

HALF-YEAR FINANCIAL REPORT

AT 30 JUNE 2018



At its meeting of 30 July 2018, EDF's Board of Directors approved this Half-year financial report and the condensed consolidated financial statements for the half-year ended on 30 June 2018 included in it.

This report contains information relating to the markets in which the EDF group is present. This information has been taken from surveys carried out by external sources. Considering the very rapid changes that characterise the energy sector in France and worldwide, it is possible that this information could turn out to be mistaken or outdated. Developments in the Group's activities could consequently differ from those described in this Half-year financial report and the declarations and information appearing in this report could prove to be erroneous.

The forward-looking statements contained in this Half-year financial report, notably in section 11 "Financial Outlook" of the Half-year management report, are based on assumptions and estimates that could evolve or be impacted by risks, uncertainties (relating particularly to the economic, financial, competitive, regulatory and weather environment) or other factors that may cause the future results, performances and achievements of the Group to differ significantly from the objectives expressed and suggested. These factors may include changes in the economic and commercial environment, regulations, and the factors discussed in section 2 of the EDF group's 2017 Reference Document "Risk Factors".

Pursuant to European and French legislation, the entities responsible for the transmission and distribution of electricity within the EDF group may not communicate certain information gathered in the course of their activities to the other entities of the Group, including its Management. Similarly, certain data specific to generation and supply activities may not be communicated to the entities responsible for transmission and distribution. This Half-year financial report has been prepared by the EDF group in compliance with these rules.



CONTENTS OF THE 2018 HALF-YEAR FINANCIAL REPORT

1.	CERTIFICATION	BY TH	IE PERSON	RESPON	ISIBLE	FOR	THE	2018	HALF-	YEAR	FINAN	ICIAL
	REPORT											

- 2. HALF-YEAR MANAGEMENT REPORT AT 30 JUNE 2018
- 3. CONDENSED CONSOLIDATED HALF-YEAR FINANCIAL STATEMENTS AT 30 JUNE 2018
- 4. STATUTORY AUDITORS' REVIEW REPORT ON THE FIRST HALF-YEAR FINANCIAL INFORMATION FOR 2018 (1 JANUARY TO 30 JUNE 2018)



1. CERTIFICATION BY THE PERSON RESPONSIBLE FOR THE 2018 HALF-YEAR FINANCIAL REPORT

I certify that, to the best of my knowledge, the condensed consolidated financial statements at 30 June 2018 are prepared in accordance with the applicable accounting standards and give a true and fair view of the assets and liabilities, financial position and income of the company and of all the companies included in the scope of consolidation, and that the attached Half-year management report presents a true and fair view of the important events of the first six months of the financial year and their impact on the financial statements, the main related party transactions and a description of the main risks and uncertainties for the remaining six months of the financial year.

Paris, 30 July 2018

Jean-Bernard Lévy

Chairman and CEO of EDF



HALF-YEAR MANAGEMENT REPORT

AT 30 JUNE 2018



MANAGEMENT REPORT CONTENTS

1	KEY FIGURES		7
2	ECONOMIC ENVIRONMENT		9
2.1	TRENDS IN MARKET PRICES FOR E	ELECTRICITY AND THE PRINCIPAL ENERGY SOURCES	9
2.2		TION	
2.3			
2.4	WEATHER CONDITIONS: TEMPER.	ATURES AND RAINFALL	14
3	SIGNIFICANT EVENTS		15
3.1	MAJOR EVENTS		15
3.2			
3.3			
4		ND THE CONSOLIDATED INCOME STATEMENTS FOR TH	
4.1			
4.2			
4.3			
4.4 4.5			
4.6		CIATES AND JOINT VENTURES	
4.7		NON-CONTROLLING INTERESTS	
4.8	EDF NET INCOME		25
4.9	NET INCOME EXCLUDING NON-RI	ECURRING ITEMS	25
5	NET INDEBTEDNESS, CASH FLO	DWS AND INVESTMENTS	26
5.1	OPERATING CASH FLOW		26
5.2	CHANGE IN WORKING CAPITAL		27
5.3			
5.4			
5.5 5.6			
5.0 5.7			
5.8		E RATE	
5.9			
5.10	FINANCIAL RATIOS		29
6	MANAGEMENT AND CONTRO	L OF MARKET RISKS	30
6.1	MANAGEMENT AND CONTROL O	F FINANCIAL RISKS	30
6.2	MANAGEMENT AND CONTROL O	F ENERGY MARKET RISKS	35
7	TRANSACTIONS WITH RELATE	D PARTIES	36
8	PRINCIPAL RISKS AND UNCERT	TAINTIES FOR THE SECOND HALF-YEAR OF 2018	36
9	SIGNIFICANT EVENTS RELATED	TO LITIGATION IN PROCESS	36
9.1	PROCEEDINGS CONCERNING EDF		36
9.2	PROCEEDINGS CONCERNING EDF	S SUBSIDIARIES AND INVESTMENTS	39
10	SUBSEQUENT EVENT		42
10.1	ASSETS DISPOSAL PLAN		42
11	FINANCIAL OUTLOOK		42



1 KEY FIGURES

Pursuant to European regulation 1606/2002 of 19 July 2002 on the adoption of international accounting standards, the EDF group's condensed consolidated financial statements for the half-year ended 30 June 2018 are prepared using the presentation, recognition and measurement rules set forth in the international accounting standards published by the IASB and approved by the European Union for application at 30 June 2018. These international standards are IAS (International Accounting Standards), IFRS (International Financial Reporting Standards), and SIC and IFRIC interpretations.

The accounting methods applied by the Group are presented in note 1 to the condensed consolidated half-year financial statements at 30 June 2018.

The figures presented in this document are taken from the EDF group's condensed consolidated half-year financial statements at 30 June 2018.

The comparative figures for the half-year ended 30 June 2017 presented in the notes to the condensed consolidated financial statements have been restated for the impact of retrospective application of IFRS 15 "Revenue from Contracts from Customers". As a consequence of these restatements, sales and energy purchases as published at 30 June 2017 have been reduced, with no impact on EBITDA (see note 2.1 to the condensed consolidated half-year financial statements at 30 June 2018).

IFRS 9 "Financial Instruments" became mandatory on 1 January 2018. It introduces new principles for classification and measurement of financial instruments, impairment for credit risk on financial assets, and hedge accounting. In application of the simplified approach allowed by IFRS 9, the comparative figures for the first year of application have not been restated. The transition measures and the new standard's principal implications for the Group are presented in note 2.2 to the condensed consolidated half-year financial statements at 30 June 2018.

The condensed consolidated half-year financial statements comply with standard IAS 34 on interim financial reporting. They do not therefore include all the information required for full annual financial statements, and are to be read in conjunction with the consolidated financial statements at 31 December 2017.

The Group's key figures for the first half of 2018 are shown in the following table.

Extract from the consolidated income statement

(in millions of Euros)	H1 2018	H1 2017 ⁽¹⁾	Variation	Variation (%)	Organic growth (%)
Sales	35,175	33,298	1,877	+5.6	+4.0
Operating profit before depreciation and amortisation (EBITDA)	8,231	6,996	1,235	+17.7	+18.9
Operating profit (EBIT)	3,650	3,882	(232)	-6.0	-1.2
Income before taxes of consolidated companies	2,013	2,894	(881)	-30.4	-23.9
EDF net income	1,726	2,005	(279)	-13.9	-8.7
Net income excluding non-recurring items (2)	1,739	1,370	370	+27.0	+34.6

⁽¹⁾ The figures published at 30 June 2017 have been restated to reflect the impact of application of IFRS 15 standard on sales.

⁽²⁾ Net income excluding non-recurring items is not defined by IFRS, and is not directly visible in the Group's consolidated income statement. It corresponds to the Group's share of net income (EDF net income) excluding non-recurring items, net changes in the fair value of energy and commodity derivatives (excluding trading activities), and net changes in the fair value of debt and equity securities, net of tax (see section 4.9 "Net income excluding non-recurring items").



From EDF net income to net income excluding non-recurring items

(in millions of Euros)		
	H1 2018	H1 2017
EDF net income	1,726	2,005
Gain on sale of 49.9% of the Group's investment in CTE ⁽¹⁾	-	(1,289)
Other, including net changes in fair value on energy and commodity derivatives, excluding trading activities and changes in the fair value of debt and equity instruments	(36)	291
Impairment	49	363
NET INCOME EXCLUDING NON-RECURRING ITEMS	1,739	1,370
Payments to bearers of perpetual subordinated bonds	(378)	(394)
NET INCOME AFTER PAYMENTS TO BEARERS OF PERPETUAL SUBORDINATED BONDS	1,361	976

⁽¹⁾ The company that holds 100% of RTE's shares (an independent EDF subsidiary as defined in the French Energy Code).

Group cash flow

(in millions of Euros)	H1 2018	H1 2017	Variation	Variation (%)
Group cash flow ^{(1) (2)}	1,599	1,482	117	+7.9

⁽¹⁾ Group cash flow is not an aggregate defined by IFRS as a measure of financial performance, and is not comparable with indicators of the same name reported by other companies. It is equivalent to the operating cash flow after changes in working capital and net investments, allocations and withdrawals from dedicated assets, and dividends (see section 5 of this half-year financial report).

Details of net indebtedness

(in millions of Euros)	30/06/2018	31/12/2017	Variation	Variation (%)
Net indebtedness ⁽¹⁾	31,275	33,015	(1,740)	-5.3
Equity (EDF share)	43,955	41,357	2,598	+6.3
Net indebtedness/EBITDA	2.1(2)	2.4		

⁽¹⁾ Net indebtedness is not defined in the accounting standards and is not directly visible in the Group's consolidated balance sheet. It comprises total loans and financial liabilities, less cash and cash equivalents and liquid assets. Liquid assets are financial assets consisting of funds or securities with initial maturity of over three months that are readily convertible into cash and are managed according to a liquidity-oriented policy (see note 20.3 to the condensed consolidated half-year financial statements at 30 June 2018).

⁽²⁾ Before the capital increase.

⁽²⁾ The ratio at 30 June 2018 is calculated based on cumulative EBITDA for the second half of 2017 and the first half of 2018.



2 ECONOMIC ENVIRONMENT

2.1 TRENDS IN MARKET PRICES FOR ELECTRICITY AND THE PRINCIPAL ENERGY SOURCES

In an interconnected European market, analysis of market prices in France must be considered in relation to prices in its neighbouring countries.

European spot electricity prices during the first half of 2018 were lower than in the first half of 2017.

2.1.1 Spot electricity prices in Europe¹

		United			
	France	Kingdom	Italy	Germany	Belgium
Average baseload price for H1 2018 (€/MWh)	40.3	59.9	53.8	35.7	44.5
Variation in average H1 baseload prices, 2018/2017	-9.3%	+17.1%	+5.1%	+0.6%	+1.8%
Average peakload price for H1 2018 (€/MWh)	48.2	64.1	60.2	42.3	51.8
Variation in average H1 peakload prices, 2018/2017	-7.7%	+14.8%	+5.1%	-2.5%	-0.8%

The comments below concern baseload prices.

In France, spot electricity prices stood at an average €40.3/MWh in the first half of 2018, €4.1/MWh lower than in the first half of 2017. This price downturn is explained by the high prices registered in January 2017 due to a spell of cold weather compared with a particularly mild month of January in 2018, and also to better nuclear availability and a more substantial contribution of hydropower in 2018. However, the decline in spot prices was mitigated by a rise in commodity prices between March and June, and a relatively late wave of cold weather at the end of February 2018.

In the first half of 2018, demand in France was stable compared to the first half of 2017 at 248.8TWh (57.3GW on average). It was met through greater availability of the nuclear fleet and higher hydropower generation, with less use of fossil-fired thermal plants. Wind power output was 3.0TWh higher than in the first half of 2017, reaching 14.1TWh in the first half of 2018, while photovoltaic power output was stable overall at 4.6TWh. France's export balance increased in the first half of the year by 10.9TWh² compared to 2017. This is primarily due to an increase in the export balance in January (+8TWh) caused by milder temperatures and a higher availability of nuclear power in 2018. At the end of the half year, exports to the CWE area increased sharply due to low wind output in Germany (+2.2TWh in May and +4.2TWh in June on France's export balance).

The month of January was 5.4°C warmer than in 2017, reducing year-on-year consumption for January by €8.6TWh with an average price of €35.0/MWh, down by €43.0/MWh from 2017. In contrast, the month of March 2017 was the warmest March since 1900, whereas March 2018 temperatures stood at an average 1.1°C below seasonal norms, and this led to a 5.7TWh increase in consumption and a €12.8/MWh increase in prices. Similar to 2017, May and June saw close-to-normal temperatures, although prices rose in those two months (+€4.9/MWh on average) due to an increase in fuel prices.

In the United Kingdom, average spot electricity prices rose by €8.7/MWh compared to the first half of 2017, reaching an average €59.9/MWh for the first half of 2018. This increase particularly concerned the months of March to June, when prices were around 30% higher year on year due to the rise in fuel prices. Another notable factor was the significant price rise in the wave of cold weather in late February and early March 2018; its effect was accentuated by tensions of gas after unscheduled outages at one Norwegian gas field and the interconnection with the Netherlands just after the closure of the Rough gas storage facility.

In Italy, average spot prices saw a year-on-year rise of €2.6/MWh, standing at an average €53.8/MWh for the first half of 2018. This rise particularly concerned the months of March to June when prices were around 20% than in the same period of 2017 as a result of higher fuel prices, while due to milder weather this year, prices in January were 32% lower in 2018 than in 2017.

^{1.} France and Germany: average previous day EPEXSPOT price for same-day delivery; Belgium: average previous day Belpex price for same-day delivery; United Kingdom: average previous day EDF Trading OTC price for same-day delivery; Italy: average previous day GME price for same-day delivery.

^{2.} Source: RTE, except for June 2018 that come from l'ENTSO-E.



In Germany, spot prices stood at an average €35.7/MWh, stable compared to first-half 2017. Despite a €22.9/MWh decrease in prices for January due to milder weather, prices were driven upwards by a recovery in commodity prices and the particularly low winds in June. Prices for June 2018 reached €42.4/MWh, up by €12.4/MWh from 2017, making it the most expensive month since 2012 outside the winter period. Wind power output nonetheless saw an overall rise of 3.7TWh year-on-year, to 55.0TWh for the first half of 2018, while photovoltaic power output was up by 0.9TWh to 21.3TWh. At 30 June 2018, the total installed wind power and photovoltaic power capacities in Germany were respectively around 58GW and 44GW. Several significant periods of wind and photovoltaic power generation led to negative prices during the first half of 2018 (104 hours against 41 hours in the same period of 2017). The lowest price, -€76.0/MWh, was registered on 1 January.

In **Belgium**, spot prices were up by €0.8/MWh compared to the first half of 2017, with an average price of €44.5/MWh. This rise particularly concerned the months of March to June, when prices registered a year-on-year rise of 30% reflecting the increase in fuel prices, whereas prices in January 2018 were almost 49.4% lower than in January 2017 as a result of this year's milder temperatures.

2.1.2 Forward electricity prices in Europe¹

		United			
	France	Kingdom	Italy	Germany	Belgium
Average forward baseload price under the 2019 annual contract for H1 2018 (€/MWh)	42.5	54.6	52.0	37.7	42.0
Variation in average H1 forward baseload price under the annual contracts, 2018/2017	+18.8%	+8.9%	+18.8%	+25.6%	+20.3%
Forward baseload price under the 2019 annual contract at 30 June 2018 (€/MWh)	48.3	58.9	58.9	43.4	48.1
Average forward peakload price under the 2019 annual contract for H1 2018 (€/MWh)	54.2	59.9	59.4	46.7	53.0
Variation in average H1 forward peakload price under the annual contracts, 2018/2017	+14.9%	+7.5%	+ 19.9%	+23.3%	+15.9%
Forward peakload price under the 2019 annual contract at 30 June 2018 (€/MWh)	62.0	64.5	65.9	53.8	59.5

Average annual contract prices for baseload and peakload electricity in Europe were higher than in first-half 2017, due to increases in coal, gas and CO₂ prices.

In France, the average annual contract baseload price for next-year delivery was nearly 19% higher than in first-half 2017. This increase is principally a result of rising fuel and CO₂ prices: the average coal price increased by 25% and the average gas price by 10% between first-half 2017 and first-half 2018. The "Calendar" N+1 ended the half-year at €48.3/MWh.

In the United Kingdom, the April Ahead contract baseload price for 1 April Y+1 to 31 March Y+2 was up by 8.9% compared to the first half of 2017 to an average €54.6/MWh for the first half of 2018. This increase is due to a rise between the two years in CO₂ prices and also gas prices, which make a significant contribution to the formation of British electricity prices.

In Italy, the annual contract baseload price for next-year delivery also rose to an average €52.0/MWh, nearly 19% higher than in first-half 2017. This increase is explained by the significant increase in gas prices, which are a major factor in electricity prices in Italy, and also by a rise in CO₂ prices.

In Germany, the average annual contract baseload price for next-year delivery was up by 25.6% compared to first-half 2017, standing at €37.7/MWh. This rise is attributable to increases between the two years in fuel and CO₂ prices, since coal still greatly influences the formation of German electricity prices.

In **Belgium**, the annual contract baseload price for next-year delivery was 20.3% higher than in first-half 2017 at €42.0/MWh, following the same trend as commodity prices.

^{1.} France and Germany: average year-ahead EEX price;

Belgium and Italy: average year-ahead EDF Trading price;

United Kingdom: average ICE annual contract prices, April 2018 then April 2019 (in the UK, annual contract deliveries take place from 1 April to 31 March).



Principal forward electricity prices in Europe in €/MWh (baseload)



2.1.3 CO₂ emission rights prices¹

The price of CO₂ emission rights for delivery in December Y+1 ended the half-year at €15.2/t, up by €10.1/t compared to 30 June 2017. CO₂ prices began to rise in the second half of 2017, triggered by the announcement of potential cooperation between France and Germany for a reform of the emission certificates trading system with a view to restoring better balance, and the introduction of an agreement protecting the system from a sudden UK withdrawal from the EU-ETS if Brexit is finalised. Also, after two years of discussions the Council of the European Union and the European Parliament agreed on 9 November 2017 to reform the EU-ETS for the period 2021-2030. The reform proposals were approved by the European Parliament in February 2018 as certain speculative actors returned to purchases on the market, stepping up the pace of CO₂ prices between February and May 2018. The price reached €16.5/t at the end of May, the highest level registered in seven years, before stabilising at around €15/t during June.

CO₂ emission rights prices



^{1.} Average ICE prices for the annual contract, Phase III (2013-2020).



2.1.4 Fossil fuel prices¹

	Coal (US\$/t)	Oil (US\$/bbl)	Natural gas (€/MWhg)
Average price for H1 2018	83.1	71.2	18.9
Average H1 price variation, 2018/2017	+25.3%	+35.0%	+10.2%
Highest price in H1 2018	90.3	79.8	22.4
Lowest price in H1 2018	72.8	62.6	16.9
Price at 30 June 2018	89.5	79.4	21.5
Price at 30 June 2017	70.2	47.9	15.9

Coal prices for next-year delivery in Europe in 2018 stood at an average US\$83.1/t in the first half of 2018, up by 25.3% (+US\$16.8/t) from the first half of 2017. This increase in coal prices was mainly registered during the second half of 2017 after rising oil prices pushed up the cost of coal transport and extraction, and higher demand in China (which accounts for 50% of worldwide demand) due to high summer temperatures. Another contributing factor was the downturn in worldwide power output due to strikes in Australian mines and bad weather in Indonesia and Colombia which meant that 3 of the ten world's largest coal-producing countries were adversely affected. During the first half of 2018, coal prices initially declined by around US\$13/t as a result of falling oil prices, downward revision of forecast demand in China, and high supplies in Asia, particularly in Indonesia where a change in regulations has encouraged producers to focus on exports. With the recovery of oil prices and rising Chinese and Indian demand, there was an upturn in March in the price of coal for delivery in Europe in Y+1 which ended the half-year at US\$89.5/t, close to the early January price levels and US\$19.3/t higher than at 30 June 2017.

Oil prices for the first half of 2018 were an average US\$71.2/bbl, a year-on-year increase of 35.0% (+US\$18.4/bbl) from the previous year. In the second half of 2017, oil prices were almost constantly on the rise (+US\$19/bbl), largely due to declarations made in 2017 in favour of broadening the Vienna agreement and extending it to the end of 2018. Measures such as limitation of production in Nigeria also played a part. During the first half of 2018, oil prices initially fell by close to US\$8bbl in early February due to fears of a slowdown in worldwide demand in the short term, and rising output and stocks in the United States. The downward trend reversed in March, beginning an increase that continued to late May as OPEC countries successfully achieved compliance with their agreement for record limitation of oil production. Oil prices then fell back in June in anticipation of an agreement between OPEC countries and partners to increase production, before rising again at the end of the month following the United States' threats of sanctions against importers of crude oil from Iran. At 30 June 2018 the price per barrel stood at US\$79.4/bbl, its highest level since the end of November 2014.

The annual gas contract for next-year delivery at the French PEG Nord hub traded at an average €18.9/MWh in the first half of 2018, a year-on-year increase of 10.2% (+€1.7/MWh). Annual gas contract prices were generally stable in the first quarter of 2018. The rise principally began in the second quarter, largely driven by the oil price recovery, since long-term contracts are partly indexed on oil prices, but also by tensions over short-term stock levels at the end of the winter which affected long-term prices. After peaking at above €22/MWh in late May, the highest level in 3 years, the annual gas contract price for next-year delivery for the French PEG Nord hub stabilised in June to end the half-year at €21.5/MWh.

^{1.} Coal: average ICE prices for delivery in Europe (CIF ARA) for the next calendar year (US\$/t);
Oil: Brent first reference crude oil barrel, ICE index (front month) (US\$/barrel);
Natural gas: average ICE OTC prices, for delivery starting from October of the following year in France (PEG Nord) - €/MWhg.



Natural gas and oil prices



2.2 ELECTRICITY¹ AND GAS² CONSUMPTION

Electricity consumption in France reached 247.8TWh for the first half of 2018, stable compared to first-half 2017.

In Italy, electricity consumption was up by 1.6% year on year, due to favourable weather conditions, particularly during the first quarter of 2018.

Estimated natural gas consumption in France was 2.8% (i.e. -7.3TWh) lower in the first half of 2018 than the first half of 2017, with contrasting developments in different months:

- January and April registered lower consumption (-22.0TWh in January and -5.7TWh in April compared to the same months of 2017) due to milder temperatures (+5.4°C in January and +2.3°C in April) resulting in reduced demand for heating and greater use of gas-fired plants to produce electricity:
- the opposite situation was observed in February and March, which saw a substantial year-on-year rise in consumption (+14.2TWh in February and +10.5TWh in March) as temperatures were colder than in 2017 (-4.8°C in February and -3.1°C in March), causing an increase in demand for heating;
- consumption in May and June was lower (-3.8TWh in May and -0.5TWh in June) due to less extensive use of gas-fired power plants for electricity production, counterbalanced by nuclear power and hydropower production levels.

In Italy, domestic demand for natural gas was down by -0.5% as a result of lower thermo-electric demand. Industrial (non thermo-electric) demand and residential demand was higher than in the first half of 2017.

2.3 ELECTRICITY SALES TARIFFS

In France, the "blue" regulated sales tariffs for residential and non-residential customers increased by 0.7% and 1.6% respectively on 1 February 2018 (see note 3.5.1 to the half-year consolidated financial statements at 30 June 2018).

In the **United Kingdom**, EDF Energy raised the tariffs for residential customers by 2.7% on 7 June 2018. This rise is mainly explained by increases in wholesale market prices and other costs. The five other principal energy suppliers also raised their tariffs.

^{1.} Sources: France: unadjusted data and data adjusted for weather effects provided by RTE.

Italy: unadjusted data and data provided by Terna, the Italian national grid operator, and adjusted by Edison.

^{2.} Sources: France: unadjusted data from Smart GRTgaz.

Italy: Ministry for Economic Development (MSE), Snam Rete Gas data adjusted by Edison on the basis 1 bcm (billion cubic metre) = 10.76TWh.

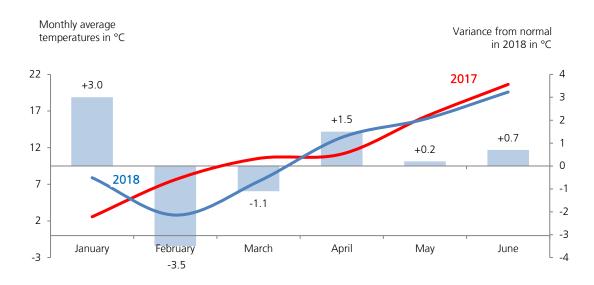


2.4 WEATHER CONDITIONS: TEMPERATURES AND RAINFALL

The first half of 2018 ended with temperatures 0.2°C above normal, after fairly mild temperatures in the second quarter.

April was a very mild month, registering temperatures 1.5°C above normal that made it the third-warmest April since 1900 after April 2007 and April 2011 (source: Météo-France). May began cool but then temperatures became warmer. June was also warm (temperatures 0.7°C higher than normal), particularly at the end of the month.

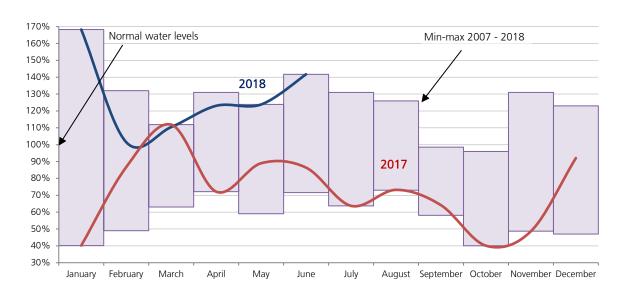
Temperatures^{(1) (2)} in France in first-half 2018 and first-half 2017



- (1) Average temperatures recorded in 32 cities weighted by electricity consumption.
- (2) Source: Miréor (data from Météo France).

The first half of 2018 was marked by excess precipitation in much of the southern half of Europe (including France), a shortfall in Germany and part of Central Europe, and close to normal levels in the North of Europe.

Water flow coefficients in France in 2017 and first-half 2018⁽¹⁾



(1) Weekly monitoring by the EDF group's Statistical Observatory energy observatory of French reservoir levels (Miréor) as far as the coast. France had very high precipitation which led to exceptionally high snowfall on all mountain ranges during the winter.

As a result of these favourable conditions, there were surplus water flow coefficients in France in every month of the first half of 2018, registering the highest levels in 40 years.



3 SIGNIFICANT EVENTS^{1 2}

This chapter reports on significant events following the publication, on 15 March 2018, of the 2017 Reference Document (see section 5.1.3 "Significant events of 2017" and 5.2 "Subsequent events").

3.1 MAJOR EVENTS

3.1.1 Sustainable development and Group Renewables

EDF Énergies Nouvelles³

- During the first half of 2018, EDF Énergies Nouvelles commissioned new facilities, signed electricity purchase agreements and undertook new projects.
- EDF Renewables sold a 49% minority stake in twenty-four of its UK wind farms (c.550MW) (see press release of 29 June 2018 and note 3.1 to. the condensed consolidated half-year financial statements at 30 June 2018).
- The realisation of the three offshore wind projects at Fécamp, Courseulles-sur-Mer and Saint-Nazaire that EDF Énergies Nouvelles is developing with its partners Enbridge Inc. and WPD has been confirmed (see press release of 20 June 2018).
- EDF Énergies Nouvelles acquired a 450MW offshore wind project in Scotland from Mainstream Renewable Power (see press release of 3 May 2018 and note 4.1 to. the condensed consolidated half-year financial statements at 30 June 2018).
- The EDF group commissioned its first renewable energy facility in the United Arab Emirates (see press release of 1 May 2018).
- EDF Énergies Nouvelles' international entities were rebranded EDF Renewables (see press release of 12 April 2018).
- EDF Énergies Nouvelles won the contract for a 114MW wind energy project in Brazil (see press release of 9 April 2018).

EDF Nouveaux Business

• EDF and McPhy signed a partnership agreement to develop carbon-free hydrogen in France and around the world (see press release of 5 June 2018).

3.1.2 Group Energy Services

- Edison, through its subsidiary Fenice, acquired the control of Zephyro SpA. and launched a mandatory tender offer (see press release of 2 July 2018).
- Dalkia, which owned 75% of Tiru, acquired the 25% of shares previously held by the Engie group (see Dalkia press release of 30 March 2018 available on the website www.dalkia.fr).

3.1.3 Nuclear industry

- Welds in the main secondary system of the Flamanville EPR: EDF sets up corrective actions and adjusts schedule and target construction costs (see press release of 25 July 2018).
- The Group provided clarifications on safety and security at EDF nuclear power plants in France (see press release of 5 July 2018).
- The Taishan 1 EPR has been connected to the grid (see press release of 29 June 2018).
- At the World Nuclear Exhibition, EDF signed a series of agreements securing the position of the nuclear decommissioning and radioactive waste management sector (see press release of 28 June 2018).
- EDF Nouveaux Business: EDF acquired Oreka Solutions, a start-up specialising in digital solutions for the decommissioning of nuclear power plants (see press release of 26 June 2018).
- EDF and Veolia concluded a partnership agreement on nuclear plant decommissioning and radioactive waste processing (see press release of 26 June 2018).

^{1.} A full list of press releases is available from the EDF website www.edf.fr

^{2.} See section 9 for details of litigation that has seen significant developments since the Reference Document was filed.

^{3.} A full list of press releases is available from the EDF Énergies Nouvelles website www.edf-energies-nouvelles.com



- EDF and GE signed a strategic cooperation agreement for the planned construction of 6 EPRs in India (see press release of 26 June 2018).
- EDF Energy has announced the outage of the Hunterston B power plant, with a return to service expected before the end of 2018 (see press release of 2 May 2018).

3.2 REGULATORY ENVIRONMENT

Regulatory changes are described in detail in the following notes to the condensed consolidated half-year financial statements at 30 June 2018:

- note 3.5.1 "Regulated electricity sales tariffs in France 'Blue' tariffs";
- note 3.5.2 "'TURPE' network access tariffs";
- note 3.5.3 "Compensation for public energy service charges (CSPE)";
- note 3.5.4 "French capacity mechanism";
- note 3.5.5 "Energy savings certificates: fourth period (2018-2020)";
- note 3.5.6 "ARENH".

3.3 OTHER SIGNIFICANT EVENTS

- EDF Trading Limited and JERA Co., Inc signed binding agreements to form an LNG optimisation and trading joint venture (see press release of 3 July 2018).
- Results of the option for payment of the balance of the dividend for the 2017 financial year in the form of shares (see press release of 15 June 2018 and note 18.2 to. the condensed consolidated half-year financial statements at 30 June 2018).
- Appointment of Bruno Bensasson to the EDF Group's Executive Committee as Group Senior Executive President responsible for Renewable Energies (see press release of 30 March 2018).
- Edison finalised the acquisition of Gas Natural Vendita Italia (see press release of 22 February 2018 and note 4.2 to the condensed consolidated half-year financial statements at 30 June 2018).



4 ANALYSIS OF THE BUSINESS AND THE CONSOLIDATED INCOME STATEMENTS FOR THE FIRST HALF-YEARS OF 2017 AND 2018

The presentation and discussion of the consolidated income statements for the first half-years of 2018 and 2017 is shown at two levels of analysis for Sales and EBITDA: a first focusing on the Group, then a second reporting on the different business segments (France - Generation and supply activities, France - Regulated activities, EDF Énergies Nouvelles, Dalkia, Framatome¹, United Kingdom, Italy, Other international and Other activities). EBIT (operating profit) and net income are analysed from a general standpoint.

In the first half of 2018, the Group has modified its segment reporting and now presents EDF Énergies Nouvelles and Dalkia separately (they were previously included in the "Other activities" segment). The segments used by the Group are presented in note 5 to the condensed consolidated half-year financial statements at 30 June 2018.

(in millions of Euros)	H1 2018	H1 2017 ⁽¹⁾
Sales	35,175	33,298
Fuel and energy purchases	(16,751)	(16,920)
Other external expenses	(4,038)	(3,733)
Personnel expenses	(6,836)	(6,286)
Taxes other than income taxes	(2,694)	(2,687)
Other operating income and expenses	3,375	3,324
Operating profit before depreciation and amortisation (EBITDA)	8,231	6,996
Net changes in fair value on energy and commodity derivatives, excluding trading activities	19	(196)
Net depreciation and amortisation	(4,410)	(4,212)
Net increases in provisions for renewal of property, plant and equipment operated under concessions	(66)	(41)
(Impairment)/reversals	(68)	(32)
Other income and expenses	(56)	1,367
Operating profit (EBIT)	3,650	3,882
Financial result	(1,637)	(988)
Income before taxes of consolidated companies	2,013	2,894
Income taxes	(625)	(712)
Share in net income of associates and joint ventures	365	(93)
GROUP NET INCOME	1,753	2,089
EDF net income	1,726	2,005
Net income attributable to non-controlling interests	27	84
EARNINGS PER SHARE (EDF SHARE) (IN EUROS)		
Earnings per share	0.46	0.66
Diluted earnings per share	0.46	0.66

⁽¹⁾ The figures published at 30 June 2017 have been restated to reflect the impact of the application of IFRS 15 standard on sales.

4.1 SALES

Consolidated sales were up by 5.6%, corresponding to an organic increase of 4.0%.

4.1.1 Change in Group sales

				Variation	Organic growth
(in millions of Euros)	H1 2018	H1 2017 ⁽¹⁾	Variation	(%)	(%)
Sales	35,175	33,298	1,877	+5.6	+4.0

⁽¹⁾ The figures published at 30 June 2017 have been restated to reflect the impact of application of IFRS 15 standard on sales.

^{1.} Framatome has been included in the consolidation since 31 December 2017. Its total net income for 2018 is included in the effect of changes in the scope of consolidation.



Sales amounted to €35,175 million in the first half of 2018, a year-on-year increase of €1,877 million (+5.6%). Excluding the effect of movements in exchange rates (-€194 million), principally the decline by the pound sterling and the US dollar against the Euro, and changes in the scope of consolidation (+€739 million) which mainly concerned the acquisition of Framatome and the sale of the assets of EDF Polska, sales showed organic growth of 4.0%.

4.1.2 Change in Group sales by segment

The following table shows sales by segment, before inter-segment eliminations.

		(4)			Organic growth
(in millions of Euros)	H1 2018	H1 2017 ⁽¹⁾	Variation	(%)	(%)
France - Generation and supply activities(2)	13,652	13,056	596	+4.6	+4.6
France - Regulated activities ⁽³⁾	8,405	8,142	263	+3.2	+3.2
EDF Énergies Nouvelles	735	620	115	+18.5	+9.2
Dalkia	2,009	1,787	222	+12.4	+6.6
Framatome	1,500	-	1,500	-	-
United Kingdom	4,605	4,427	178	+4.0	+4.8
Italy	4,113	3,820	293	+7.7	+4.3
Other international	1,147	1,706	(559)	-32.8	-0.9
Other activities	1,284	1,259	25	+2.0	+3.2
Inter-segment eliminations	(2,275)	(1,519)	(756)	+49.8	+6.8
GROUP SALES	35,175	33,298	1,877	+ 5.6	+4.0

⁽¹⁾ The figures published at 30 June 2017 have been restated to reflect the impact of application of IFRS 15 standard on sales, and changes in segment reporting (IFRS 8).

4.1.2.1 France - Generation and supply activities

Sales in the first half of 2018 by the **France - Generation and supply activities** segment amounted to €13,652 million, an organic rise of €596 million (+4.6%) compared to the first half of 2017.

The rise in regulated electricity sales tariffs on 1 August 2017² and 1 February 2018³ led to a €48 million increase in sales.

Sales also benefited from the rise in net sales on the wholesale markets in the first half of 2018 (estimated impact of €100 million⁴) resulting from higher generation levels and greater subscriptions to the ARENH mechanism (for regulated access to historical nuclear electricity).

The weather effect was favourable, particularly during February and March 2018, with a positive impact estimated at €67 million (+0.4TWh) compared to the first quarter of 2017.

Intensifying competition was reflected in the lower volumes supplied due to losses of customers (-6.9TWh). However, the effect of this decrease on sales was offset by a slight increase in demand, and rising prices on market-price contracts. These factors had a combined positive effect on sales estimated at €4 million.

The rest of the increase in sales is chiefly explained by the rise in sales of renewable electricity subject to purchase obligations, estimated at €220 million, and the end of the basic necessity tariff, with an estimated effect of €98 million.

Electricity generation

Nuclear generation in the first half of 2018 produced 202.6TWh, up by +5.4TWh from the first half of 2017. This increase is explained by better availability of the power plant fleet compared to the corresponding period of 2017, which was marked by outages at several reactors in connection with the Creusot manufacturing record checks, and the carbon segregation issue.

⁽²⁾ Generation, supply and optimisation in mainland France, and sales of engineering and consulting services.

⁽³⁾ Regulated activities comprise distribution in mainland France, which is carried out by Enedis¹, EDF's island activities and the activities of Électricité de Strasbourg. In mainland France, distribution network activities are regulated via the network access tariff TURPE (tarifs d'utilisation des réseaux publics d'électricité).

^{1.} Enedis is an independent EDF subsidiary as defined in the French Energy Code.

^{2. +1.70%} on "blue" tariffs for residential and non-residential customers (incorporating in particular the indexation of the TURPE 5 distribution tariffs of +2.71% at 1 August 2017).

^{3. +0.70%} on "blue" tariffs for residential customers and +1.60% on "blue" tariffs for non-residential customers.

^{4.} Excluding additional energy purchases on the wholesale markets.



Hydropower output stood at 29.3TWh¹, 8.0TWh more than in the first half of 2017, due to exceptional hydrological conditions (see section 2.4 "Weather conditions: temperatures and rainfall").

There was lower use of thermal generation facilities, particularly gas-fired plants. Production by these plants for the first half of 2018 saw a year-on-year decrease of 3.2TWh and stood at 4.6TWh.

Sales volumes to final customers (a market segment that includes local distribution firms and excludes foreign operators) were down by -6.6TWh, including -6.9TWh reflecting losses of customers and +0.4TWh relating to favourable weather conditions.

EDF was a net seller on the wholesale markets to the extent of 45.4TWh. The +15.4TWh rise in net market sales compared to the first half of 2017 is principally explained by increase in production and decline in volumes sold to final customers, partly offset by increase in deliveries under the ARENH mechanism.

4.1.2.2 France - Regulated activities

Sales in the first half of 2018 by the France - Regulated activities segment amounted to €8,405 million, a year-on-year organic rise of +€263 million (+3.2%). Sales essentially benefited from favourable effects for Enedis, relating to the rise in the TURPE network access tariff (€186 million)², weather conditions (€41 million) and income from connection services (€47 million).

4.1.2.3 EDF Énergies Nouvelles

EDF Énergies Nouvelles' contribution to Group sales was €735 million for the first half of 2018, an organic increase of 9.2% from the first half of 2017, driven mainly by the output of the wind farms and solar power plants newly commissioned in 2017.

Sales by EDF Énergies Nouvelles also benefited from the growth in distributed solar power activities (€25 million), notably at Grosolar in the United States.

4.1.2.4 Dalkia

Sales by Dalkia contributed €2,009 million to Group sales for the first half of 2018. This organic increase of €118 million (+6.6%) is mainly explained by higher energy prices and favourable trends in the indexes for revising service prices, with no impact on EBITDA, and the signing or renewal of a large number of commercial contracts.

4.1.2.5 Framatome³

Sales by Framatome amounted to €1,500 million in the first half of 2018. A significant portion of sales are with the Group.

4.1.2.6 United Kingdom

Sales by the United Kingdom segment in the first half of 2018 totalled €4,605 million, a year-on-year increase of €178 million. The pound sterling's decline against the euro had an unfavourable impact of €99 million compared to the first half of 2017. Excluding foreign exchange effects and changes in the scope of consolidation, the organic growth in sales compared to the first half of 2017 was 4.8%.

The increase in UK sales primarily results from higher tariffs and the volumes of gas sold in the cold weather of the first quarter of 2018. It was partly counterbalanced by the lower level of nuclear power generation and the lower realised prices for electricity. Also, the number of customer accounts has declined by 2% since 31 December 2017.

4.1.2.7 Italy

Sales in Italy totalled €4,113 million for the first half of 2018, an organic increase of €164 million (i.e. +4.3%) compared to the first half of 2017.

^{1.} After deduction of pumped-storage hydropower volumes, hydropower production stood at 25.5TWh for the first half-year of 2018 (17.6TWh for first-half 2017).

^{2.} Incorporating in particular the indexation of the TURPE 5 distribution tariffs of +2.71% at 1 August 2017.

^{3.} Framatome has been included in the consolidation since 31 December 2017. Its total net income for 2018 is included in the effect of changes in the scope of consolidation.



This increase resulted from a rise in the volumes of gas and electricity sold due to more favourable weather conditions in the first half of 2018 than the same period of 2017. Sales also benefited from a positive price effect on gas and electricity.

4.1.2.8 Other international

The Other international segment principally covers operations in Belgium, the United States, Brazil and Asia (China, Vietnam and Laos).

Sales by the Other international segment stood at €1,147 million in the first half of 2018, down by €559 million from the first half of 2017. Excluding foreign exchange effects (-€48 million) and changes in the scope of consolidation (-€496 million, mainly associated with the sale of EDF Polska's assets in 2017), sales saw a slight year-on-year organic decline (-€15 million or -0.9%).

The downturn essentially comes from **Belgium** which saw an organic decrease of €18 million. The decline in the volumes of electricity sold (essentially on the business customers' market) was partly counterbalanced by an increase in gas volumes sold and growth in sales by the service companies.

4.1.2.9 Other activities

Other activities comprise, among other entities, EDF Trading and the gas activities.

Sales by the Other activities segment totalled €1,284 million for the first half of 2018, €25 million higher than in the first half of 2017 (+2.0%) or an organic increase of €40 million (+3.2%).

EDF Trading's sales¹ for the first half of 2018 amounted to €468 million, a year-on-year organic rise of €171 million (+54.6%). The increase reflects the return of volatility in the commodity markets, a good performance in the United States, and favourable weather effects in the first quarter of 2018. Business activities relating to LNG (Liquefied Natural Gas) also contributed to this sales performance, which was stimulated by rising demand in Asia and upward trends in oil prices.

4.2 EBITDA

EBITDA for the first half-year was up by 17.7%, corresponding to an organic increase of 18.9%.

(in millions of Euros)	H1 2018	H1 2017 ⁽¹⁾	Variation	Variation (%)	Organic growth (%)
Sales	35,175	33,298	1,877	+5.6	+4.0
Fuel and energy purchases	(16,751)	(16,920)	169	-1.0	+0.5
Other external expenses	(4,038)	(3,733)	(305)	+8.2	+0.9
Personnel expenses	(6,836)	(6,286)	(550)	+8.7	-1.8
Taxes other than income taxes	(2,694)	(2,687)	(7)	+0.3	+0.3
Other operating income and expenses	3,375	3,324	51	+1.5	+0.5
EBITDA	8,231	6,996	1,235	+17.7	+18.9

⁽¹⁾ The figures published for the first half of 2017 have been restated to reflect the impact of application of IFRS 15 standard on sales.

4.2.1 Change in consolidated EBITDA and analysis

Consolidated **EBITDA** for the first half of 2018 amounted to €8,231 million, a year-on-year increase of 17.7% corresponding to organic growth of 18.9%.

The Group's **fuel and energy purchases** amounted to €16,751 million in the first half of 2018, down by €169 million (-1.0%) from the first half of 2017. The organic change was a rise of €90 million (+0.5%).

- In the France Generation and supply activities and France Regulated activities segments, fuel and energy purchases were down by €265 million (-2.7%) year-on-year to €9,375 million, principally due to higher nuclear power and hydropower output and lower purchase prices, particularly for meeting demand under the ARENH mechanism.
- In the United Kingdom, the -€312 million organic increase observed (+11.5%) relates to the rise in regulatory costs, and the higher energy prices and coal costs.

^{1.} EDF Trading's sales consist of its trading margin.



Other external expenses amounted to €4,038 million, €305 million more than in the first half of 2017 (+8.2%) corresponding to an organic increase of €34 million (+0.9%).

- In the France Generation and supply activities and France Regulated activities segments, other external expenses totalled €1,996 million, an organic decrease of €64 million (i.e. -3.1%).
- The organic increase in other external expenses of €41 million for EDF Énergies Nouvelles and €45 million for Dalkia principally relates to development by these entities, particularly of service activities.

The Group's personnel expenses totalled €6,836 million, up by €550 million from the first half of 2017, but corresponding to an organic decrease of €111 million (-1.8%).

- In the France Generation and supply activities segment, personnel expenses for the first half of the year totalled €3,005 million, a year-on-year decrease of €127 million that reflects the efforts made to control payroll costs. The average workforce numbers fell by 3.6% across all activities over the first half of 2018.
- In the France Regulated activities segment, personnel expenses for the first half of the year totalled €1,587 million, a year-on-year decrease of €27 million, while the average workforce remained stable (-0.1%).

Taxes other than income taxes amounted to €2,694 million, stable compared to the first half of 2017.

Other operating income and expenses generated net income of €3,375 million in the first half of 2018, €51 million more than in the first half of 2017 (an organic increase of €15 million or +0.5%).

- In the France Generation and supply activities segment, the €72 million organic rise principally relates to recoveries of provisions and the lower level of compensation for power cuts than in the corresponding period of 2017.
- EDF Énergies Nouvelles saw an organic decline of -€108 million (-40.4%), mainly resulting from a lower year-on-year impact of business in development and sales of structured assets.

4.2.2 Change in consolidated Group EBITDA and analysis by segment

(in millions of Euros)	H1 2018	H1 2017 ⁽¹⁾	Variation	Variation (%)	Organic growth (%)
France - Generation and supply activities	3,578	2,453	1,125	+45.9	+45.9
France - Regulated activities	2,663	2,400	263	+11.0	+11.0
EDF Énergies Nouvelles	360	451	(91)	-20.2	-22.0
Dalkia	159	155	4	+2.6	+2.6
Framatome	86	-	86	-	-
United Kingdom	485	627	(142)	-22.6	-16.9
Italy	407	426	(19)	-4.5	-4.5
Other international	117	275	(158)	-57.5	-4.4
Other activities	376	209	167	+79.9	+80.9
GROUP EBITDA	8,231	6,996	1,235	+17.7	+18.9

⁽¹⁾ The figures published for the first half of 2017 have been restated due to changes in segment reporting (IFRS 8).

4.2.2.1 France - Generation and supply activities

The contribution to Group EBITDA by the France - Generation and supply activities segment amounted to €3,578 million, corresponding to organic growth of 45.9% (i.e. +€1,125 million) compared to the first half of 2017.

This increase in nuclear and hydropower output compared to 2017 had a very favourable impact on EBITDA estimated at €544 million.

EBITDA also benefitted from the improvement in price conditions on the wholesale markets for an estimated total of €469 million. This change is related to purchases (in particular to cover ARENH requests) made at prices lower than those of the first half of 2017 and to sales made under more favourable price conditions.

The impact of tariff changes¹, excluding Energy Savings Certificates (which have a neutral effect on EBITDA) and excluding the incorporation of delivery in the tariff "stacking", led to an estimated decrease of €79 million compared to the first half of 2017.

^{1.} Tariff changes of +1.7% at 1 August 2017 on the "blue" residential and non-residential tariffs (incorporating in particular the indexation of the TURPE 5 distribution tariffs of +2.71% at 1 August 2017) and +0.7% and +1.6% respectively at 1 February 2018.



The weather effect was more favourable than in the first half of 2017, with a positive impact of €67 million (+0.4TWh).

Downstream market conditions¹ had a positive impact of €4 million compared to the first half of 2017. The intensification of competition (-6.9TWh) was more than counterbalanced by positive price effects on new market-price offers.

Under the EDF group's performance plan, operating expenses² were reduced by €159 million (i.e. -3.7%) through purchase optimisation measures and control of payroll costs. These measures are being applied across all entities, notably through reductions in support costs and in cost-to-serve, and the optimisation of costs for the hydropower and thermal fleet.

4.2.2.2 France - Regulated activities

EBITDA for the France - Regulated activities segment stood at €2,663 million, reflecting organic growth of €263 million (+11.0%) compared to the first half of 2017.

EBITDA benefited from positive developments in the TURPE 5 tariffs on 1 August 2017³, with an estimated impact of €64 million, and the rise in volumes delivered due to the positive weather effect, with an estimated impact of €39 million.

Growth in the connection services activity and lower operating expenses (excluding storms) had positive impacts estimated at €47 million and €37 million respectively.

The rest of the rise in EBITDA (€76 million) essentially relates to the less intense weather events in the first half of 2018, particularly as regards storms.

4.2.2.3 EDF Énergies Nouvelles

EDF Énergies Nouvelles' contribution to consolidated EBITDA totalled €360 million, corresponding to a year-on-year organic decrease of -€99 million (-22.0%).

This decrease is mainly explained by the significant contribution by the development and sales of structured assets activity in the United States in the first half of 2017, which had no equivalent in the corresponding period of 2018.

Generation recorded an organic increase of 10.7% to €435 million, thanks to the projects commissioned in 2017.

In addition, development costs rose by €38 million in particular to support growth projects.

The gross capacities brought into operation by EDF Énergies Nouvelles during the first half of 2018 totalled 0.7GW. The net installed capacities at 30 June 2018 totalled 8.1GW, up by 1.4GW. The gross portfolio of projects under construction at 30 June 2018 amounted to 1.7GW (0.7GW in wind power and 1.0GW in solar power).

In the first half of 2018, EDF Énergies Nouvelles sold a 49% minority stake in twenty-four of its UK wind. The sale of this investment, considered as a transaction between shareholders with no change of control, has no impact on the EBITDA.

4.2.2.4 Dalkia

Dalkia's EBITDA was €159 million, corresponding to year-on-year organic growth of 2.6%. This increase is notably driven by competitivity improvements through the operational performance plan, which generated costs savings of €14 million during the first half of 2018. The signing or renewal of a large number of commercial contracts was another contributing factor, whereas business activity was penalised by maintenance operations at several important plants.

4.2.2.5 Framatome⁴

Framatome's contribution to Group EBITDA for the first half of 2018 was €86 million. Including the margin realised with other EDF group entities, Framatome's EBITDA was €194 million.

Framatome registered good levels of business in the Fuel activity, with a slight slowdown in the Installed Base activity, particularly in the United States.

¹ Excluding the Energy Savings Certificate component of market-price offers.

² Sum of personnel expenses and other external expenses. Based on comparable scope and exchange rates and constant discount rates for pensions. Excluding changes in operating expenses of the service activities.

^{3.} Indexation as of 1 August 2017 of the TURPE 5 Distribution of +2.71% and the TURPE 5 Transport of +6.76%.

^{4.} Framatome has been included in the consolidation since 31 December 2017. Its total net income for 2018 is included in the effect of changes in the scope of consolidation.



The Components activity is gradually picking up again after the ASN issued authorisation in January 2018 to resume production of forged parts at the Creusot site.

Framatome's EBITDA also benefited from the application of a plan to cut operating and structural costs. EBITDA for the first half of 2018 included a €21 million expense related to the revaluation of inventories undertaken to establish Framatome's acquisition balance sheet.

4.2.2.6 United Kingdom

The United Kingdom's contribution to Group EBITDA for the first half of 2018 was €485 million, a year-on-year organic decrease of 16.9%. The pound sterling's decline against the Euro had an unfavourable impact of €14 million compared to the first half of 2017.

EBITDA in the United Kingdom was affected by the downturn in nuclear generation and lower realised prices for nuclear power compared to the same period of 2017. Nuclear generation output amounted to 30.2TWh, -2.0TWh less than at 30 June 2017 due to the outage at Hunterston B and extension of the shutdown at Sizewell B, which was reconnected to the network on 31 January 2018.

The supply activities benefitted from increases in residential tariffs. On the other hand, the customer portfolio was down (-2% compared to the end of December 2017) in a highly competitive environment.

4.2.2.7 Italy

The Italy segment contributed €407 million to the Group's consolidated EBITDA, an organic decrease of -4.5% compared to the first half of 2017.

EBITDA for the electricity activities was up, essentially due to a good performance in hydropower generation and good performance by the ancillary services.

EBITDA for the hydrocarbon activities was down, mainly as a result of unfavourable movements in gas prices that affected the margin on long-term contracts, combined with the steady rise of Brent oil prices since 2016. In this context, the exploration-production activity benefited from a positive price effect and higher volumes as a new field was commissioned in Algeria.

4.2.2.8 Other international

EBITDA for the Other international segment stood at €117 million for the first half of 2018, an organic decrease of €12 million (-4.4%) compared to the first half of 2017.

In Belgium, EBITDA registered organic growth of €9 million, mainly sustained by a substantial increase in EDF Luminus' renewable electricity generation thanks to larger installed wind power capacities and more favourable weather effects than in the first half of 2017. Installed capacity was 390.5MW at 30 June 2018, up by +26.2% from one year earlier. However, overall performance was affected by extended outages of nuclear reactors operated by the Engie group. In addition, the drop in nuclear realised prices and the continued strong commercial competition had a negative impact.

In **Brazil**, EBITDA registered an organic decline of -€26 million, principally due to significant levels of purchases on the energy markets to cover the Power Purchase Agreement (PPA) during major scheduled maintenance operations in the first half of 2018, in a context of rising market prices.

4.2.2.9 Other activities

Other activities contributed €376 million to Group EBITDA for the first half of 2018, a year-on-year organic increase of €169 million (+80.9%).

EBITDA at EDF Trading amounted to €346 million, an organic increase of €161 million (+86.1%) compared to the first half of 2017. This change follows the rise in the trading margin mentioned earlier in the discussion of sales (see section 4.1.2.9).

4.3 OPERATING PROFIT (EBIT)

EBIT decreased by 6.0%.

(in millions of Euros)	H1 2018	H1 2017	Variation	Variation (%)
EBITDA	8,231	6,996	1,235	+17.7
Net changes in fair value on energy and commodity derivatives,				
excluding trading activities	19	(196)	215	-109.7



Net depreciation and amortisation Net increases in provisions for renewal of property, plant and	(4,410)	(4,212)	(198)	+4.7
equipment operated under concessions	(66)	(41)	(25)	+61.0
(Impairment)/reversals	(68)	(32)	(36)	+112.5
Other income and expenses	(56)	1,367	(1,423)	-104.1
OPERATING PROFIT (EBIT)	3,650	3,882	(232)	-6.0

The Group's consolidated EBIT amounted to €3,650 million for the first half of 2018, 6% lower than in the first half of 2017. This unfavourable development is essentially explained by the sale of 49.9% of CTE during the first half of 2017, which had no equivalent in 2018, and the rise in net depreciation and amortisation despite the higher EBITDA and the higher net changes in fair value on energy and commodity derivatives, excluding trading activities.

4.3.1 Net changes in fair value on energy and commodity derivatives, excluding trading activities

The net changes in fair value on energy and commodity derivatives, excluding trading activities, increased from -€196 million in the first half of 2017 to +€19 million in the first half of 2018. In Italy, this change was mainly attributable to the renegotiation of long-term gas contracts in recent years, which reduced the impact of volatility.

4.3.2 Net depreciation and amortisation

Net depreciation and amortisation was up by €198 million compared to the first half of 2017.

The France - Generation and supply activities segment registered a €30 million increase in net depreciation and amortisation, essentially explained by a volume effect related to maintenance investments in the nuclear fleet, and an increase in the depreciable asset base following revision of the discount rate applied to nuclear provisions. These impacts were partly offset by the effect of oil-fired thermal plant closures in 2017.

The France - Regulated activities segment registered a €76 million increase in net depreciation and amortisation. The Framatome segment contributed €105 million to net depreciation and amortisation in the first half of 2018.

4.3.3 Net increases in provisions for renewal of property, plant and equipment operated under concessions

The €25 million increase between the first half of 2017 and the first half of 2018 is attributable to the France - Regulated activities segment.

4.3.4 Impairment/reversals

At 30 June 2018 the Group booked impairment of €68 million on certain specific assets.

At 30 June 2017 the Group booked impairment of €32 million in respect of certain real estate assets in France.

4.3.5 Other income and expenses

Other income and expenses amounted to -€56 million for the first half of 2018.

In the first half of 2017, other income and expenses totalled €1,367 million and mainly comprised a gain of €1,462 million on the sale of 49.9% of the Group's investment in CTE.

4.4 FINANCIAL RESULT

(in millions of Euros)	H1 2018	H1 2017	Variation	Variation (%)
Cost of gross financial indebtedness	(785)	(879)	94	-10.7
Discount effect	(1,707)	(1,283)	(424)	+33.0
Other financial income and expenses	855	1,174	(319)	-27.2
FINANCIAL RESULT	(1,637)	(988)	(649)	+65.7



The financial result for the first half of 2018 is a financial expense of €1,637 million, €649 million lower than in the first half of 2017. This change is explained by:

- a €94 million decrease in the cost of gross financial indebtedness, due notably to the lower level of outstanding long-term debt following bond redemptions;
- an unfavourable change of €424 million in the discount effect, principally due to the reduction of the discount rate in France from 4.1% at 31 December 2017 to 4.0% at 30 June 2018, whereas this rate was stable at 4.2% between 31 December 2016 and 30 June 2017 (the assumed inflation is 1.5%, the same as in 2017);
- a €319 million decrease in other financial income and expenses, principally due to:
 - non-significant net changes in the fair value of debt and equity instruments during the first half of 2018, in line with market developments over the period (IFRS 9 is applied from 1 January 2018, with no restatement of prior year figures);
 - significant gains on sales of dedicated assets during the first half of 2017 (in application of IAS 39).

4.5 INCOME TAXES

Income taxes amounted to -€625 million in the first half of 2018 (corresponding to an effective tax rate of 31.0%) compared to an expense of -€712 million in the first half of 2017 (corresponding to an effective tax rate of 24.6%). The increase in the Group's effective tax rate between June 2017 and June 2018 essentially relates to the favourable impact of the partial sale of CTE, which was completed on 31 March 2017 and had no equivalent in 2018.

After eliminating non-recurring items, the effective tax rate for the first half of 2018 was 30.7%, compared to 34.3% for the first half of 2017, as the 2018 taxable income was higher in countries where the income tax rate is lower than in France.

4.6 SHARE IN NET INCOME OF ASSOCIATES AND JOINT VENTURES

The Group's share in net income of associates and joint ventures was a positive €365 million in the first half of 2018, compared to a negative -€93 million in the first half of 2017, essentially relating to CTE and CENG.

This +€458 million change is mainly explained by impairment of €341 million booked in 2017 on the assets of CENG, for which there was no equivalent in the first half of 2018.

4.7 NET INCOME ATTRIBUTABLE TO NON-CONTROLLING INTERESTS

Net income attributable to non-controlling interests amounted to €27 million at 30 June 2018, down by €57 million (-67.9%) compared to 30 June 2017. This downturn is mainly explained by the sale of EDF Polska's assets in 2017, and by Centrica's lower income from nuclear generation in the **United Kingdom**, due to the lower level of nuclear generation and realised prices for nuclear power.

4.8 EDF NET INCOME

EDF net income totalled €1,726 million at 30 June 2018, down by €279 million in comparison to the first half of 2017 (-13.9%).

4.9 NET INCOME EXCLUDING NON-RECURRING ITEMS

The Group's net income excluding non-recurring items¹ stood at €1,739 million at 30 June 2018, up by 27.0% compared to 30 June 2017.

¹ EDF net income excluding: non-recurring items, net changes in fair value on energy and commodity derivatives (excluding trading activities), and net changes in the fair value of debt and equity instruments, net of tax.

Amount of non-recurring items, net changes in fair value on energy and commodity derivatives, excluding trading activities, and net changes in the fair value of debt and equity instruments, net of tax:

^{- €90} million for miscellaneous risks and impairment in the first half of 2018, compared to +€777 million in the first half of 2017.

^{• +€15} million of net changes in the fair value of energy and commodity derivatives, excluding trading activities, net of tax in the first half of 2018, compared to -€142 million for the first half of 2017.

^{+€62} million of net changes in the fair value of debt and equity instruments in the first half of 2018 (IFRS 9).



5 NET INDEBTEDNESS, CASH FLOWS AND INVESTMENTS

Net indebtedness comprises total loans and financial liabilities, less cash and cash equivalents and liquid assets. Liquid assets are financial assets consisting of funds or securities with initial maturity of over three months that are readily convertible into cash and are managed according to a liquidity-oriented policy.

The Group's net indebtedness stood at €31,275 million at 30 June 2018 compared to €33,015 million at 31 December 2017.

(in millions of Euros)	H1 2018	H1 2017	Variation	Variation (%)
Operating profit before depreciation and amortisation (EBITDA)	8,231	6,996	(1,235)	+17.7
Cancellation of non-monetary items included in EBITDA	(786)	(1,271)		
Net financial expenses disbursed	(730)	(828)		
Income taxes paid Other items including dividends received from associates and joint ventures	140 126	(827) 86		
Operating cash flow (1)	6,981	4,156	(2,825)	+68.0
Change in working capital	1,434	482		
Net investments ⁽²⁾	(6,339)	(1,480)		
Cash flow after net investments	2,076	3,158		
Dedicated assets	74	(1,105)		
Cash flow before dividends (3)	2,150	2,053		
Dividends paid in cash	(551)	(571)		
Group cash flow	1,599	1,482		
Other monetary changes – including capital increase (Increase)/decrease in net indebtedness, excluding the impact of	(54)	3,738		
changes in exchange rate	1,545	5,220		
Effect of change in exchange rate	103	498		
Effect of other non-monetary changes	92	439		
(Increase)/decrease in net indebtedness	1,740	6,157		
NET INDEBTEDNESS AT BEGINNING OF PERIOD	33,015	37,425		

	NET INDEBTEDNESS AT END OF PERIOD	31,275	31,268		
((1) Operating cash flow is not an aggregate defined by IFRS	as a measure of financial	performance, and is	s not directly comparable	₂ with
	indicators of the same name reported by other companies	This indicator also known	as Funds From Opera	tions (FEO) is aquivalent	to not

cash flow from operating activities excluding changes in working capital after adjustment where relevant for the impact of non-recurring effects, less net financial expenses disbursed and income taxes paid.

(2) Not investment are appreciate investments and financial investments for growth, not of disposals. They also include not debta acquired as

5.1 OPERATING CASH FLOW

The operating cash flow amounted to €6,981 million in the first half of 2018 compared to €4,156 million in the first half of 2017, an increase of €2,825 million (+68.0%).

This change mainly reflects:

- the rise in EBITDA (+€1,235 million);
- the lower level of non-monetary items of EBITDA (+€485 million), resulting from several effects including the underlying fair value of the EDF Trading portfolio and the effect of less neutralisation of gains on sale of the development and sale of structured assets activity in the first half of 2018;
- a decrease in income taxes paid (+€967 million), due to the change in the balance and advance instalments of income tax due, in correlation with the lower taxable income for the past three years in France.

⁽²⁾ Net investments are operating investments and financial investments for growth, net of disposals. They also include net debts acquired or transferred in acquisitions or disposals of securities, investment subsidies received, non-Group partner investments, Linky, new developments and the asset disposal plan of the Group.

⁽³⁾ Cash flow before dividends is not an aggregate defined by IFRS as a measure of financial performance, and is not comparable with indicators of the same name reported by other companies. It is equal to the operating cash flow defined in note (1) after the change in working capital, net investments defined in note (2) and net allocations to dedicated assets.



5.2 CHANGE IN WORKING CAPITAL

The change in working capital improved by €1,434 million in the first half of 2018. The main explanations for this change are:

- the favourable change in working capital, related to tax and social liabilities in France (+€783 million), principally
 driven by the seasonal nature of local taxes;
- receipts related to the CSPE (+€607 million);
- receipts of margin calls on 2017 positions that were settled/realised in 2018 in connection with the optimisation and trading activity (+€115 million).

The difference between the change in working capital compared to the first half of 2017 (+€952 million) essentially concerns France, and is explained by:

- favourable effects related to the CSPE (+€539 million), following payments received in early 2018;
- an increase in the liability for external management of pensions, as smaller payments were made in early 2018 (+€250 million).

5.3 NET INVESTMENTS

Net investments amounted to €6,339 million in the first half of 2018 compared to €1,480 million in the first half of 2017, an increase of €4,859. Details are as follows:

(In millions of Euros)	H1 2018	H1 2017 ⁽¹⁾	Variation	Variation (%)
France - Generation and supply activities	2,346	2,632	(286)	-10.9
France - Regulated activities	1,694	1,621	73	+4.5
EDF Énergies Nouvelles	63	(102)	165	n.a.
Dalkia	68	42	26	+61.9
Framatome	90	_	90	n.a
United Kingdom	204	256	(52)	-20.3
Italy	162	190	(28)	-14.7
Other international	102	175	(73)	-41.7
Other activities	33	99	(66)	-66.2
NET INVESTMENTS EXCLUDING LINKY, NEW DEVELOPMENTS AND ASSETS DISPOSAL PLAN OF THE GROUP LINKY, NEW DEVELOPMENTS AND ASSETS DISPOSAL PLAN OF THE GROUP	4,762 1,577	4,913 (3,433)	(151) 5,010	-3.1 n.a.
NET INVESTMENTS	6,339	1,480	4,859	n.a.

¹⁾ The figures published at 30 June 2017 have been restated due to changes in segment reporting (IFRS 8). n.a. = not applicable.

5.3.1 Net investments excluding Linky, new developments and assets disposal plan of the Group

Net investments by the France - Generation and supply activities segment saw a decreased of €286 million (i.e. -10.9%), mainly reflecting the insourcing of the supplier Framatome.

Net investments by the France - Regulated activities segment were up by €73 million (i.e. +4.5%), primarily as a result of higher connections for residential customers and local authorities by Enedis, and payment to suppliers in 2018 of obligations originating in 2017.

In the **United Kingdom**, the decrease of €52 million (i.e. -20.3%) is mainly explained by the absence of investments in renewables in 2018.

In Italy, the decrease of €28 million was principally due to lower investments in the exploration-production activity. The decrease in the Other International segment (-€73 million) is notably explained by the sale of Polish entities in late 2017.

Net investments by EDF Énergies Nouvelles were up by +€165 million. In the first half of 2018 they included acquisition of development rights for an offshore wind farm in Scotland, and in the first half of 2017 they included the acquisition of Futuren.



5.3.2 Linky, new developments and assets disposal plan of the Group

The Group is also continuing its investments in the Linky programme, for which the step-up in the rollout continued during the first half of 2018.

New developments correspond to the Group's new development projects. In the first half of 2018, these new developments concerned New Nuclear investments in the United Kingdom (the Hinkley Point C project), and Edison's acquisition of Gas Natural Vendita Italia.

In addition, no transaction was closed under the assets disposal plan during the first half of 2018.

5.4 DEDICATED ASSETS

In compliance with the French Law of 28 June 2006 on the sustainable management of radioactive materials and waste, EDF has built up a portfolio of dedicated assets for secure financing of its long-term nuclear obligations which amounted to €26,606 million at 30 June 2018.

Overall, the changes in dedicated assets comprise:

- allocations to reach full coverage of obligations as defined in the law;
- reinvestment of financial income (dividends and interest) generated by these assets;
- withdrawals of assets corresponding to the costs incurred over the period in application of long-term nuclear obligations falling within the scope of the Law of 28 June 2006;
- exceptional withdrawals proposed to the governance bodies in charge of managing dedicated assets when the value of the portfolio exceeds the amount of the obligations to be financed; such withdrawals must be validated by these bodies.

The net movement of +€74 million in the first half of 2018 mainly corresponds second and third of the above categories.

5.5 CASH FLOW BEFORE DIVIDENDS

The cash flow before dividends in the first half of 2018 was positive at $+ \in 2,150$ million (compared to a positive $+ \in 2,053$ million in the first half of 2017) and is mainly explained by the following factors:

- operating cash flow of +€6,981 million;
- net investments of -€6,339 million;
- net movements in change in working capital of +€1,434 million.

The increase of +€97 million in the cash flow before dividends compared to the first half of 2017 essentially resulted from a higher level of net investments in the first half of 2018 due to the absence of strategic disposals, despite the improvement in operating cash flow (+€2,825 million), the change in working capital (+€952 million) and the changes in dedicated assets (+€1,179 million).

5.6 DIVIDENDS PAID IN CASH

Dividends paid in cash during the first half of 2018 (-€551 million) were practically stable compared to the first half of 2017. They comprise:

- the cash portion of the balance of the 2017 dividends (-€60 million);
- payments made in 2018 to bearers of perpetual subordinated bonds for the "hybrid" bond issues of January 2013 and January 2014 (-€378 million);
- dividends paid by Group subsidiaries to their minority shareholders (-€113 million).

5.7 GROUP CASH FLOW¹

The Group cash flow for the first half of 2018 amounted to $+ \le 1,599$ million compared to $+ \le 1,482$ million for the first half of 2017. The $+ \le 117$ million year-on-year improvement primarily reflects the $+ \le 97$ million change in cash flow before dividends.

^{1.} Before the capital increase.



5.8 EFFECT OF CHANGE IN EXCHANGE RATE

The foreign exchange effect, while still favourable at +€103 million, was -€395 million lower than in the first half of 2017, which saw a marked decline in the US dollar against the Euro¹, in contrast to the slight appreciation observed in the first half of 2018.

5.9 OTHER MONETARY CHANGES

Other monetary changes had an unfavourable impact of -€3,792 million compared to the first half of 2017, principally reflecting the fact that the capital increase by EDF SA in the first half of 2017 had no equivalent in 2018.

5.10 FINANCIAL RATIOS

	30 June 2018	31 December 2017	31 December 2016
Net indebtedness/EBITDA	2.1(1)	2.4	2.3
Net indebtedness/(Net indebtedness + equity) ⁽²⁾	38%	40%	48%

⁽¹⁾ The ratio at 30 June 2018 is calculated based on cumulative EBITDA for the second half of 2017 and the first half of 2018.

_

⁽²⁾ Equity including non-controlling interests.

The US dollar rose by +2.9% against the Euro, from €0.834/\$1 at 31 December 2017 to €0.858/\$1 at 30 June 2018.
 The US dollar fell by -7.69% against the Euro, from €0.949/\$1 at 31 December 2016 to €0.876/\$1 at 30 June 2017.



6 MANAGEMENT AND CONTROL OF MARKET RISKS

This section sets forth the policies and principles for management of the Group's financial risks defined in the Strategic Financial Management Framework (liquidity, interest rate, foreign exchange rate and equity risks), and the Group counterparty risk management policy set up by the EDF group. These principles apply only to EDF and subsidiaries controlled by the Group or subsidiaries that do not benefit by law from specific guarantees of independent management such as Enedis. In compliance with IFRS 7, the following paragraphs describe the nature of risks resulting from financial instruments, based on sensitivity analyses and credit (counterparty) risk assessments.

Since 2002, a dedicated body – the Financial Risks Control Department (*Département Contrôle des Risques Financiers et Investissements* – CRFI) – has been in charge of financial risk control at Group level by ensuring correct application of the principles of the Strategic Financial Management Framework (July 2015). This department, which has reported to the Group's Risk Division since 2008, is an independent unit that also has the task of carrying out a second-level check (methodology and organisation) of EDF entities and subsidiaries controlled by the Group (excluding Enedis), and a first-level check of financing activities at parent company level, including trading room activities.

The CRFI Department issues daily monitoring reports of risk indicators relevant to activities in EDF's trading room. Regular internal audits are carried out to ensure controls are actually applied and are effective.

6.1 MANAGEMENT AND CONTROL OF FINANCIAL RISKS

6.1.1 Liquidity position and management of liquidity risks

6.1.1.1 Liquidity position

At 30 June 2018, the Group's liquidities, consisting of liquid assets, cash and cash equivalents, totalled €23,222 million and available credit lines amounted to €11,441 million.

At 30 June 2018, no Group company was in default on any borrowing.

6.1.1.2 Management of liquidity risk

The EDF group was able to meet its financing needs by conservative liquidity management, and has obtained financing on satisfactory terms.

A range of specific levers are used to manage the Group's liquidity risk:

- the Group's cash pooling system, which centralises cash management for controlled subsidiaries. The subsidiaries' cash balances are made available to EDF SA in return for interest, so as to optimise the Group's cash management and provide subsidiaries with a system that guarantees them market-equivalent financial terms;
- centralisation of financing for controlled subsidiaries at the level of the Group's cash management department. Changes in subsidiaries' working capital are financed by this department in the form of stand-by credit lines provided for subsidiaries, which may thus be granted revolving credit from the Group. EDF SA and the investment subsidiary EDF Investissements Groupe (EDF IG), set up in partnership with the bank Natixis Belgique Investissements, also provide medium and long-term financing for EDF group operations outside France, arranged by EDF SA and EDF IG on a totally independent basis: each company sets its own terms, which are the same as the subsidiary would have in an arm's-length market transaction;
- active management and diversification of financing sources used by the Group: the Group has access to short-term resources on various markets through programmes for French commercial paper (billets de trésorerie), US commercial paper and Euro market commercial paper. For EDF, the ceilings for these programmes are €6 billion for its French commercial paper and \$10 billion for its US commercial paper.

At 30 June 2018, EDF SA had an overall amount of €10,287 million in available credit facilities (syndicated credit and bilateral credit):

- the syndicated credit line amounts to €4 billion with maturity extending to November 2020. No drawings had been made on this syndicated credit line at 30 June 2018;
- bilateral credit lines represent an available amount of €6,157 million, with expiry dates extending to March 2022. The level of available credit is very regularly reviewed to ensure that the Group has sufficient back-up facilities;



• the amount available through credit lines with the European Investment Bank is €130 million. €70 million had been drawn on the total credit line of €200 million at 30 June 2018. Three other credit lines were fully drawn at 30 June 2018 for the respective amounts of €225 million, €500 million and €500 million.

EDF Investissements Groupe has a syndicated credit facility for €400 million (maturing in September 2020). At 30 June 2018, there were no drawings on this credit facility.

Edison has a \leq 275 million credit line with the European Investment Bank (which is fully drawn), and a \leq 385 million credit line with a pool of banks on which no drawings had been made at 30 June 2018.

Dunkerque LNG has a syndicated credit facility for €800 million (with 5-year maturity), which is fully drawn.

6.1.2 Credit ratings

The financial ratings agencies Standard & Poor's, Moody's and Fitch Ratings attributed the following long-term and short-term ratings to EDF group entities at 30 June 2018:

Company	Agency	Long-term rating	Short-term rating
	Standard & Poor's	A-, negative outlook	A-2
	Moody's	A3, stable outlook	P-2
EDF	Fitch Ratings	A-, stable outlook	F2
EDF Trading	Moody's	Baa2, stable outlook	n.a.
EDF Energy	Standard & Poor's	BBB-, negative outlook	A-3
	Standard & Poor's	BB+, stable outlook	В
Edison	Moody's	Baa3, stable outlook	n.a.

n.a. = not applicable.

6.1.3 Management of foreign exchange risk

As a result of the financing and foreign exchange risk hedging policy, the Group's gross debt at 30 June 2018 breaks down as follows by currency after hedging:

Gross debt structure by currency before and after hedging

30 June 2018 (in millions of Euros)	Initial debt structure	Impact of hedging instruments ⁽¹⁾	Debt structure after hedges	% of debt
Borrowings in Euros (EUR)	27,722	18,195	45,917	82%
Borrowings in US dollars (USD)	16,081	(14,113)	1,968	4%
Borrowings in pounds sterling (GBP)	9,340	(2,639)	6,701	12%
Borrowings in other currencies	2,726	(1,443)	1,283	2%
TOTAL DEBT	55,869	-	55,869	100%

⁽¹⁾ Hedges of liabilities and net assets of foreign subsidiaries.

The table below presents the impact of an unfavourable variation in exchange rates on the Group's gross debt at 30 June 2018.

Exchange rate sensitivity of the Group's gross debt

30 June 2018 (in millions of Euros)	Debt after hedging instruments converted into Euros	Impact of a 10% unfavourable variation in exchange rates	Debt after a 10% unfavourable variation in exchange rates
Borrowings in Euros (EUR)	45,917	-	45,917
Borrowings in US dollars (USD)	1,968	197	2,165
Borrowings in pounds sterling (GBP)	6,701	670	7,371
Borrowings in other currencies	1,283	128	1,411
TOTAL DEBT	55,869	995	56,864

Due to the Group's foreign exchange risk hedging policy for liabilities, the income statement for companies controlled by the Group is marginally exposed to foreign exchange rate risk.



The table below sets forth the foreign exchange position relating to net non-operating investments in foreign currencies of the Group's principal subsidiaries at 30 June 2018.

(in millions of currency units)	Net position after management (Assets) at 30 June 2018 ⁽¹⁾	Net position after management (Assets) at 31 December 2017
USD	2,105	2,606
CHF (Switzerland)	227	245
GBP (United Kingdom)	10,684	9,153
CLP (Chile)	(305)	1,135
PLN (Poland)	159	35
BRL (Brazil)	1,103	1,066
CNY (China)	10,120	10,028

⁽¹⁾ The net positions shown exclude certain non-significant exposures.

The assets in the above table are the net assets of the Group's foreign subsidiaries in foreign currencies, adjusted for changes in the fair value of cash flow hedges and available-for-sale financial assets recorded in equity, and changes in the fair value of financial instruments recorded in income.

6.1.4 Management of interest rate risk

The Group's gross debt after hedging instruments at 30 June 2018 was structured as follows: 52.4% of debt bore interest at fixed rates and 47.6% at floating rates.

A 1% uniform annual rise in interest rates would generate an increase of approximately €266 million in financial expenses, based on gross floating-rate debt at 30 June 2018 after hedging.

The average cost of Group debt (weighted interest rate on outstanding amounts after hedging) was 2.78% at 30 June 2018.

The table below sets forth the structure of Group debt and the impact of a 1% variation in interest rates at 30 June 2018.

Structure and interest rate sensitivity of Group debt

30 June 2018 (in millions of Euros)	Initial debt structure	Impact of hedging instruments	Debt structure after hedges	Impact on net income of a 1% variation in interest rates
Fixed rate	51,120	(21,833)	29,287	-
Floating rate	4,749	21,833	26,582	266
TOTAL	55,869		55,868	266

6.1.5 Management of equity risks

The equity risk is concentrated in the following areas:

Coverage of EDF's nuclear obligations

Analysis of the equity risk is presented in section 6.1.6 "Management of financial risk on EDF SA's dedicated asset portfolio".

Coverage of employee benefit obligations for EDF SA, EDF Energy and British Energy

Assets covering EDF's employee benefit liabilities are partly invested on the international and European equities markets. Market trends therefore affect the value of these assets, and a downturn in equity prices would lead to a rise in balance sheet provisions.

31% of the assets covering EDF's employee benefit obligations were invested in equities at 30 June 2018, representing an amount of €3.6 billion of equities.

At 30 June 2018, the three pension funds sponsored by EDF Energy (EDF Energy Pension Scheme, EDF Energy Group Electricity Supply Pension Scheme and the British Energy pension fund) were invested to the extent of 12% in equities and equity funds, representing an amount of £1,052 million of equities.



6.1.6 Management of financial risk on EDF SA's dedicated asset portfolio

Governance and management principles

The governance principles setting forth the structure of dedicated assets, and the decision-making and control processes for their management, are validated by EDF's Board of Directors. These principles also lay down rules for the asset portfolio's structure, selection of financial managers, and the legal, accounting and tax structure of the funds.

Following a ministerial letter of 31 May 2018 authorising EDF, subject to conditions, to increase the portion of unlisted assets in its dedicated assets, on 29 June 2018 the Board of Directors validated a new strategic allocation for dedicated assets. Approximately one third of these assets will now consist of unlisted assets (infrastructures – which include CTE, real estate property, and investment funds) instead of one quarter under the previous strategic allocation applied since February 2013.

The strategic benchmark for the financial portfolio (listed equities and bonds) will also be progressively modified from 1 January 2019, until 1 January 2022 at the latest, from the current 49% equities / 51% bonds to 57% equities / 43% bonds.

Content and performance of EDF's dedicated asset portfolio

Breakdown of the portfolio

	30/06/2018	31/12/2017
Equities sub-portfolio	34.5%	35.5%
Bonds sub-portfolio	35.4%	33.0%
Cash sub-portfolio	0.6%	0.4%
CSPE after funding	10.0%	11.9%
Unlisted assets (EDF Invest)	19.5%	19.2%
TOTAL	100%	100%

At 30 June 2018, the total value of the dedicated asset portfolio was €28,144 million compared to €28,115 million at 31 December 2017.

Portfolio content under the classification from article 4, decree 2007-243 of 23 February 2007

Categories				
(in millions of Euros)	30 June 2018		31 December 2017	
	Book value ⁽¹⁾	Realisable value	Book value ⁽¹⁾	Realisable value
OECD government bonds and similar	4,901	5,010	4,261	4,363
OECD corporate (non-government) bonds	698	708	618	636
Funds investing in the above two categories	4,013	4,191	4,352	4,544
Funds not exclusively invested in OECD bonds	8,401	9,909	8,230	9,785
Hedges, deposits, amounts receivable	21	1	-	30
TOTAL FINANCIAL PRODUCT PORTFOLIO	18,034	19,819	17,461	19,358
CTE (the company that holds 100% of RTE) $^{(2)}$	2,705	2,730	2,705	2,705
Other unlisted securities and real estate assets	2,522	2,769	2,427	2,703
TOTAL EDF INVEST	5,227	5,499	5,132	5,408
CSPE after funding	2,788	2,826	3,294	3,349
TOTAL DEDICATED ASSETS	26,049	28,144	25,887	28,115

⁽¹⁾ Net book value in the parent company financial statements.

Details of the coverage of nuclear liabilities by dedicated assets are provided in note 22 to the condensed consolidated half-year financial statements at 30 June 2018.

⁽²⁾ Dedicated assets include 50.1% of the Group's investment in Coentreprise de Transport d'Électricité (CTE), the company that holds 100% of RTE.



Performance of EDF's dedicated asset portfolio

The table below presents the performance by portfolio at 30 June 2018 and 31 December 2017:

	30/06/2018 Stock market or realisable value	Performance for first-half 2018		31/12/2017 Stock market or realisable value	Performance for 2017	
(in millions of Euros)		Portfolio	Benchmark index ⁽¹⁾		Portfolio	Benchmark index ⁽¹⁾
Equities sub-portfolio	9,715	1.2%	1.1%	9,972	12.9%	13.0%
Bonds sub-portfolio	9,941	-0.4%	0.2%	9,282	2.1%	0.8%
TOTAL FINANCIAL PORTFOLIO	19,656	0.5%	0.7%	19,254	7.7%	6.6%
Cash sub-portfolio	163	-0.2%	-0.2%	104	-0.1%	-0.4%
CSPE after funding	2,826	0.2%	-	3,349 ⁽²⁾	0.4%	-
EDF INVEST ⁽³⁾	5,499	2.8%	-	5,408	8.9%	
including CTE shares ⁽⁴⁾	2,730	1.3%	-	2,705	7.3%	-
including other unlisted assets	2,769	4.2%	-	2,703	11.2%	-
TOTAL DEDICATED ASSETS	28,144	0.9%		28,115	6.6%	

⁽¹⁾ Benchmark index: MSCI World AC DN hedged in Euros 50% (excluding emerging country currencies) for the equities sub-portfolio, composite index of 60% Citigroup EGBI and 40% Citigroup EuroBIG corporate for the bonds sub-portfolio, Eonia Capitalisé for the cash sub-portfolio, 49% equities index and 51% bonds index for the total financial portfolio.

Change in unlisted assets

EDF Invest continued to build up its portfolio of infrastructures, real estate property and investment funds over the first half of 2018.

Change in listed assets

After a record low in 2017, volatility began to rise again in early 2018. The markets were nervous about the risks of a trade "war". The arrival of Italy's new government was another source of concern, as it introduced a national budget that was contrary to Italy's commitments to the European Commission in Brussels. Meanwhile the most advanced central banks are continuing to normalise their monetary policy: the Fed raised its base rates and the ECB began to move out of QE. The ECB also announced that it planned to stop increasing its balance sheet from the end of 2018, although it policy of extremely low interest rates should last until summer 2019.

The market environment was thus less favourable than in recent years, and this is visible in the management performance of the dedicated assets' financial portfolio, which achieved growth of +0.5% while the benchmark index reported +0.7%. This slight underperformance principally concerned the bonds sub-portfolio, which ended the half-year on -0.4% while its benchmark index was up by +0.2%. There are two reasons for this gap. First, the bonds sub-portfolio's sensitivity was kept below the sensitivity of the benchmark index, mainly on the yield curve tails in the core Eurozone countries, where equities tended to outperform the rest of the EGBI. Second, although exposure to credit was reduced from the beginning of the year, the funds making up this sub-portfolio tended to underperform compared to their index. The equities sub-portfolio did much better, turning in a performance of +1.2% against 1.1% for the benchmark index. The selected funds outperformed their index in almost every zone. In general, the allocation decisions remained neutral overall, as indicated by the low tracking error of 0.5%

In the first half of 2018, the overall after-tax performance of dedicated assets (impacts on reserves and net income) was +€327 million, comprising +€82 million on the financial and cash portfolios (+€125 million before tax), +€15 million for the CSPE after hedging (+€23 million before tax) and +€230 million for EDF Invest (including +€153 million for the CTE shares allocated to dedicated assets).

Dedicated assets' exposure to risks

EDF is exposed to equity risks, interest rate risks and foreign exchange risks through its dedicated asset portfolio.

The market value of the equities sub-portfolio was €9,715 million at 30 June 2018. The volatility of the equities sub-portfolio can be estimated through the volatility of its benchmark index, which at 30 June 2018 was 11.0% based on 52 weekly performances, compared to 6.0% at 31 December 2017. Applying this volatility to the value of equity assets at the same date, the Group estimates the annual volatility of the equities portion of dedicated assets at €1,066 million.

⁽²⁾ Including a €38 million adjustment at 30 June 2018.

⁽³⁾ Performance for assets held at the start of the year.

^{(4) 50.1%} of the Group's investment in Coentreprise de Transport d'Électricité (CTE), the company that holds 100% of RTE.



At 30 June 2018, the sensitivity of the bond sub-portfolio (€9,941 million) was 5.31, i.e. a uniform 100 base point rise in interest rates would result in a €528 million decline in market value. The sensitivity was 5.08 at 31 December 2017. This sub-portfolio's sensitivity is thus well below the sensitivity of the benchmark index (6.49).

6.1.7 Management of counterparty/credit risks

Counterparty risk is defined as the total loss that the EDF group would sustain on its business and market transactions if a counterparty defaulted and failed to perform its contractual obligations.

The Group has a counterparty risk management policy which applies to the parent company and all operationally controlled subsidiaries. This policy sets out the governance associated with monitoring for this type of risk, and organisation of the counterparty risk management and monitoring. The policy also involves monthly consolidation of the Group's exposures, updated monthly for financial and energy market activities and quarterly for other activities. The CRFI (Financial Risks Control) department closely monitors Group counterparties (daily review of alerts, special cautionary measures for certain counterparties).

The table below gives details, by rating category, of the EDF group's consolidated exposure to counterparty risk. At 31 March 2018, 91% of the Group's exposure concerns "investment grade" counterparties, mainly as a result of the predominance of exposures generated by the cash and asset management activity, with most short-term investments in low-risk assets:

	Good credit rating	Poor credit rating	No internal rating	Total
au 30/09/2017	79%	12%	9%	100%
au 31/03/2018	91%	7%	2%	100%

The exposure to counterparty risk by nature of activity is distributed as follows:

	Purchases	Insurance	Distribution and sales	Cash and asset management	Fuel purchases and energy trading	Total
30/09/2017	14%	1%	8%	71%	6%	100%
31/03/2018	6%	1%	9%	78%	6%	100%

Exposure in the energy trading activities is concentrated at the level of EDF Trading, where each counterparty is assigned a limit that depends on its financial robustness. A range of methods are used to reduce counterparty risk at EDF Trading, primarily position netting agreements, cash-collateral agreements and establishment of guarantees from banks or affiliates.

For counterparties dealing with EDF's trading room, the CRFI department has drawn up a framework specifying counterparty authorisation procedures and the methodology for calculation of allocated limits. The level of exposure can be consulted in real time and is systematically monitored on a daily basis. The suitability of limits is reviewed without delay in the event of an alert or unfavourable development affecting a counterparty.

As the political and financial situation in the Euro zone is still uncertain, EDF has continued to apply a conservative management policy for its cash investments in non-core countries. Only banking, sovereign and corporate counterparties with good credit ratings are authorised, for limited amounts and maturities.

6.2 MANAGEMENT AND CONTROL OF ENERGY MARKET RISKS

This section presents the main changes in energy market risks affecting the Group since 31 December 2017.

The principles for management and control of energy market risks are presented in section 2.1.1 of the 2017 Reference Document. They have not been changed since 31 December 2017.

For operationally controlled entities in the Group, positions on the energy markets are taken predominantly by EDF Trading, the Group's trading entity, which operates on the markets on behalf of other Group entities and for the purposes of its own trading activity, backed by the Group's industrial assets. EDF Trading is therefore subject to a strict governance and control framework in compliance with European regulations on trading companies.

In 2018, EDF Trading's exposure on the markets is controlled, being subject to a Value at Risk limit of €35 million, a Capital at Risk limit for long-term contracts and a Capital at Risk limit for operations on illiquid markets of €250 million each, and a stop-loss limit of €180 million.

During the first half of 2018, these limits were not exceeded and EDF Trading managed its risks within the boundaries of its mandate from EDF at all times. The stop-losses have never been triggered since their introduction.



7 TRANSACTIONS WITH RELATED PARTIES

The transactions undertaken with related parties are discussed in note 24 "Related Parties" to the condensed consolidated half-year financial statements at 30 June 2018.

8 PRINCIPAL RISKS AND UNCERTAINTIES FOR THE SECOND HALF-YEAR OF 2018

The principal risks and uncertainties to which the EDF group considers itself exposed are described in section 2 of the 2017 Reference Document.

The Group's policies for risk management and control are described in section 2 of the 2017 Reference Document.

This presentation of the major risks remains valid at the date of publication of this report as regards assessment of the principal risks and uncertainties for the second half of 2018, and the Group remains subject to the usual risks specific to its business.

9 SIGNIFICANT EVENTS RELATED TO LITIGATION IN PROCESS

Litigations concerning the EDF group are described in section 2.4 of the 2017 Reference Document. This chapter reports on litigations which have seen significant developments since the release of the 2017 Reference Document.

9.1 PROCEEDINGS CONCERNING EDF

9.1.1 Appeal against the European Commission's decision authorising EDF's takeover of Framatome

On 3 February 2018, Teollisuuden Voima (TVO) brought an action before the European Union General Court seeking cancellation of the European Commission's decision of 29 May 2017 that authorised EDF's takeover of Framatome, on the grounds that it breaches the regulation on control of concentrations. TVO has withdrawn its action and the Court announcement of 16 May 2018 removing the case from its register was made public at the end of May.

9.1.2 General Network (RAG)

In October 2002, the European Commission initiated proceedings against France, claiming that State aid had been granted to EDF when its balance sheet was restructured on 1 January 1997. By a decision dated 16 December 2003, the European Commission set the principal amount of aid to be repaid at €889 million. On 11 February 2004, the French State issued a collection note for €1,224 million which covered the principal amount and interest. This amount was paid by EDF. On 27 April 2004, EDF initiated an action before the European Union General Court, at the time known as the European Court of First Instance, to annul the European Commission's decision. On 15 December 2009, the European Union General Court issued a ruling annulling the European Commission's decision of 16 December 2003, holding that when making its decision, it should have applied the informed market economy investor test to determine whether or not the action constituted State aid. As this ruling was binding on both parties, the State repaid €1,224 million to EDF on 30 December 2009.

On 26 February 2010, the European Commission filed an appeal against the European Union General Court's ruling before the Court of Justice of the European Union. By order dated 5 June 2012, the Court of Justice rejected the appeal by the European Commission and confirmed the European Union General Court's ruling of 15 December 2009.

On 2 May 2013, the European Commission decided to reopen its investigation in order to check whether the State had acted as an informed market economy investor under the tests established by the European courts. On 22 July 2015, the European Commission issued a new decision ruling that the tax treatment of the provisions created between 1987 and 1996 for the renewal of the General Network constituted incompatible State aid, considering that the tax exemption granted to EDF could not be treated as an investment made for economic reasons. Following this decision, the State ordered EDF to repay the amount of the aid granted plus interest in accordance with the terms decided by the European Commission, corresponding to a total amount of €1.38 billion.



EDF formally acknowledged this decision and repaid the sums demanded. However, the Group disputed the existence of unlawful State aid and on 22 December 2015, it initiated a new action for annulment before the European Union General Court. On 19 April 2016, the French State became involved in these proceedings, in support of EDF. By a ruling dated 16 January 2018, the European Union General Court rejected this action and confirmed the decision of the European Commission. On 27 March 2018, EDF submitted an appeal against the General Court's decision of 16 January 2018 to the Court of Justice of the European Union.

9.1.3 **AET**

Azienda Elettrica Ticinese (AET), a public company in the Canton of Tessina, requested a renegotiation of energy prices applied under a 20-year basic electricity supply agreement entered into on 20 December 2007 for an annual capacity of 70MW, claiming that the market prices had fallen below the prices set in the agreement at certain periods since 2014.

As the prices in the agreement were non-negotiable and it contains no hardship clause, EDF offered to adjust the prices while preserving the original economic balance, stressing that it was under no obligation to renegotiate.

The negotiations were unsuccessful, and AET issued proceedings against EDF before the Paris Commercial Court on 12 April 2016. The Paris Commercial Court issued a decision on 4 December 2017 in favour of EDF, rejecting all of AET's claims. AET has lodged an appeal against this decision.

AET also brought an action against EDF on 9 November 2017 in relation to the same agreement, claiming a share in the profits from the capacity mechanism.

9.1.4 Flamanville 3 - action against the amended decree authorising construction

Three appeals have been filed against the amended construction authorisation decree for Flamanville 3. The first two were filed on 23 May 2017 before the Council of State by several non-profit organisations (one by CRILAN and the other by *Notre Affaire à tous*), directly challenging the decree of 23 March 2017 amending the construction authorisation decree for Flamanville 3 and changing the commissioning deadline. In a decision of 28 March 2018, the Council of State rejected both appeals and ordered the organisations to pay EDF the sum of €2.000.

The third appeal was filed on 21 August 2017, also before the Council of State, by several non-profit organisations including Greenpeace, CRILAN and *Notre Affaire à tous* and concerned the Prime Minister's implicit refusal to revoke the amended construction authorisation decree for Flamanville 3. This appeal is still under examination.

9.1.5 Flamanville 3 – complainte by Greenpeace and the *Sortir du Nucléaire* network

On 18 July 2017 Greenpeace and the *Sortir du Nucléaire* network filed a joint complaint with the Cherbourg Public Prosecutions office against EDF (operator), Framatome (manufacturer) and persons unknown for various breaches of the French environmental Code and the regulations concerning basic nuclear installations, due to welding issues observed at the Flamanville construction site.

9.1.6 Fessenheim

On 14 March 2017, the *Association Trinationale de Protection Nucléaire* (ATPN), represented by Ms Corinne Lepage, lodged an appeal before the Council of State, requesting the cancellation firstly of decision no. 2016-DC-0551 of 29 March 2016 by the French Nuclear Safety Authority (ASN) fixing the instructions relative to the procedures for water sampling and consumption, effluent discharge, and environmental monitoring at the Fessenheim power plant, and secondly of decision no. 2016-DC-0550 by the ASN setting the limits for effluent discharge by that plant into the environment.

In its ruling of 14 June 2018, the Council of State partly cancelled the decision setting effluent discharge limits, as no reasons were provided for the exemptions granted. However, it stated that "in view of the economic and energy interests attached to operation of Fessenheim, and also in view of the fact that temporary continuation of the limits, cancelled by this decision on the sole grounds of an absence of stated reasons, does not entail any particular risks for the interests referred to by article L.593-1 of the Environmental Code (...)", EDF is permitted to discharge the effluents concerned by the decision into the environment, respecting these cancelled limits, until the ASN takes a new decision by 1 October 2018 at the latest laying down new limits.

The Council of State also rejected all other claims and the application for cancellation of the decision mentioned earlier concerning sampling procedures.



In addition, two trade union organisations (FO and CFE-CGC) and several local authorities, including the municipality of Fessenheim, lodged appeals respectively in May and July 2017 before the Council of State, seeking cancellation of decree 2017-508 of 8 April 2017 which repealed the authorisation to operate the Fessenheim nuclear power plant.

Finally, in a ruling of 14 June 2018 the Council of State rejected the urgent applications filed by APTN for suspension of the ASN's decision of 12 March 2018 which ended suspension of the serviceability certificate granted to Areva NP for the Fessenheim steam generator. The Council of State must now issue a ruling on the merits of the matter, and the case is currently under examination.

9.1.7 Regulated electricity sales tariffs – appeal against the decision of 27 July 2017

On 24 August 2017, ENGIE filed an appeal before the Council of State against the decision of 27 July 2017 relative to regulated electricity sales tariffs. On 27 September 2017, the national association of retail energy operators (ANODE) also brought a summary petition against this decision, which it supplemented with an additional supporting statement on 22 December 2017.

Engie and ANODE asked the Council of State to cancel the decision of 27 July 2017 on the grounds that it was taken on the basis of legislative provisions that are contrary to European Union law. More specifically, the applicants argued that the regulated electricity sales tariffs do not fulfil the cumulative conditions laid down by Directive 2009/72/EC of 13 July 2009 concerning common rules for the internal electricity market, as interpreted by the Court of Justice of the European Union (in the Federutility ruling of 20 April 2010 and the ANODE ruling of 7 September 2016) and the Council of State (ANODE decision of 19 July 2017).

In its decision of 18 May 2018, the Council of State validated the principle of regulated electricity sales tariffs, notably acknowledging that they serve the public economic interest objective of price stability. However, the Council of State considered that the regulated tariffs are a disproportionate measure in two respects, and made their continuation conditional on changes to the legislative framework to introduce regular reviews of the measure and restrict the regulated electricity sales tariffs in mainland France to residential customers and non-residential sites other than sites "belonging to large firms". It therefore partly cancelled the tariff decision of 27 July 2017 on those grounds.

The law must now define the scope of beneficiaries of regulated tariffs and set the frequency of reviews.

9.1.8 SUN'R

On 21 June 2012, SUN'R filed a complaint against EDF and Enedis, along with an application for protective measures (*mesures conservatoires*), with France's Competition Authority, the ADLC. SUN'R accused Enedis of delays in the procedure for the connection of its photovoltaic facilities and EDF of delays in implementation of the mandatory purchase contracts and payment of the related invoices. SUN'R also claimed that EDF ENR had benefited from special treatment from Enedis for the connection of its facilities and from EDF for the payment of its invoices.

In a decision of 14 February 2013, the ADLC rejected all the applications for protective measures made by SUN'R but decided to continue examination of the merits of the case.

On 12 January 2018 the ADLC's investigation departments sent the parties a proposal to dismiss the matter due to the absence of anticompetitive practices by EDF, Enedis and RTE. On 4 July 2018, the ADLC closed the proceedings by issuing a decision dismissing the case.

Concurrently with its complaint to the ADLC in 2012, on 29 August 2012 SUN'R filed a petition for expert assessment and provision for costs at an urgent applications hearing before the Paris Administrative Court, including a claim for provisional compensation of €1 million from EDF and €2.5 million from Enedis. By order of 27 November 2012, the urgent applications judge (juge des référés) at the Administrative Court of Paris dismissed this petition.

On 30 April 2015, SUN'R issued proceedings against Enedis and EDF SA before the Paris Commercial Court, seeking compensation for the loss allegedly caused to it by the delays in the procedure for connecting its solar power generation plants to the electricity distribution network. It asked the Court to suspend proceedings pending the ADLC's decision on the merits of the case, and claimed a provisional amount of €10 million to be applied against future compensation for its loss. In a ruling of 7 November 2016 the Paris Commercial Court dismissed SUN'R's claim for provisional compensation and suspended proceedings until the ADLC issued a decision on the merits of the case.

On 24 November 2015, Sun West, Azimut 56 and JB Solar issued proceedings against Enedis and EDF SA before the Paris Commercial Court on the same grounds. They are claiming almost €4 million for the alleged loss, but asked the Court to suspend proceedings pending the ADLC's decision on the merits of the case. In a ruling



of 4 December 2017, the Paris Commercial Court rejected claims for provisional compensation made by Sun West, Azimut 56 and JB Solar and suspended proceedings until the ADLC issued a decision on the merits of the case.

9.1.9 CRE/REMIT investigation

On 1 December 2016, CRE (French Regulatory Commission of Energy) launched an investigation into whether EDF and its subsidiaries EDF Trading Limited and EDFT Markets Limited were guilty of engaging, since 1 April 2016, in practices that could constitute breaches of the provisions of Regulation (EU) No. 1227/2011 of 25 October 2011 on wholesale energy market integrity and transparency (REMIT). CRE informed EDF in a letter dated 5 July 2018 that it had filed a complaint with Cordis.

On 1 December 2016, CRE (French Regulatory Commission of Energy) launched another investigation into whether EDF and its subsidiaries EDF Trading Limited and EDFT Markets Limited were guilty of engaging, since 1 January 2014, in practices that could constitute breaches of the provisions of the REMIT Regulation.

On 14 December 2017, the CRE (French Regulatory Commission of Energy) launched a third investigation into whether EDF or any other person related to it were guilty of engaging, since 1 January 2017, in practices that could constitute breaches of the provisions of Regulation (EU) No. 1227/2011 of 25 October 2011 on wholesale energy market integrity and transparency (REMIT).

They do not in any way mean that an offence has been committed that could be attributed to the EDF group.

9.2 PROCEEDINGS CONCERNING EDF'S SUBSIDIARIES AND INVESTMENTS

9.2.1 Enedis

Quadlogic Corporation Controls

On 24 February 2016, Enedis received a summons for proceedings brought before the Paris Regional Court by an American company, Quadlogic Corporation Controls (QCC), for an alleged infringement of a European patent held by QCC. Enedis strongly contests both QCC's inventive input and the alleged infringement. In November 2017, the Paris Regional Court ruled in favour of Enedis and cancelled QCC's European patent in France. QCC filed an appeal against this ruling on 12 March 2018.

TURPE 5

On 2 February 2017, Enedis filed an application before the Council of State for cancellation of the CRE (French Energy Regulator) decisions of 17 November 2016 and 19 January 2017 regarding the TURPE 5 Distribution tariff, which were published in the *Journal officiel* of 28 January 2017. The dispute concerns the level of remuneration of the network operator, the pricing method, the tariff structure and the incentive regulations put in place

On 3 February 2017, EDF, in its capacity as the shareholder of Enedis, also filed an application before the Council of State for cancellation of the same CRE decisions. Subsequently (10 March 2017), the Minister of the Environment, Energy and the Sea also brought an action for cancellation, as did CFE-CGC Energie (April 2017). These proceedings gave rise to statements of defence from the CRE (July and October 2017), and an intervention statement by the association *UFC – Que Choisir* (August 2017).

By a decision of 9 March 2018, the Council of State partly cancelled the TURPE 5 decisions since in determining the cost of capital invested, they did not apply the "risk-free rate" to the assets funded by recovery of the remaining portion of the provisions established during the tariff period covered by the 'TURPE 2' tariffs, and the corresponding portion of the installations handed over by the concessionary authorities to the network operator during the same period. Consequently the above investments must be reincorporated into regulated equity. After holding a consultation with the actors, the CRE published its proposals for the TURPE 5 tariff on 14 June 2018. Under these proposals, the €1.6 billion will be added back to regulated equity. The CRE also decided to take the effects of France's decreasing corporate income tax rate into consideration when setting regulated tariffs. Its decision will take effect the day after its publication in the *Journal officiel*, which will take place by 31 July 2018, in compliance with the Council of State's decision of 9 March 2018 described above.

Litigation with photovoltaic producers

In 2010, announcements of cuts in electricity purchase prices led to a considerable surge in the number of connection requests received by Enedis units, primarily in August 2010 (since at that time, the date on which a full request was filed determined the applicable prices). Three months later, the moratorium decree issued on 9 December 2010 suspended the conclusion of new contracts for a three-month period and stipulated that if the financial and technical proposal for a request had not been approved by 2 December 2010, a new connection request would have to be submitted after that three-month period (see section 2.4.1 of the 2017 Reference



document, "Legal proceedings concerning EDF").

At the end of this moratorium, new electricity purchase provisions were introduced. Within this framework, a system of invitations to tender was developed and, moreover, a new order set the new mandatory purchase price for photovoltaic electricity. This order, issued on 4 March 2011, led to a significant drop in photovoltaic electricity purchase prices.

A Council of State decision of 16 November 2011 rejecting appeals against the moratorium decree of December 2010 generated a large volume of legal proceedings against ERDF in late 2011, which continued in 2012, 2013, 2014 and 2015. The limitation period for issuing claims for compensation connected to this moratorium expired in March 2016. These proceedings were mainly issued by producers forced to abandon their projects because the operating conditions are less attractive than before due to the new electricity purchase prices. These producers believe that this situation was caused by Enedis, on the grounds that Enedis failed to issue technical and financial proposals for connection in time for them to benefit from the more attractive electricity purchase conditions. The judgments issued at first instance, and by the Court of Appeal, are divergent in their reasoning and findings, with some courts dismissing all of the claims filed by the claimants while others award compensation, but on the whole the compensation awarded is lower than initially requested.

Enedis wanted to use its Civil Liability insurance policy but the insurers refused to cover these matters. The Court of Cassation ruled in a decision of 9 June 2015, (the Green Yellow ruling) that Enedis was responsible for the situation and that it was to be covered by its insurers. However, the insurers are continuing to refuse to apply their policies for other pending cases.

In December 2015 the Versailles Court of Appeal decided to submit a reference to the Court of Justice of the European Union (CJEU) for a preliminary ruling on the compliance the tariff decisions of 2006 and 2010 with European State aid laws.

The CJEU dismissed this reference for a preliminary ruling for procedural reasons. On 20 September 2016, the Versailles Court of Appeal submitted a new reference to the CJEU for a preliminary ruling on the compliance of the 2006 and 2010 tariff decisions with European state aid laws and decided to suspend its own proceedings. Since this decision, Enedis or the insurer have routinely applied for a suspension of proceedings pending the CJEU's decision. Many lower and appeal courts have granted this application.

By order dated 15 March 2017, the CJEU confirmed that the decisions of 10 July 2006 and 12 January 2010 setting the purchase prices for photovoltaic electricity constituted "intervention by the State or through the resources of the State", one of the four criteria for qualifying as state aid. It reiterated that such aid measures, implemented without prior notification to the Commission, are illegal. The national courts must now implement the consequences of this, particularly by ruling out application of these illegal decisions.

Several decisions in favour of Enedis have been issued since the beginning of 2018. Notably, in early July Versailles Court of Appeal dismissed 150 producers' claims, because there was no evidence establishing misconduct by Enedis, or because there was no causal link between Enedis' misconduct and the prejudice, or because the prejudice was not deemed eligible for compensation since the tariff decisions of 2006 and 2010 are illegal, as the European Commission did not receive the prior notification required by State aid control rules. Appeals against these decisions may be filed before the Court of Cassation within two months of their notification.

9.2.2 SOCODEI

The low-level waste processing and packaging centre (Centraco) operated by SOCODEI, a wholly-owned EDF subsidiary, is used to process low-level radioactive waste either by smelting or by incineration. On 12 September 2011, the explosion of a waste smelter caused a fire, killing one person and injuring four. The accident did not cause any chemical or radioactive discharge. The ASN rated the accident as an INES level-1 accident and decided, on 27 September 2011, that prior authorisation must be given to restart the smelters and incinerators that were stopped shortly after the accident. On 29 June 2012, the ASN authorised SOCODEI to restart the incinerator, subject to prior submission to the ASN of a full report on inspections verifying the compliance of the facilities necessary for its safe operation. Following the accident, several investigations were opened. On 16 September 2011, the Public Prosecutor's Department in Nîmes opened an investigation against persons unknown for manslaughter and accidental injury, which is still ongoing. The results of the investigations by the French Labour Inspectorate and the ASN were sent to the Public Prosecutor's Department and a court expert was appointed. Once the court-ordered expert assessment operations had been completed, the examining magistrate authorised the removal of the seals on the smelter, which meant that the repairs could commence.

After its decision of 14 January 2014 setting new technical requirements to be met before resuming operations, the ASN authorised the restarting of the smelters in a decision issued on 2 April 2015. Following a summons served on its representative to appear before the examining magistrate on 16 September 2015, SOCODEI was placed under investigation for manslaughter. In a judgement of 16 March 2018, the Criminal Court in Nîmes sentenced



the legal entity SOCODEI to a fine of €87,500 for manslaughter and accidental injury causing temporary work incapacity of more than three months. SOCODEI was also ordered to pay the civil claimants €170,000 in damages. As the Public Prosecutor's Department did not appeal, this judgement is now final in insofar as the criminal aspects are concerned.

9.2.3 Edison

Proceedings concerning the sale of Ausimont (Bussi)

Further to a preliminary investigation initiated by the Public Prosecutor of Pescara (Abruzzo region) in relation to a suspected case of water pollution and ecological disaster affecting the river Aterno basin at Bussi sul Tirino, which for more than a century has been the site of an industrial complex belonging to Ausimont SpA that was sold to Solvay Solexis SpA in 2002, the Public Prosecutor notified certain former directors and managers of Solvay Solexis and Edison that the case would go to court on charges of water poisoning, ecological disaster and fraud to the prejudice of the site's purchaser, Solvay Solexis.

On 15 December 2009, the proceedings against Montedison (now Edison) for fraud were abandoned. The proceedings on the matters of environmental disaster and poisoning of water or foodstuffs continued and, on 18 April 2013, the competent judge decided to send Montedison's former managers before the Assize Court in Chieti. In a decision issued on 7 February 2014 by the Assize Court, the case against Edison was dismissed and accordingly, it is no longer a party to the criminal proceedings. In a decision of 19 December 2014, the same Court acquitted all of the defendants. The Public Prosecutor referred the case to the Court of Cassation, which issued a decision on 18 March 2016 ruling that the appeal was inadmissible and referring the case back to the Assize Court of Appeal in L'Aquila. The decision, given in February 2017 by the Appellate Assize Court, was taken in appeal to the Court of Cassation. The next hearing, initially scheduled for 13 March 2018, has been deferred to 28 September 2018.

In this context, a large quantity of industrial waste was found on a plot of land belonging to Edison adjacent to the plant. An attachment order was placed on that land, and on 4 October 2007, the President of the Italian Council of Ministers appointed a deputy special commissioner empowered to undertake urgent measures: identification, safety and rehabilitation measures for the land. The commissioner ordered Edison to prepare a survey of the zone, take urgent measures to make it safe and present proposals for decontamination of the ground and ground water. Edison, which has never used this site for its business, filed an appeal with the Regional Administrative Court in June 2008. The Regional Administrative Court rejected this appeal in March 2011 and Edison challenged this judgment before the Council of State.

Following the hearing of 15 January 2015, the Council of State definitively set aside the decision of the deputy special commissioner in a judgment handed down on 5 March 2015. Edison is thus no longer obliged to take urgent measures.

Also in this context, the Province of Pescara informed Solvay Speciality Polymers Italy SpA (formerly named Solvay Solexis SpA) and Edison SpA on 28 February 2018 that an administrative procedure was being started to determine who is responsible for the pollution of the land to be sold belonging to Ausimont SpA.

In 2012, an arbitration procedure was begun by Solvay SA and Solvay Specialty Polymers Italy SpA for violation of the environmental representations and warranties concerning the Bussi and Spinetta Marengo sites contained in the contact for the sale of Agora SpA (the company that controls Ausimont SpA), signed in December 2001 between Montedison SpA and Longside International SA on the one hand, and Solvay Solexis SpA (Solvay Specialty Polymers Italy SpA) on the other hand. After an initial phase of preliminary questions and rulings, the proceedings are continuing with examination of the merits of the parties' claims.

Environmental litigation

Edison is involved in several criminal proceedings currently in progress concerning damage caused by the operation of Montedison's chemical factories (petrochemical facilities in Porto Marghera, Crotone, Mantua and Cesano Maderno) prior to their sale to Enimont. These criminal proceedings also include actions brought by third parties concerning personal injuries related to the alleged environmental damage.

During the first half of 2018, the Public Prosecutor of Pescara (Abruzzo region) began a preliminary investigation against Edison's directors, for allegedly failing to execute decontamination work on the industrial site of Piano D'Orta (Province of Pescara, Abruzzo region), where the company Montecatini had an establishment until the late 1960s.



10 SUBSEQUENT EVENT

10.1 ASSETS DISPOSAL PLAN

 The EDF Group signed binding agreements for the disposal of its interest in the share capital of the liquefied natural gas (LNG) terminal in Dunkirk (Dunkerque LNG) (see press release of 12 July 2018 and note 3.2 to. the condensed consolidated half-year financial statements at 30 June 2018)¹.

11 FINANCIAL OUTLOOK

2018 targets for EBITDA and debt ratio upgraded

The Group is continuing the deployment of its strategic plan and has upgraded its 2018 targets for EBITDA and debt ratio:

- Operating expenses²: €800 million reduction compared to 2015;
- EBITDA³: between €14.8 and €15.3 billion;
- Cash flow² ⁴ excluding Linky, new developments and the 2015-2020 asset disposal plan: slightly positive or close to break-even;
- Net investments excluding Linky, new developments and the 2015-2020 asset disposal plan: around €11 billion;
- Total net investments excluding acquisitions and the 2015-2020 asset disposal plan: less than or equal to €15 billion;
- Assets disposal plan: around €10 billion over 2015-2018⁵
- Net financial debt/EBITDA³: less than or equal to 2.5x;
- Payout ratio, based on net income excluding non-recurring items⁶ post-hybrid: 50%.

^{1.} Following this sale, the long-term agreement between EDF and Dunkerque LNG for reservation of LNG regasification capacities should lead to recognition of a provision for an onerous contract. The gain on the sale, net of the provision to be recognised, is thus expected to be limited.

^{2.} Sum of personnel expenses and other external expenses. Based on comparable scope and exchange rates and constant discount rates for pensions. Excluding changes in operating expenses of the service activities.

^{3.} At comparable exchange rates and "normal" weather conditions, assuming nuclear power generation in France >395TWh and constant discount rates for pensions.

^{4.} Excluding any interim dividend for the 2018 tax year.

^{5.} Disposals signed or realised.

^{6.} Adjusted for the return on hybrid bonds recorded in equity.