in tonnes)

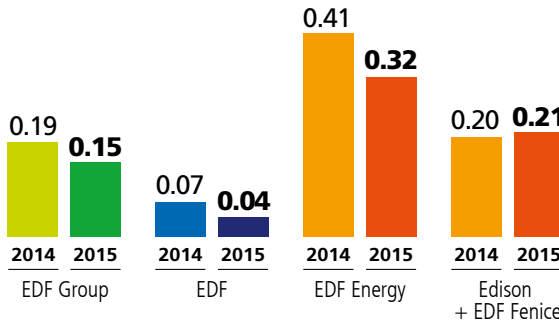


The reduction in SO<sub>2</sub> emissions parallels the decline in the Group's fossil-fired generation and the improved efficiency of desulphurisation systems.

These results also reflect Group companies' efforts with respect to the quality of coal used, as well as the halt to Edison's use of industrial gas as fuel and EDF Luminus's replacement of heavy fuel oil with natural gas at the Ham site.

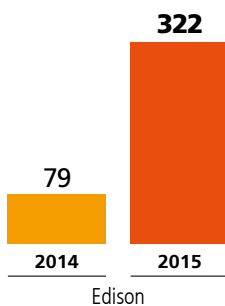
## NITRIFICATION: NO<sub>x</sub> EMISSIONS

Emissions due to electricity and heat generation (in g/kWh)



The decline in NO<sub>x</sub> emissions reflects the reduction in fossil-fired (coal and oil) generation at Group level and the Group's investments in improving its generation fleet's environmental performance, partly offset by the rise in gas-fired generation.

Emissions associated with oil and gas activities (in tonnes)



# Environmental indicators

## ASSESSMENT OF EDF'S GREENHOUSE GAS EMISSIONS

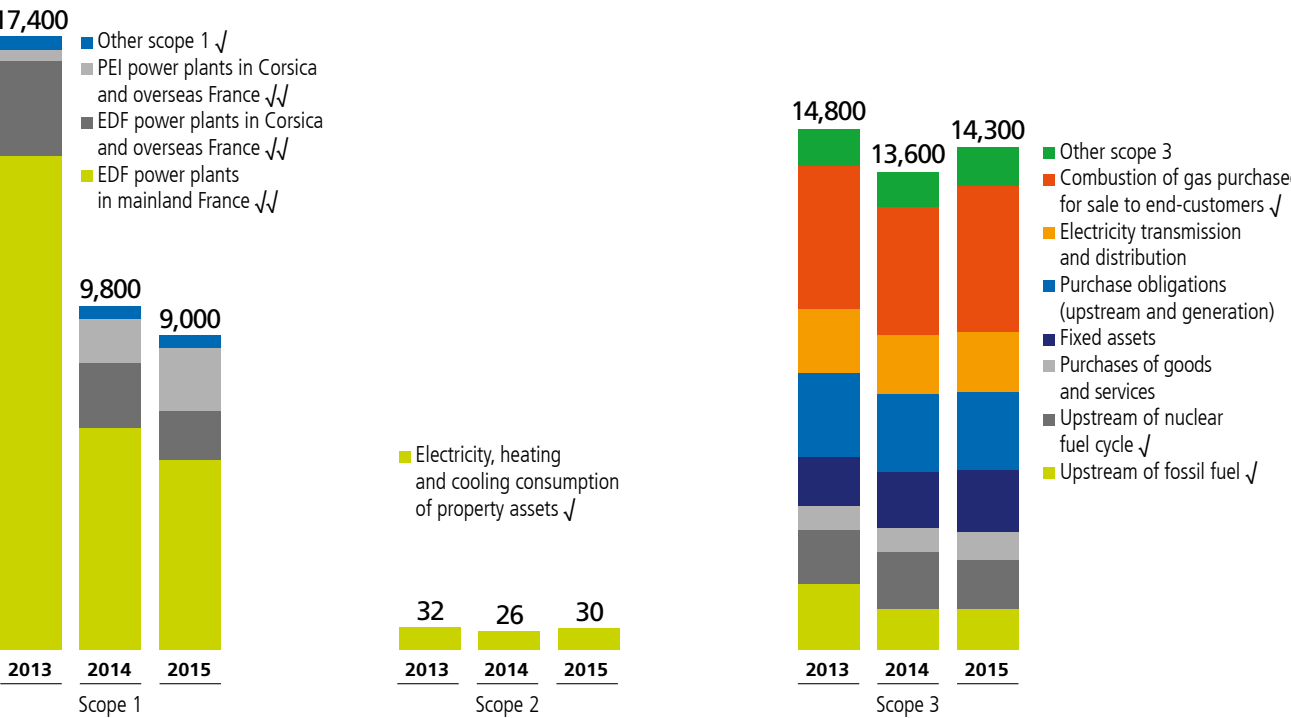
EDF publishes an annual report on its greenhouse gas emissions. The report includes direct and indirect emissions, thereby going beyond the legal requirements in France (article 75 of the Grenelle 2 law) by publishing its scope 3 emissions and having a sample of emissions verified by a third party.

The assessment includes all activities of EDF<sup>(1)</sup>, mainland France, the French island energy systems (SEI) and, for the first time in 2015,

PEI (Production Électrique Insulaire)<sup>(2)</sup>, including a review of previous years.

The analysis focuses on scopes 1, 2, and 3 of GHG Protocol<sup>(3)</sup>, covering the six greenhouses gases listed in the Kyoto Protocol (CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFC, PFC, SF<sub>6</sub>, NF<sub>3</sub>), and ranging from fuel manufacturing to employees' office activities. The data is presented in CO<sub>2</sub> equivalent, other gases being converted based on their global warming potential (GWP).

### Greenhouse gas emission assessment (in kt CO<sub>2</sub> equivalent)



#### Other scope 1 emissions:

- filling hydro reserves with water (CO<sub>2</sub> and CH<sub>4</sub>);
- SF<sub>6</sub> and coolant leaks;
- fossil fuels consumed for own use;
- fuel consumed for work-related travel and worksite equipment.

#### Other scope 3 emissions:

- upstream operations of gas sold;
- business trips (excluding car fleet) and employee commuting;
- downstream transportation of by-products;
- leased assets;
- transport and treatment of waste (conventional and radioactive);
- upstream operations and losses from consumption for own use;
- upstream operations of fuel consumed by fleet vehicles and worksite equipment;
- upstream operations of fossil fuels (gas and domestic fuel oil) consumed for own use.

### Main changes between 2014 and 2015

In 2015, EDF's aggregate direct and indirect greenhouse gases were stable compared with 2014 (down 1%) as the fall in scope 1 emissions was offset by a similar rise in scope 3 emissions.

#### Scope 1

Direct emissions (scope 1) declined a further 9% in 2015, having fallen 44% from 2013 to 2014. Compared with base year 2010, the fall in scope 1 emissions was 55%. In 2015, the average temperature in mainland France was 0.3 °C higher than normal, which was 0.2 °C lower than in 2014<sup>(4)</sup>. This led to a slight increase in demand. Furthermore, rainfall was much lower than usual (20% below normal levels). Nuclear generation, however, increased slightly due to good availability. Five coal-fired plants were mothballed in April with a view to withdrawing them from operation shortly, and the three remaining plants had periods of unavailability due to works and maintenance visits. Output from renewables subject to purchase obligation increased significantly: 24% for wind power and 22% for both photovoltaic and biomass. All these different factors led to very low demand being made on coal-fired plants (down 20%). This was partly offset by higher demand on gas-fired generation (which produces fewer emissions). The end result was a fall in direct CO<sub>2</sub> emissions of 14%.

Direct emissions from the island energy systems rose 3% due to lower rainfall in Corsica.

Lastly, EDF continued its efforts to reduce SF<sub>6</sub> leaks, which fell 21% in 2015 due to maintenance operations at some nuclear sites.

#### Scope 2

Emissions associated with the energy consumption of office buildings rose 16% compared with 2014 because of unfavourable weather conditions, particularly in January and February, and, despite efforts to enhance building energy efficiency, an increase in surface areas. However, they remained lower than the 2013 level. These emissions, which represented 30kt in 2015 in absolute emissions, are calculated by taking into account the average GHG content of a kilowatt-hour in France generated by EDF. The value reached is therefore on the conservative side.

#### Scope 3

Total scope 3 emissions rose 5%, due mainly to:

- the rise in sales of gas to end-customers (15%) related to the increase in overall demand and the rise in market share;
- the increase in construction works associated with major projects, which contributed to an increase in the "Fixed assets" item.

(1) The term "EDF" refers to EDF SA, the parent company, and PEI, a subsidiary of EDF.  
(2) PEI is an EDF subsidiary that is in charge of new generating assets in Corsica and the overseas French departments. EDF has decided to include it to give a fuller view of its emissions in the island energy systems.  
(3) The Greenhouse Gas Protocol Initiative, more commonly known as the GHG Protocol, is the most internationally recognised method for GHG accounting. Introduced in 1998 by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD), it was developed in partnership with companies, NGOs and governments. It provides a set of resources, tools and data for carbon footprint calculation.  
(4) Source: OSGE-EDF; usual EDF weather forecasting service in mainland France.

✓ 2015 data audited for reasonable assurance: greenhouse gas emissions in scope 1 CO<sub>2</sub> equivalent emissions related to CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O emissions from EDF fossil-fired power plants and to the consumption of domestic fuel and kerosene by back-up power systems at nuclear power plants.

✓ 2015 data audited for limited assurance:  
— other scope 1: GES emissions due to the fuel consumption of EDF's vehicle fleet, domestic fuel consumption of data centre back-up power systems, office building consumption of gas, domestic fuel oil and off-road diesel fuel, SF<sub>6</sub> emissions and fugitive emissions of CO<sub>2</sub> and CH<sub>4</sub> from hydro reservoirs and French island energy systems (SEI);  
— scope 2: indirect GHG emissions from electricity consumption by office buildings, data centres, and heating and cooling systems in office buildings;  
— scope 3: GHG emissions related to upstream operations in coal for fossil-fired power plants, upstream operations of gas sold to end-customers and at point of consumption, upstream operations of gas used as fuel for the power plants of the Thermal Generation and Engineering Division (DPIT), upstream operations of fuel oil for DPIT, SEI and PEI, upstream operations of nuclear fuel load, upstream operations and losses of energy consumed for EDF's own use, and upstream operations for fuel consumed by nuclear power plant back-up systems and worksite equipment.



# Environmental indicators

## RADIOACTIVE EMISSIONS

Nuclear power plants do not produce any direct CO<sub>2</sub> emissions, nor SO<sub>2</sub> or NO<sub>x</sub>. However, they do release radioactive effluents into the air and water.

For EDF in France, the environmental control systems monitoring radioactive emissions on a regular basis involve between 15,000 and 20,000 annual measurements for each nuclear power plant. Measurements are made in the terrestrial ecosystem and in the ambient air, as well as in surface and ground water receiving liquid effluents.

This monitoring programme meets regulatory requirements and is subject to the prior approval of the *Autorité de sûreté nucléaire* (ASN), France’s national nuclear safety authority. In order to become a member of the French national network of environmental radioactivity measurement (RNM) set up by the *Institut de radioprotection et de sûreté nucléaire* (IRSN), France’s national institute for radiation protection and nuclear safety, EDF requested accreditation for its laboratories. This was obtained by decision of the ASN in June 2009.

To further minimise its environmental impact, EDF has put in place an active approach to treating its radioactive effluents to continue reducing them down as low as reasonably achievable (ALARA).

## ATMOSPHERIC EMISSIONS

	Unit	2015	2014
<b>EDF</b>			
<b>Carbon 14</b>	TBq <sup>(1)</sup> /reactor	<b>0.17</b>	0.17
<b>Tritium<sup>(2)</sup></b>	TBq/reactor	<b>0.50</b>	0.50
<b>EDF Energy</b>			
<b>Carbon 14 – AGR<sup>(3)</sup> reactor</b>	TBq/reactor	<b>0.693</b>	0.64
<b>Carbon 14 – PWR<sup>(4)</sup> reactor</b>	TBq/reactor	<b>0.24</b>	0.26
<b>Tritium – AGR reactor</b>	TBq/reactor	<b>0.71</b>	0.66
<b>Tritium – PWR reactor</b>	TBq/reactor	<b>0.68</b>	0.92
<b>CENG (Constellation Energy Nuclear Group)</b>			
<b>Carbon 14</b>	TBq/reactor	<b>0.36</b>	0.36
<b>Tritium</b>	TBq/reactor	<b>4.43</b>	1.02

## LIQUID EFFLUENT EMISSIONS

EDF has been obtaining results for liquid effluent emissions from its nuclear power plants that are well below regulatory limits for over 10 years. These results are stable for EDF, and falling for the Group.

	Unit	2015	2014
<b>EDF</b>			
<b>Carbon 14</b>	GBq <sup>(1)</sup> /reactor	<b>12.9</b>	12.8
<b>Tritium<sup>(2)</sup></b>	TBq <sup>(1)</sup> /reactor	<b>18.1</b>	17.5
<b>EDF Energy</b>			
<b>Tritium – AGR<sup>(3)</sup> reactor</b>	TBq/reactor	<b>120</b>	129
<b>Tritium – PWR<sup>(4)</sup> reactor</b>	TBq/reactor	<b>19</b>	67
<b>CENG (Constellation Energy Nuclear Group)</b>			
<b>Tritium</b>	TBq/reactor	<b>11.63</b>	12.1

(1) The radioactivity of a substance is measured in becquerels (Bq, the SI unit of radioactivity). This unit represents levels that are so low that multiples are normally used: GBq (gigabecquerel) or TBq (terabecquerel).

(2) Tritium, a hydrogen isotope, has a low level of radioactivity and is produced in the primary circuit coolant of nuclear reactors. It exists naturally in small doses in seawater and rainwater.

(3) Advanced gas-cooled reactor: nuclear reactors developed in the UK.

(4) Pressurised water reactor: the most commonly used nuclear reactors worldwide.

## WASTE

### CONVENTIONAL INDUSTRIAL WASTE

Conventional industrial waste includes all non-radioactive waste produced and discharged by all EDF’s generation facilities (thermal, hydro and nuclear) and research sites.

Fly ash and gypsum, which are fully recycled, are considered as by-products and are therefore not counted within the indicator “Conventional industrial waste”.

Specific laws and regulations apply to radioactive waste.

### Waste recycling

The indicator “Conventional industrial waste recycled or transported for recycling” includes two types of waste:

- hazardous waste, defined as such by regulations if it has one or more of the following characteristics: explosive/oxidising/ignitable, irritable/harmful/toxic, carcinogenic, corrosive, infectious, reprotoxic/mutagenic, ecotoxic;
- non-hazardous waste, which refers to inert waste and non-hazardous industrial waste (with collection and treatment processes similar to household waste).

Waste is recycled in two different ways:

- materials recovery: scrap iron and other metals, gravel and other aggregates;
- energy recovery: incineration of waste to produce energy (electricity or steam).

EDF Group	Unit	2015	2014
<b>Volume of conventional industrial waste recycled or transported for recycling</b>	t	<b>365,744</b>	392,815

In 2015, the volume of waste was lower than in 2014. A large portion of the volume (65%) is produced in France, including island energy systems. This waste remains mainly related to construction, decommissioning and maintenance activities.

### Recycling rate for conventional industrial waste

	Unit	2015	2014
<b>EDF Group</b>	%	<b>80.6</b>	79.9
<b>EDF</b>	%	<b>92.5</b>	92.6
<b>EDF Energy</b>	%	<b>94.5</b>	98.5

EDF’s sustainable development policy raised the target for recycling all recyclable waste from 75% in 2011 to 90% for 2015. The recycling rate for all conventional waste resulting from electricity generation and engineering activities (excluding fly ash and gypsum, which are fully recycled) stabilised in 2015 at 92.5%, compared with 92.6% in 2014.

### Impact of decommissioning and maintenance activities

In 2015, there was a reduction in these activities in France (including island energy systems), mainly due to the completion of some major projects and in particular the removal of waste from thermal facilities being decommissioned. In France, in the nuclear engineering business, waste management organisation plans are now systematically drawn up before each major construction, decommissioning or maintenance site, and a “lessons learnt” phase is coordinated annually by EDF’s business divisions. This procedure is coming into widespread use for major projects in the divisions in charge of fossil-fired and hydro facilities.

Moreover, EDF’s sustainable development policy includes a recycling target for **green list** waste (internal list of waste that can be recycled using the meshed network of facilities throughout France). In 2015, EDF’s green list covered 152 categories of waste, with a total of 260 types of waste classified in the internal reference framework.

EDF	Unit	2015	2014
<b>Recycling rate for green list waste</b>	%	<b>96.6</b>	97.3

### WASTE ASSOCIATED WITH OIL AND GAS ACTIVITIES

Waste generated by oil and gas activities is:

- residual sludge from drilling operations;
- aqueous solution produced by drilling operations.

Relative to other Group activities, gas activities generate very little waste apart from residual water from gas extraction, which is classified as non-hazardous waste.

EDISON	Unit	2015	2014
<b>Hazardous waste</b>	t	<b>530</b>	827
<b>Non-hazardous waste</b>	t	<b>783</b>	446
<b>Recycled conventional industrial waste</b>	t	<b>261</b>	65

# Environmental indicators

## RADIOACTIVE WASTE

Radioactive waste is classified into different categories in accordance with regulations in specific countries depending on its nature, level of radioactivity and the lifespan of the radionuclides it contains.

France			
EDF	Unit	2015	2014
Waste produced by electricity generation			
Solid very low-level radioactive waste (VLLW)	m³/TWh	6.0	7.4 <sup>(1)</sup>
Solid low- and intermediate-level short-lived radioactive waste (LILW-SL)	m³/TWh	16.4	15.8 <sup>(1)</sup>
Solid intermediate- and high-level long-lived radioactive waste (IHLW-LL)	m³/TWh	0.88	0.88
Waste produced by decommissioning activities			
Very low-level radioactive waste (VLLW)	m³	1,847	2,580
Low- and intermediate-level radioactive waste (LILW)	m³	914	659
Fuel			
Evacuated spent nuclear fuel	t	1,216	1,124

(1) Value modified following a change in method; value published in 2014: VLLW of 7.6m³/TWh and FMA of 15.4m³/TWh.

Radioactive waste is classified into four categories (VLLW, LLW, ILW and HLW) and is said to be “long lived” if it contains a significant quantity of radionuclides with a half-life greater than 31 years.

### Characterisation of the waste produced by EDF

Very low-level radioactive waste (VLLW)	— Waste with a radioactivity level close to naturally occurring radioactivity. It results primarily from the decommissioning of nuclear facilities and consists mostly of construction debris (concrete, scrap metal, thermal insulation, piping, etc.).
Low- and intermediate-level short-lived radioactive waste (LILW-SL)	— Waste from nuclear plants (gloves, filters, resins, etc.).
Low-level long-lived radioactive waste (LLW-LL)	— Waste from the decommissioning of obsolete natural uranium graphite gas reactors (graphite, waste from processes).
Intermediate-level long-lived radioactive waste (ILW-LL)	— Mainly waste from spent fuel assemblies (hulls, fragments of cladding, endcaps, etc.) separated during the processing of spent fuel. Currently, such waste is compacted and encapsulated in stainless steel canisters. — Other ILW-LL results from research and the fuel cycle industry.
High-level long-lived radioactive waste (HLW-LL)	— Waste resulting from processing, by vitrification, spent fuel, corresponding to the operation of the now-obsolete natural uranium graphite gas plants and to 40 years of operation of the current PWR plants.

## United Kingdom

EDF Energy	Unit	2015	2014
Evacuated low-level radioactive waste	m³	485	452
Intermediate-level radioactive waste generated	m³	178	178
Evacuated uranium	t	172	193

Radioactive waste is classified as high-, intermediate- or low-level waste (HLW, ILW and LLW respectively) with each type processed differently.

Low-level radioactive waste (LLW)	— Waste stored at the nuclear plants in dedicated facilities until being prepared for shipment (for processing or disposal). These facilities are inspected and monitored on a regular basis. — In 2010, EDF Energy created a programme for the recycling of radioactive metals, which are decontaminated and then recycled at 95%, the remainder being sent out for final disposal. Three EDF Energy nuclear plants participated in that programme in 2010.
Intermediate-level radioactive waste (ILW)	— Waste stored at the nuclear plants in dedicated facilities, which are inspected regularly as part of the site's safety requirements. The monitoring of radioactive waste is carried out in the form of planned inspections as part of the plant's tentative work schedule and by staff working in these areas on a day-to-day basis. — At present, no waste disposal programme exists for the Group's operations in the United Kingdom.
High-level radioactive waste (HLW)	— Waste from the reprocessing of nuclear fuel, stored in purpose-built facilities at the Sellafield site.

## United States

Constellation Energy Nuclear Group (CENG) <sup>(1)</sup>	Unit	2015	2014
Evacuated solid low- and intermediate-level radioactive waste	m³	110	896
Delivered nuclear fuel	t	33	47

(1) Data consolidated according to the percentage ownership in the subsidiary.

# Environmental indicators

## WATER RESOURCE MANAGEMENT

Water is needed for generating power (for hydropower and for cooling fossil-fired plants) and for its supply chain: extraction, refining and fuel production (ethanol and hydrogen).

EDF is a major player in water resource management, managing 75% of artificial surface water reserves in France. It contributes to the multi-purpose management of water and fulfils all its commitments to stakeholders in terms of compliance with water levels for tourism, water restitution, low flow and agricultural support, while retaining adequate stocks for the onset of winter.

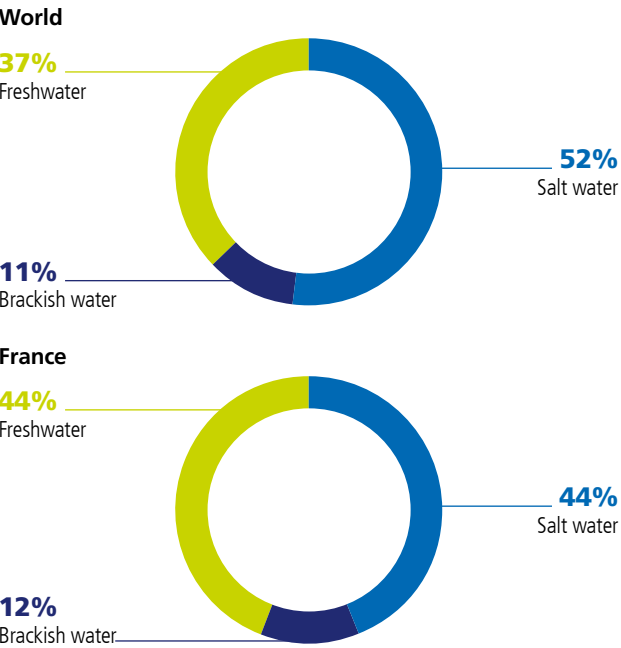
Within the context of operating its generation facilities, EDF Group seeks to optimise its water use, particularly at its thermal generation plants, and reduce its consumption of freshwater.

EDF Group's exposure to water stress – a lack of adequate water resources that poses a threat to industrial activity – is low due to the following:

- its facilities are located mainly in Europe;
- the majority of its thermal generation plants are located near the sea (see breakdown of cooling water drawn).

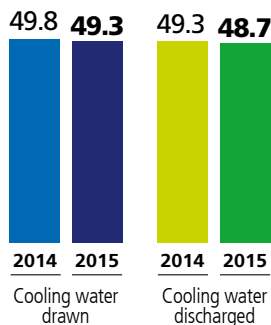
### INDICATORS RELATED TO COOLING EDF GROUP'S THERMAL GENERATION PLANTS

Water used to cool EDF Group's thermal generation plants (in %)



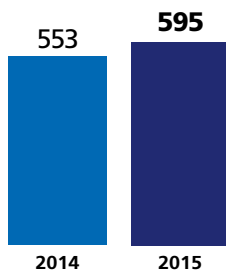
Overall, 63% used by the Group for cooling purposes and 56% for France is drawn from the sea or estuaries, where there is no risk of water shortage. These sources account for more than 99% in the United Kingdom and 94% in Italy. Annual variations in the quantity of cooling water drawn are very low (at the level of uncertainty) and depend on generation levels (see results below). In France, there is a decrease in the heat sensitivity of fossil-fired power plants, with the closing of old coal-fired plants located near rivers. New thermal generation facilities are located near the sea (e.g. the Martigues CCGT) or equipped with air cooling systems (Blénod 5 and Bouchain CCGT, currently in the test phase), which reduce water dependency.

Water drawn and discharged (in 10<sup>9</sup> m<sup>3</sup>)



The 1% decline in water drawn is due mainly to variations in thermal generation, in particular the fall in coal-fired generation.

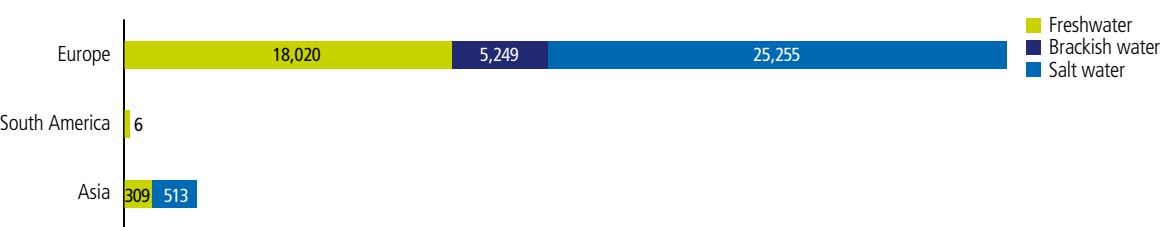
Water evaporated (in 10<sup>6</sup> m<sup>3</sup>)



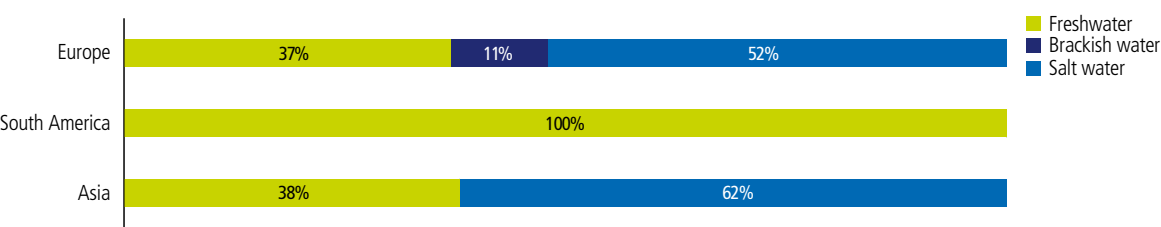
Water evaporated, which is comparable to the consumption of water necessary for cooling certain fossil-fired generation plants (closed circuit), accounts for only 1% of water drawn. Based on that fact, almost 99% of all water drawn is returned to the environment in line with local regulations governing quality and temperature. Group companies implement corrective measures immediately in the event of thresholds being exceeded.

## GEOGRAPHICAL BREAKDOWN OF WATER DRAWN TO COOL EDF GROUP'S THERMAL GENERATION PLANTS

Water drawn in 2015 (in 10<sup>6</sup> m<sup>3</sup>)



Breakdown of water drawn in 2015 (in %)

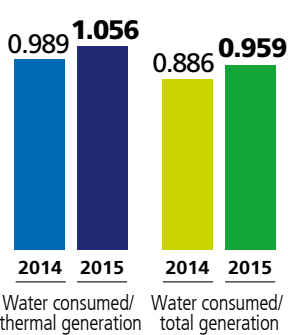


The majority of EDF Group's facilities are located in Europe, accounting for over 98% of total water drawn by the Group. Over 78% of facilities are in France and over 16% are in the United Kingdom. Furthermore, the facilities mainly use water drawn from the sea or estuaries: almost 56% for France, almost 99% for the UK and over 94% for Italy. The slight increase in the amount of freshwater drawn, especially in France, relates to the good availability rate of the nuclear power plants.

These figures reinforce the Group's low exposure to water stress.

## SPECIFIC CONSUMPTION

Specific consumption (in l/kWh)



Specific water consumption remained virtually unchanged at less than 1 l/kWh generated.

# Environmental indicators

## BIODIVERSITY

EDF Group’s industrial activities take place in the natural environment, sometimes in remarkable areas, and interact with the ecosystems there. The Group’s commitment is structured around its biodiversity policy, which was introduced in 2009 and is based on three objectives in line with the Global Reporting Initiative (G4) indicators:

- develop knowledge of natural environments and the potential impacts of the Group’s activities on their ecosystems;
- conserve biodiversity by protecting or restoring natural areas;
- inform employees and nearby residents, raise their level of awareness and provide them with training, and engage in dialogue with scientific communities and non-profit organisations in particular.

The impacts (G4 EN 12)<sup>(1)</sup> of power industry activities on biodiversity mainly concern water and aquatic biodiversity, natural terrestrial habitats and birdlife. Furthermore, EDF manages 41,000 hectares of land in France. Most of EDF’s generation sites are located in or close to protected sites (80% of hydropower sites are inside or near to a Natura 2000 site). This land is protected from agriculture and urbanisation and is close to watercourses, which are factors that encourage biodiversity. Some areas around fossil-fired or hydro plants can constitute areas for biodiversity protection or restoration. Taking biodiversity into account is now leading to EDF Group becoming a manager of natural areas, very often in partnership with local non-profit organisations, either in the context of the introduction and management of offsetting measures or on a voluntary basis on its own land (G4 EN 13 and G4 EU 13)<sup>(1)</sup>.

### Number of EDF sites located less than 5km from a protected area (G4 EN 11)

IUCN CATEGORIES <sup>(2)</sup>	FRANCE		UNITED KINGDOM
	METROPOLITAN	OVERSEAS	
I	34	8	0
II	18	16	0
III	190	3	1
IV	79	16	10
V	142	4	2
VI	0	0	0
Natura 2000	310	0	5
High-biodiversity areas	532	24	4

### Number of threatened species (G4 EN 14) listed in metropolitan France in municipalities where EDF sites are located

Country	IUCN threatened species categories					
	Global Red List			National Red List		
	CR	EN	VU	CR	EN	VU
Metropolitan France	5	10	37	19	67	219

CR: critically endangered; EN: endangered; VU: vulnerable.

(1) For further information, see the Group’s reference document (section 3.2.2.2 “Sensitivity of generation sites to biodiversity (G4 indicators: EN 11 and EN 14)”.  
(2) International Union for Conservation of Nature.

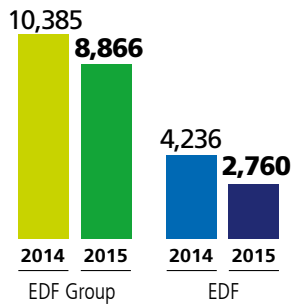
# Social indicators

## RECRUITMENT

In 2015, the purpose of EDF Group’s recruitment programme was:

- to renew skills in relation to the number of retirements forecast;
- recruitment of technical staff for projects under way.

### New hires (in numbers)

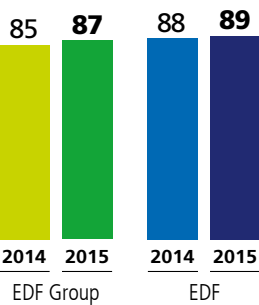


The Group hired 8,866 new employees in 2015. EDF Group turnover rate<sup>(1)</sup> was 5.3 in 2015, compared with 5.6 in 2014.

## TRAINING AND WORK-STUDY PROGRAMMES

### ! Group commitment

### Employees having benefited from training (in %)



The EDF Group invests heavily in the development of its employees’ skills: in 2015, 87% of Group employees followed at least one training programme, with an average duration of 66 hours. Access to training is one of the Group’s CSR commitments, with the goal of 75% following at least one training programme each year; in 2015 this goal was exceeded.

The Group devoted over €709 million to employee training in 2015. Its training facilities are based on a network of activity-related campuses and training sites.

The training courses provided at the different campuses are optimised and adapted to the Group’s skills needs by 14 Vocational Academies (for each business activity and cross-business subjects) and a Group Management University (GMU).

With 5,585 people following work-study programmes at the end of 2015, representing 5.3% of the workforce of EDF and ERDF, the Group has kept up its commitment to work-study. The purpose is to meet its need to renew skills (12% of positions in the supervisory and operating categories and 33% in the management category are filled by work-study trainees), but also to work towards improving the level of qualifications of young people or the long-term unemployed and improving their chances of finding work.

## ABSENTEEISM

Number of days	2015	2014	2013
EDF Group	9.2	9.1	8.8
EDF	9.2	8.8	8.9

The two main causes of absenteeism are stress and musculoskeletal disorders. Group-wide initiatives are in place to address these two problems.

In 2015, a guide on how to prevent musculoskeletal disorders was written and sent out to each Group entity. It is the latest publication in a whole range of guides on subjects such as preventing addictions, staying in good health and the longer working life, as well as on keeping people facing mental health difficulties in work or managing their return to work.

(1) Turnover is calculated on the basis of the number of hires and departures (dismissals, retirements, early retirements, resignations, redundancies). They represent the “entries + exits” divided by two out of the total physical workforce at the end of the period and multiplied by 100.



# Social indicators

## PEOPLE WITH DISABILITIES

EDF and ERDF apply their disabilities agreements, which were both signed in 2013 by all labour unions, and which affect around 3,600 employees with recognised disabilities at the end of 2015. The EDF agreement underlines the conditions required to promote equal opportunities at every stage of working life, while the ERDF agreement underlines accessibility to the company's different business activities, training and a dynamic career path. In November 2015, EDF entered into negotiations on a new disabilities agreement. In total, the number of disabled employees in the Group increased.

### Number of employees with disabilities

	2015	2014
EDF Group	5,232	5,086
EDF	2,157	2,093
ERDF	1,437	1,351

### Number of new hires with disabilities

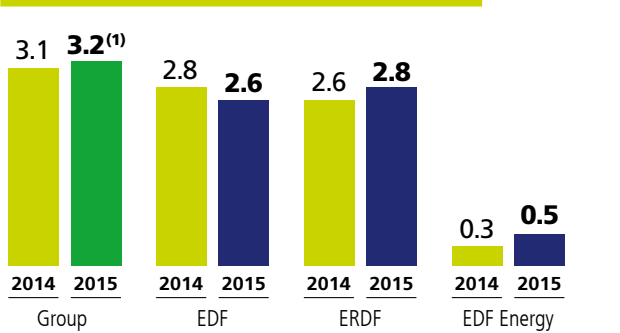
	2015	2014
EDF Group	237	221
EDF	91	112
ERDF	93	74

## SAFETY INDICATORS

### ! Group commitment

Since January 2014, the Group's health and safety policy has set out a joint framework for the policies of the different subsidiaries and their action plan. As part of this Group policy, EDF has committed to halving the workplace accident frequency rate of its employees between 2013 and 2017 (CSR commitment). In 2015, the Group reaffirmed the strength of its vision for health and safety, which is one of the main commitments included in the Cap 2030 strategy. The Group's accident frequency rate continued to improve in 2015, on a comparable structure basis (number of workplace accidents involving at least one lost day, counted during the current year, per million hours worked).

### Accident frequency rate for employees

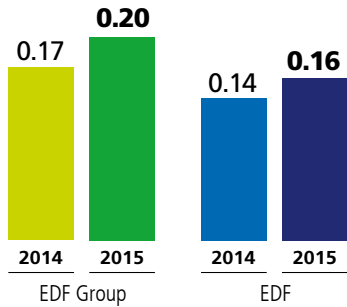


The accident frequency rate<sup>(2)</sup> has fallen from 4.5 in 2010 to 3.2<sup>(1)</sup> in 2015.

Furthermore, for the second year running, EDF Group is publishing the accident frequency rate of its subcontractors<sup>(2)</sup>. It was 4.1 in 2015.

### Accident severity rate

The accident severity rate corresponds to the number of calendar days lost due to workplace accidents per thousand hours worked<sup>(3)</sup>.



(1) On a comparable basis with 2014, the 2015 rate is 2.9. The difference is due to the 2015 acquisition of seven new subsidiaries.  
(2) Number of workplace accidents involving at least one lost day, counted during the current year, per million hours worked.  
(3) Lost days are included in the year in which they occur even if the accident happened the previous year.

### Number of workplace accidents involving at least one lost day

	2015	2014
EDF Group	757	694
EDF	261	284

### Number of fatalities at work

EDF Group data	2015	2014	2013
<b>Total fatalities for employees and subcontractors</b>	<b>16</b>	15	13
<i>of which employee fatalities: – with 3 fatalities linked to accidents in “core business activities”<sup>(1)</sup></i>	<b>3</b>	4	4
<i>of which subcontractor fatalities: – with 7 fatalities linked to accidents in “core business activities”</i>	<b>13</b>	11	9

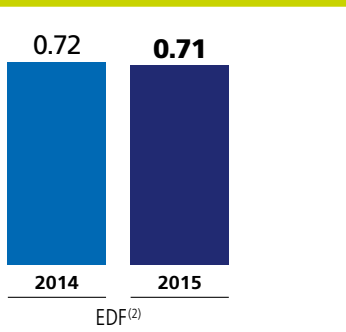
Since 2014, all fatal accidents are reported immediately to the Chairman and Chief Executive Officer and an in-depth analysis is systematically presented to the Executive Committee.

## RADIATION PROTECTION (OCCUPATIONAL DOSIMETRY)

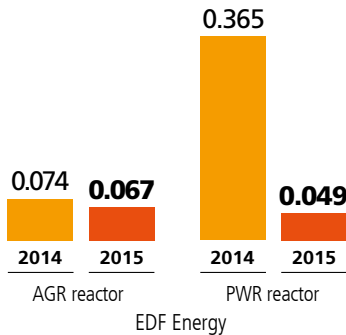
By mobilising all local players, EDF has achieved continuous improvement in the protection of employees against ionising radiation.

In France, the average annual collective dose for all site workers, whether EDF or external company employees, has been halved in less than 10 years; in the United Kingdom, it has been reduced, mainly as a result of optimised governance of maintenance and repair work. In 2015, no site worker, whether an EDF or subcontractor employee in either country, registered an individual dose in excess of the regulatory threshold (individual dose over a rolling 12-month period).

### Average collective dose (in man-sieverts per reactor)



This result, better than the target, was achieved by optimising work-sites, reducing the volume of activities and significantly decreasing shutdown extensions.



The current level is comparable with the average values recorded by operators of pressurised water reactors (PWR). EDF continues to apply its ALARA (as low as reasonably achievable) approach to controlling ionising radiation in view of upcoming major refits and the resulting volumes of work.

Given this situation, based on the levels already achieved, the future focus will be on those plants whose results need to be improved to be on a par with the best.

(1) “Core business activity” accidents are those linked to major risks: electrocution, fall from height, roads, and handling heavy loads.  
(2) Dose for all site workers, whether EDF or subcontractor employees.

# Ethics

Adopted in 2012 by EDF's Executive Committee and then by the Ethics Committee of the Board of Directors, **the Group Code of Ethics** rounds out the laws, rules and national and international agreements to which Group companies and employees must adhere.

The Group has set in place an organisation and procedures that guarantee all its employees access to:

- the tools and information needed to guide their decisions and actions in their daily lives;
- identified contact people (managers, Group Ethics Officer and department/company ethics officers) who can help them;
- a confidential, secure whistleblowing system for reporting issues to a manager, contact person or, as a last resort, the Group Ethics and Compliance Committee, which was set up in 2013.

### ETHICS ALERTS AND FEEDBACK

In reporting terms, the Group's whistleblowing system led to the handling of 101 cases, including 91 ethics alerts made in 2015 (up 21% compared with 2014).

### Alerts by type of situation

Types of central ethics alert	2015	2014	2013
<b>Respect for the individual</b>	<b>47</b>	26	23
<i>harassment</i>	<b>16</b>	12	3
<i>discrimination</i>	<b>16</b>	9	12
<i>recognition</i>	<b>15</b>	5	8
<b>Integrity</b>	<b>15</b>	4	4
<i>corruption</i>	<b>0</b>	0	0
<i>fraud</i>	<b>11</b>	2	1
<i>conflict of interests</i>	<b>2</b>	1	1
<i>favouritism</i>	<b>2</b>	1	1
<b>Performance</b>	<b>9</b>	1	0
<b>Environment</b>	<b>7</b>	8	2
<b>Solidarity</b>	<b>5</b>	1	1
<b>Other</b>	<b>8</b>	35	1
<b>TOTAL</b>	<b>91</b>	75	30

"Lack of respect for the individual" is the most commonly reported issue, and has been for some years. A total of 89% of incidents were dealt with through dialogue, information or intervention by the line manager in 2015; 11% led to corrective measures or disciplinary action that may result in dismissal. A total of 51% of incidents are reported by employees; of the remainder, 31% are reported by third parties and 16% by customers. Suppliers are responsible for only a marginal number of alerts.

### SERIOUS BREACHES OF THE CODE OF ETHICS

In 2014, in addition to the alerts dealt with by the Group Ethics and Compliance Committee, EDF set up a system enabling companies to report serious breaches of the Code of Ethics that are dealt with directly by the companies. For 2015, 60 such cases were identified by the companies, breaking down as follows:

Types of serious breaches of conduct	Number of cases identified during the year	Geographic breakdown			
		EDF	France (excluding EDF)	Europe (excluding France) audit or HR	Rest of the world
<b>Lack of respect for the individual</b>	30	13	11	5	1
<b>Fraud<sup>(1)</sup></b>	29	0	4	19	6
<b>Violation of human rights</b>	0	0	0	0	0
<b>Unfair competition practices</b>	1	0	0	1	0
<b>Causing harm to the environment</b>	0	0	0	0	0
<b>TOTAL</b>	60	13	15	25	7

(1) Of which no cases of corruption. There were no fines or sanctions due to corruption.

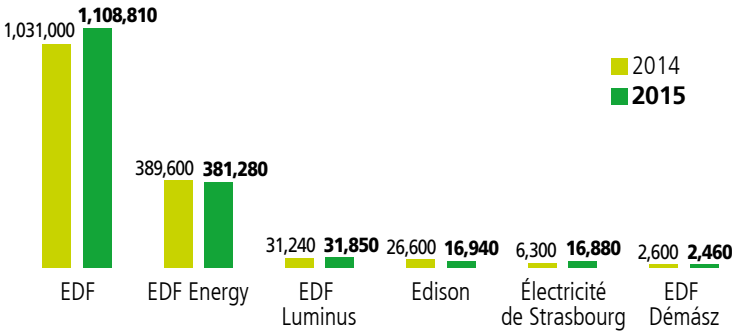
# Social responsibility indicators

### TACKLING FUEL POVERTY

#### ! Group commitment

Beyond meeting its regulatory obligations, the Group's approach to tackling fuel poverty is to help customers in difficulty by providing them with support through advice and occasional financial aid and by developing longer-term preventive action to reduce the energy consumption of the most vulnerable households.

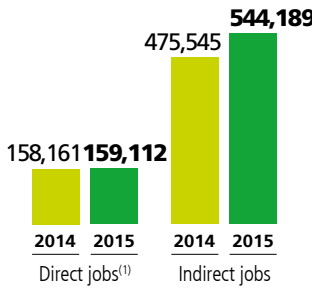
Number of actions to support our customers in need carried out by Group companies supplying energy



### CONTRIBUTION TO SOCIAL AND ECONOMIC DEVELOPMENT THROUGH EMPLOYMENT

#### ! Group commitment

Number of direct jobs (Group workforce) and indirect jobs (through orders placed with suppliers and subcontractors) generated by EDF Group business activities



(1) Consolidation scope include Dalkia, and excludes RTE.

# Social responsibility indicators

## SOCIAL INTEGRATION AND EMPLOYMENT

EDF's objective is to help people excluded from the workplace to find job opportunities, gain qualifications through work-study programmes and validate work experience in a promising sector. Since 2013, EDF's annual target is to sign 200 such contracts. EDF runs programmes specifically designed to train young people, particularly those who have difficulty accessing work-study programmes, to work in its business activities. The *Trait d'Union* initiative, for example, implemented by EDF's Sales Division in France, aims to train young people to become customer advisors.

### Employment and work-study qualification opportunities proposed by EDF

	2015	2014	2013	2012	2011	2010	2009
Number of people having signed a vocational training contract	479	310	336	473	499	401	506
Aggregate	3,004	2,525	2,215	1,879	1,406	907	506

## FONDS AGIR POUR L'EMPLOI EDF (FAPE)

Le *Fonds Agir Pour l'Emploi EDF* (FAPE EDF) forms part of EDF Group's patronage policy to support solidarity, specifically covering social integration and employment. The fund provides financial aid for projects that work to integrate and employ people in difficulty: organisations supporting integration through economic activity (integration schemes, neighbourhood development centres, etc.), and the creation of businesses by the long-term unemployed.

FAPE EDF is a scheme jointly run by Group companies, the EDF Foundation and union organisations. It is jointly managed and financed primarily through donations from 15,137 current and retired EDF Group employees, with each donation triggering a 200% contribution from the companies. In 2015, 280 social integration through work projects for unemployed people were supported, with grants totalling €2.2 million. These helped create and consolidate over 3,300 jobs.

### Actions at Fonds Agir Pour l'Emploi

	2015	2014	2013
Number of projects supported	280	272	118
Number of jobs consolidated	3,300	Almost 3,000	Over 3,000
Grants awarded (in millions of euros)	2.2	1.9	1.6

## SUPPLIERS AND RESPONSIBLE PURCHASING

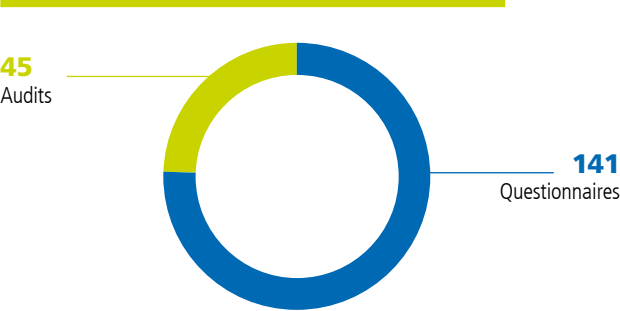
EDF Group's Purchasing Department applies a responsible approach in EDF's business activities and Group companies with a view to taking the following factors into account at every stage of the purchasing process:

- the environmental impact of purchasing decisions;
  - the social aspects of the supply chain;
  - the economic impact of the purchasing decision on the company, its environment and its suppliers.
- Several types of action are implemented across all EDF's business lines, such as carrying out sustainable development/corporate social responsibility audits at the premises of suppliers and service providers to ensure that commitments are being met.

## NUMBER OF SUSTAINABLE DEVELOPMENT/CSR ASSESSMENTS COMPLETED

In 2015, EDF Group's Purchasing Department carried out 186 "sustainable development/corporate social responsibility" assessments (of which 45 audits), exceeding the target of 90 and compared with 129 in 2014 and 60 in 2013.

### 2015 breakdown of types of assessment



## PURCHASES FROM BACK-TO-WORK ORGANISATIONS

As part of its sustainable development policy, EDF in France has to meet a target for purchases from back-to-work organisations. In 2015, the target annual volume of purchases was set at €1.5 million. The actual volume achieved was €1.8 million.

# Non-financial ratings

## Non-financial ratings: continuous improvements for the Group in 2015

- Significant progress in EDF's non-financial rating by leading agencies.
- Inclusion in a growing number of sustainability indexes.

EDF submits its performance data in response to requests from ESG rating agencies and non-financial analysis departments working on behalf of investors. Using their own methodologies, the agencies assess and assign scores to companies based on their policies and results in the area of sustainable development. They then create and manage the indexes that are used by socially responsible investment (SRI) analysts to guide their investment choices. The assessments of the main specialist rating agencies and ethical fund managers indicate the Group's CSR performance in its sector.

### Main agencies to which EDF submits its performance data:

## FTSE – Russel

EDF has been a member of the FTSE4Good Index since March 2012. The Group's inclusion has been confirmed every year since then. In 2015, EDF's rating progressed, with 4.5 out of 5 (compared with 4.3 out of 5 in 2014), and above all EDF became leader in its sector. EDF is one of the five global nuclear operators that meet the stringent criteria developed and overseen by the FTSE4Good Policy Committee.

FTSE ESG ratings	2013	2014	June 2015	Dec. 2015	
Overall score (from 0 to 5)	3.7	4.3	4.3	4.5	↗
Sector score (from 0 to 100)	75	100	98	100	↗

ESG criteria <sup>(1)</sup>	2013	2014	June 2015	Dec. 2015	
Environmental	4	4.3	4.3	4.5	↗
Social	4	4.0	4.3	4.7	↗
Governance	3	4.6	4.3	4.4	↗

(1) Environmental, social and governance.



## S&P DOW JONES INDICES – McGraw Hill Financial

In 2015, EDF obtained the very good score of 79 out of 100 (stable compared with 2014), whereas the average sector score for Electric Utilities fell (52 in 2015 compared with 56 in 2014). This score put EDF in the top 15% of companies with the highest performance in its sector, and enabled it to once again earn the title of Year Book Member in the RobecoSam 2016 Sustainability Yearbook.

RobecoSam ratings	2013	2014	2015	
EDF overall score (0 to 100)	66	79	79	→
Electric Utilities sector average	54	56	52	↘

ESG criteria	2013	2014	2015	
Economic	74	81	75	↘
Environment	59	82	76	↘
Social	63	75	87	↗



In 2015, there was a strong improvement in EDF's score because it earned maximum points for transparency (100/100) and obtained, for the first time, the score of A- for performance. EDF is a member of the CDLI France 2015 (Climate Disclosure Leadership Index). In its annual report on climate change, CDP underlines the excellent performance of EDF Group, which reduced its CO<sub>2</sub> emissions 16.6% in 2015.

CDP ratings	2013	2014	2015	
Transparency score (0 to 100)	95	98	100	↗
Performance score	B	B	A-	↗

# Non-financial ratings



EDF is a member of the Euronext Vigeo Europe, Vigeo Eurozone and Vigeo France indices.

Vigeo ratings	2011	2012	2014	
Overall EDF score (0 to 100)	59	55	58	↗
Ranking in Utilities sector	1 <sup>st</sup> on 27	9 <sup>th</sup> on 34	10 <sup>th</sup> on 43	↗

ESG criteria	2011	2012	2014	
Environment	59	64	61	↘
Human resources	75	71	76	↗
Human rights	68	54	68	↗
Community involvement	67	59	70	↗
Business behaviour	41	34	39	↗
Corporate governance	53	54	54	→



In 2015, EDF's score rose 2 points to 78/100 (vs. 76/100 in 2014). EDF is a member of the Stoxx ESG Leaders Index.

SUSTAINALYTICS ratings	2013	2014	2015	
EDF overall score (0 to 100)	71	76	78	↗
Ranking in Utilities sector	29 <sup>th</sup> on 206	14 <sup>th</sup> on 224	16 <sup>th</sup> on 246	↗

ESG criteria	2013	2014	2015	
Environment	72	74	79	↗
Social	69	78	76	↘
Governance	72	78	79	↗

## OEKOM RESEARCH

Oekom ratings	2013	2014	2015	
EDF overall score (D– to A+)	C	C+	C+	→

ESG criteria	2013	2014	2015	
Environment	C	C+	C+	→
Social	C	C+	C+	→

## MSCI

MSCI ratings	2013	2014	2015	
EDF overall score (CCC to AAA)	BBB	A	NA	

ESG criteria	2013	2014	2015	
Environment (from 0 to 10)	6	6.3	NA	↗
Social	7.2	5.1	NA	↘
Governance	3	5.8	NA	↗

## EcoVadis

In 2015, EDF's score rose 5 points to 72/100 (vs. 67/100 in 2014). EDF obtained Advanced level and above all became leader in its sector.

EcoVadis ratings	2011	2014	2015	
EDF overall score (0 to 100)	67	67	72	↗

ESG criteria	2011	2014	2015	
Environment		80	80	→
Social		70	70	→
Ethics		50	60	↗
Supply chain		50	70	↗

# Summary of indicators

## INPUTS AND OUTPUTS OF EDF’S GENERATION OPERATIONS IN FRANCE

This information is collected on the basis of the main inputs (raw materials, consumables, energy and water) and outputs (waste, by-products and emissions) of EDF’s electricity generation process in France (nuclear, fossil-fired and hydro), providing more details as a complement to the Group’s environmental indicators. Some indicators take into account the latest updates reported at the beginning of 2016.

## RAW MATERIALS, CONSUMABLES, ENERGY AND COOLING WATER LINKED TO EDF’S ELECTRICITY GENERATION IN FRANCE

— INPUT DATA	Unit	2015	2014	2013
<b>Raw materials</b>				
Nuclear fuel load	t	1,120	1,272	1,205
Coal	t	1,811,839	2,367,304	5,423,069
Heavy fuel oil	t	330,452	456,552	724,524
Domestic fuel oil	t	222,503	215,645	297,227
Industrial gas MWh (LHV)	MWh (PCI)	0	0	0
Non-industrial gas MWh (LHV)	MWh (PCI)	3,872,721	2,210,961	2,926,884
<b>Consumables</b>				
Oils	t	3,944	5,805	7,332
Limestone for desulphurisation plant	t	7,606	19,622	49,284
Lime	t	889	965	1,370
Soda ash	t	1,765	1,925	2,233
Hydrochloric acid	t	3,725	4,052	4,347
Sulphuric acid	t	28,858	32,064	28,698
Flocculating agents	t	253	259	296
Hydrazine	t	111	111	104
Boric acid	t	274	282	273
Denitrification ammonia	t	8,716	9,541	22,875
<b>Energy</b>				
Internal consumption, pumping electricity	TWh	6.8	7.9	7.1
Internal consumption, electricity	TWh	22	22	22
Total thermal energy of fuel	TJ	4,623,488	4,642,015	4,587,441
<b>Water</b>				
Cooling water drawn	10 <sup>6</sup> m <sup>3</sup>	38,704	38,978	39,773
— of which freshwater	10 <sup>6</sup> m <sup>3</sup>	16,787	16,504	15,920
— of which brackish water	10 <sup>6</sup> m <sup>3</sup>	4,939	5,440	5,732
Industrial usage water	10 <sup>3</sup> m <sup>3</sup>	24,739	30,881	39,468



# Summary of indicators

## WASTE, BY-PRODUCTS AND EMISSIONS LINKED TO EDF'S ELECTRICITY GENERATION IN FRANCE

— OUTPUT DATA	Unit	2015	2014	2013
Products				
Gross electricity	TWh	487.3	493.9	496.1
Net electricity	TWh	465.5	471.9	474.0
By-products				
Evacuated spent nuclear fuel	t	1,216	1,124	1,099
Coal ash produced	t	195,235	245,326	576,227
Coal ash recycled	t	332,332	371,329	577,073
Gypsum	t	28,624	33,598	81,746
Desulphurisation sludge	t	1,358	2,174	5,504
Water				
Cooling water discharged into rivers and the sea	10 <sup>6</sup> m <sup>3</sup>	38,090	38,484	39,295
— of which freshwater	10 <sup>6</sup> m <sup>3</sup>	16,282	16,010	15,695
— of which brackish water	10 <sup>6</sup> m <sup>3</sup>	4,939	5,440	5,732
Cooling water evaporated	10 <sup>6</sup> m <sup>3</sup>	505	494	478
— of which freshwater	10 <sup>6</sup> m <sup>3</sup>	505	494	478
— of which brackish water	10 <sup>6</sup> m <sup>3</sup>	0	0	0
Gas emissions				
CO <sub>2</sub> quotas	kt	6,708	8,058	16,591
Total CO <sub>2</sub>	kt	6,720	8,097	16,627
SO <sub>2</sub>	t	13,366	21,740	47,222
N <sub>2</sub> O <sup>(1)</sup>	kt eq. CO <sub>2</sub>	27	30	70
NO <sub>x</sub>	t	18,669	30,411	54,624
CH <sub>4</sub> (Methane in air) <sup>(1)</sup>	kt eq. CO <sub>2</sub>	5	5	7
SF <sub>6</sub> <sup>(1)</sup>	t eq. CO <sub>2</sub>	58,301	73,480	66,318
Air				
Dust	t	793	1,331	3,049
Particulate matter (PM <sub>10</sub> )	kg	695,206	1,190,179	2,594,443
Mercury	kg	47	66	155

(1) Indicators for which 2014 and 2013 data was recalculated according to the 2015 method.

— OUTPUT DATA (continued)	Unit	2015	2014	2013
Radioactive emissions into air				
Noble gases	TBq/reactor	0.418	0.557	0.438
Tritium	TBq/reactor	0.497	0.499	0.492
Carbon 14	TBq/reactor	0.172	0.172	0.167
Iodines	GBq/reactor	0.017	0.020	0.027
Other fission and activation products	GBq/reactor	0.002	0.002	0.003
Radioactive emissions into water				
Tritium <sup>(1)</sup>	TBq/reactor	17.797	17.738	18.378
Carbon 14 <sup>(1)</sup>	GBq/reactor	12.910	12.886	12.514
Iodines	GBq/reactor	0.005	0.005	0.005
Other radioelements	GBq/reactor	0.226	0.261	0.289
Waste				
Total conventional waste	t	229,705	318,873	239,021
— of which recycled (excluding ash and gypsum)	t	211,316	295,140	212,711
Non-hazardous conventional industrial waste	t	201,566	280,062	209,630
Hazardous conventional industrial waste	t	28,140	38,812	29,391
Solid high- and intermediate-level long-lived radioactive waste (HILW-LL)	m <sup>3</sup> /TWh nuclear net	0.88	0.88	0.86
Solid low- and intermediate-level short-lived radioactive waste (LILW-SL) <sup>(1)</sup>	m <sup>3</sup> /TWh nuclear net	16.42	15.76	18.95
	m <sup>3</sup> /unit	118.0	110.5	131.9
Very low-level radioactive waste (VLLW)	m <sup>3</sup> /TWh	6.0	7.4	8.3
VLLW from decommissioning <sup>(1)</sup>	m <sup>3</sup>	1,847	2,580	1,214
LILW from decommissioning <sup>(1)</sup>	m <sup>3</sup>	921	576	407
Water				
Cu	kg	50,049	48,179	45,693
Zinc	kg	22,537	20,164	22,915






(1) Indicators for which 2014 and 2013 data was recalculated according to the 2015 method.

# Summary of indicators

## ENVIRONMENTAL INDICATORS

					SCOPE <sup>(1)</sup>			
	Unit	2015	2014	2013	2015	2014	2013	GRI ref. <sup>(2)</sup>
Economic indicators								
Compensation paid or to be paid following legal decisions on environmental matters <sup>(3)</sup>	€k	10.5	25	7.8	1	1	1	EN 29
Management								
Environmental protection expenditure — of which net provisions	€M	3,553 2,560	3,043 1,996	2,924 1,901	1	1	1	EN 30
Environmental management (% of consolidated Group revenue covered by ISO 14001 certification)	%	98 <sup>(4)</sup>	98 <sup>(4)</sup>	95 <sup>(4)</sup>	2	2	2	

(1) Scope 1: EDF. Scope 2: EDF Group.  
(2) GRI: Global Reporting Initiative, version 3.  
(3) Excluding legal fees.  
(4) Including certified companies not covered by the Group certificate.

					SCOPE <sup>(1)</sup>			
	Unit	2015	2014	2013 restated <sup>(2)</sup>	2015	2014	2013	GRI ref.
Fuel and raw materials – fuel consumed								
Nuclear fuel load	t	1,120	1,272	NA	1	1	1	EN 1
Coal 	kt	15,065	18,151	23,644	2	2	2	EN 1
Heavy fuel oil	kt	867	833	870	2	2	2	EN 1
Domestic fuel load	kt	368	345	372	2	2	2	EN 1
Natural gas	GWh (LHV)	100,013	95,340	103,131	2	2	2	EN 1
Industrial gas	GWh (LHV)	4	474	8,018	2	2	2	EN 1
Biomass	kt	3,172	3,078	2,550	2	2	2	EN 1
— of which wood	kt	1,724	1,509	1,057	2	2	2	EN 1
Water – raw materials from sources outside the company								
Cooling water drawn 	10 <sup>9</sup> m <sup>3</sup>	49.3	49.8	50.8	2	2	2	EN 8
— of which freshwater 	10 <sup>9</sup> m <sup>3</sup>	18.3	18.1	17.7	2	2	2	EN 8
— of which brackish (or estuary) water	10 <sup>9</sup> m <sup>3</sup>	5.2	5.8	6.1	2	2	2	EN 8
Cooling water discharged 	10 <sup>9</sup> m <sup>3</sup>	48.7	49.3	50.3	2	2	2	EN 21
— of which freshwater 	10 <sup>9</sup> m <sup>3</sup>	17.8	17.6	17.4	2	2	2	EN 21
— of which brackish (or estuary) water	10 <sup>9</sup> m <sup>3</sup>	5.2	5.8	6.1	2	2	2	EN 21

NC: not communicated; NA: not applicable.  
(1) Scope 1: EDF. Scope 1a: EDF + ERDF. Scope 2: EDF Group.  
(2) 2014 pro forma Group data (restated) – see section 3.4.2.1 of the Group's reference document, "Reporting Scope".  
☼ 2015 data checked by the Statutory Auditors, appointed as independent third parties, in respect of 2015. This work is described under the formed opinion on the fair presentation of CSR information in the Statutory Auditors' report, available in EDF Group's 2015 reference document.

(Continued)	Unit	2015	2014	2013 restated <sup>(2)</sup>	SCOPE <sup>(1)</sup>			GRI ref.
					2015	2014	2013	
Air – gas emissions								
Total CO <sub>2</sub> emissions due to electricity and heat generation (including facilities not subject to quotas) 🌱🌱🌱	Mt	59.1	64.3	79.3	2	2	2	EN 16
— of which CO <sub>2</sub> emissions from coal-fired power plants	Mt	32.8	39.8	NC	2	2	–	EN 16
— of which CO <sub>2</sub> emissions from heavy fuel oil-fired power plants	Mt	20.9	19.1	NC	2	2	–	EN 16
— of which CO <sub>2</sub> emissions from gas-fired power plants	Mt	3.6	3.4	NC	2	2	–	EN 16
SO <sub>2</sub> emissions 🌱	kt	70.0	82.5	113.6	2	2	2	EN 20
NO <sub>x</sub> emissions 🌱	kt	92.2	117.6	169.9	2	2	2	EN 20
Dust 🌱	t	4,385	5,205	7,761	2	2	2	EN 20
Particulate matter (PM <sub>10</sub> ) – EDF	t	713	1,189	NA	1	1	1	EN 21
Particulate matter (PM <sub>10</sub> ) – Group	t	2,660	3,374	NC	2	2	NC	EN 21
Mercury – EDF	t	0.04	0.07	NA	1	1	1	EN 21
Mercury – Group	t	0.18	0.27	NC	2	2	NC	EN 21
CH <sub>4</sub> emissions	kt eq. CO <sub>2</sub>	37.3	32.3	34.4	2	2	2	EN 16
N <sub>2</sub> O emissions	kt eq. CO <sub>2</sub>	238.9	274.3	313.1	2	2	2	EN 16
SF <sub>6</sub> emissions – EDF 🌱	kt eq. CO <sub>2</sub>	58.6	64.2	NA	1	1	1	EN 16
SF <sub>6</sub> emissions – EDF + ERDF 🌱	kt eq. CO <sub>2</sub>	69.2	72.5	NA	1a	1a	1a	EN 16
SF <sub>6</sub> emissions – Group 🌱	kt eq. CO <sub>2</sub>	80.3	82.1	94.1	2	2	2	EN 16
Conventional waste								
Hazardous waste 🌱	t	64,411	82,504	63,978	2	2	2	EN 22
Non-hazardous waste 🌱	t	389,471	409,245	326,975	2	2	2	EN 22
Conventional industrial waste recycled or transported for recycling 🌱	t	365,744	392,815	293,752	2	2	2	EN 22
Ash produced 🌱	kt	2,657	3,062	3,859	2	2	2	EN 22
Energy								
Renewable energy: electricity and heat generated from renewable sources (excl. hydro) 🌱	GWh	19,163	18,811	17,692	2	2	2	EN 6
Direct energy consumption, by primary source								
Internal consumption, pumping electricity	TWh	7.0	8.0	NA	1	1	1	EN 3
Internal consumption, electricity	TWh	22.0	22.1	NA	1	1	1	EN 3

NC: not communicated; NA: not applicable.  
(1) Scope 1: EDF. Scope 1a: EDF + ERDF. Scope 2: EDF Group.  
(2) 2014 pro forma Group data (restated) – see section 3.4.2.1 of the Group's reference document, "Reporting Scope".  
☼ 2015 data checked by the Statutory Auditors, appointed as independent third parties, in respect of 2015. This work is described under the formed opinion on the fair presentation of CSR information in the Statutory Auditors' report, available in EDF Group's 2015 reference document.  
☼☼ 2015 data audited for reasonable assurance by the Statutory Auditors, appointed as independent third parties. This work is described under the formed opinion on the fair presentation of CSR information in the Statutory Auditors' report, available in EDF Group's 2015 reference document.

# Summary of indicators

## NUCLEAR INDICATORS

— EDF	Unit	2015	2014	2013	GRI ref.
Shutdowns and events					
Automatic shutdowns	Nb. of reactors/ 7,000 hours	0.66	0.53	0.59	
Events and incidents (level ≥ 1)	Nb. of reactors/year	1.15	1.14	1.19	
Dosimetry					
Average collective dose	h-Sv/reactor	0.71	0.72	0.79	
Individual dose (nb. of workers exposed to more than 20 mSv)	No.	0	0	0	
Individual dose (nb. of workers exposed to more than 16 mSv)	No.	0	0	0	
Dose to the most exposed member of the public	mSv/year	NA	NA	0	
Radioactive liquid effluents released into water <sup>(1)</sup>					
Tritium	TBq/reactor	18.1	17.5	18.6	EN 21
Carbon 14	GBq/reactor	12.9	12.8	12.5	EN 21
Radioactive atmospheric emissions <sup>(1)</sup>					
Tritium	TBq/reactor	0.50	0.50	0.49	EN 20
Carbon 14	TBq/reactor	0.17	0.17	0.17	EN 20
Fuel					
Unloaded spent nuclear fuel	t	1,110	1,272	1,205	EN 24
Evacuated spent nuclear fuel	t	1,216	1,124	1,099	EN 24
Operational nuclear waste					
Solid very low-level radioactive waste <sup>(2)</sup>	m³/TWh	6.0	7.6 (7.4)*	8.7 (8.3)*	EN 24
Solid low- and intermediate-level short-lived radioactive waste	m³/TWh	16.4	15.4 (15.8)*	19.0 (19.0)*	EN 24
Solid high- and intermediate-level long-lived radioactive waste	m³/TWh	0.88	0.88	0.86	EN 24
Radioactive waste from decommissioning					
Very low-level radioactive waste	m³	1,847	2,580 (2,580)*	1,214 (1,214)*	EN 24
Low- and intermediate-level radioactive waste	m³	914	659 (576)*	513 (407)*	EN 24
Waste sent to Centraco processing plant	t	357	187	188	

(1) Radioactive atmospheric emissions and radioactive liquid effluents released into water by EDF in France are continuously measured.  
Published data corresponds to:  
— for tritium, data measured for the period December N-1 to November N;  
— for carbon 14, data calculated on the basis of generation output from January to December N.  
(2) The methodology concerning operational nuclear waste and decommissioning nuclear waste has been updated (see reference document, section 3.4.2.2 “Further details on the environmental data”).  
NA: not available.  
\* The values arrived at according to the new methodology are presented between brackets.  
2015 data checked by the Statutory Auditors, appointed as independent third parties, in respect of 2015. This work is described under the formed opinion on the fair presentation of CSR information in the Statutory Auditors’ report, available in EDF Group’s 2015 reference document.

— EDF ENERGY	Unit	2015	2014	2013	GRI ref.
Shutdowns and events					
Automatic shutdowns	Nb. of reactors/ 7,000 hours	0.60	1.13	0.45	
Events and incidents (level ≥ 1)	Nb. of reactors/year	0.47	0.33	0.80	
Dosimetry					
Average collective dose – AGR <sup>(1)</sup>	h-Sv/reactor	0.07	0.07	0.03	
Average collective dose – PWR <sup>(2)</sup>	h-Sv/reactor	0.05	0.36	0.39	
Individual dose (nb. of workers exposed to more than 20 mSv)	No.	0	0	0	
Individual dose (nb. of workers exposed to more than 15 mSv)	No.	0	0	0	
Dose to the most exposed member of the public	mSv/year	0.007	0.005	0	
Radioactive liquid effluents released into water					
Tritium – AGR <sup>(1)</sup>	TBq/reactor	120	129	150	EN 21
Tritium – PWR <sup>(2)</sup>	TBq/reactor	19	67	41	EN 21
Radioactive atmospheric emissions					
Tritium – AGR	TBq/reactor	0.71	0.66	0.59	EN 20
Tritium – PWR	TBq/reactor	0.68	0.92	0.80	EN 20
Carbon 14 – AGR	TBq/reactor	0.69	0.64	0.67	EN 20
Carbon 14 – PWR	TBq/reactor	0.24	0.26	0.20	EN 20
Fuel					
Unloaded uranium	t	172	193	177	EN 24
Evacuated uranium	t	172	193	177	EN 24
Operational nuclear waste					
Evacuated low-level radioactive waste	m³	485	452	655	EN 24
Intermediate-level radioactive waste generated	m³	178	178	178	EN 24

— CONSTELLATION ENERGY NUCLEAR GROUP	Unit	2015	2014	2013	GRI ref.
Radioactive liquid effluents released into water					
Tritium	TBq/reactor	11.63	12.12	8.34	EN 21
Radioactive atmospheric emissions					
Tritium	TBq/reactor	4.43	1.02	1.16	EN 20
Carbon 14	TBq/reactor	0.36	0.36	0.37	EN 20
Fuel <sup>(3)</sup>					
Unloaded uranium	t	41	59	33	

(1) Advanced gas-cooled reactor.  
(2) Pressurised water reactor.  
(3) Data consolidated according to the percentage ownership in the subsidiary.  
2015 data checked by the Statutory Auditors, appointed as independent third parties, in respect of 2015. This work is described under the formed opinion on the fair presentation of CSR information in the Statutory Auditors’ report, available in EDF Group’s 2015 reference document.



# Summary of indicators

## SOCIAL INDICATORS

— EDF GROUP	Unit	2015	2014	2013	GRI ref.
Total EDF workforce in full-time equivalents (FTE)		156,534	148,025	154,942	
Actual no. of employees at 31/12/2015 and breakdown					
EDF + ERDF	No.	110,610	111,040	109,754	LA 1
Total EDF Group**	No.	159,112	158,161	158,467	LA 1
Employees by age					
Under 25 years**	%	8	9	8	
From 25 to 35 years**	%	28	27	25	
From 36 to 45 years**	%	25	25	25	
From 46 to 55 years**	%	28	30	32	
56 years and over**	%	11	10	10	
Employees by geographical area (per head office location)					
France	No.	133,406	132,107	129,492	
— of which Dalkia International	No.	—	—	13,056	
— of which Dalkia France and Citelum	No.	16,036	14,207		
United Kingdom	No.	14,908	15,727	16,190	
Italy	No.	4,950	4,955	5,175	
Rest of Europe	No.	5,521	5,207	6,114	
Rest of the world	No.	327	165	1,496	
Manager (as defined by French regulations)	No.	45,935	44,539	42,327	LA 1
Women at managerial level <sup>(1)</sup> *	%	30	28.65	25.70	LA 13
Non-management employees	No.	113,177	113,622	116,140	LA 13
Gender equality					
Male workforce**	No.	117,295	116,582	116,928	LA 13
Female workforce**	No.	41,817	41,579	41,539	LA 13
Male managers*	No.	33,383	32,626	31,468	LA 13
Female managers*	No.	12,552	11,913	10,859	LA 13
Hires/departures					
Hires*	No.	8,866	10,385	10,945	LA 2
Other arrivals <sup>(2)</sup> *	No.	8,466	6,628	8,027	LA 2
Retirements/inactive employees*	No.	4,722	4,665	4,321	LA 2
Resignations <sup>(3)</sup> *	No.	2,104	1,727	1,768	LA 2
Redundancies, dismissals, employees made inactive*	No.	1,097	815	824	LA 2
Other departures <sup>(2)</sup> *	No.	8,289	7,963	8,424	LA 2

(1) This percentage represents the number of female managers compared to the number of female employees.  
(2) Inclusions and exclusions from consolidation scope are accounted for under “Other arrivals” and “Other departures” respectively.  
(3) Special contracts (including those for work-study trainees) that reach termination are included in “Other departures” regardless of whether a job offer was made at the end of the contract. Departures during the trial period are also included in “Other departures”.  
\* Data checked by the Statutory Auditors, appointed as independent third parties, in respect of 2015. This work is described under the formed opinion on the fair presentation of CSR information in the Statutory Auditors’ report, available in EDF Group’s 2015 reference document.  
\*\* 2015 data audited for reasonable assurance by the Statutory Auditors, appointed as independent third parties. This work is described under the formed opinion on the fair presentation of CSR information in the Statutory Auditors’ report, available in EDF Group’s 2015 reference document.

— EDF GROUP (continued)	Unit	2015	2014	2013	GRI ref.
Remuneration					
Total gross remuneration	€M	7,878	7,426	7,494	
Part-time employees	Nb.	11,491	11,977	12,943	LA 1
Absenteeism					
Average number of days lost through illness or accident per year*	Nb.	9.2	9.1	8.8	
Health and safety					
Fatal accidents*	Nb.	3	4	4	LA 7
Accident frequency rate <sup>(1)</sup> *		3.2	3.1	3.1	LA 7
Workplace accidents involving at least one lost day*	Nb.	757	694	750	LA 7
Accident severity rate <sup>(2)</sup> *		0.20	0.17	0.16	
Employee relations					
Employees covered by collective bargaining agreements	%	90	91	89	LA 4
Training					
Total hours of training provided*	Nb.	9,085,028	8,915,338	8,636,882	
Employees benefiting from training*	Nb.	138,839	135,040	134,910	LA 10
Employment and integration of employees with disabilities					
Employees with disabilities <sup>(3)</sup> *	Nb.	5,232	5,086	4,645	LA 13

(1) The frequency rate represents the number of workplace accidents involving at least one lost day per million hours worked.  
(2) The severity rate represents the number of lost days per thousand hours worked.  
(3) Declaration of this data is compulsory in some subsidiaries.  
\* Data checked by the Statutory Auditors, appointed as independent third parties, in respect of 2015. This work is described under the formed opinion on the fair presentation of CSR information in the Statutory Auditors’ report, available in EDF Group’s 2015 reference document.

# Summary of indicators

— EDF	Unit	2015	2014	2013	GRI ref.
<b>Workforce at 31/12/2015 and breakdown</b>					
Employees covered by collective bargaining agreements at 31/12/2015	Nb.	<b>67,088</b>	67,567	66,561	LA 1
Employees under unlimited-term contracts not covered by collective bargaining agreements	Nb.	<b>479</b>	461	434	LA 1
Employees under fixed-term contracts not covered by collective bargaining agreements	Nb.	<b>4,013</b>	4,153	4,094	LA 1
Total employees not covered by collective bargaining agreements	Nb.	<b>4,492</b>	4,614	4,528	LA 1
Total workforce	Nb.	<b>71,580</b>	72,181	71,088	LA 1
Managers (as defined by French regulations)	Nb.	<b>31,192</b>	30,701	29,595	LA 1
Women at managerial level	%	<b>28.4</b>	27.8	26.8	LA 13
Non-management employees	Nb.	<b>40,388</b>	41,480	41,493	LA 13
Technicians and supervisory staff	Nb.	<b>33,016</b>	33,531	33,410	LA 13
Operatives	Nb.	<b>7,372</b>	7,949	8,084	LA 13
<b>Gender equality</b>					
Male workforce	Nb.	<b>49,099</b>	49,524	48,991	LA 13
Female workforce	Nb.	<b>22,481</b>	22,657	22,097	LA 13
Male managers	Nb.	<b>22,315</b>	22,175	21,650	LA 13
Female managers	Nb.	<b>8,877</b>	8,526	7,945	LA 13
<b>Hires/departures</b>					
Hires	Nb.	<b>2,760</b>	4,236	4,433	LA 2
Integration and rehiring	Nb.	<b>256</b>	230	249	LA 2
Other arrivals <sup>(1)</sup>	Nb.	<b>2,809</b>	3,022	3,598	LA 2
Retirements/inactive employees	Nb.	<b>2,433</b>	2,499	2,134	LA 2
Resignations	Nb.	<b>110</b>	107	109	LA 2
Redundancies, dismissals, employees made inactive	Nb.	<b>23</b>	9	16	LA 2
Deaths	Nb.	<b>77</b>	68	81	LA 2
Other departures <sup>(1)</sup>	Nb.	<b>3,786</b>	3,731	3,725	LA 2
<b>Overtime</b>					
Overtime worked	Thousands of hours	<b>2,835</b>	2,770	2,847	
<b>Outside contractors</b>					
Monthly average of temporary employees <sup>(2)</sup>	Nb.	<b>NA</b>	NA	1,948	LA 1
<b>Organisation of working hours</b>					
Full-time employees	Nb.	<b>64,318</b>	64,534	62,990	LA 1
Part-time employees	Nb.	<b>7,262</b>	7,647	8,098	LA 1
Employees working shifts	Nb.	<b>6,860</b>	6,955	6,917	LA 1
<b>Absenteeism</b>					
Absenteeism	%	<b>3.7</b>	3.7	3.8	LA 7
Hours of maternity or paternity leave/hours worked	%	<b>0.8</b>	0.8	0.8	LA 7

(1) Excluding arrivals and departures on seasonal short-term contracts.

(2) The 2015 data was not available at the time of publication of this document.

NA: not available.

— EDF (continued)	Unit	2015	2014	2013	GRI ref.
<b>Health and safety</b>					
Work-related illnesses reported during the year		<b>64</b>	51	53	
Fatal accidents	Nb.	<b>0</b>	2	0	LA 7
Accident frequency rate		<b>2.6</b>	2.8	2.7	LA 7
Accident severity rate		<b>0.16</b>	0.14	0.14	LA 7
Workplace accidents involving at least one lost day	Nb.	<b>261</b>	284	273	LA 7
<b>Remuneration – social security payments – profit-sharing</b>					
Main monthly remuneration					
Managers	euros	<b>4,361</b>	4,334	4,327	EC 1
Technicians and supervisory staff	euros	<b>2,606</b>	2,608	2,615	EC 1
Operatives	euros	<b>1,871</b>	1,864	1,870	EC 1
Personnel costs	€M	<b>6,525</b>	6,408	6,366	EC 1
Average amount of profit-sharing per employee	euros	<b>2,107</b>	1,980	1,820	EC 1
<b>Employee relations</b>					
Collective bargaining agreements signed in France	Nb.	<b>2</b>	3	8	HR 5
Percentage of employees covered by collective bargaining agreements <sup>(1)</sup>	%	<b>93</b>	93	93	LA 4
<b>Training</b>					
Employees benefiting from training	Nb.	<b>63,748</b>	63,252	62,074	LA 10
<b>Employment and integration of employees with disabilities</b>					
Employees with disabilities	Nb.	<b>2,157</b>	2,093	1,946	LA 13
Employees with disabilities hired	Nb.	<b>91</b>	112	110	LA 13
<b>Charitable works</b>					
Committee budgets (fulfilling 1% requirement)	€M	<b>201</b>	199	205	

(1) EDF employees are not covered by a collective bargaining agreement in the French legal sense but by the *statut des industries électriques et gazières* (electricity and gas sector statutes).

# Reporting scope

The scope covered by the reporting procedure is defined on the basis of:

- the consolidation scope established by the Financial Department;
- the criteria linked to relevance of the subsidiaries’ activities in terms of environmental and social impact.

Entities included in the consolidation scope at 31/12/2015:

CONSOLIDATION LEVEL	COMPANIES	ENVIRONMENTAL KPI SCOPE	SOCIAL KPI SCOPE
France	Électricité de France	X	X
	ERDF	X	X
	EDF PEI	X	X
Other activities	Électricité de Strasbourg	X	X
	Tiru	X	X
	Socodei	X	X
	EDF Energies Nouvelles	X	X
	Dalkia	X	X
	Citelum		X
	EDF Trading (CCGT asset) <sup>(1)</sup>	X	X
	CHAM		X
United Kingdom	EDF Energy	X	X
Italy	Edison	X	X
	Fenice	X	X
Other international	EDF Luminus (Belgium)	X	X
	EDF Belgium (Belgium)	X	
	EDF Polska (Poland)	X	X
	Kogeneracja (Poland)	X	X
	Zielona Gora (Poland)	X	X
	EDF Paliwa (Poland)		X
	EDF Démasz (Hungary)	X	X
	BERT (Hungary) <sup>(1)</sup>	X	X
	EDF Norte Fluminense (Brazil)	X	X
	Figlec (China) <sup>(1)</sup>	X	
	Meco (Vietnam)	X	X

(1) Companies that left the consolidation scope during the year and are consolidated according to the length of time they were held by EDF.

For more information on the reporting methodology and the Statutory Auditors’ assurance report, see the Group’s reference document (sections 3.4.2 “Methodological elements on the social and environmental data” and 3.6 “Assurance report of one of the Statutory Auditors”).

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