2020 FACTS & FIGURES

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Detailed information regarding these uncertainties and potential risks are available in EDF's Universal Registration Document (URD) filed with the Autorité des marchés financiers on 15 March 2021, which is available on the AMF's website at www.amf-france.org and on EDF's website at www.edf.fr.

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BEFORE STARTING…

WHAT'S NEW?

- **Strategic targets upgrade** in accordance with the *Raison d'être*
- **On the road to carbon neutrality:** new objectives on the reduction of CO_2 emissions and strengthened CSR commitments across all the Group's activities
- **An overview of regulated activities** (Enedis, Linky, etc.)
- **New topics in renewable energies** (pipeline breakdown, etc.) **and growth prospects**

Did you know?

Reading suggestions

- To help you understand the terms used, you will find a **glossary** at the end of the document
- You will also find **"Did you know?"** takeaway boxes throughout the document that shed light on specific content
- Much more information is available in our URD, which you can download via:

https://www.edf.fr/en/the-edf-group/dedicated-sections/investors-shareholders/financial-information/regulated-information/reference-documents

Browsing suggestions

- **Hypertext links** have been included to help you browse this document
- **Clicking on the EDF logo** will bring you back to the main table of contents (page 5)
- The name of the chapter can be found at the bottom of each page
- **Clicking on the title of the chapter** will bring you back to the beginning of this part

MAIN BUSINESSES RENEWABLES

TABLE OF CONTENTS

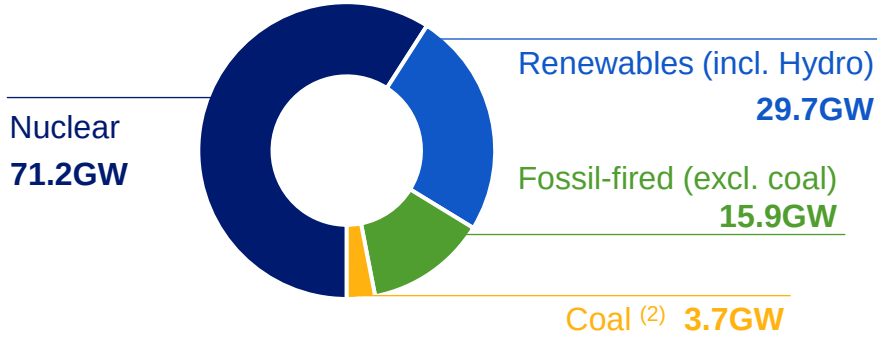
The EDF's *raison d'être* is in line with the values of progress and sharing that have inspired EDF's actions since its creation, as well as with today's major issue of addressing climate change and preserving the planet. The key issues surrounding its *raison d'être* have been formalised in 16 CSR commitments adopted by all the Group's business lines and subsidiaries, focusing on major environmental, social and societal issues

THE EDF GROUP

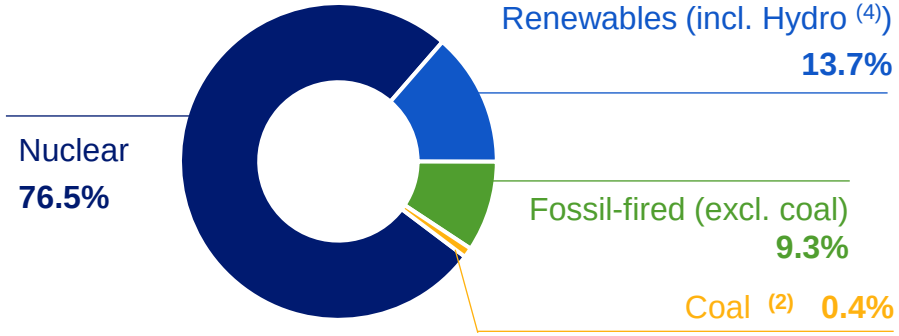
EDF GROUP 2020 KEY FIGURES

Operational figures as of end 2020

- **37.9 million customer sites**
- **120.5GW (1) installed capacity**



- **501.9TWh electricity output (3)**



- **165,200 employees**
  o.w. 63,244 at EDF, 38,624 at Enedis, 15,015 at Framatome, 18,198 at Dalkia and 11,717 at EDF Energy

2020 Financials

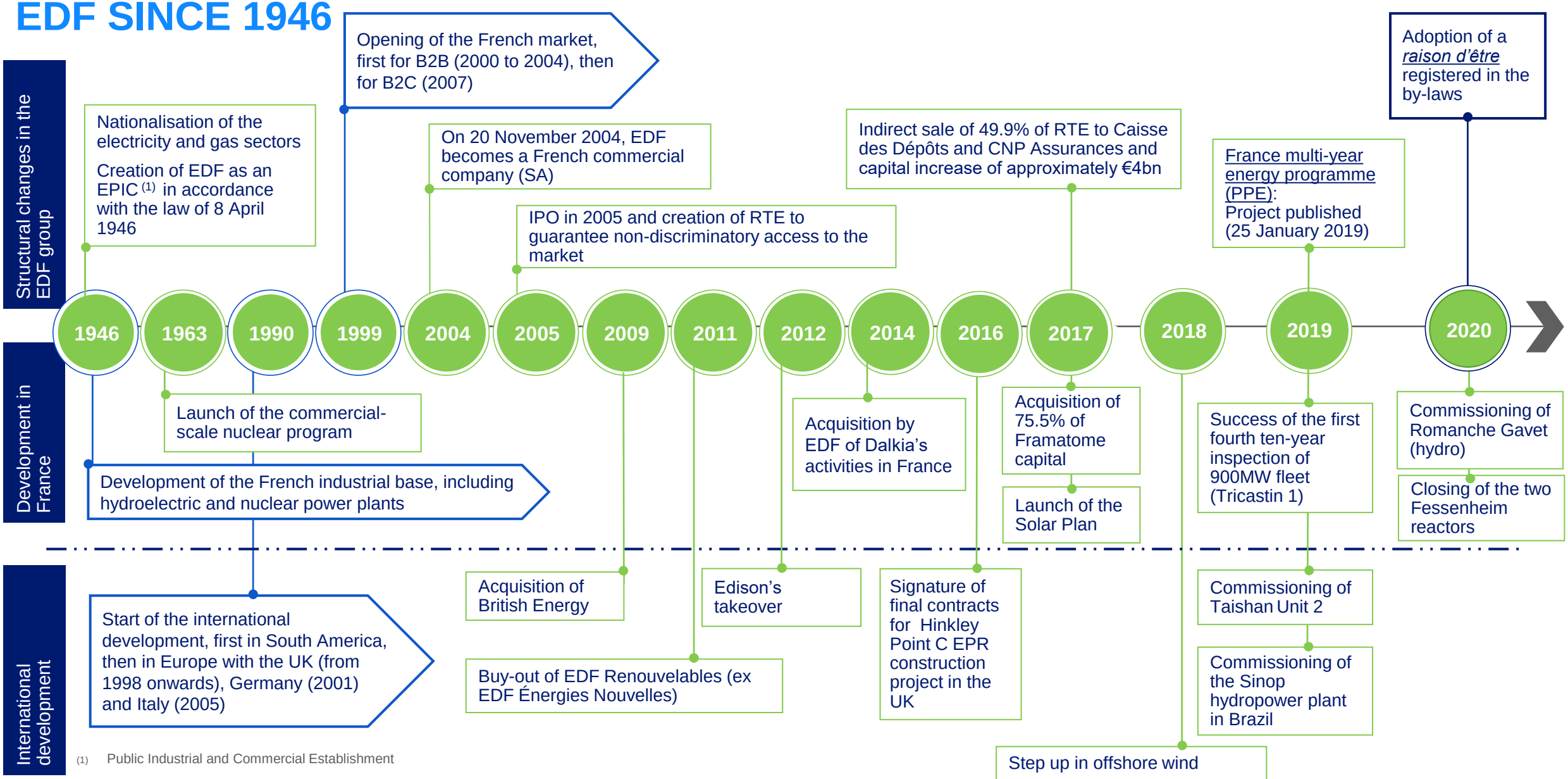
- **Sales: €69bn**
- **EBITDA: €16.2bn**
- **Net income excluding non-recurring items (5): €2bn**
- **Net investments (7): €14.1bn**
- **Net financial debt : €42.3bn**
- **Ratings (6): B+++ stable (S&P) / A3 negative (Moody's) / A- negative (Fitch)**

Extra-financial ratings

- **CDP Climate change**: EDF, member of the "A list" for the 4th time in 2020
- **CDP Water security**: EDF obtained for the 1st time the "Leader" level with A-
- **Sustainalytics:** score of **86/100**, EDF is in the top 5 of companies evaluated
- **Sam/DJSI**: score of **84/100,** EDF is **DJSI World member** and in the top 3 of companies evaluated

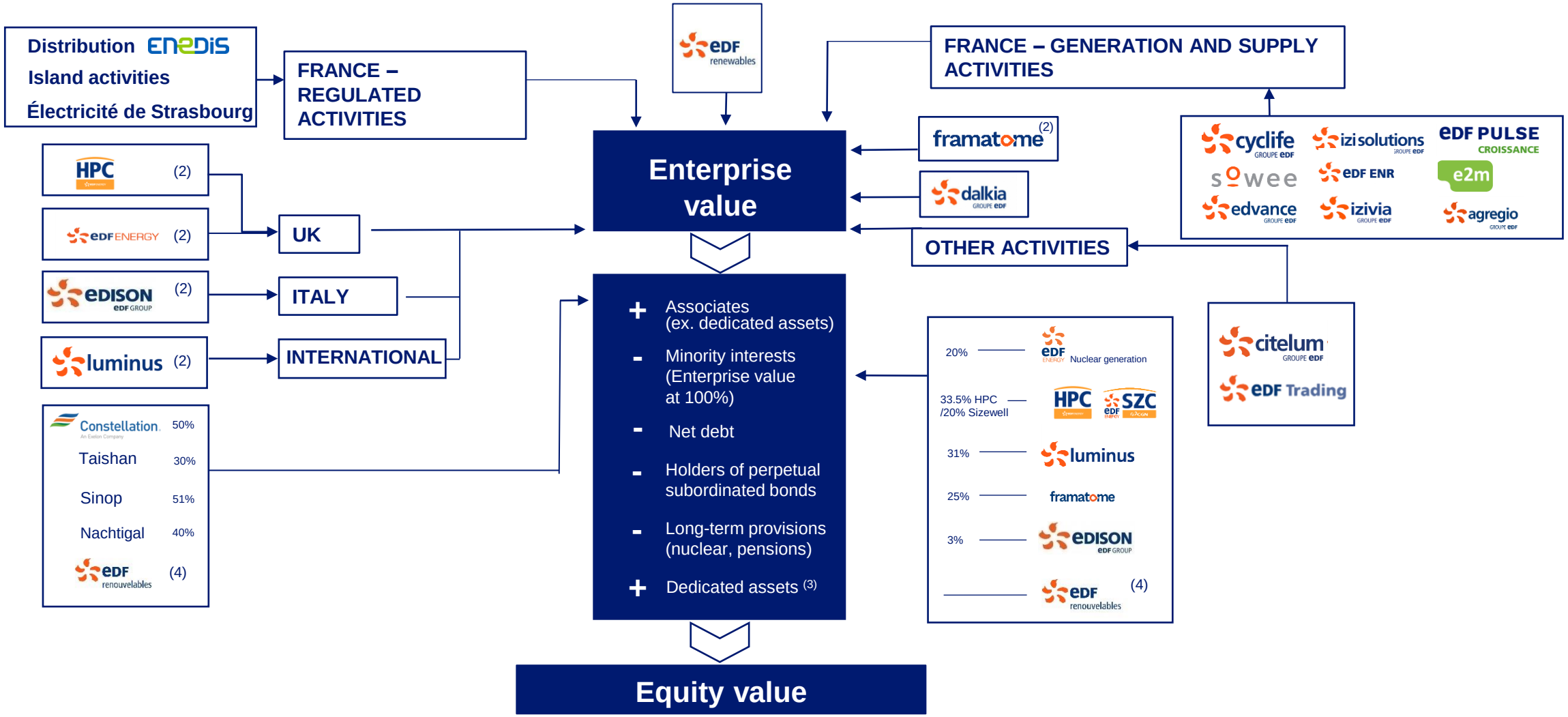
(1) Consolidated capacities of EDF group
(2) The Le Havre coal power plant has been shut down and mothballed (AGP - multi-year guaranteed shutdown) since 01/04/2021, and will be disconnected from the network by end-2021
(3) Output from fully consolidated entities
(4) Hydro output including pumping
(5) Net income excluding non-recurring items is not defined by IFRS, and is visible in the note 19.1 of the consolidated financial statements. It corresponds to the Group net income excluding non-recurring items, net changes in fair value on Energy and Commodity derivatives, excluding trading activities, net of tax and excluding net change in fair value of debt and equity securities, net of tax
(6) Sources: rating agencies as of 02/04/2021
(7) Net total investments including acquisitions, excluding disposal plan

EDF SINCE 1946



(1) Public Industrial and Commercial Establishment

EDF GROUP: ORGANISATIONAL CHART (1)



(1) Simplified organisational chart
(2) Shareholdings with significant minority interests
(3) See appendix "Performance of EDF SA's dedicated assets" on p.238
(4) Companies and shareholdings held at different levels by the EDF Renewables group

CAP 2030 THREE STRATEGIC FOCUSES FOR DECARBONISING OUR COMPANIES IN FRANCE, EUROPE AND WORLDWIDE

A creator of services and solutions to support customers and regions in the shift towards carbon neutrality

Support customers and regions in the drive towards CO_2 neutrality through accessible and innovative solutions for energy savings and low-carbon practices

Transport

- Electric mobility plan in the G4 (1)
- Decarbonised hydrogen projects for heavy mobility

Buildings

- Leader in the heat pump market in France (2) and the UK, smart metres
- Leader in own consumption in France
- Energy performance contracts and renovation in the service sector

Industry

- Energy efficiency solutions, electrification of processes, waste-heat recovery, decarbonised hydrogen

Systems

- Heating and cooling networks, promotion of the flexibility and aggregation of the RE portfolio, power-grid infrastructure

A global leader in the generation of CO_2-neutral electricity

Produce decarbonised electricity with the complementary development of nuclear power and REs

Renewables (including hydro)

- Step up the development of installed capacities worldwide
- Geographical re-balance
- Solar Plan & Storage Plan

Nuclear

- Succeed in projects under way (Fla 3, HPC)
- Successfully complete *Grand Carénage*, a major industrial project
- Initiate new EPRs in France, the UK and internationally and an SMR demonstrator in France
- Excell Plan

Flexibility

- Respond to needs for electricity flexibility and the energy transition by shrinking our carbon footprint and developing innovative solutions

A key international player in the energy transition

Support countries in the energy transition by harnessing our expertise as an energy specialist

Multi-business presence

- Development of renewable-energy, nuclear and gas capacities to support the energy transition
- Energy services, networks, storage, decarbonised hydrogen, mobility, off-grid kits

Targeted geographical development

- 3 priority countries in Europe: Italy, Belgium and the UK
- Reinforce our positions in North America and China
- A leading player in a limited number of countries to support the energy transition

Coal

- Withdrawal from coal-based production assets by 2030

(1) Priority countries: France, UK, Italy, Belgium
(2) IZI by EDF, Cham and EDF ENR

Bolstered by fresh momentum in transformation, human ambition, innovation and new commitments in corporate social responsibility

CAP 2030 2030 STRATEGIC TARGETS UPGRADE

To build a net zero energy future with electricity and innovative solutions and services, to help save the planet and drive wellbeing and economic development

A creator of services and solutions to support customers and territories in the shift towards carbon neutrality

- **>15MtCO$_2$** AVOIDED EMISSIONS (1)
- **€10bn revenues** IN SERVICES (3)
- **> 1.5** CONTRACT/CUSTOMER (2)

A global leader in the generation of CO_2-neutral electricity

- **↘ 50%** CO_2 eq DIRECT EMISSIONS vs 2017
- **60GW NET**, **>x2** NEW RENEWABLES CAPACITIES (INCL.HYDRO) VS. 2015
- INITIATING **NEW** **EPRs & 1 SMR**

An international key player in the energy transition

- **EXIT** COAL
- **1.5-2GW NET** HYDRO INSTALLED CAPACITY (4)
- **1 MILLION** OFF GRID KITS

Scope: (1) Customers, Services & Territories sector's activities. EDF estimate, including CO_2 savings linked mainly to heating and cooling networks, the development of the electric vehicle and energy saving certificates; (2) EDF estimate: France, UK , Italy and Belgium (Residential); (3) Group; (4) Excluding priority countries in Europe (France, Italy, UK and Belgium)

CUSTOMERS AND REGIONS: 2030 OBJECTIVES AND 2023 MILESTONES

Remain the leading player in energy supply in the G4

Excellence in the customer experience
(8-9/10 customers satisfied, trust in EDF, enhanced range, etc.)

Services revenues (1)

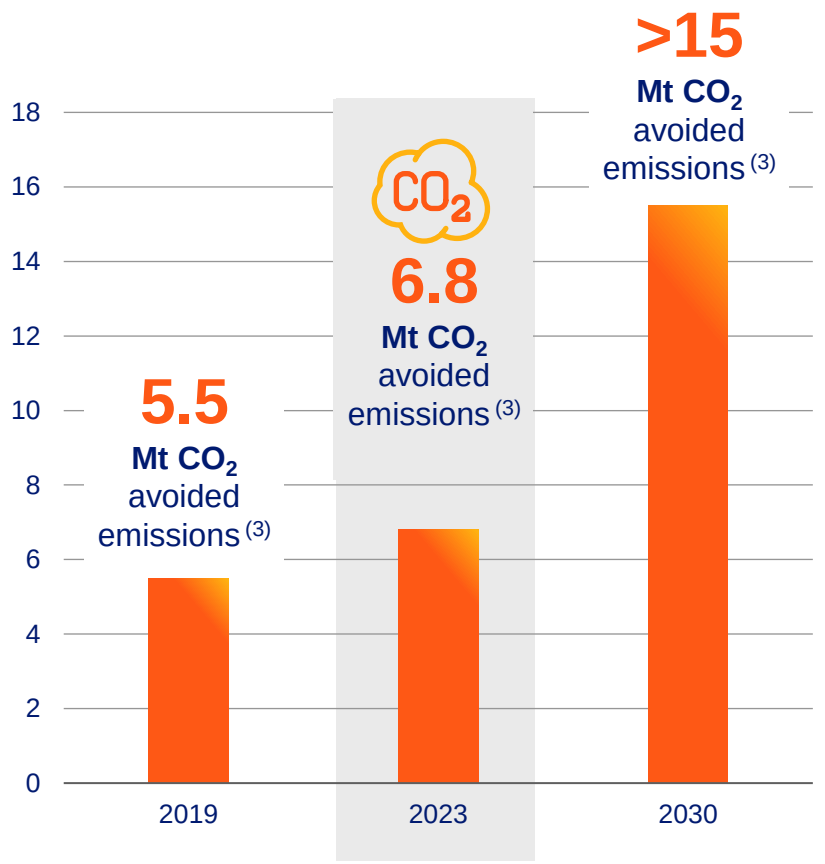
> 90% contributes to the energy transition

€3.7bn	€6 - 7bn	€10bn
2015	2023	2030

Number of contracts per customer (2)

1.1	1.3	>1.5

Bring to residential customers global solutions for energy, energy efficiency and transition to low-carbon



2030 Ambitions

>15 Mt CO_2
emissions avoided (3)

€10bn
In Services revenues

> 1.5
contract per retail customer (2)

(1) Group
(2) EDF estimate: France, UK , Italy and Belgium (Residential)

(3) Customers, Services & Territories sector's activities. EDF estimate, including CO_2 savings linked mainly to heating and cooling networks, the development of the electric vehicle and energy saving certificates

WORLD LEADER IN LOW-CARBON ELECTRICITY GENERATION: 2030 OBJECTIVES AND 2023 MILESTONES

Renewable energies

RE net capacity (including hydro)

2014	2023	2030
28 GW net	**40** GW net	**60** GW net

Nuclear

in 2023

100% of milestones for 4th 10-years inspections respected

3 EPRs commissioned (Flamanville 3, Taishan 1&2)

2 EPRs under construction (HPC)

2030 Ambitions

Réduction of **50 %** in **CO_2eq direct emissions vs 2017**

> X2 new renewables capacities (incl. hydro) vs. 2015 i.e. **60GW NET**

New EPRs & **1 SMR**

BUSINESS MODEL (1/2)

ASSETS AND RESOURCES - 2020

Customer proximity

- **32.7** million customers in electricity and **5.3** million customers in gas (1)
- **Leading** brands : EDF, Edison, Luminus, Dalkia
- **73** million customer visits on digital consumption monitoring platforms (2)

A human ambition

- **165,200** employees (3)
- **71%** of employees attended a skills development training during the year (3)

An ambitious innovative ecosystem

- EDF Pulse Croissance, a structure dedicated to incubation and support for start-ups,
- More than **2,700** R&D employees (4)
- R&D consolidated budget of **€685m** in 2020
- **716** innovations patented at end-2020 by Group R&D

Major industrial assets

- **120.5GW** of electricity generation capacity (3)
- An integrated nuclear industry
- EPR technology
- A **60GW** gross pipeline of renewable wind and solar projects (3)(6)
- **1.4** million km of distribution network (5)
- **32** millions smart meters installed (3)
- **330** heating and cooling networks operated by Dalkia

BUSINESS MODEL

CAP 2030

See following slide

A solid financial base

- Total consolidated balance sheet: ~ €300 billion
- No. 1 investor among European utilities (€16.5bn in 2020)

A strong CSR commitment

- **A** rating CDP Climate Change,
- **No. 3** SUSTAINALYTICS
- €12.5bn of green & sustainable funding

VALUE CREATION - 2020

For the climate

- A carbon neutrality ambition by 2050
- Electricity output of **501.9TWh, 90%** decarbonised (1) with emissions of **51g CO_2/kWh** (2) in 2020
- EDF, a water sharing player: water intensity of **0.87 l/kWh** in 2020 (3)
- Commitment for biodiversity

Sustainable Development Goals – United Nations

For customers

- High customer satisfaction level
- **More than 905,000** vulnerable customers received energy assistance (4)

For partners and territories

- **More than 300** academic and industrial partnerships worldwide linked by the EDF R&D
- SMEs account for between **22** and **26%** of EDF and Enedis procurements
- **1** EDF SA direct job generates **4.1** jobs on the national territory (5)
- Nearly **84 %** of projects are subject to consultation (6)

For employees

- An employee engagement index of **69%** (7)
- Women represent **28.7%** in Management Committees (8)
- An average salary equity ratio (9) of **6.6**

Sales €69.0bn
EBITDA €16.2bn
Net income €2.0bn
excl. non-recurring items

Sharing added value with our stakeholders

Suppliers
Purchases (10)
€41bn
EDF Group Global CSR Agreement

States and territories
Taxes (11)
€4.7bn

Employees
Remuneration (12)
€14bn

Shareholder Dividends
Target distribution rate (13)
45%-50%

(1) Consolidated scope. Counted per site
(2) EDF SA scope excluding French overseas departments and Corsica
(3) Group scope
(4) FTEs (full-time equivalent) at Group level
(5) Enedis distribution network under concession
(6) All the projects in prospection phase included in the pipeline, starting 2020

(1) Direct CO2 emissions, excluding life-cycle analysis (LCA) of fuel and generation means.
(2) CO2 emissions due to heat and electricity generation. Group scope
(3) Water consumed / electrical generation of fleet. Group scope
(4) Scope EDF SA + ÉS
(5) France excluding Corsica and Overseas. Nuclear DPNT and DIPNN (including EDVANCE) and DTEAM and non-fuel purchases
(6) In accordance with the Equator Principles - Group Scope
(7) MyEDF Group internal survey
(9) EDF SA perimeter - ratio established in accordance with the guidelines published by AFEP
(10) Consolidated purchases and other external expenses
(11) Consolidated taxes, including income taxes
(12) Consolidated personnel expenses
(13) Rate applied to net income excluding non-recurring items adjusted for the remuneration of hybrid bonds accounted for in equity excl corona virus decision

BUSINESS MODEL (2/2)

BUSINESS MODEL

« Raison d'être » of EDF:
To build a net zero energy future with electricity and innovative solutions and services, to help save the planet and drive wellbeing and economic development

Three strategic axes for the decarbonisation of our companies in France, Europe and worldwide:

A creator of services and solutions to support customers and territories in the shift towards carbon neutrality	A global leader in the generation of CO2-neutral electricity	An international key player in the energy transition
>15 $MtCO_2$ AVOIDED EMISSIONS	**↘ 50%** CO_2 eq DIRECT EMISSIONS VS.2017	**EXIT** COAL
€10bn revenues IN SERVICES	**60GW NET** **>X2** NEW RENEWABLES CAPACITIES (INCL. HYDRO) VS.2015	**1.5–2GW NET** HYDRO INSTALLED CAPACITIES
>1.5 CONTRACT/CUSTOMER	INITIATING **NEW EPRs & 1 SMR**	**1 MILLION** OFF GRID KITS

Supported by a new drive for transformation, innovation, human ambition and new Corporate Social Responsibility commitments,
and the implementation of 4 new plans:

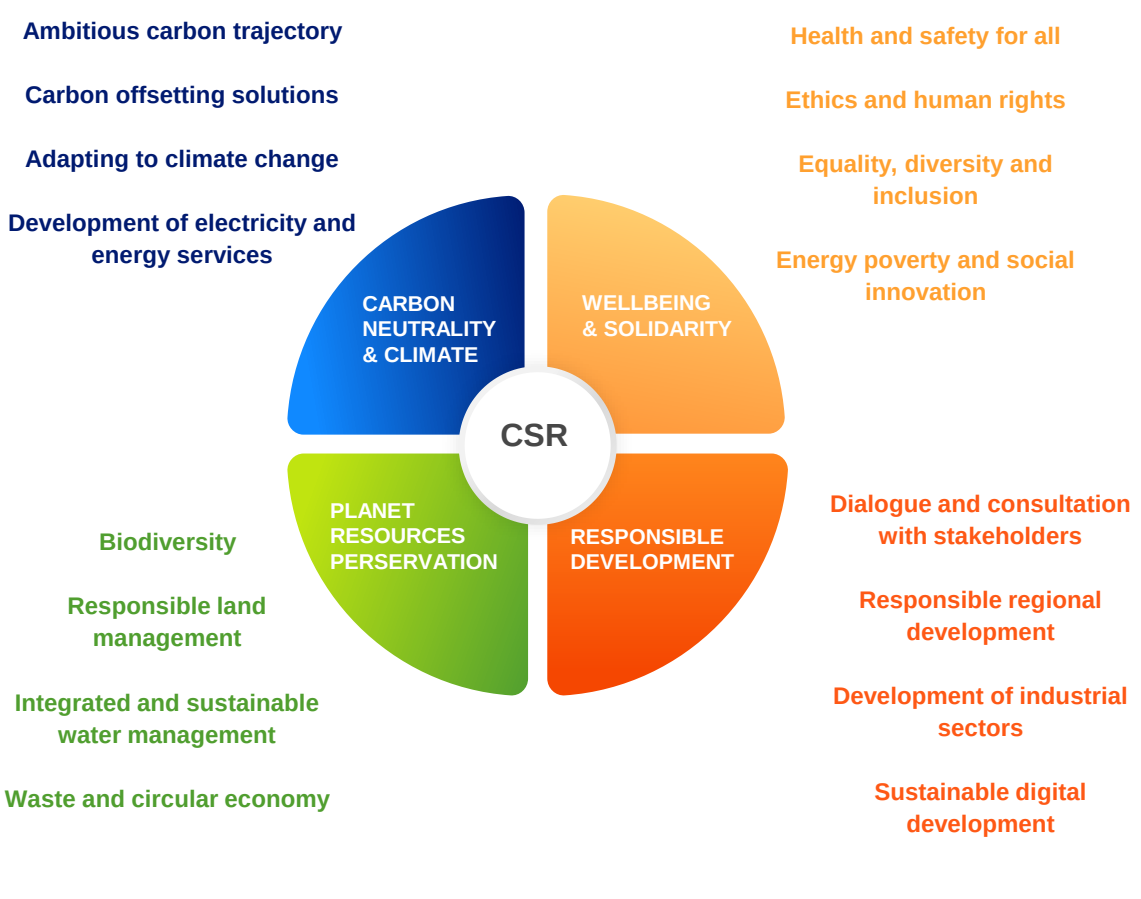
LEPLANSOLAIRE

LE PLAN stockage électrique

THE ELECTRIC MOBILITY PLAN

LE PLAN excell Excellence nucléaire

16 commitments to the 4 CSR goals



GOVERNANCE & CLIMATE STRATEGY SUPPORT THE GROUP'S AMBITION

The EDF Group was one of **the first companies in the world** to commit to supporting the TCFD (1) initiative in 2017 and to report publicly, from 2018, on the impact of climate change on its organisation according to the 4 fundamentals of TCFD

Since 2018, the EDF Group's Statement on Non-Financial Performance has included a table of correspondence serving to exhaustively identify the Group's responses to the TCFD recommendations.

TCFD | TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

THE FOUR FUNDAMENTALS OF THE TCFD RECOMMENDATIONS

PROGRESS & COMMITMENTS IN 2020

1 STRENGTHENING OF CLIMATE GOVERNANCE

- Designation of a climate officer on the Board and on the Executive Committee
- Introduction of a climate criterion based on carbon intensity in the corporate officers' variable compensation (2)

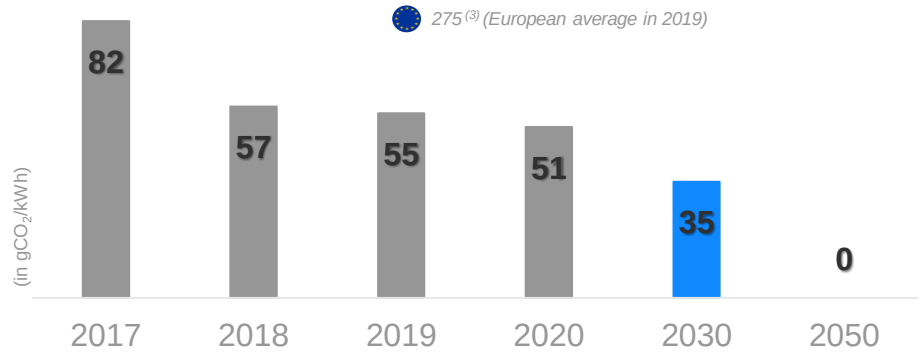
2 CARBON PRICES FOR GUIDING INVESTMENTS

In line with the CDP 2020, the carbon price range currently used by EDF for its scenarios is €24 to €100/t CO_2 by 2040 with a median price of €55/t CO_2

3 RISK MANAGEMENT

Strengthening the integration of climate risks into the risk management process of all entities

4 AN AMBITIOUS CARBON INTENSITY TRAJECTORY



(1) Task Force on Climate-related Financial Disclosures.
(2) In 2020, this criterion concerns EDF SA scope and will be extended to EDF Group by 2021
(3) Average 2019 carbon intensity of power producers in Europe according to EEA

THE GROUP EDF

CSR COMMITMENTS ACCORDING TO THE 4 GOALS OF THE COMPANY *RAISON D'ÊTRE*

CARBON NEUTRALITY & CLIMATE
- An ambitious carbon trajectory
- Carbon offsetting solutions
- Adapting to climate change
- Development of electricity and energy services

WELLBEING & SOLIDARITY
- Health and safety for all
- Equality, diversity and inclusion
- Ethics, conformity and human rights
- Energy precariousness and social innovation

PLANET RESOURCES PRESERVATION
- Biodiversity
- Responsible land management
- Integrated and sustainable water management
- Waste and circular economy

RESPONSIBLE DEVELOPMENT
- Dialogue and consultation
- Responsible regional development
- Development of industrial sectors
- Sustainable and inclusive digitalisation

(1) EDF's *Raison d'être*, approved by the Shareholders' Meeting of 07/05/2020
(2) Priority SDG's as defined in WBCSD public report: An SDD Roadmap for Electric Utilities"

ENVIRONMENTAL AND SOCIAL COMMITMENTS STRENGTHENED IN 2020 (1/2)

On 19 May 2020, EDF reaffirmed its commitment to achieve carbon neutrality by 2050 by joining the joint initiative of the United Nations Global Pact, **Science Based Target** (as part of its **Business ambition for 1.5°C campaign**) and the **WeMeanBusiness** coalition**, for governments and decision-makers to integrate climate ambition into the post-Covid recovery effort**

EDF has also been involved in **2 initiatives in favour of biodiversity**: "act4nature France" and "act4nature International" with a **voluntary programme** in favour of biodiversity based on 3 pillars and broken down into 17 commitments by 2022:

1 Reducing the Group's contribution to the 5 pressure factors on nature

- ✓ Land and sea use change
- ✓ Resources overexploitation
- ✓ Climate Change
- ✓ Pollution
- ✓ Invasive alien species

2 Improving and sharing biodiversity knowledge

- ✓ Data collection and processing
- ✓ Ambitious R&D programme

3 Training and awareness

- ✓ Employee training and awareness

act4nature
Les entreprises pour la biodiversité

EDF's corporate responsability in the management of the health crisis

In France, towards its small and medium **suppliers**, the **Group accelerated invoice payment** beyond the contractually prescribed payment period of 60 days

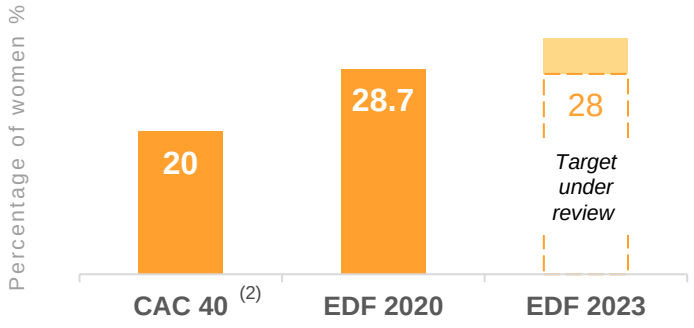
Period	Amount paid
April-July 2020	€500 million

ENVIRONMENTAL AND SOCIAL COMMITMENTS STRENGTHENED IN 2020 (2/2)

GENDER EQUALITY

GROWING WOMEN PRESENCE
in management committees
of Group's entities

In 2020, EDF exceeded its 2023 target
3 years ahead of plan (1)



(1) Initial target fixed by EDF for 2023 was 28%
(2) Average in 2019 for CAC 40 companies according to a study by France Invest and BCG on gender diversity published in March 2020

INCLUSION

APPRENTICESHIP

France's leading recruiter of apprentices (6,800 expected in 2021)

1 apprentice out of 100 works for EDF

Group's ambition:

1 apprentice out of 3 from Priority Districts and Revitalised Rural Areas

NB : EDF measures its ESG ('Environmental, Social and Governance') performance with 18 other quantitative KPIs, the results of which are verified by independent third-party bodies and published in the Statement on Non-Financial Performance.

EDF A COMPANY COMMITTED TO THE CLIMATE

Since the Paris agreements, EDF has strengthened its actions and commitments in favour of the climate: by committing to its direct and indirect emissions, by strengthening its climate governance and by maintaining its leading position in CDP climate

A look back at 5 years of commitments and trajectory to carbon neutrality

2016

PARIS 2015

CDP A LIST 2016 CLIMATE

2017

TCFD

2018

Scope 1 carbon emission reduction commitment

40% (1)

CDP A LIST 2018 CLIMATE CHANGE

2019

FRENCH BUSINESS CLIMATE PLEDGE

CDP A LIST 2019 CLIMATE

2020

SCIENCE BASED TARGETS

WELL BELOW 2°

CDP DRIVING SUSTAINABLE ECONOMIES

A **Climate Change 2020**

A- **Water Security 2020** Leadership level

2023

scope 1 **-40%** (1)

scope 3 **-8%** (2)

2030

scope 1 **-50%** (1)

scope 3 **-28%** (2)

2050

Carbon neutrality

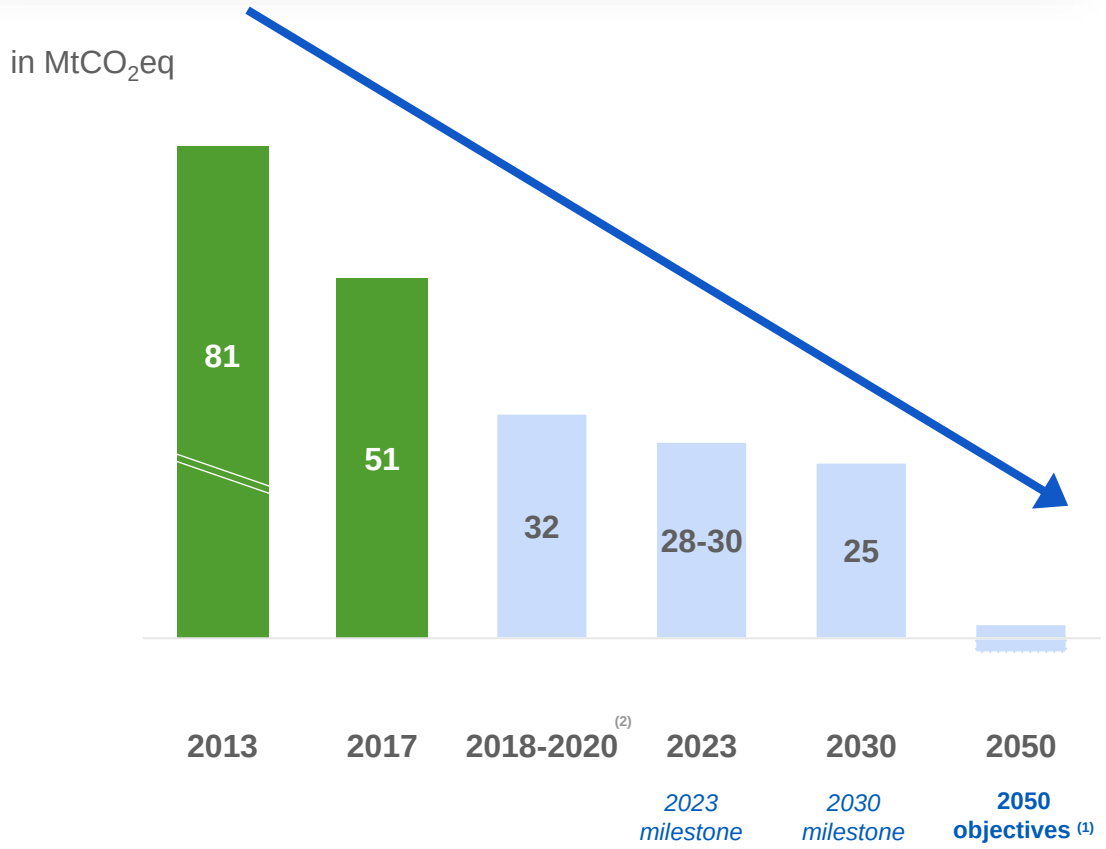
(1) Vs 2017
(2) Vs 2019

CARBON NEUTRALITY TRAJECTORY

CARBON NEUTRALITY & CLIMATE: AT THE HEART OF THE EDF'S *RAISON D'ÊTRE*

- In line with its *raison d'être*, EDF's ambition is to achieve **carbon neutrality by 2050**
- In 2020, EDF group announced a commitment to move away from coal-based generation by 2030 in all geographical areas
- In 2020, the Group fixed new objectives of reduction of greenhouse gas emissions by 2030, covering both direct (scope 1) and indirect (scope 2 and 3) emissions. On 7 December, these objectives were validated as part of a "*Well Below 2°C*" by the *Science-Based Target* initiative
- In coherence with these objectives validated by SBTi, EDF group set objectives for 2030:
  - 25 $MtCO_2eq$ for Group's scope 1 emissions in 2030 with **an intermediary milestone in 2023 of 28-30$MtCO_2eq$**. This range takes into account the uncertainties related to post health crisis scenarios
  - 35gCO_2/kWh Group carbon intensity (heat and electricity generation) by 2030
  - Reduction of 28%, compared to 2019, of all the scope 3 emissions by 2030
- The **continuous reduction** in Group CO_2 emissions, with a Group intensity carbon of 51g/kWh at end-December 2020, confirms EDF's commitment to carbon neutrality

DIRECT GREENHOUSE GAS EMISSIONS (SCOPE 1)



(1) Carbon neutrality would be achieved in 2050 thanks to almost zero direct CO_2 emissions, as much as possible a reduction in indirect emissions and offsetting of residual emissions by projects with negative emissions

(2) Average emissions from 2018 to 2020

NON-FINANCIAL RATINGS

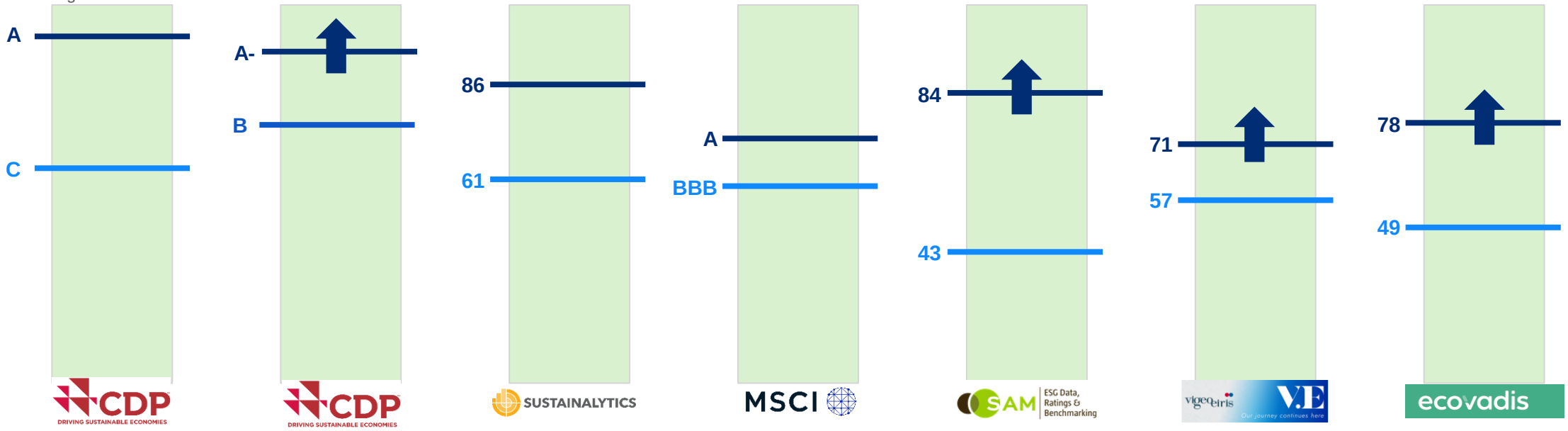
Constant progression of the rating: CDP Water Security (passage from Management to Leadership level), S&P CSA (ex-SAM) (+4 points, member of the Sustainability leaders and obtaining of the bronze medal), V.E (ex VigéoEiris) (+5 points in 2020) and 3rd in the sector instead of 6th, Ecovadis (+5 points in 2020 and obtaining of the platinum medal)

Maintenance in the major non-financial indexes (non-exhaustive list): CDP Climate Change A list, DJSI World, STOXX ESG Leaders, FTSE4Good, MSCI: CLIMATE CHANGE, ESG SCREENED, ESG UNIVERSAL, WORLD CLIMATE CHANGE, CLIMATE CNG EU PARIS ALIGNED… Euronext VE (ex VigéoEiris) : WORLD120, EUROZONE 120, EUROPE 120, FRANCE 20

EDF increase compared to 2019

EDF Stability of the rating compared to 2019

Sector average



EDF major international coalitions

wbcsd · BUSINESS AMBITION FOR 1.5°C OUR ONLY FUTURE · EV 100 by THE CLIMATE GROUP · WE MEAN BUSINESS economic opportunity through bold climate action · act4nature international

19 KPIs FOR MEASURING OUR PERFORMANCE ON OUR CSR GOALS

Our CSR goals	Performance indicators (KPIs)	Targets	2018 (2)	2019 (2)	2020 (2)	UN SDGs (1)
Carbon and climate neutrality	**Direct greenhouse gas emissions** (Scope 1) of the EDF Group ($MtCO_2eq$)	25 Mt (2) in 2030	36	33	**28**	7 AFFORDABLE AND CLEAN ENERGY; 13 CLIMATE ACTION
	Carbon intensity**: specific CO_2** emissions from the production of electricity and heat (gCO_2/kWh)	35gCO_2/kWh by 2030	57	55	**51**	
	Net installed renewable **power generation** capacity (GW)	60 GW in 2030	33	32	**33**	8 DECENT WORK AND ECONOMIC GROWTH; 11 SUSTAINABLE CITIES AND COMMUNITIES
	Number of **smart metres** installed, Group (millions)	41 in 2021	18	26	**32**	
	Percentage of **electric vehicles** in the light vehicle fleet	100% in 2030	6.1%	8.6%	**12.2%**	
Resource conservation	**Completion rate of Group commitments** as part of the **international act4nature initiative**	100% in 2022	-	-	**44%**	14 LIFE BELOW WATER; 15 LIFE ON LAND
	Water intensity: water consumed/electricity generation of fleet (l/kWh)	< 0.95 l/kWh on average in last 5 years	0.86	0.87	**0.87**	
	France: volume of solid radioactive waste, high- and medium-level long-lived (m^3)	-	315	304	**283**	6 CLEAN WATER AND SANITATION; 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
	UK: volume of solid low-level radioactive waste evacuated (m^3)	-	474	444	**352**	
Well-being and solidarity	**Nuclear safety:** number of significant events equal to level 2 on the INES scale	-	1	3	**1**	1 NO POVERTY; 3 GOOD HEALTH AND WELL-BEING
	Overall LTIR (employees and service providers)	< 1.8 in 2020	-	2.4	**1.9**	
	Number of **fatal accidents** linked to business risks (employees and service providers)	0	1	7	**7**	4 QUALITY EDUCATION; 5 GENDER EQUALITY; 10 REDUCED INEQUALITIES
	Percentage of senior executives trained on the **anti-corruption programme**	100% in 2021	57%	61.8%	**62.5%**	
	Gender diversity rate: percentage of women in Group entity management committees	28% in 2023	26.3%	27.3%	**28.7%**	
	Percentage of employees having followed an **upskilling action**	75%	83%	80%	**71%**	7 AFFORDABLE AND CLEAN ENERGY; 12 RESPONSIBLE CONSUMPTION AND PRODUCTION
	Percentage of employees covered by a **collective bargaining agreement**	> 87%	-	-	**87.2%**	
	Number of **energy supports**	-	1,302,590	894,260	**905,017**	
Responsible development	Percentage of projects subject to **consultation compliant with the Equator Principles** (%)	100% in 2030	82%	89.7%	**84%**	8 DECENT WORK AND ECONOMIC GROWTH; 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE; 12 RESPONSIBLE CONSUMPTION AND PRODUCTION; 16 PEACE, JUSTICE AND STRONG INSTITUTIONS
	Annual percentage of **purchasing from SMEs in France** (%)	22%-26%	23.7%	22.5%	**23.4%**	
	Number of customer consultations on digital platforms for monitoring consumption (millions)	-	28	47	**73**	

(1) To find out more, and download our KPIs and non-financial indicators, go to open data groupe edf

(1) United Nations Sustainable Development Goals
(2) Achieved results

GREEN BONDS: EDF'S COMMITMENTS

EDF IS A LEADING ISSUER IN THE GREEN BOND MARKET

- **1st company** to issue a Green Bond **in 2013**
- **Active member** in the governance of **Green Bond Principles**
- **Co-founder** of the **Corporate Forum on Sustainable Finance**
- **2 updates to the Green Bond Framework** in order to help create market best practices

GREEN BOND FRAMEWORK 2013

- **November 2013: 1st issue** of a Green Bond by EDF
  - **€1.4bn,** 7.5-year maturity
- **October 2015**: 2nd issue
  - **$1.25bn,** 10-year maturity

Construction of **new wind power and PV projects**

GREEN BOND FRAMEWORK 2016

- **October 2016:** 3rd issue
  - **€1.75bn,** 10-year maturity
- **January 2017**: 4th issue, in 2 tranches
  - **¥19.6bn,** 12-year maturity
  - **¥6.4bn,** 15-year maturity

Construction of **new wind power and PV projects**

Modernisation and improvement of **existing hydropower facilities** in France

GREEN BOND FRAMEWORK 2020

- **Applicable starting January 2020**
- **Update of the Framework in line with the CAP 2030 strategy**
- **September 2020**: 5th emission
  - **€2.4bn**, 4-year maturity

New generation projects in **renewable energies**

Modernisation and improvement of **existing hydropower facilities** in France and abroad

Energy efficiency projects

Biodiversity preservation projects

EDF'S GREEN BOND FRAMEWORK FOLLOWS BEST MARKET PRACTICES AND GREEN BOND PRINCIPLES (GBP)

1 - USE OF FUNDS

- **Development of new renewable generation capacities**
- **Renovation and modernisation of existing hydroelectric assets** with the aim of:
  - improving their efficiency, flexibility and ability to contribute to meeting the needs of electricity systems that evolve as the share of intermittent means of generation increases in the energy mix,
  - adapting the existing hydropower assets to changes in climate
- **Energy efficiency solutions** to allow all EDF customers to make better use of energy, mainly through its subsidiary Dalkia
- **Biodiversity**, to enable EDF to continue to pursue its goal of having a positive impact on biodiversity, from simple prevention measures to measurable improvements

2 - PROJECT SELECTION PROCESS

- A **internal organisation** dedicated to the evaluating and ensuring that **only Eligible Projects** as defined in the Use of Funds section are eligible to receive **Green Bond financing**
- **Respect of specific environmental and social criteria**
- Investments may include:
  - **tangible or intangible assets**
  - **Investments** (including acquisitions mainly related to new developments/technologies)
  - **certain operating expenditures** such as R&D and investments in the maintenance of green assets

3 - FUND MANAGEMENT

- Funds are **managed and monitored separately** until they are allocated to eligible projects
- They are invested in **SRI funds** until their allocation

4 – REPORTING

- **At half-yearly intervals**: allocation of funds
- **Annually**: allocation of funds + list of projects financed by the Green Bond and aggregated impacts (at the level of each green issue)

5 – EXTERNAL REVIEW

- **External ex-ante opinion**: "**reasonable**" level of assurance delivered by **Vigeo Eiris** on EDF's Gren Bond Framework (their highest level),
- **Ex-post certification**: annual report issued by an **external auditor, Deloitte,** on the allocation of funds and the compliance of Green Bond issues with the Green Bond Framework and the Green Bond Principles, and the conformity of the CO_2 emissions determination modality

GREEN BONDS: PROCEEDS ALLOCATION

Issue date (1)	Maturity *(in years)*	Nominal amount *(in million of currency units)*	Currency	Allocated funds as of 31/12/2020				
				New renewable capacities (2)	Investments in hydro facilities (2)	Energy efficiency projects	Biodiversity projects	**Total** (% of raised funds)
Nov. 2013	7.5	1,400	EUR	1,400	*Not applicable*	*Not applicable*	*Not applicable*	**1,400** (100%)
Oct. 2015	10	1,250	USD	1,250	*Not applicable*	*Not applicable*	*Not applicable*	**1,250** (100%)
Oct. 2016	10	1,750	EUR	1,248	502	*Not applicable*	*Not applicable*	**1,750** (100%)
Jan. 2017	12	19,600	JPY	8,149	11,451	*Not applicable*	*Not applicable*	**19,600** (100%)
Jan. 2017	15	6,400	JPY	5,872	528	*Not applicable*	*Not applicable*	**6,400** (100%)
Sept. 2020	4	2,400	EUR	2,246	110	-	28	**2,384** (93%)

EUR Green Bond issued in September 2020: 93% of the funds allocated at end-December 2020 on the net proceed total of **€2,559M**

Breakdown (in €M)

Country	Biodiversity	Hydro	Renewables	Total
United States			869	869
England			728	728
France	28	110	518	656
Luminus			7	7
Israel			74	74
Canada			50	50
Total	**28**	**110**	**2,246**	**2,384**

Entity	Total
EDF ENR	3
Luminus	7
EDF Hydro	138
EDF Renewables	2,236
Total	**2,384**

Look-back amount	**1,477**
o/w renewable capacities	1,461
o/w biodiversity projects	16

(1) Date of funds reception

(2) Since 2019, the Green Bonds funds are financing eligible investments of Luminus in Belgium: construction of wind farms and renovation of a hydroelectric power plant; and also for EDF ENR: installation of solar awnings

GREEN BONDS: AVOIDED CO2 EMISSIONS

Issue date	Funds raised	Funds allocated	Projects financed by the Green Bond	Part of the total investments financed by the Green Bond	Gross total capacity of GB funded projects (in MW)		Expected output (in TWh/year)		Expected avoided CO_2 emissions (in Mt/year)	
					Gross (1)	Net (2)	*Gross* (1)	Net (2)	*Gross* (1)	Net (2)
Nov. 2013	€1.4bn	**€1.4bn**	13 EDF Renewables projects (3)	59%	*1,529*	**976**	*6.0*	**4.1**	*2.21*	**1.55**
Oct. 2015	$1.25bn	**$1.25bn**	7 EDF Renewables projects (3)(4)	58%	*1,107*	**815**	*4.6*	**3.3**	*2.53*	**1.83**
Oct. 2016	€1.75bn	**€1,248m**	10 EDF Renewables projects (4)(5)	54%	*1,450*	**962**	*5.3*	**3.5**	*2.42*	**1.61**
		€502m	600 EDF Hydro operations	100% (6)	*903*	**903**	*0.2* (7)	**0.2** (7)	*0.01* (7)	**0.01** (7)
Jan. 2017	¥26,000m	**¥14,021m**	5 wind projects (5) (2 EDF renewables, 3 Luminus)	15%	*137*	**86**	*0.4*	**0.26**	*0.17*	**0.12**
		¥11,979m	206 EDF Hydro operations + 1 Luminus hydro project	87%	*142*	**133**	*0.1*	**0.05**	*0.01*	**0.01**
Sept. 2020	€2.4bn	**€2,246m**	23 projects (5) + 3 portfolio purchases by EDF Renewables, 2 EDF ENR projects, 2 Luminus projects	77%	*1,355*	**1,088**	*4.0*	**3.1**	*1.59*	**1.15**
		€138m	153 EDF Hydro operations 39 biodiversity projects	100%	*123*	**123**	*0.03*	**0.03**	*0.001*	**0.001**
				Total	*6,746*	**5,084**	*20.6*	**14.6**	*8.94*	**6.27**

(1) The detailed list of EDF Renewables projects and hydraulic investment operations by category will be published in the 2020 EDF URD document

(2) Sum of the gross impacts of each project funded by the corresponding Green Bond

(3) Sum of the impacts of each project weighted by the share of total investment funded by the corresponding Green Bond

(4) Of which one project received funding from both Green Bonds of November 2013 and October 2015

(5) Of which one project received funding from both Green Bonds of October 2015 and October 2016

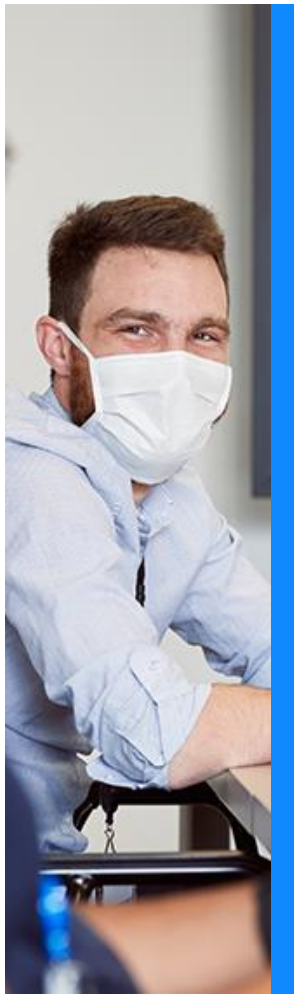
(6) Of which two projects received funding from green Bonds of October 2016,January 2017 and September 2020

(7) Share of investments funded by EDF taken in full, including half of Romanche-Gavet investment amount

(8) Only linked to additional output expected from development investments, including half of the additional output expected from the Romanche-Gavet project

THE GROUP EDF

STRONG MOBILISATION OF THE GROUP DURING THE HEALTH CRISIS



EDF MOBILISED TO ENSURE CONTINUITY OF SERVICE

Robust arrangements made to ensure **continuity of service**

Digital response: c.70,000 employees connected at the same time from home

Strong health procedures put in place to protect employees and contractors

EDF SOLIDARITY

Acceleration of payments to micro, small and medium-size **suppliers** in France during the first period of health emergency

Payment arrangements granted to its small business customers in France in accordance with government measures

CIVIC ACTIONS

EDF Foundation: €2million to care workers and the most disadvantaged

Fuel poverty: partnership with the Abbé Pierre Foundation

IN 2020,
AFTER DEMONSTRATING ITS RESILIENCE FACING THE CRISIS, EDF PURSUES ITS STRATEGY

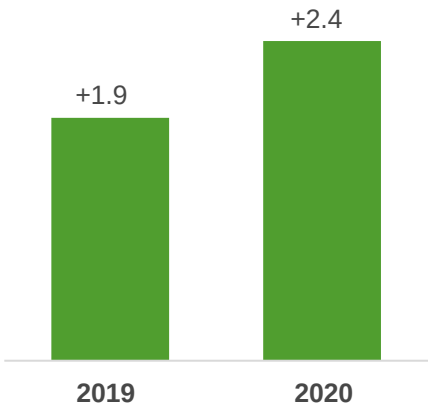
- **RENEWABLE ENERGY**: STRONG ACCELERATION IN GROWTH
- **NUCLEAR**: MAJOR CONTRIBUTION TO LOW-CARBON GENERATION
- **CUSTOMERS AND SERVICES**: EDF BECOMES A MAJOR PLAYER IN TERMS OF MARKET OFFERINGS IN FRANCE
- **ENEDIS**: LEADER AT THE HEART OF THE ENERGY TRANSITION IN EUROPE
- **INTERNATIONAL**: SUCCESSES IN HYDRAULIC PROJECTS AND IN DEVELOPMENTS
- PROGRESS IN THE **3 LARGE PLANS**: SOLAR, STORAGE AND ELECTRIC MOBILITY

RENEWABLES: STRONG ACCELERATION IN GROWTH (1/3)

1

HIGH LEVEL OF COMMISSIONING

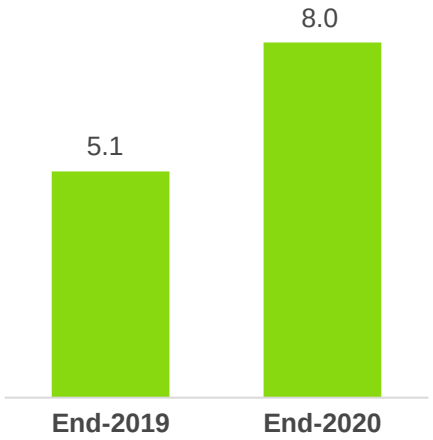
Capacity commissioned (1)
(GW gross)



2

SHARP INCREASE IN CAPACITY UNDER CONSTRUCTION

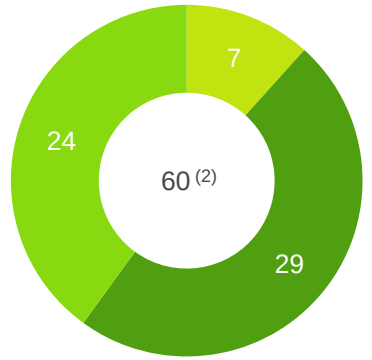
Capacity under construction at year-end (1)
(GW gross)



3

A LARGE PIPELINE

Pipeline of projects under development (1)(2)
(GW gross)



End-2020

Prospection phase (3) | Under development (4) | Secured (5)

(1) Wind and solar capacities.
(2) Pipeline excluding capacity under construction. All the projects in prospection phase included in the pipeline, starting 2020
(3) Start of land identification and preliminary studies
(4) Sufficient land securisation and start of technical studies
(5) Securing a power purchase agreement (following a call for tenders, auction, OTC negotiation)

RENEWABLES: STRONG ACCELERATION IN GROWTH (2/3)

OFFSHORE WIND ACHIEVEMENTS

Construction launch of a 500MW wind farm in France at Fécamp, commissioning planned in 2023

First projects in China
302MW in operation and **200MW** under construction

Other construction in progress ~1GW

- Saint-Nazaire, 480MW, France, commissioning planned in 2022
- Neart-na-Gaoithe, 450MW, Scotland, commissioning planned for 2023

Development of a 1GW project in Ireland

STRENGTHENING IN ONSHORE WIND

Construction launch of a 400MW wind farm in Saudi Arabia (commissioning planned in 2022)

Commissioning of 1.4GW (o/w 1GW in the USA)

ACCELERATION IN SOLAR

Major successes

2GW in the United Arab Emirates, the world's largest solar project to date

1.3GW in India

~200MW in France

Commissioning of ~1GW

400MW in the United Arab Emirates,

500MW in the USA

Acquisition of a **4.5GW pipeline of projects** in the USA

SOLAR PLAN IN FRANCE

~2.5GW of ground-based projects in development at end-2020

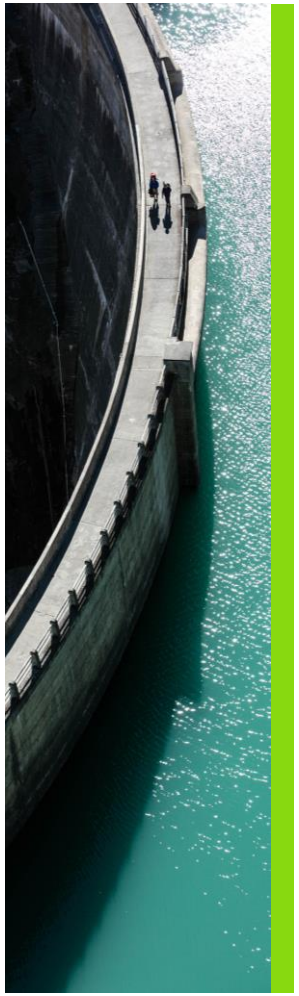
~0.5GW of secured projects at end-2020

~0.3GW under construction at end-2020

Construction launch for the first floating photovoltaic power plant

CRE tender # 4.8: **market share of ~30% reached**

RENEWABLES: STRONG ACCELERATION IN GROWTH (3/3)



DEVELOPMENT IN HYDRO POWER

MODERNISATION OF ROMANCHE-GAVET PLANT IN FRANCE

Commissioning of the new power plant (97 MW) and power output increased by 40%

INTERNATIONAL HYDRO POWER

PROJECTS AND POWER PLANT CONSTRUCTIONS

Nachtigal construction (420MW) in Cameroon, nearly 37% of the civil engineering work carried out, consortium including EDF (commissioning planned in 2024)

Mpatamanga project (350MW) in Malawi: prequalification of the consortium including EDF, as exclusive developer

ENGINEERING ASSISTANCE FOR PSHP (1) PROJECTS

Hatta (250MW) in United Arab Emirates: construction kicked-off, supervised by EDF

IMPLEMENTATION OF THE STORAGE PLAN

CONSTRUCTION OF 100MW IN THE UNITED KINGDOM

First two projects (2) of Pivot Power

SIGNATURE OF A PPA FOR A 180MW STORAGE SYSTEM PROJECT IN THE USA

Chuckwalla: Storage system (3) coupled with a 200MW solar power plant, to deliver 180MW over four hours

TENDER AWARDED FOR 90MW IN ISRAEL

Storage systems (3) coupled with 230MW solar projects, to deliver 90MW over four hours

COMMISSIONING IN FRANCE

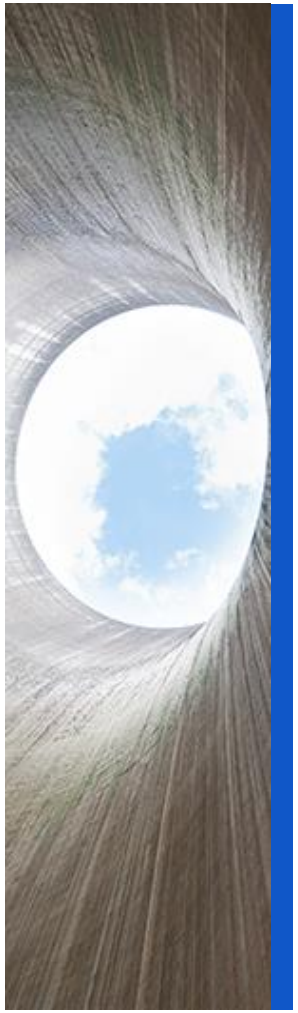
Toucan 2, photovoltaic plant coupled with a smart storage system (3) in French Guiana

~ 1GW PROJECTS BUILT OR SECURED AT END-2020

LE PLAN stockage électrique

(1) Pumped-storage hydropower plant.
(2) Storage for network services
(3) Storage for generation optimisation

NUCLEAR: MAJOR CONTRIBUTION TO LOW-CARBON GENERATION



NUCLEAR OUTPUT

FRANCE

Nuclear output of **335.4TWh** in 2020, down -44TWh, of which ~-33TWh (1) due to the Covid-19 health crisis

Rescheduling outages during the health crisis to optimise the generation

Closing of the two Fessenheim reactors

Lifetime extension of the 900MW fleet beyond 40 years: authorisation given by the ASN on 23 February 2021

UK

Nuclear output of **45.7TWh** in 2020, down -5.3TWh (2)

Final shutdown of Hunterston B and Hinkley Point B planned by 2022

FRAMATOME

Signing of an agreement to acquire the Instrumentation & Control activity of Rolls-Royce

MAJOR PROJECTS (3)

FLAMANVILLE 3

Preparing to upgrade penetration welding works authorised by ASN (authorisation for these penetration welding upgrade still pending) (4)

On-site acceptance of initial fuel assemblies following ASN and French High official for defence and security (HFDS) authorisations

HINKLEY POINT C

Main operational milestones reached on schedule

Review of planning and costs (5)

SIZEWELL C

UK Government decision to enter talks with EDF on the funding of two new EPRs

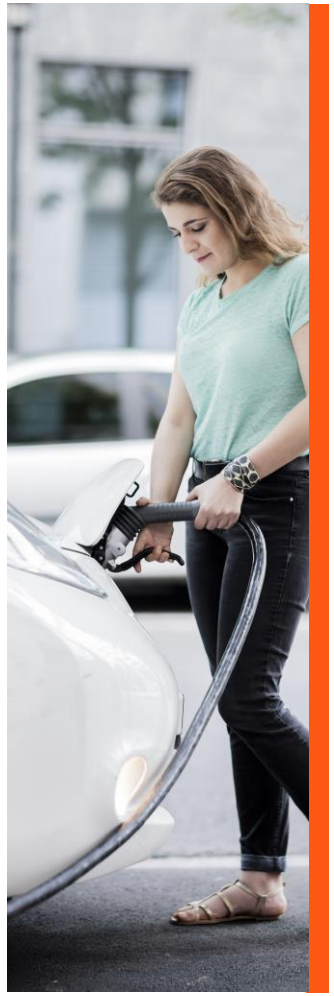
DEVELOPMENT OF SMR

Development of a Small Modular Reactor (SMR) NUWARD™ (6)

EXECUTION OF THE EXCELL PLAN aiming for excellence in the French nuclear industry, finalisation of first deployment phase and beginning of the second phase.

(1) Estimated figures
(2) 50% reduction of Sizewell B output, -2.1TWh between May and September at the request of National Grid.
(3) See Appendices
(4) Authorisation to upgrade the penetration welding work given the 19 Mars 2021
(5) See press release of 27 January 2021. Unit 1 expected to begin generating electricity in June 2026 rather than end-2025 and project completion costs estimated at £$_{2015}$ 22 to 23bn (versus £$_{2015}$21.5 to 22.5bn).
(6) Joint development by CEA, EDF, Naval Group and TechnicAtome

CUSTOMERS AND SERVICES: EDF BECOMES A MAJOR PLAYER IN MARKET OFFERINGS IN FRANCE



BROAD AND INNOVATIVE RANGE OF OFFERS

COMMERCIAL PERFORMANCE

Nearly **1 million** residential electricity customers with market offers in France, up nearly **80% vs end-2019**

Average basket growth for service and gas contracts for 1,000 electricity contracts:
- residential customers **+16%** vs 2019
- business customers **+19%** vs 2019

BROADENED OFFERING

Launch of the “Flexible Contract” adapting to the needs of business customers (< 36 kVA)

CUSTOMER TAKEOVER IN THE UK (1)

Green Network Energy: portfolio of 360,000 customers

BELGIUM: SIGNATURE OF A BINDING AGREEMENT FOR A CUSTOMER PORTFOLIO ACQUISITION

Portfolio of nearly 330,000 customers (Essent Belgium) (2)

SERVICE GROWTH & LOW CARBON ACTIVITIES

ELECTRIC MOBILITY

Over 100,000 charging points at end-2020 (10x increase vs 2019) **and 5,000 smart charging points**
- Acquisition of **Pod Point** in February 2020 in the UK (around 90,000 charging points as of end 2020)
- Izivia, leader in public electric charging in France with a 26% market share (3)

DALKIA: KEY SUCCESSES

Commercial achievements in the development of renewable heat networks and energy savings in all sectors of activity. Energy performance contract won with the Centre Hospitalier de Pontoise and 90% of renewable energy for the Montargis heating network

IZI BY EDF

Local service platform: broader range in **energy renovation** and **electric mobility**

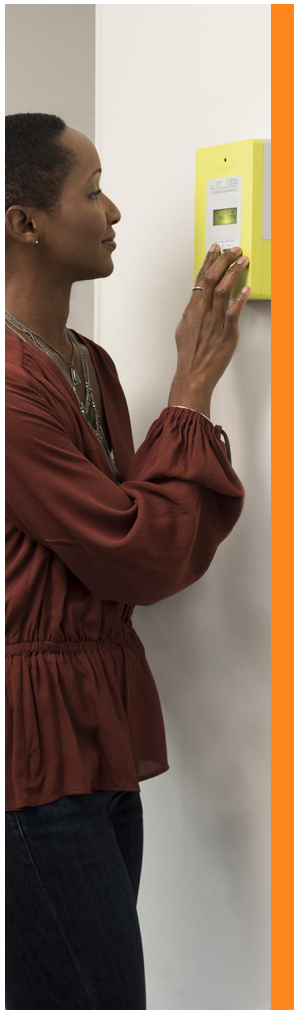
Heat pump commercialisation: 5x increase in heat pump sales between the first and the second semester of the year

HYDROGEN

First contracts awarded to **Hynamics** (Electrolyser project and green hydrogen production and distribution station)

(1) Customers take-on awarded by Ofgem (the UK regulatory authority) after auction, following Green Network Energy ceasing to trade
(2) See Luminus Press release on 5 February 2021
(3) Source Elexent Consulting Agency

ENEDIS: LEADER AT THE HEART OF THE ENERGY TRANSITION IN EUROPE



ENEDIS

LINKY PROGRAMME

Over 30 million smart meters rolled out by January 2021, in line with the 2021 target

40,000 remote operations a day

ELECTRIC MOBILITY ACROSS FRANCE

Over 200 projects developed via partnerships (including bus depots, boat charging at wharves, and rapid car charging)

Electrification of the Enedis vehicle fleet

TARIFFS

Decision by the French Regulator on the new TURPE 6 (1) tariff, which will come into force on 1 August 2021 for a four-year period: stability of the remuneration model

GRID CONNECTIONS

Business resilient despite the COVID-19 crisis

Continued momentum in customer connections: more than 350,000 connections in 2020, of which 30,000 “small producer” connected solar facilities, as well as 900MW of photovoltaic and 700MW of wind power plants

LAUNCH OF THE 2020-2025 HUMAN AND INDUSTRIAL PROJECT

Co-built with 20,000 employees and stakeholders aiming to make Enedis the preferred public service of the French people to serve the ecological transition

(1) Tariff for use of public electricity transmission and distribution networks. French regulator deliberation on 21 January 2021.

INTERNATIONAL – 2020 HIGHLIGHTS

PROGRESS ON HYDROELECTRIC PROJECTS

PROJECTS AND POWER PLANT CONSTRUCTIONS

Nachtigal construction in Cameroon, nearly 37% of the civil engineering work carried out, consortium including EDF (commissioning planned in 2024)

Mpatamanga project (350MW) in Malawi: prequalification of the consortium including EDF, as exclusive developer

Projects under development in the **Andean region, Sub-Saharan Africa and South-East Asia**

ENGINEERING ASSISTANCE FOR PSHP (1) PROJECTS

Hatta (250MW) in United Arab Emirates: construction site kick-off, supervised by EDF

Mont Gilboa (300 MW) in Israel: commissioning of the first PSHP of the country

DEVELOPMENT IN ENERGY TRANSITION

ELECTRIC MOBILITY

Signature of a strategic partnership BMW in Belgium, enabling BMW customers to benefit from the Luminus charging offer accompanied by a green energy supply contract or even a PV installation

GREEN HYDROGEN

Participation to the construction project of an electrolyser in Germany, powered from offshore wind energy

OFF-GRID

Continued development in the sale of solar kits, solar water pumps (sub-Saharan Africa) and the installation of micro-grids (Africa and South-East Asia)

Luminus: more than 250,000 customers equipped at end-2020 (with an ambition of 450,000 customers by end-2023)

ENERGY EFFICIENCY

Development projects in networks and smart meters, notably in India (100,000 smart meters), as well as in the fields of **self-consumption and energy efficiency**, particularly in the Middle East

(1) Pumped-storage hydropower plant.

EDF ELECTRIC MOBILITY PLAN (1)

TARGET

30% MARKET SHARE IN THE ELECTRICITY SUPPLY FOR ELECTRIC VEHICLE OWNERS IN 2023
In the Group's four main markets (G4): France, UK, Italy and Belgium

150,000
Charging stations rolled out by 2023

10,000
Smart charging stations operated by 2023

ACHIEVEMENTS AND PROJECTS

Support for EDF's customers and European partners in their shift towards e-mobility:

IZIVIA has taken over the operational control of MObiVE, a network of over 1,200 stations in Nouvelle-Aquitaine, and signed a major contract with PSA to equip 31 PSA sites in Europe

Signature of a strategic partnership with BMW in Belgium enabling BMW customers to subscribe to a green energy contract or a photovoltaic installation accompanied by a charging station

Signature of a partnership between EDF and Volkswagen Group France through the proposal of the EDF Regional Green Electric offering to VW customers in France

+ 100,000 charging stations rolled out by the Group at end-2020

IZIVIA is the leader in public charging in France (26% market share)
Pod Point rolled out around 35,000 charging stations in the UK in 2020

+ 5,000 smart charging stations operated by Izivia in France and PowerFlex in California

Vehicle-to-grid: IZIVIA, Dreev, Nissan, the Occitanie region and ADEME have launched the Flexitanie project to test this innovant technology on a large scale

"EV100" project in line with the objective

12.2% of the EDF Group vehicle fleet electrified

THE FRENCH SOLAR PLAN

LEPLANSOLAIRE

A STRONG ACCELERATION OF SOLAR PV DEVELOPMENTS

TARGET

BE A LEADER IN FRANCE

30% MARKET SHARE (1) BY 2035

SOLAR PLAN WELL UNDER WAY

c.2.5GW
of grounded-based projects in development at end-2020
x9 vs 2017

c.500MW
of secured projects at end-2020
x11 vs 2017

c.250MW
under construction at end-2020
x9 vs 2017

CRE tender 4.8 : market share **of ~ 30%** reached

(1) Market share expressed as installed gross capacities

ELECTRICITY STORAGE PLAN (1)

LE PLAN stockage électrique

TARGET

DEVELOP 10GW IN NEW STORAGE SITES WORLDWIDE BY 2035, IN ADDITION TO THE 5GW OPERATED TODAY (2)


Pivot Power

ACHIEVEMENTS AND PROJECTS

A PORTFOLIO OF COMPLETED OR SECURED PROJECTS HAVING INCREASED BY OVER 58% IN 2020 TO A TOTAL 950MW AT END-DECEMBER 2020

Results in line with the initial trajectory of the Electricity Storage Plan

The results in 2020 benefited from the contribution of major large scale projects:

- Signature of the Chuckwalla PPA (Nevada): storage system coupled with a 200MW solar power plant, to deliver 180MW over four hours
- Construction of the first two Pivot Power projects (UK) : 2 x 50MW
- Winner of the PV + storage tender in Israel: storage systems coupled with 230MW solar projects, to deliver 90MW over four hours

INVESTMENTS TO PREPARE FOR THE FUTURE:

- Acquisition of a stake in Ecosun (PV containers + storage, plug-in ready) to address the small-scale microgrid segment
- Participation in the capital increase of start-up PowerUp to develop assessment and optimisation services for stationary batteries
- Commissioning of the post-mortem battery analysis R&D lab

(1) The EDF group's business development model is based on partnerships. Not all of these projects will necessarily be fully consolidated

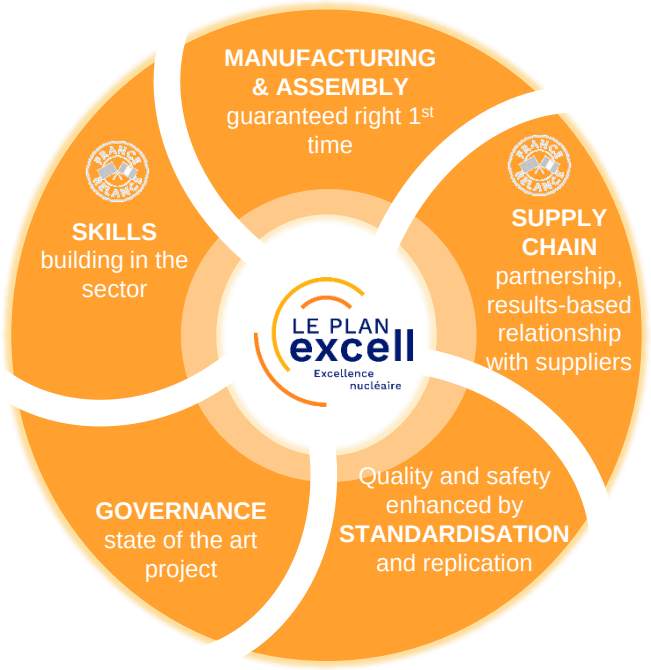
(2) Principally PSHP (Pumped-Storage Hydropower Plants)

LAUNCH OF THE EXCELL PLAN

Targeting excellence in the France nuclear sector

Announced in late 2019 and launched in May 2020, the objective of the excell plan is to enable the French nuclear sector to attain the highest levels of rigor, quality and excellence in order to succeed in major new projects and the existing nuclear fleet

In 2020, the Group led 10 transformation projects, enabling it to implement the commitments made in December 2019 and make 25 new commitments for mid-2021 based on five main pillars :



AMBITIONS

Divide by 10 at least the study and manufacturing repairs for the first EPR2 pair (vs Flamanville 3)

Secure the gains forecast in terms of costs and times for Sizewell C and the first EPR2 pair (vs Hinkley Point C)

Sustainably recover control of welding operations at our new constructions and those installed (welding plan)

SOME FIRST ACHIEVEMENTS IN 2020

Governance: implementation of new nuclear Major Projects Control to ensure maturity at each milestone

Skills: more cross-cutting engineering/operational courses and four to six month-long field courses for all beginner engineers. Commitment and by-laws defined for the Nuclear Occupations University. Framatome's creation of a Welding Excellence Centre

Manufacturing: road map for EDF ISO 19443 certification. Implementation of an "excell in quality" plan at Framatome

Supplier chain: profit-sharing contracts based on simplified specifications. Initiatives taken with "France Relance" to consolidate the sector

Standardisation: streamlining of equipment references, with initial results visible at EPR2

THE GROUP EDF

CAP 2030: EDF PULSE CROISSANCE, CORPORATE VENTURE AND EDF GROUP INCUBATOR (1/2)

MISSION

CREATE INNOVATIVE AND COMPETITIVE NEW OFFERS AND SERVICES FOR OUR CUSTOMERS CONSISTENT WITH THE GROUP'S RAISON D'ÊTRE

DRIVERS

INVESTOR
in external start-ups
or joint ventures

PARTNER
of mainstream and multi-sector funds
(IdInvest, Supernova,
Electranova Capital, etc.)

INCUBATOR
Incubation and acceleration
programme for entrepreneurs and
projects developed by Group
employees

RESOURCES

Over €250m
invested since creation in 2017

Over 15
strategic venture capital funds

Over 20
start-up collaborations and creations

CAP 2030: EDF PULSE CROISSANCE, CORPORATE VENTURE AND EDF GROUP INCUBATOR (2/2)

INVESTMENTS MADE BETWEEN SEPTEMBER 2017 AND DECEMBER 2020

"Our mission consists in exploring new business models for the energy and digital transition in all of its dimensions"

Michel Vanhaesbroucke,
Director of EDF Pulse Croissance Holding

SUSTAINABLE TERRITORIES

urbanomy GROUPE EDF

zenpark votre place vous attend

hynamics GROUPE EDF

MyBus™

PRODUCTION-TOOL PERFORMANCE

teeptrak

exaion GROUPE EDF

metroscope GROUPE EDF

seclāb

PowerUp Manage & extend batteries life

perfesco GROUPE EDF

SERVICES FOR RESIDENTS

securkeys

ARCHIPELS

DECENTRALISED ENERGY SYSTEMS

NEOT CAPITAL

agregio GROUPE EDF

McPhy Driving clean energy forward

e2m

zinium

dreev GROUPE EDF

store & forecast GROUPE EDF

R&D TO INNOVATE TODAY AND VENTURE INTO TOMORROW

EDF's R&D covers all the business areas and activities in the energy sector.
In line with EDF group's *raison d'être* and cap 2030 strategy, its research focuses on three main priorities:

- **Electricity transition**
- **Climate transition**
- **The digital and societal transition**

- R&D mobilises its energy experts for the benefit of the EDF group entities and subsidiaries, as well as external customers. It relies on more than 70 platforms for testing, measurement and simulation, among **the most modern and effective in the world**, in all areas of the energy sector.
- R&D also provides its customers with expertise in large-scale **digital simulation software and supercomputers.**
  EDF's R&D has a computing capacity of 11 petaFLOPS, making it one of the largest players in this field.

EDF SA'S R&D IN 2020

- 1,800 employees (EDF SA)
- 168 PhD students
- 160 teacher-researchers
- 9 research centres:
  - 3 in France
  - 6 internationally (Germany, United Kingdom, China, United States, Singapore and Italy)
- 20 joint laboratories with partners
- + 300 academic and industrial partnerships around the world
- 716 patented innovations protected by 2,103 property titles in France and abroad
- €518 million budget in 2020 (EDF SA)

R&D AROUND THE WORLD

Located in areas where innovative technologies and business models thrive, the international centres are piloting key projects for the Group on microgrids, hydrogen, offshore wind and mobility solutions.

R&D INNOVATES TO PREPARE FOR THE FUTURE

R&D INSIDE: THE CONTRIBUTION OF R&D TO SOME MAJOR ACHIEVEMENTS OF THE EDF GROUP

OFFSHORE WIND POWER

Development of multi-physical modelling tool for eliminating risks in the design of offshore wind turbines

EPIFLEX

This approach, under way at Dunkerque, enables the design of ecological industrial parks that enhance regional energy-material flows through the implementation of exchange networks and innovative technologies

VERCORS

This digital containment enclosure has been used with the Technical Department to optimize the installation of a sealing lining on one nuclear fleet enclosure

AGRI PV

An innovation that responds to the challenges of the solar power plan: cohabitation between traditional agricultural activity and a photovoltaic installation

CHARGING STATIONS

R&D is contributing to the reliability and durability of the charging stations rolled out by Group entities (IZI, IZIVIA, DREEV) by testing and qualifying the equipment

STORAGE

Commissioning of a laboratory to autopsy batteries and assess used batteries with a view to furthering understanding of their ageing mechanisms

LITE DERMS

An affordable and scalable microgrid management solution to accelerate electricity access worldwide

INTERACTIVE IMMERSIVE PLANT

R&D provides the nuclear fleet with a virtual-reality simulator for training agents in the field

RESPONSE

A European H2020 project by the EDF Group, overseen by EIFER and aimed at promoting “positive-energy neighbourhoods”, with Dijon as the pilot city in France

EDF, ACTOR IN THE HYDROGEN SECTOR

Hydrogen is a key vector in the energy transition: it could meet 20% of worldwide energy demand in 2050 (1)

Complementarity with the EDF's low carbon mix

- EDF group's positioning on this market in line with the objective of carbon neutrality

Favourable context

- Government incentives in several European countries (France €7bn)

Ambitions :

- **€220m gross investments** (2) for the 2021-2024 period for mobility (support collectivities in the supply for buses, trucks, etc.) and industrial projects (refinery, chemistry, cement work, etc.)

INDUSTRIAL AND COMMERCIAL PARTNERSHIP WITH McPHY (14.1% OWNED TO DATE BY EDF)

Leading player in the hydrogen sector

A complete range of solutions:

- Electrolysers
- Hydrogen charging stations
- Storage

GROUP'S SUBSIDIARY PRESENT ACROSS THE VALUE CHAIN

2020 achievements

- 1st commercial contract for Hynamics : to install a production and distribution station for green hydrogen produced by electrolysis to power urban transport network buses
- Hynamics, key partner in a 30 MW electrolyser project in Germany: H_2 production from offshore wind power for a refinery

World presence

HYDROGEN IN ITALY

In Italy, green hydrogen projects in partnership, of which refineries or steelworks decarbonation and hydrogen distribution and alimentation in public transport (trains and buses)

(1) McKingley report – *Hydrogen Council 2019*

(2) Corresponding to €65M net investments

THE GROUP EDF

COMPOSITION OF THE BOARD OF DIRECTORS AND OF ITS COMMITTEES

AUDIT COMMITTEE

- Chaired by a director appointed by the General Shareholder's Meeting
- 3 other directors appointed by the General Shareholders' Meeting (1)
- 4 directors elected by the employees

BOARD OF DIRECTORS

- 11 directors appointed by the General Shareholders' Meeting
  - ✓ 5 on recommendation from the French State
  - ✓ the Chairman and Chief Executive Officer
  - ✓ 5 independent directors
- 6 directors elected by the employees
- 1 Representative of the French state

CORPORATE RESPONSIBILITY COMMITTEE

- Chaired by an independent director appointed by the General Shareholders' Meeting (2)
- 2 other directors appointed by the General Shareholders' Meeting
- 3 directors elected by the employees

NUCLEAR COMMITMENTS MONITORING COMMITTEE

- Chaired by a director appointed by the General Shareholders' Meeting (2)
- 3 other directors appointed by the General Shareholders' Meeting
- 2 directors elected by the employees

APPOINTMENT, COMPENSATION AND GOVERNANCE COMMITTEE

- Chaired by an independent director appointed by the General Shareholders' Meeting (2)
- 1 other director appointed by the General Shareholders' Meeting (2)
- 1 Representative of the French State
- 1 director elected by the employees

STRATEGY COMMITTEE (3)

- Chaired by the Chairman and Chief Executive Officer
- 3 other directors appointed by the General Shareholders' Meeting
- 1 Representative of the French State
- 4 directors elected by the employees

(1) These members meet the criteria of both expertise (article L.823-19 of the French Commercial Code) and independence (code AFEP-MEDEF)
(2) This member meets the criteria of independence (code AFEP-MEDEF)
(3) Directors who are not members of the Strategy Committee may attend its meetings

BOARD OF DIRECTORS MEMBERS

DIRECTORS APPOINTED AT THE GENERAL SHAREHOLDERS' MEETING

- Jean-Bernard LÉVY (1)
- Bruno CREMEL (1)
- Colette LEWINER (2)
- Laurence PARISOT (2)
- Claire PEDINI (1)
- Philippe PETITCOLIN (1)
- Véronique BEDAGUE-HAMILIUS, appointed on recommendation of the French State (1)
- François DELATTRE, appointed on recommendation of the French State (2)
- Gilles DENOYEL, appointed on recommendation of the French State (1)
- Marie-Christine LEPETIT, appointed on recommendation of the French State (2)
- Michèle ROUSSEAU, appointed on recommendation of the French State (2)

DIRECTOR REPRESENTING THE FRENCH STATE

- Martin VIAL (3)

DIRECTORS ELECTED BY THE EMPLOYEES

- Claire BORDENAVE (4)
- Jacky CHORIN (4)
- Karine GRANGER (4)
- Marie-Hélène MEYLING (4)
- Vincent RODET (4)
- Christian TAXIL (4)

CHARACTERISTICS OF THE BOARD OF DIRECTORS' COMPOSITION

- 41.7% independent qualified directors (5)
- 50.0% of women sitting on the Board (5)
- Skills and expertise in line with the diversity policy which was adopted by the Board, updated in 2021
- Staggered renewal of the directors (4-year term of office, renewed by half every 3 years)

(1) Term of office expiring at the end of the General Meeting called to approve the financial statements for 2022
(2) Term of office expiring at the end of the General Meeting called to approve the financial statements for 2020
(3) Term of office expiring on 20 November 2022
(4) Term of office expiring on 22 November 2023
(5) Excluding directors that represents the employees

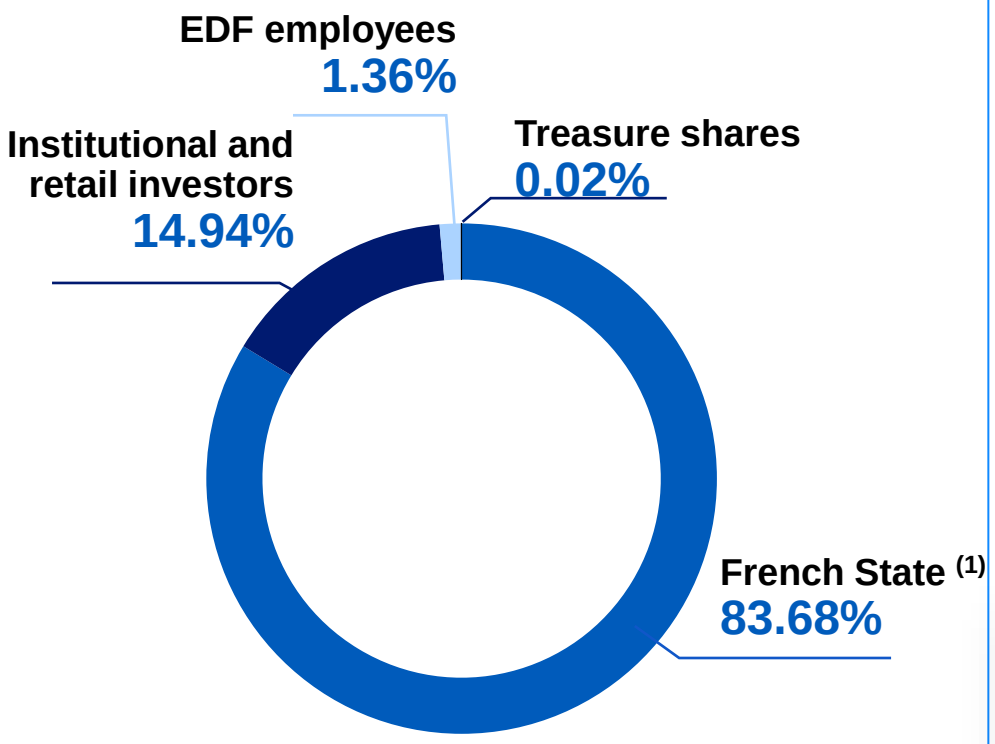
EDF GROUP EXECUTIVE COMMITTEE

- **Jean-Bernard LÉVY** Chairman and Chief Executive Officer (CEO)
- **Marc BENAYOUN** Group Senior Executive Vice President in charge of Customers, Services and Territories. He also oversees Edison and the Group's gas business
- **Bruno BENSASSON** Group Senior Executive Vice President in charge of Renewable Energies, chief Executive Office of EDF Renewables.
- **Béatrice BUFFON** Group Senior Executive Vice President in charge of the International Division
- **Christophe CARVAL** Group Senior Executive Vice President in charge of Group Human Resources
- **Xavier GIRRE** Group Senior Executive Vice President in charge of Group Finance
- **Véronique LACOUR** Group Senior Executive Vice President in charge of Change Management and Operational Efficiency
- **Cédric LEWANDOWSKI** Group Senior Executive Vice President in charge of Nuclear and Thermal business
- **Alexandre PERRA** Group Senior Executive Vice President in charge of Innovation, Corporate Social Responsibility and Strategy
- **Simone ROSSI** Group Senior Executive Vice President, CEO of EDF Energy
- **Pierre TODOROV** Group Senior Executive Vice President and Group General Secretary
- **Alain TRANZER,** General Representative for Industrial Quality and Nuclear Skills
- **Xavier URSAT** Group Senior Executive Vice President in charge of Engineering and New Nuclear Projects

Paul-Marie DUBEE Senior Executive Vice President in charge of Executive Coordination and Government Relations, is also discharging clerical duties for the Executive Committee

EDF: SHAREHOLDING STRUCTURE AS OF 31/12/2020

SHARE CAPITAL AS OF 31/12/2020



SHARES INFORMATION AS OF 31/12/2020

	Shares
Number of shares	3,099,923,579
Number of shares outstanding	3,099,923,579
Number of treasure shares	830,000
French security identification no. (ISIN code)	FR0010242511
Main index	CAC Next 20, Euro Stoxx Utilities, Stoxx Europe 600 Utilities, Euronext 100
Listing	Paris (Euronext Paris)

- Pursuant to article L 225-123 of the French Commercial Code, as amended by the Act n°2014-384 of 29/03/2014, all fully-paid shares that have been held in registered form for at least 2 years in the name of the same shareholder will automatically entitle their holder to double voting right. These provisions have taken effect on 3 April 2016. As of 31 December 2020, the French State holded 83.68% (1) of EDF's share capital and 89.05% (1) of EDF's voting rights

(1) On January 15, 2018, the French State entered into a share allotment agreement with EPIC Bpifrance, whereby it allotted 328,349,361 EDF shares. BPI France returned 61,000,000 EDF shares to the French State in October 2020. The French state and EPIC Bpifrance act together and have to consult each other before every Shareholders' Meeting of EDF. The EPIC Bpifrance has undertaken not to transfer the securities, to put them back as collateral or otherwise to dispose of them.

EDF: A LISTED COMPANY MAJORITY OWNED BY THE FRENCH STATE

EDF STATE-OWNED COMPANY: LEGAL AND CONTRACTUAL FRAMEWORK

- EDF's chairman and CEO is appointed by decree of the President of France on recommendation of the Board of Directors
- In accordance with article 13 of the French Constitution, EDF's Chairman is appointed based on the candidates' interviews and the opinion of the relevant committees of the French National Assembly and Senate
- The Board of Directors can be composed of 3 to 18 members, including members appointed by the Shareholders' Meeting(1), a State representative(2), and one-third of employees' representative elected in accordance with the provision of the Act of 26 July 1983
- Some decision related to financials, investments, acquisitions and disposals, or related to the compensation of executive officers must be subject to specific authorisation procedures (the Order of 20 August 2014 and the Decree of 9 August 1953)
- The company is subject to controls by different authorities: State Inspector, *Cour des Comptes* (Government Audit Body), Finance Inspection
- The French State Shareholdings Agency (APE) represents the State as a shareholder

EDF LISTED COMPANY: CORPORATE GOVERNANCE

- EDF has to abide by listed companies laws and specific standards of a public sector entity
- Internal rules of its Board of Directors are similar to those of other listed companies
- EDF adheres to the consolidated AFEP- MEDEF Code which is the corporate governance code to which the company refers, in accordance with the French commercial code, subject to the specific laws and regulations applicable to EDF
- EDF is subject to the rules relative to the balanced representation of women and men on Boards of Directors and has to respect the proportion of members of the Board of each sex of not less than 40%, excluding directors that represent the employees (Commercial Code and executive order of 20 August 2014). In accordance with AFEP-MEDEF Code, the EDF Board must include a third of independent qualified members (3). The appointments of directors proposed to the General Meeting are in line with the diversity policy applicable to Board members (French Commercial Code).
- A Climate Officer was appointed within the Board in 2020; this function was entrusted to the Chair of the Corporate Responsibility Committee
- The Board of Directors has created five dedicated committees to review and prepare certain projects before their submission to the Board of Directors
- The Appointments, Compensation and Governance Committee reports annually on the functioning of the Board of Directors and proposes areas for improvement. Furthermore, every 3 years, this evaluation is conducted by a specialist external consultant under the supervision of the Committee
- EDF comply with internal control procedures COSO(4)

(1) If need be upon recommendation from the State, in accordance with article 6 of the Order of 20 August 2014
(2) Appointed by the Minister of Economy amongst State agents, in accordance with article 4 of the Order of 20 August 2014
(3) In accordance with the independance criteria indicated by the AFEP-MEDEF code.
(4) Committee Of Sponsoring Organizations of the Treadway Commission

EDF'S INTERACTION WITH THE FRENCH STATE SHAREHOLDING AGENCY (APE)

- The French State Shareholding Agency (APE) is a national department controlled by the Minister of Economy and Finance. It performs the function of the State shareholder by safeguarding the State's patrimonial interests and the management of its investments. As such, it proposes and implements the decisions and policies of the French State with the related ministries
- Its main objectives consist of:
  - Reviewing the strategy and financial health of the company
  - Representing the French Government as a shareholder
  - Facilitate relationship between the company and the French Government
- As a result, the APE has expressed the following requirements to public sector enterprises. They have to:
  - Designate points of contact persons for the APE
  - Prepare a scorecard reporting for the APE on the main financial and qualitative data
  - Organise regular meetings, at least once a year to present the company's strategy and financial performance
  - Inform the APE of any investment operation, or any specific audit mission

OTHER REGULATORY BODIES WITH AN IMPACT ON EDF'S ACTIVITIES

THE FRENCH NUCLEAR SAFETY AUTHORITY (ASN)

The ASN helps monitor nuclear safety and radiation protection and informs the public in these areas. Its activity is focused on several main missions:

- Regulation through the submitting of opinions to the French government on draft decrees and ministerial orders, and by the regulatory decisions of a technical nature that it adopts
- The individual authorisations it grants for the operation of the plants, in particular the authorisations for restarting after the reactor stoppages
- The control of the installations that it carries out through the on-site regulatory inspections, scheduled or unannounced (with an average of 650 INB inspections per year, and 656 in 2018), in particular on the occasion of periodic reviews of compliance and re-evaluation security, mandatory for the continuation of the operation of the plant

THE CRE (FRENCH ENERGY REGULATION COMMISSION)

The CRE ensures the proper functioning of the electricity and gas markets for the end-customers in compliance with the energy policy. The regulation fields include:

- Energy networks
  - Access to regulated networks and their operation and development
  - Independence of network operators
- Energy markets
  - Monitor deals on energy and CO_2 markets
  - Monitor retail markets (for instance, making proposals for regulated tariffs' evolution)
- Regulated tariffs
  - As per the provisions of the French Energy Code, the CRE henceforth is in charge of proposing the evolutions of all the regulated electricity sale tariffs

OTHER CONTROL PROCEDURES INVOLVING EDF

- EDF may be subject to State audit procedures, in particular through economic and financial evaluation assessment and through verifications by the French General Finance Inspectorate (Inspection Générale des Finances)

- The company's accounts and management, and where applicable, those of its directly-held majority subsidiaries are under the control of the Cour des comptes (National Audit Court). Thus have been published on the Cour des comptes website:
  - The report on EDF's international strategy (16/03/2016)
  - The report on the management of the Électricité de Strasbourg group (20/05/2015)
  - The summary proceedings on working hours in the Group's main entities (16/09/2013)
  - The summary proceedings with the Minister for the Ecological and Inclusive Transition and to the Minister of Economy and Finance on the assessment of the implementation of Regulated Access to Historic Nuclear Power (ARENH) (115/03/2018)
  - The annual public report 2019, Volume II, on the wage policy at EDF SA (06/02/2019)

- EDF must also undergo the audit procedures performed by the French Parliament

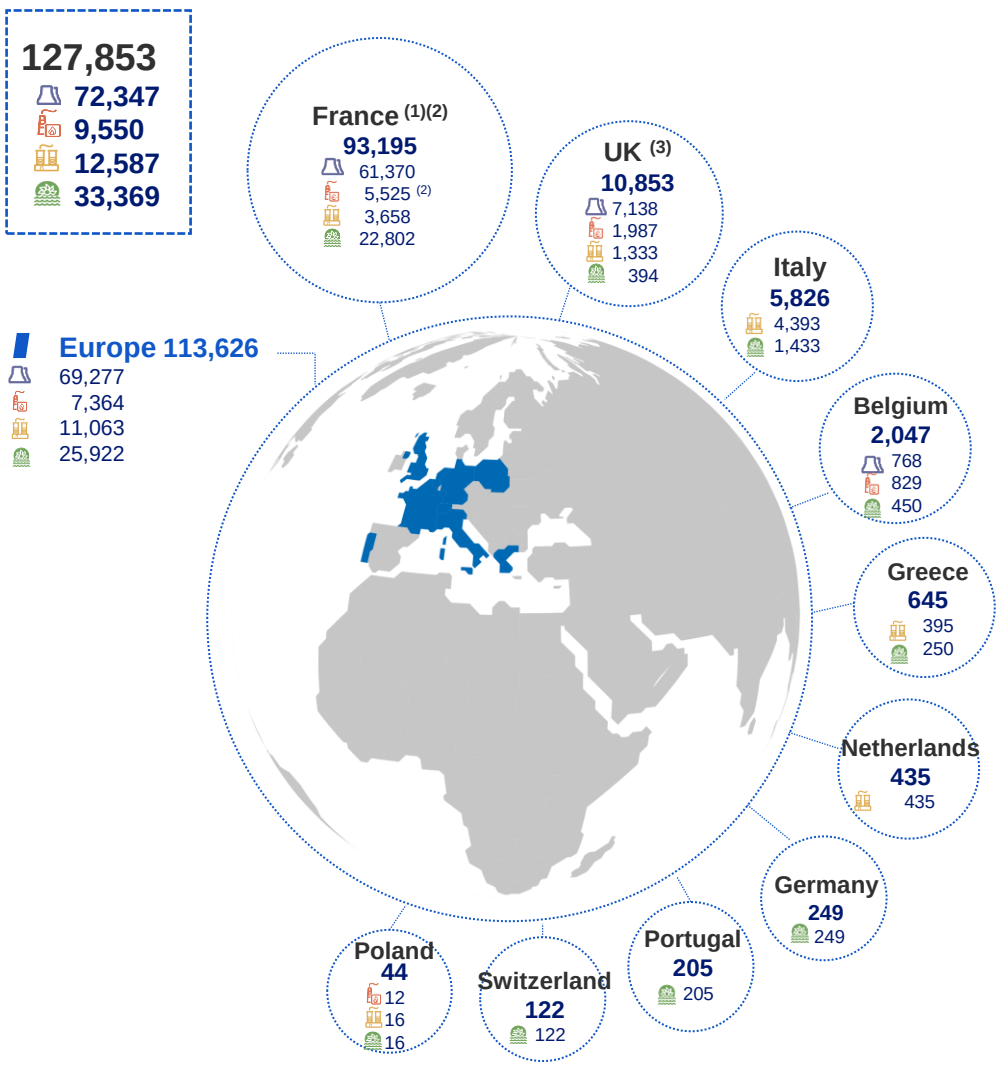
TABLE OF CONTENTS

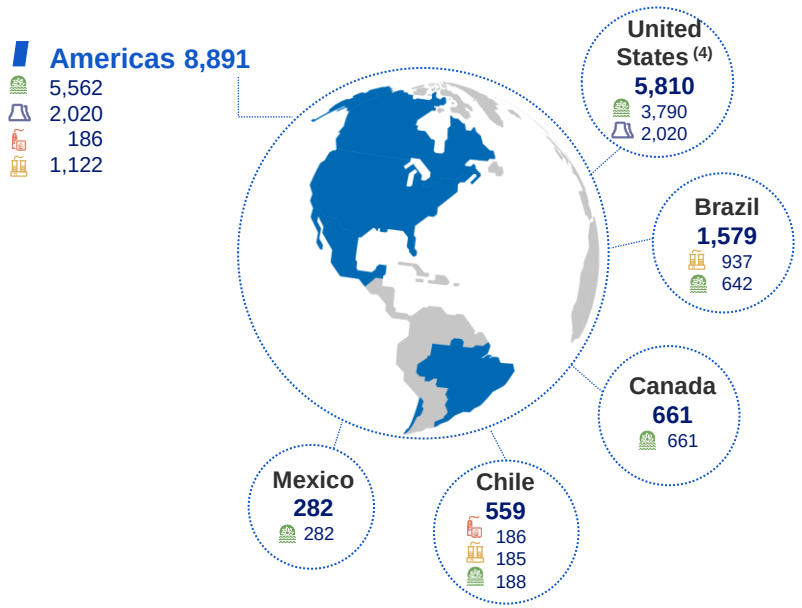
EDF group is a world leader in low-carbon energy, having developed a diverse production mix based mainly on nuclear and renewable energy (including hydropower). It is also investing in new technologies to support energy transition (storage, microgrids, hydrogen, etc.)

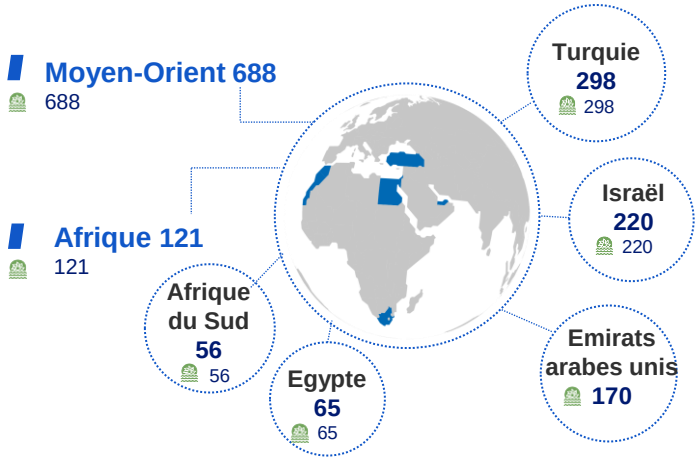
EDF GROUP'S NET INSTALLED CAPACITY* BY COUNTRY AT END-2020

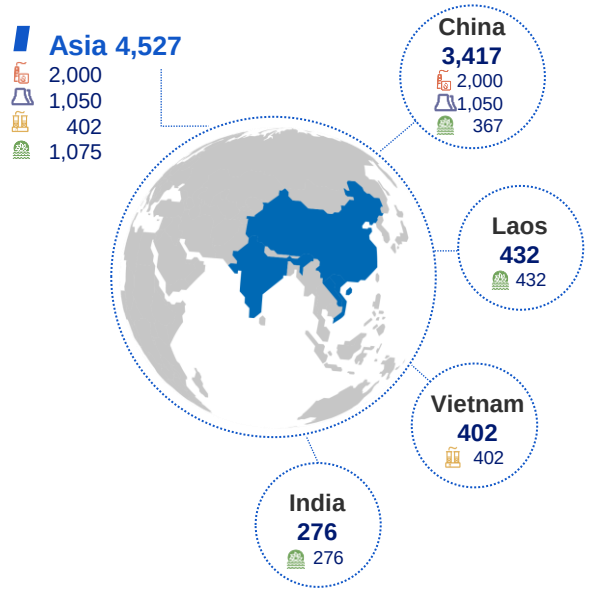
*** Net capacity according to EDF's percentage ownership in Group companies, including associates and joint ventures.**

127,853
- 72,347
- 9,550
- 12,587
- 33,369









- Nuclear
- Fossil-fired (coal and fuel oil)
- Gas (including cogeneration)
- Renewables (including hydropower)

(1) Including small hydropower plants in France and assets in overseas France.

(2) The Le Havre coal power plant has been shut down and mothballed (AGP - multi-year guaranteed shutdown) since 01/04/2021, and will be disconnected from the network by end-2021

(3) Closing of the coal power plant of West Burton A planned in September 2022

(4) Excluding energy storage capacity and EDF Renewables biogas production capacity

N.B. The values correspond to the first decimal or integer closest to the sum of the precise values, taking into account rounding

FRANCE – COUNTRY PROFILE

KEY POINTS

- EDF is active accross the whole electricity value chain, from generation to sales and optimisation/trading. The activities can be split into:
  - **Non regulated activities**: generation and supply, optimisation and trading
  - **Regulated activities,** with **RTE**(1)(2) (transmission) and **Enedis** (2) (distribution). EDF's activities in Corsica and the French overseas departments and municipalities are managed by the **Island Energy Services** (SEI), **Island Electric Production** (PEI) and are regulated, as well as the activities of the subsidiary ÉS (Électricité de Strasbourg) (3)
- EDF owns the largest nuclear fleet worldwide, o/w 56 operating plants in France
- RTE (1) and Enedis are subsidiaries of EDF but are operationally independent (legal unbundling), within the meaning of the provisions of the French Energy Code
- EDF also plays a holding role through the 100% control of **EDF Renewables** (4) **and EDF International** (which controls the greater part of EDF stakes in international subsidiaries) as well as interests in various companies, including:
  - **EDEV** (o/w, Électricité de Strasbourg, Citelum, etc.)
  - **Dalkia** (energy services provider)
  - **EDF Trading** (market operator for the Group)
  - **Framatome** (supplier in the nuclear industry), see the p. 80

INSTALLED CAPACITY AND OUTPUT IN 2020

CAPACITY	MW	%
Nuclear	61,370	69
Hydro (a)(c)	20,103	23
ENR excl. hydro	2,046	2
Thermal (b)(d)	5,525	6
Total (c)	**89,044**	**100**

a. Excl. Corsica and the French overseas department, *i.e.* 439MW in 2020
b. Excl. Corsica and the French overseas department, *i.e.* 1,567MW in 2020..
c. Tidal capacity of 240MW included.
d. Incl. Le Havre coal power plant, shut down and mothballed (AGP - multi-year guaranteed shutdown) since 01/04/2021, and which will be disconnected from the network by end-2021

OUTPUT	TWh	%
Nuclear	335.4	85
Hydro (d)(e)	44.7	11
ENR excl. hydro	4.7	1
Thermal (f)	8.8	2
Total	**393.6**	**100**

a. Excl. Corsica and the French overseas department, *i.e.* 1.3TWh in 2020
b. Output including pumped volumes
c. Excl. Corsica and the French overseas department, *i.e.* 4.4TWh in 2020

EBITDA 2020 of the France Segments excl ENR	**€m**
Generation & supply	**7,412**
Regulated	**5,206**

(1) RTE is consolidated by the equity method via the CTE holding company
(2) Subsidiaries managed with complete independence, within the meaning of the provisions of the French Energy Code
(3) For more information on the Electricité de Slrasbourg activities, please see the p. 147
(4) For more information on the Renewables activities including EDF Renewables, please see the p. 107

MARKET DEVELOPMENT IN FRANCE

French market deregulation chronology

Implementation of the NOME law of 7 December 2010 to foster competition on the French market

1946 — Nationalisation of the electricity and gas sector pursuant to the Law of 8 April 1946

1999 — Opening of the French market, first for B2B (2000 to 2004), then for B2C from 2007 onwards

2011 — **1 July 2011:** NOME law entered into force guarantying to EDF's competitors, for a 15-year transitory period, a regulated and limited access to EDF's historical nuclear generation capacity (ARENH) to supply their end customers located in France. The available global energy volume cannot exceed 100TWh(1) per year

2012 — On 1 January 2012, ARENH price was set to €42/MWh

2014 — New tariff construction method by costs stacking (ARENH price, cost of supply of the complementary purchases, on wholesale power markets, electricity networks and commercial costs, plus a normal rate of return)

CRE proposal on new tariff, then Ministerial order, who only have an opposition right

2016 — Regulated electricity sales tariffs (TRV). 31 December 2015: end of Yellow and Green regulated tariffs 1 January 2016: The CRE is henceforth in charge of proposing changes to the regulated tariffs

ARENH :
Evolution of the modalities of anticipated resignation by suppliers. Clarification of the "*monotonie* clause"

2017 — Capacity market mechanism implemented in 2017

2018 — Regulated electricity sales tariffs (TRV):
Validity of the principle of TRV confirmed par the State Council

2019 — France multi-year energy programme (PPE):
Project published (25 January 2019)

2020 — ARENH:
Requests from suppliers at the November 2020 window of 146TWh for 2021.
Maximum global volume of 100TWh. The CRE proceeded with a cropping

Regulation:
Global negotiation as part of the future regulation on existing nuclear facilities under way between the French government and the European Commission

(1) Excluding supply losses
(2) For more information on the capacity auctions in France p160 and on the impact on EDF's EBITDA, please see p.163-165

2019 – 2028 MULTIANNUAL ENERGY PLAN (MEP) FOR FRANCE

- The MEP Decree dating from 21 April 2020 was published in the *French Official Journal* of 23 April 2020. The MEP covers two successive five-year periods: 2019-2023 and 2024-2028.
- The decree is accompanied by a report constituting an appendix of the decree and thus having regulatory value.

	Main points in the MEP
Nuclear	14 nuclear reactors to close by 2035 to achieve a 50% share of the energy mix; 4 to 6 reactors (including Fessenheim) to be closed by 2028, subject to certain conditions being fulfilled. The draft MEP presents EDF's proposal for sites likely to be concerned. The government will have the final responsibility for identifying the priority sites. Between now and mid-2021: the French government will study next-generation nuclear power with the sector and make its decision on scheduling construction of new plants.
Fossil-fired energy	France will close all coal-fired power plants by end-2022. No new all-fossil fuel thermal generation plants will be built.
Renewables	Injected biogas production of 14 TWh to 22 TWh in 2028, the volumes being contingent on a sufficient decrease in costs (€75/MWh in 2023, €60/MWh in 2028). Doubling of installed renewable electricity generation capacity (73 GW in 2023, and 101 GW to 103 GW in 2028), including the launch of nearly 1 GW/year of offshore wind capacity. Increase renewable heat consumption by 25% in 2023 and 40% to 60% in 2028 compared with 2016 figures (154TWh)
Other objectives	A decrease in oil consumption of 19% by 2023 and 34% by 2028 (compared with 2012) and a decrease in natural gas consumption of 10% by 2023 and 22% by 2028 Industrial hydrogen: 10% in 2023 and 20% to 40% in 2028 via low-carbon generation (renewable or electrolytic) 2023: 2.5 million housing units renovated, 9.5 million housing units heated by wood, 3.4 million equivalent housing units connected to a heating network 2023: 1.2 million electric passenger cars in circulation (electric and plug-in hybrids) and more than 100,000 public charging points by 2023

NB: Island regions not connected to metropolitan France (Corsica, Guadeloupe, French Guiana, Martinique, Mayotte, Reunion and Saint-Pierre-et-Miquelon) are each subject to a distinct MEP currently under development

FRENCH GOVERNMENT STIMULUS PACKAGE

		EDF entities benefiting from the government plan
ENERGY RENOVATION OF BUILDINGS	➢ Strengthen the energy renovation of private housing (€2 billion spread over 2021 and 2022, the “MaPrimRenov” scheme), social housing (€0.5 billion) and public buildings (€4 billion)	EDF Solutions énergétiques dalkia smart building izi by EDF cham sowee
INDUSTRY DECARBONATION	➢ €1.2 billion over 2020-2022 ➢ Low carbon heat (biomass, heat pump, waste-to-energy, heat network, etc) ➢ **Energy efficiency** and electrification of processes	
NUCLEAR	➢ **€470m over 2020-2022** ➢ Maintain skills and support the competitiveness of businesses ➢ Promote **innovation,** in particular the development of French small modular reactors **(SMR) Nuward** ➢ Deploy the Fessenheim “Technocentre” project (recycling of very-low-level metal waste) ➢ Finance innovative solutions for radioactive waste management	EDF framatome cyclife
HYDROGEN	➢ Put France at the forefront of generation technologies of renewable and low-carbon hydrogen (€7.1bn by 2030, of which €3.4 billion by 2023)	hynamics EDF
ELECTRIC MOBILITY	➢ Increased support for **the purchase of clean vehicles** (€1.9 billion) ➢ Acceleration in the deployment of **charging stations for electric vehicles**: 100,000 charging stations expected in France by 2021, accessible to the public	izivia Enedis

UNITED KINGDOM – COUNTRY PROFILE

KEY POINTS

Main entity:

EDF Energy, one of the UK's largest energy companies and the largest producer of low carbon electricity

3 principal activities:

1. **Customers and services**: power and gas supply and customer services for residential and business customers (4.8 million residential customer accounts at the end 2020).
2. **Generation**: 15 reactors in 8 nuclear power stations (1), 1 coal-fired power station (2) (with open-cycle gas turbine (OCG)) and 1 gas-fired power station. Renewable energy generation from wind farms by EDF Renewables (JV EDF Energy and EDF Renewables Group). Development of large-scale batteries and high-volume power connections to enable rapid electric vehicle charging through Pivot Power.
3. **Nuclear New Build:** Construction of Hinkley Point C (3.2GW) EPR power plant project and development of Sizewell C (3.2GW) EPR power plant project in partnership with China General Nuclear Power Corporation ("CGN"), as well as developing proposals for a new nuclear station Bradwell B, a UK HPR1000 ("Hualong") by CGN

Strategy:

- The purpose of EDF Energy, the country's largest low-carbon electricity generator, is to help Britain achieve Net Zero. It does this by leading the transition to a decarbonised energy system
- EDF Energy is developing solutions to help British households, businesses and the public sectors to achieve Net Zero, in areas including electric mobility, low-carbon heating, flexibility services and smart meters combined with data services
- In electricity generation, EDF Energy seeks to secure value from is existing nuclear, coal and gas assets through continued operational excellence and safe, reliable generation. Moreover, EDF Energy continues to examine its options to the optimisation of its plants, whilst supporting UK Government policy aimed at ceasing coal-fired generation by 2024

2020 supply market share

Electricity supply: ~41TWh — ~15 % (3)

Domestic Gas supply: ~29TWh — ~10 % (3)

2020 key figures

EBITDA 2020 of the UK: €823m

	Capacity (GW)	Output (TWh)
Nuclear (1)	8.9	45.7
ENR	0.4	1.1
Gas(3)	1.3	4.9
Fossil-fired excl. gas (4)	2.0	1.2
Total	**12.6**	**52.9**

Did you know ?

EDF Energy advances its low-carbon strategy with the acquisition **of Pod Point,** an EV charge point specialist, and **Pivot power**, company specialising in battery electricity storage and the deployment of private electricity grids for EV charging infrastructures.

(1) Including Centrica's 20% stake
(2) West Burton A : end generation date planned in September 2022.
(3) UK Gas and Electricity supply is as per BEIS data
(4) Coal capacity represents transmission entry capacity. Net power including biomass

ITALY – COUNTRY PROFILE

KEY POINTS

The Italian gas and electricity markets are strategic for EDF due firstly to their major significance in Europe, secondly to their connection to the French markets and the key position in the Mediterranean basin

- **Edison**: The Group owns 97.446% of Edison's share capital. The company is a major player (1) in the Italian energy market and active in:
  - the production of power from renewable sources and gas
  - in gas midstream activities (supply of natural gas mainly through long term contracts, storage and distribution)
  - in the sale of electricity, gas as well as energy and environmental services to the final market and services and infrastructures for sustainable mobility (small scale LNG)
- Edison continued on its path towards becoming a **responsible operator** and a **leader in the energy transition**: in 2020 the sale of E&P activities (2) to Energean was completed and in March 2021 the Norwegian E&P business was sold to Sval Energi (3) . With these transactions, Edison enacted its strategy of exiting the hydrocarbon E&P sector (4) and frees up resources to support its strategic development in other sectors, such as the generation of energy from renewable sources and latest generation gas, customer services, energy efficiency and sustainable mobility. Furthermore, in mid-February 2021, Edison completed the closing with F2i for the purchase of 70% of E2i Energie Speciali (wind power farm)
- **Key strategic priorities**:
  - **Electricity generation**: increase power generation from renewable sources, mainly PV solar and wind aiming to become one of the main players in the sector by 2030. In order to complement the growth in renewables and ensure the security of power supply, Edison is working on the construction of two-latest-generation combined cycle power plants, with high efficiency and low environmental impact, in Marghera Levante (780MW) and Presenzano (760MW). These plants will benefit from the capacity market for 15 years with a positive impact on margin volatility
  - **Customers and services**: strengthen the positioning on the Italian market through the development of innovative low carbon energy services (5) targeted to industrial, tertiary and public administration segments and the combined offer of power and gas as well as of value-added services to B2B and B2C customers.
  - **Gas activities** (6): develop not only greater flexibility in the portfolio of long-term contracts but a greater commitment to green uses, through the development of small-scale LNG infrastructures, biogas production and the experimentation of hydrogen systems to promote decarbonation of end uses (industry and transport)

2020 GROUP KEY FIGURES IN ITALY

	Capacity(a) (MW)	Output(a)(1) (TWh)
Thermal	4,576	13.8
Hydro	861	3.2
Other renewable	1,426	1.8
Total	**6,863**	**18.8**

a. Incl. Generation and energy efficiency services

Generation fleet in Italy is made up of **89** hydropower plants, **14** thermal power plants, **43** wind farms and **64** photovoltaic power plants

2020 EBITDA in Italy: €683m

16.6Gm³ of gas sold to end customers
O/w 13% to the residential sector, 31% to the industrial sector and 34% for thermoelectric uses (including Edison's own internal needs)

12.3Gm³ of natural gas imports by Edison, *i.e.* 19% of the country's natural gas imports

1.5 million sales contracts of power, gas and energy services

(1) According to the 2020 ARERA report based on 2019 data Edison is the 3rd largest producer at national level (the 2020 data will be available in mid-2021). Edison's net electricity output in Italy in 2020 represents ~6.6% of net Italian electricity generation
(2) Excluding Algeria and Norway
(3) Edison press release dated 25 March 2021
(4) Only the Algerian activities remain in the portfolio, the divestment of which is planned at a later date.
(5) For more information on energy efficiency activities, see p.181
(6) For more information on the group gas activities, see pages 191-194

BELGIUM AND NETHERLANDS – AREA PROFILE

Key points

- **The Benelux region** includes important interfaces with the Franco-German electric power plate and plans for new connections to Germany and Great Britain are under consideration. The Benelux is also an important node in the European gas market due to its numerous import and transit infrastructures

- **Main entities:**
  - **Luminus**
    - EDF majority shareholder (**68.63**%), through EDF Belgium (100%)
    - 2nd largest player in the Belgian energy market with 10% of the national generation capacity. Total electricity output of **7.6TWh** in 2020.
    - Present in renewable energies through 7 hydropower plants.
    - Leader in wind power with **70 onshore wind farms**, the group built 22 wind turbines with an additional capacity of 70MW in 2020, for a total of **588MW**
    - thermal park composed of several plants (combined cycles and open cycles) for a total installed capacity of **1,208MW**
    - Owning 10.2% (**419MW**) of the nuclear power plants Tihange 2 and 3, and Doel 3 and 4, Luminus also has **100MW** of drawing rights on the French Chooz B nuclear power plant.
    - The company has 2,100 employees, including the recently acquired subsidiaries
    - On the B2B market, acquisitions of CDL Engineering, Electric NV, Elekrotech and Westelec, strengthening the Luminus position in energy services
  - **EDF Belgium:** wholly-owned by EDF, it holds 50% of the Tihange 1 nuclear plant, or 481MW, representing 2% of Belgian generation capacity. The life span of this power plant has been extended to 2025
  - **Sloe Centrale B.V. (Netherlands):** Thanks to its very high technical performance, the Sloe power plant (50% owned by EDF) has been called upon to operate nearly **4,896 hours** between the beginning of the year and December 2020, with a service factor of more than 70%, 6 points higher than the average calculated over the last three years

2020 key figures

Pays	Company	Main activities	Technical data
Belgium	EDF Belgium	Electricity generation	**Nuclear installed capacity: 481MW**
Belgium	Luminus	Electricity generation Electricity and gas sales	**Installed capacity: 2,283MW** 16.5% gas market share and 17.8% electricity market share in Belgium **Delivery points: ~1.6 million**
Netherlands	Sloe Centrale B.V.	Electricity generation	**Installed capacity CCGT: 870MW**

In 2020, EBITDA in Belgium amounted to €247 million
(Luminus: €188m, EDF Belgium €59m)

In 2020, Luminus was awarded the Top Employers in Belgium for the 8th consecutive year

Did you know ?

By the end of 2023, the company aims to reach **795MW in wind power**, making Luminus the **leading wind energy company in Belgium**. Its 70 onshore wind farms total
238 turbines in Wallonia and Flanders

In 2020, EDF acquired MegaWindy CVBA which operates onshore projects in the Flemish region

NORTH AMERICA – AREA PROFILE

Electricity

- **In North America the group has:**
  - More than 9.5GW of installed and under construction gross capacity
- **Activities in North America:**
  - **Renewable energies:** EDF Renewables holds 7.1GW of net capacity or in construction, mainly located in the USA, and close to 12.9GW managed for own account or third parties
  - **Trading:** EDF Trading operates in the Northern American markets for electricity (including financial transmission rights) and gas. EDF Trading activities also include trading of RECs (1), biogas, carbon emissions and credits and weather derivatives
  - **Nuclear**: EDF Inc. has 49.99% stake in **CENG** which owns 5 nuclear reactors with Exelon, with a global capacity of 4,272MW. On 20 November 2019, EDF initiated the put procedure by notifying Exelon of its intention to the exercise of the put option. The put was deemed exercised on 20 January 2020. The disposal price of the shares will be based on a determination of their fair value, pursuant to the contractual provisions in the put option agreement. The CENG put transaction is expected to close in Q4 2021
  - **Framatome** also helps supply electricity to 36m North American households

Energy supply

- **Commercialization of gas and electricity:** EDF Trading, through its subsidiary EDF Energy Services, is part of the Top 5 suppliers to non-residential customers in North America, offering all environmental products, natural gas and electricity

Energy services

- **Trading:** EDF Energy Services (100% subsidiary of EDF Trading North America) provides management and optimization services for thermal, wind, PV and hydro power generators
- **Local management of energy and energy efficiency:** through Dalkia, a 100% subsidiary of the EDF Group, with 455 employees

R&D

- **EDF Innovation Lab:** located in Silicon Valley, this R&D and Innovation team partners with local Universities and Utilities on Future of energy markets, Distributed resources integration and Electric Mobility.
  It also works with EDF Corporate Venture Capital in order to identify relevant investment opportunities amongst US startups

Did you know ?

Citelum, a subsidiary of EDF in the field of urban public lighting and indoor lighting, has begun the liquidation and the dissolution of its activities in the United States. As part of this process, Citelum transferred the assets of its business in Albuquerque, New Mexico, to Dalkia Energy Solutions, effective 6 August 2020

(1) Renewable Energy Certificate

MAP OF EDF GROUP NORTH AMERICAN OPERATIONS

The EDF group has operations in 42 out of 50 states and in 5 out of 10 Canadian provinces

EDF present subsidiaries

- EDF Inc
- DK Energy US

- Dalkia Energy Services
- Aegis Energy Services

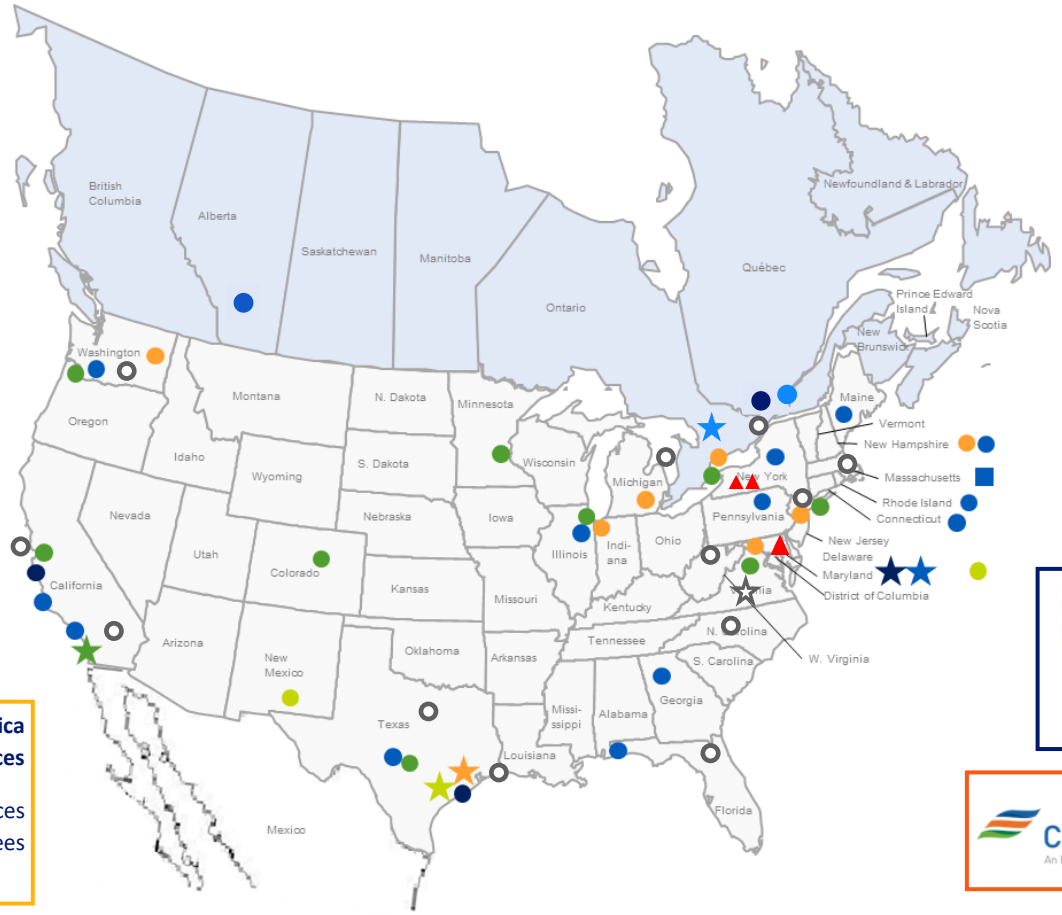
- EDF Renewables Energy
- EDF Renewables Canada
- EDF Renewables Mexico
- EDF Renewables Energy Services

- EDF Trading North America
- EDF Energy Services

- Dalkia Wastenergy

EDF Renewable Energy
★ HQ - ● Other offices
USA: 856 employees

EDF Renewables Canada



DK Energy US
★ HQ
USA: 2 employees
Dalkia Energy Solutions
■ HQ ● Other offices
USA: 99 employees
Dalkia Aegis
USA: 94 employees
Dalkia Wastenergy (HQ in La Défense)
● Montreal site
Canada: 270 employees

EDF Inc.
★ HQ ● Other offices
USA: 30 employees*
**Does not include CENG staff*

Constellation Energy Nuclear Group
▲ Nuclear plant

Framatome
☆ HQ ○ Other offices
USA : 2,100 employees

EDF Trading North America
EDF Energy Services
★ HQ ● Other offices
USA: 418 employees

LATIN AMERICA – AREA PROFILE

Brazil

- **EDF Norte Fluminense** *(EDF NF)*
  - The Group owns 100% of **EDF Norte Fuminense**, which has built and operates a CCG(1) with an installed capacity of **826MW**
  - EDF NF owns **51%** of the **Sinop Energia** (SEC), which is responsible for the construction and operation of the Sinop hydroelectric facility **(402MW)** commissioned in 2019

- **EDF Renewables:** (100% subsidiary of EDF) has been present in Brazil since 2015, with a net capacity of 182MW in wind power (Ventos da Bahia), and 199MW in solar power (ex: Pirapora II) as well as 344MW in wind power under construction

- EDF is also present in Brazil through the activities of **Edison** (Iberitermo (50% stake) subsidiary which operates a CCG of 226MW) and those of **Citelum** (subsidiary 100% owned by EDF dedicated to public lighting).
  In 2020, Citelum renewed its contracts in Imperatriz, Salvador de Bahia and Macapà and won the LED renovation contracts for lighting in the cities of Marilia and Jandira

Solar plant of Pirapora

Chile

- In partnership with AME (Andes Mining Energy), the group subsidiary **EDF Andes** (2) acquired **750MW** of flexible generation capacity (**gas and peak**) in 2018 to support the development of its renewable activity in Chile by compensating for fluctuations in wind and solar generation. Moreover, in 2021 EDF Andes will start developing its own renewable projects with the construction of a 480MW solar power plant and will convert to gas one of its two peakers (diesel today), in collaboration with the AME

- **EDF Renewables** is present in Chile with 3 assets: the solar power stations of **Bolero (146MW gross) and Santiago Solar (115MW gross)** and the wind farm of **Cabo Leones 1 (115MW gross)** . Cabo Leones 1 is currently undergoing a 60MW capacity extension, which will be ready in 2021

- **Citelum** is present in Chile on the public lighting market. In 2020, Citelum has installed 572 solar-powered luminaires in Estacion Central to enable the city to achieve significant energy savings and significantly reduce its CO_2 emissions

Solar plant of Bolero (Atacama's desert)

(1) Combined cycle gas plant
(2) Formerly known as EDF Chile
(3) Floating Storage Regasification Unit

CHINA – COUNTRY PROFILE

The EDF group is one of the largest foreign investors in the electricity sector in China, with interests in nuclear, renewable and thermal power plants for a **total net capacity of 3,650MW** (1)

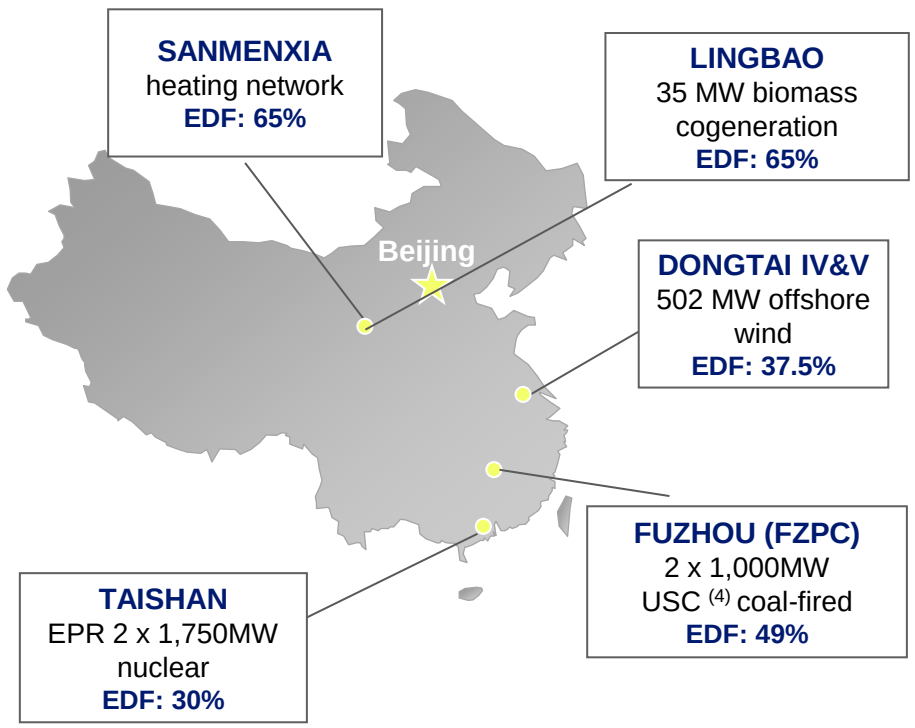
Nuclear

- As the first foreign company to invest in a project to build and operate a **nuclear power plant** in China, EDF owns 30% of **Taishan** (TNPJVC), which owns and operates two EPR nuclear reactors. Unit 1 was the first EPR in the world to enter commercial service on 13 December 2018 and the Unit 2 was commissioned on 7 September 2019
- **Partnership with CGN**: On 29 September 2016, **EDF and CGN** signed the final contracts for the Hinkley Point C power plant project (2). EDF's stake in Hinkley Point C is 66.5% and CGN's is 33.5%. An agreement covering the development of the UK HPR1000 (Hualong One) technology at Bradwell, United Kingdom was also signed at that time. In addition, EDF is working with CGN to advance a project similar to Hinkley Point C, a 3.2GW EPR construction project at Sizewell

Thermal

- EDF owns 49% of FZPC, which built and operates the "ultra-supercritical" **coal-fired power plant** of **Fuzhou**. This technology ensures better performance (~44% for Fuzhou) and a limited environmental impact. EDF holds minority shares in two other thermal power plants

Main assets in China



Renewables

- **EDF Renewables** acquired in 2016 a majority share (80%) in UPC Asia Wind Management (AWM), which develops and builds **wind power** projects in China. In 2018, EDF Renewables diversified its activities in distributed solar power by creating a joint venture with ACC to develop **solar roof solutions** for industrial customers. End-2020, net installed capacity amounts to 140MW in wind and 78MW in solar power, and 98MW are under construction - mostly in wind power.
- In **offshore wind energy**, EDF Renewables is building the Dongtai IV (302MW) and Dongtai V (200MW) wind farms in partnership with China Energy Investment.

Energy services

- EDF operates since 2016, a **heating network** that supplies homes over an area of 8 million m² in the city of Sanmenxia (Henan). In the nearby town of Lingbao, EDF operates a 35MW **biomass cogeneration** power plant which supplies heating and electricity.
- On the tropical island of Hainan the Group has started in Sanya to build a cooling network for the air conditioning of hotels located in a tourist area

New Business

- Battery exchange stations for electric vehicles
- Offer of computer-aided engineering services based on EDF software

(1) Data in proportion to EDF's equity
(2) For more information on the Hinkley Point C EPR project, see p. 84-85
(3) SC = "supercritical" technology, USC = "ultra-supercritical" technology

SOUTHEAST AND SOUTHERN ASIA – AREA PROFILE

India

- In **March 2018**, the EDF group and the Indian energy company NPCIL(1) signed an industrial agreement for the construction of 6 EPRs on the Jaitapur site in India. With a total power of about **10GW, Jaitapur** would be **the largest nuclear project in the world** (2)
- **Citelum**, an EDF subsidiary specialised in street lighting, is also present in India where it manages **178,000** lighting points in the city of Ahmedabad
- **A roll-out Smart Meters project** signed in 2018 and officially launched in March 2019 with EESL 3 for 5 millions Smart Meters, and with NDMC for 75,000 Smart Meters installed by EDF International Networks
- **Wind and solar power sectors:** At the end of 2020, the Group's **installed renewables power (excl. Hydro) capacity is 276MW net**

Vietnam

- In **2020**, EDF owns **56.25%** of Mekong Energy Company (MECO), the company that owns Phu My 2.2, a combined cycle plant with a capacity of **715MW**. The other shareholders are TEPCO (JERA) and SGM2 (Sumitomo). This is the 1st IPP project (3) dedicated exclusively to foreign investment in Vietnam. The BOT contract (Build, Operate, Transfer) has a duration of 20 years. In 2005, EDF completed the turnkey delivery of the plant, which MECO now operates
- The **Son My 1** project concerns the construction and operation of a regasified LNG (liquefied natural gas) combined cycle plant with optimised environmental performance of approximately **2,250MW,** scheduled to be **commissioned in 2025**. In March 2018, the EDF group was appointed leader of the consortium **(37.5%**) to study the project alongside the Vietnamese partner Pacific Corporation **(25%)** and two Japanese partners, Sojitz Corporation (18.75%) and Kyushu Electric Power Co (18.75%)

Indonesia

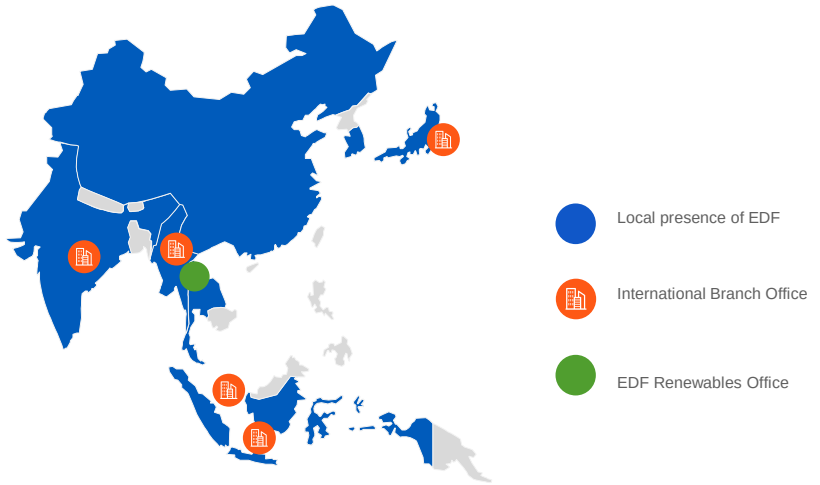
- In 2020, EDF continues its development strategy in Indonesia by prioritising renewable energy projects and the acceleration of access to electricity in the country most distant islands thanks to the development of microgrids

Laos

- **At the end of 2020**, the Group **owns 40% of Nam Theun 2 Power Company** (NTPC), which owns the Nam Theun 2 Hydropower Complex **(1,070MW installed capacity)**. Built by EDF under a turnkey contract, the other shareholders are the Thai company EGCO (5) (35%) and the Laotian society LHSE (6) (25%). NTPC company operates the power plant on a 25-year concession contract concluded with the government of Laos
- A project to develop an hybrid floating solar farm with a capacity of 240 MW on the Nam Theun 2 hydroelectric dam reservoir was launched in 2019 **and formalised in 2020 with the EDF's partners**

R&D

- The lab in Singapore supports the development of *microgrid* throughout Southeast Asia thanks to inauguration **of the *microgrid* demonstrator "MASERA"**. It also hemps the International Direction on new businesses: e-mobility, hydrogen, aggregation, energy services



(1) Nuclear Power Corporation of India Ltd.
(2) See press release 10/03/2018
(3) Independent power plant

(4) EDF is paying close attention to political developments in the wake of the coup on 1 February 2021 and may review its projects currently under development in Myanmar.
(5) Electricity Generating Public Company Ltd.
(6) Lao Holding State Enterprise

AFRICA – AREA PROFILE

The Group wishes to develop on the continent of Africa by assisting countries with high-energy demand, on a selective basis appropriate to each geographical region, and by building sustainable and multi-industry partnerships. EDF is also intensifying its action in the supply of competitive off-grid energy.

South Africa

- Since 2007, EDF has a subsidiary in Johannesburg, focused on reviving the South African nuclear program
- **Wind energy sector:** Since 2011, EDF Renewables has been developing in the wind energy market and operates three wind farms with a gross capacity of **142MW** through its 84%-owned EDF Renewables South Africa subsidiary. The construction of a 35MW new wind farm started in 2019
- In December 2018, EDF acquired **30%** of GIBB POWER, a subsidiary of the South African group GIBB Engineering and Architecture, in order to increase its activity in thermal engineering, hydraulics, transportation and distribution services(1). The company started its activity in 2019

Morocco

- **Solar energy sector:** In 2019, the EDF Renewables – Masdar - Green Of Africa consortium successfully bid for the first place of the **Noor Midelt 1** solar project in Morocco, using a hybrid solar-storage technology that is a world first. This hybrid solar project with installed capacity of **800MW** innovatively combines two technologies: concentrated solar power (CSP) and photovoltaic solar power. Discussion with the different interested parties about the planning are ongoing
- **Wind energy sector:** EDF-RE (60%), in partnership with Mitsui&Co (40%), is developing the **Taza** wind farm (150 MW project, with a 1st phase of **87MW**). The PPA was signed at the end of 2019. The construction of the first phase began on the 2 September 2020

Egypt

- **Solar energy sector**: In 2019, EDF Renewables commissioned the **Benban plants** with **130MW** in partnership with Elsewedy Electric. EDF Renewables also took a strategic share in the Egyptian company **KarmSolar** to tackle the private PPAs and micro-grid market

Cameroon

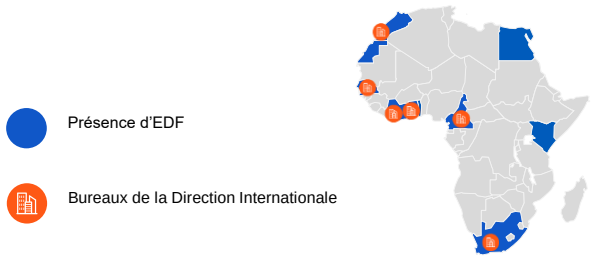
- EDF has started the construction works on the **Nachtigal** hydroelectric dam **(420MW),** and will operate it through its 40% stake in Nachtigal Hydro Power Company (NHPC) alongside IFC, the State of Cameroon, Africa50 and STOA. 37% of civil engineering achieved at 31/12/2020
- In November 2019, EDF and the State of Cameroun signed a Development Agreement for a second hydroelectric dam, on the Sanaga river, on the site of Kikot, with capacity of about 450MW

Ivory Coast

- In partnership with SIFCA, the Ivorian agro-industrial group and Meridiam, EDF is developing the **"Biovéa"** biomass plant project (2 x 23 MW); the biggest of Western Africa. The concession agreement was signed with the State in December 2019. The Final Investment Decision is targeted for early 2021

Off-Grid

- EDF has more than fifteen years of experience in the field of "**Off-Grid**" (decentralized energy). In addition to the historical activities of KES in South Africa (company created in 2002 and 50 % owned by EDF) and ERA (Senegal), the Group partners with innovative start-ups to provide energy and services to a rural clientele **in South Africa, Côte d'Ivoire, Ghana, Senegal, Kenya and Togo**.
- Such services enable **more than 1 million people** to light and power their low-consumption household appliances or also to be equipped by solar-powered water pumps and thereby significantly improve their crop yields.
- EDF aims to **multiply this figure by 2** over the next 3 years



(1) See press release of 8 October 2018

MIDDLE EAST– AREA PROFILE

United Arab Emirates

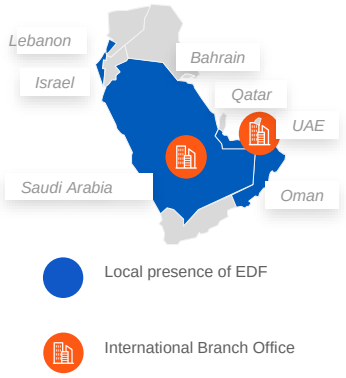
- EDF Renewables joined forces with the Masdar-led consortium to develop the "**DEWA III**" project, representing the third phase (800MWac) of one of the world's most powerful solar fleet project, the Mohammed bin Rashid Al Maktoum solar plant, in partnership with Dubai Electricity and Water Authority (DEWA) near Dubai. In 2020, EDF, through its EDF Renewables subsidiary, won the Al Dhafra photovoltaic contract with a 2GW installed capacity. Located in Abu Dhabi, it will be the world's most powerful solar power plant, to date
- In addition, EDF operates a project supporting the contracting authority of a 250MW pumping station dam, planned to be developed in the Hatta mountains in the Emirate of Dubai, as well as a second project for the construction of a fossil-fired power plant in Al Aweer with power of 3 x 233MWe, for DEWA customer
- Signature in January 2020 of a shareholders' agreement with Masdar for the creation of a joint venture to develop solar energy and energy-efficiency projects

Saudi Arabia

- In 2019, EDF Renewables gained a foothold in Saudi Arabia by winning, in consortium with Masdar, the call for tender for the Dumat Al Jandal wind project. With an installed capacity of 416MW, this wind farm will be the first in Saudi Arabia and the most powerful in the Middle East. The construction of the fleet started in the summer of 2019
- In 2020, in partnership with Masdar and the Nesam group, EDF Renewables took part in the call for tender launched by Repdo ("Repdo 2"). **A 300MW solar contract is expected to be attributed to the Group in the Jeddah region**

Israel

- Since 2010, EDF Renewables has owned a subsidiary in Israel that has established itself as the leading local player in solar energy. At end-2020, it had 383MWc of installed gross capacity, 150MW under construction, an additional 157MW won as part of a call for tender, to be connected in 2021-2022, and several dozens of additional projects under development. EDF Renewables Israel won two calls for tender in 2020, for around 70MW in offshore photovoltaic projects and 225MW in photovoltaic projects combined with storage to be built by 2023
- The subsidiary is also active in the fields of electricity storage, wind power and wave energy. EDF Renewables Israel was selected in 2019 by the Israeli Ministry of the Environment to set up and run the Israeli Innovation Lab in the field of renewable energies and sustainable development



Did you know?

At end-2020, Dalkia extended its business activities by signing with the Kingdom Tower (Riyadh) a contract in O&M of the cooling centre and the corresponding equipment. All that thanks to its locally-based DESC (1), which has enabled to generate considerable energy savings for the Tower

(1) Energy performance management centre that combine digital and human intelligence

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As a major player in energy transition, the EDF group is an integrated energy company active in all businesses: generation, transmission, distribution, energy trading, energy sales, and energy services. Faced with the climate change emergency, EDF is committed to a fair, innovative and sustainable energy future, and aims to be carbon neutral by 2050. The Group wants to deploy electricity that is increasingly low in carbon thanks to nuclear power and the accelerated development of renewable energies.

ELECTRICITY OUTPUT AS OF 31 DECEMBER 2020

Output from fully consolidated entities

(in TWh)	**2019**		**2020**	
Nuclear	437.6	*78.5 %*	384.1	*76.5 %*
Hydro (1)	44.2	*7.9 %*	49.4	*9.8 %*
ENR	18.3	*3.3 %*	19.3	*3.8 %*
Gas	49.0	*8.8 %*	42.0	*8.4 %*
Fioul oil	5.1	*0.9 %*	5.0	*1.0 %*
Coal	3.4	*0.6 %*	2.2	*0.4 %*
Group	**557.6**	*100 %*	**501.9**	*100 %*

NB: The values correspond to the expression to the first decimal or integer closest to the sum of the precise values, taking into account rounding

(1) Hydro output includes tidal energy for 532GWh in 2019 and 540GWh in 2020. Hydro output after deductions of pumped volumes is 37.9TWh in 2019 and 43.2TWh in 2020

EDF GROUP MAIN BUSINESSES

EDF: UNIQUE EXPERTISE AND KNOW-HOW IN THE NUCLEAR INDUSTRY

EDF, THE WORLD'S LEADING NUCLEAR OPERATOR (1)

56
Reactors in operation (2)

1
Reactor under construction

France / 61.4GW

15
reactors

2
Reactors under construction

UK / 8.9GW

2
Reactors in operation

China / Taishan

EDF, GLOBAL EXPERTISE

EDF manages the entire lifecycle of nuclear generation facilities: design, operation and decommissioning

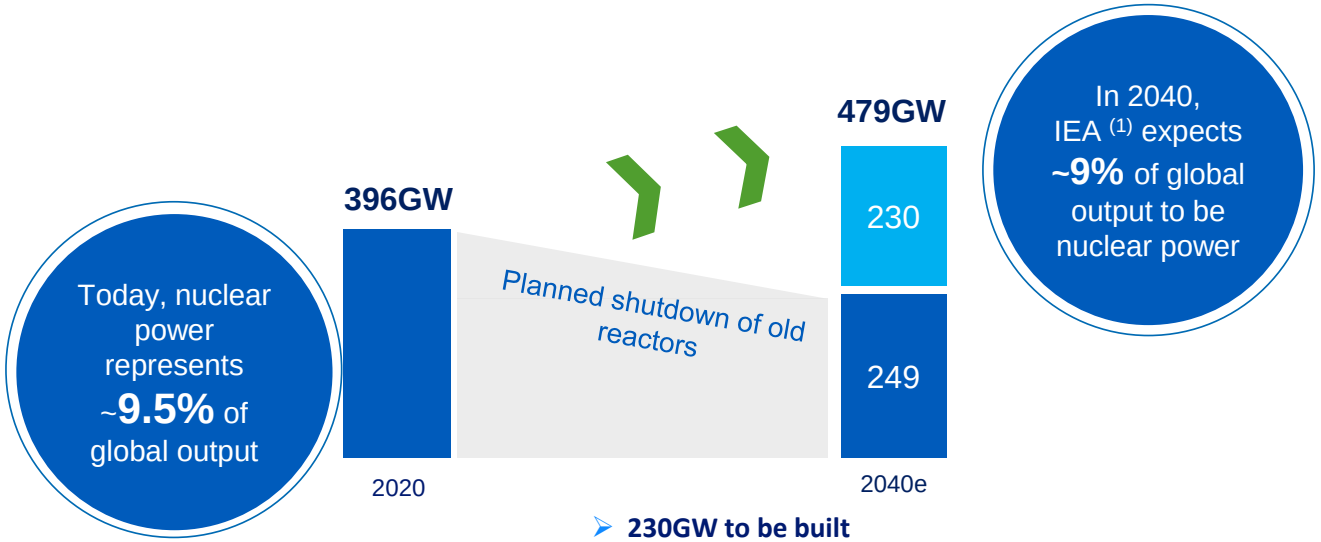
- **EDF is the world's leading nuclear operator** (1) with a standardised nuclear fleet of 56 reactors (2) in France and 15 reactors in Great Britain
- EDF is investing **to continue the operation, safely,** of its reactors beyond 40 years in France a guarantee of the competitiveness of electricity generation
- **Construction of EPR-type reactors** throughout the world (France, China, Great Britain), development of an optimised version of the EPR (EPR 2) for the renewal of the French nuclear fleet by 2030 and development of a type of SMR, Nuward ™, with the CEA, TechnicAtome and NavalGroup (3)
- EDF is present in the French and international markets for the **decommissioning** of nuclear power plants and **radioactive waste treatment** facilities

- **To operate the existing nuclear fleet beyond 40 years**, and building the success of **Tricastin 1 and Bugey 2** - first reactors to successfully pass their fourth ten-year inspection to extend their operating life, EDF plans to invest €49.4billion over the period 2014-2025, as part of the **"Grand Carénage"** programme. The ASN authorised on the 23 February 2021 the lifetime of the 900MW fleet beyond 40 years
- The pooling of EDF and Framatome engineering teams in a joint subsidiary **Edvance** (5), implements the re-engineering of the French nuclear sector, for **new projects in France and abroad**
- **Implementation of the excell Plan, to** strengthen the industrial quality, the skills, and the governance of the large nuclear projects *(for more information, see the Launch of the excell plan p.42)*

(1) AIEA (Agence Internationale de l'Énergie Atomique), Nuclear power reactors in the world, 2017 edition
(2) Shutdown of the 2 Fessenheim reactors respectively on 22 February 2020 and 30 June 2020
(3) See press release of 17 September 2019
(4) Edvance, bringing together EDF's and Framatome's engineering expertise around the nuclear island

UNIQUE POSITIONING IN NUCLEAR NEW-BUILD

WORLD NUCLEAR CAPACITY EXPECTED TO EXPAND OVER THE NEXT QUARTER CENTURY



- **230GW to be built**
- **147GW to be decommissioned**

- The world's primary energy demand is expected to grow by 25% by 2030. This period will be marked by a accelerated growth of the electric share of energy consumption: +4,500TWh by 2030. The electricity share in the world's final energy consumption is expected to reach 24% in 2040, compared to 19% in 2019 (1)
- The share of nuclear power in global output is to stay relatively stable between 2020 and 2040, at 9%

UNIQUE POSITIONING ON GLOBAL NEW NUCLEAR BUILD GROWTH

New Nuclear Development

2 EPR reactors in operation at end-2020

2 China / Taishan

- 1st Unit: start of commercial operation on 13 December 2018
- 2nd Unit: start of commercial operation on 7 September 2019

1 France / Flamanville

- Completion of the 2nd phase of the "hot" tests
- First fuel assemblies arrival in October 2020

2 UK / Hinkley Point

- Lift of the liner ring onto Unit 1 reactor building
- J-0, completion of the nuclear island common raft of Unit 2
- Electricity generation of the first reactor expected in June 2026 (2)

In 2016, EDF also signed two other agreements with CGN concerning development of two nuclear construction projects **in the UK**, Sizewell C and Bradwell B. Discussions are ongoing with the UK Government with regards to the Sizewell C project.

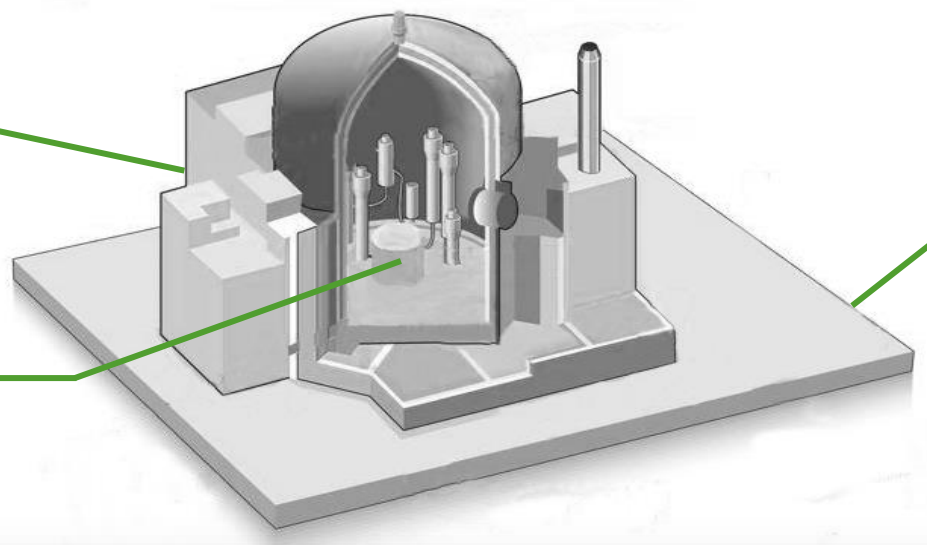
In March 2018, EDF and the Indian company NPCIL signed an industrial agreement relative to the construction by NPCIL of six EPRs at the Jaitapur site **in India**. On 14 December 2018, EDF submitted a complete and packaged technical and commercial offer, with a view to signing a General Framework Agreement

(1) International Energy Agency's reference scenario
(2) See press release of 27 January 2021

NEW NUCLEAR: AN INTEGRATED CHAIN FOR CONQUERING NEW MARKETS

edvance
Nuclear island integrator

framatome
Boiler and fuel supplier



EDF
Project Entity – Architect Integrator

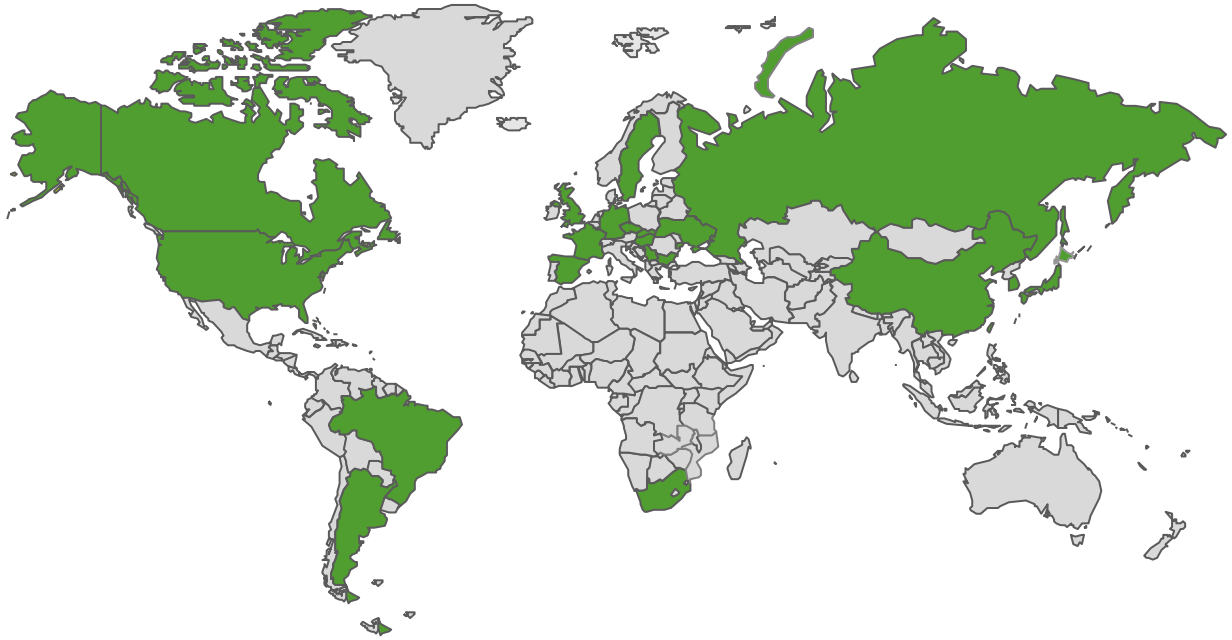
➢ **EDF Group (EDF SA, Framatome, Edvance) drives the French nuclear sector with the following goals:**

- Make project delivery and management more effective by harnessing each company's core strengths and the synergies expected from Framatome's integration into EDF group and the pooling of the EDF and Framatome engineering teams as part of the joint subsidiary Edvance
- Enhance the competitiveness and appeal of our technologies and services through complementary expertises
- Provide development opportunities for the French nuclear sector by ensuring ever greater engineering and business expertise in integrated projects

A promising market and active projects on every continent

FRAMATOME, A MAJOR INTERNATIONAL PLAYER IN THE NUCLEAR INDUSTRY

An international presence



€3.3bn
in sales (1)

€11.8bn
backlog (1)

68
sites in
18
countries (1)

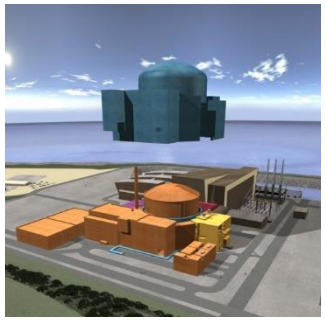
More than
14,000
employees (1)

(1) Data at the end of 2020

Benchmark supplier in the nuclear industry

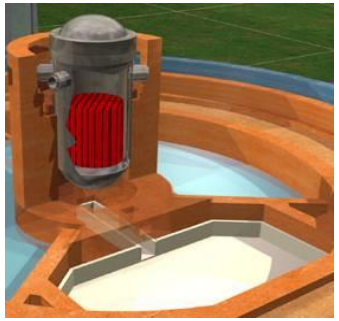
- Designer and supplier of nuclear steam supply system and nuclear equipment, services, fuel and control systems for high levels of safety and performance
- 5 business areas
  - **Installed base:** products and services for the maintenance, modernization and life extension of existing nuclear reactors, those under construction and those being dismantled
  - **Fuel:** development, design, licensing and manufacturing of fuel assemblies and components for power reactors (PWR, VVER, BWR) and research reactors. Development of zirconium products.
  - **Projects and Components:** project management and construction of new boiler and replacement component projects including the manufacturing of heavy and mobile nuclear island components
  - **Instrumentation & Control:** Design and manufacture of instrumentation and control solutions for the safety of the nuclear boiler
  - **Engineering and Design Authority:** Development, design and licensing of boilers and associated services

EPR, A SAFE AND HIGH-PERFORMING REACTOR



Double-wall containment building with a shell able to resist to an airplane crash

4 independent safeguard systems



Core catcher in case of an accident

Safety

- Accident probability reduction (factor 10)
- External hazard protection (shell able to resist an airplane crash)
- Evolutionary design (core catcher)

Performance

- Annual generation boosted by 36%
- Efficiency improvement (+3pts)
- Increased availability (91%)

Radioprotection

- At least 40% cut in collective annual exposure

Environment

- Very important reduction in radioactive waste and gaseous and liquid discharges

FLAMANVILLE 3 EPR (1,650MW) (1/2)

KEY ELEMENTS OF 2020

- Construction progress:
  - ✓ ASN (8 October 2020) and Senior Civil Servant for Defence and Safety approval for the fuel arrival on site. Following this authorisation, the first fuel assemblies were warehoused in the EPR's Fuel Building

Work on the site was suspended during the first lockdown of March 2020, except for equipment surveillance and preservation activities

UPDATING OF SECONDARY CIRCUIT WELDS

In a letter dated 19 June 2019, the French Nuclear Safety Authority (ASN) asked EDF to rework, before commissioning, the eight penetration welds on the Flamanville EPR reactor containment building that deviated from the "break preclusion" reference document. EDF's preferred scenario, approved by the ASN in March 2021, for reworking the penetration welds is the use of remotely-controlled robots, designed to conduct high-precision operations within the pipes in question. This technology has been developed for the fleet in operation.

In addition, the technical investigation into reworking the welds located in the main secondary circuit with quality shortfalls and/or not complying with the requirements of the break preclusion reference document defined by EDF is ongoing (1).

At end-2020, repairs concern some one hundred welds on the Main Secondary Circuit (*Circuit Secondaire Principal*, CSP), on the steam generator water supply lines (ARE), and on the steam generator steam removal lines (VVP). At this stage, repairing the penetration welds is one of the key challenges on the critical pathway. However, repair work on other welds and other activities underway on the worksite are also creating additional risk to the schedule and the target cost on completion for the reactor.

The qualification of the ARE weld repair process is underway, with the goal of works taking place at the end of the second half of 2021. This process is an adaptation of the one used for VVP penetration repairs

(1) The ASN gave its agreement in July 2020 for the repair of a first batch of five welds, then in November for the repair of a second batch of two welds and in April 2021 for the repair of a third batch of 6 welds. The five welds in the first batch were successfully repaired; repairs on the two welds in the second batch are in progress

FLAMANVILLE 3 EPR (1,650MW) (2/2)

CONTROLS ON THE MAIN PRIMARY CIRCUIT

On 2 June 2020, ASN asked EDF to conduct fresh survey inspections of the Main Primary Circuit (*Circuit Primaire Principal,* CPP). EDF has drawn up a sample of welds that are representative of all CPP welds for this re-inspection. Work started on 24 February 2021 and is due to continue through to the second half of 2021.

In a separate development, on 2 March 2021 EDF declared a significant event to ASN. This concerned the incomplete observance of the "break preclusion" referential in respect of the implantation of three nozzles on the main primary circuit (a nozzle allows to connect auxiliary circuits to the primary circuit). EDF and Framatome engineering teams are currently carrying out an instruction to identify, and then propose to ASN, documentary or corrective actions; to date, no impact on the schedule or costs has been identified.

SCHEDULE AND COSTS

On 9 October 2019 (1), the Group submitted a new schedule and a new estimate of construction cost (2) for Flamanville 3 EPR and indicated that provisional schedule for implementing the repairing of the penetration welds, considering the agreement of the ASN, would mean the fuel being loaded at end-2022 and a revised construction cost of €12.4 billion (2). The additional costs with respect to the previous estimate of $€_{2015}$1.5 billion have mostly been booked under "other income and expenses" (3) rather than as investments. For 2020, these additional costs booked as "other income and expenses" amounted to €397 million.

At end-2020, the review of the impact of the first lockdown on the works did not result in any change to the target dates for loading fuel or the construction costs announced in October 2019, but indicated that the project no longer has any margins, either in terms of schedule or in terms of costs. Meeting these targets is dependent on an number of factors and technical issues, including ASN investigations. As works progress, new technical issues emerge and may increase the risk of a postponement. In addition, worksite delays entail a risk of equipment and materials ageing.

Furthermore, other risks may also emerge.

The risk regarding the schedule and cost on completion is therefore very high

(1) See press release of 9 October 2019
(2) In 2015 euros, excluding interim interest (see note 10 of the Groupe financial statements)
(3) IAS 16 paragraph 22 on abnormal costs incurred in connection with assets constructed by the Company. These costs will affect the Group share of net income, without any impact on net income excluding non-recurring operations

HINKLEY POINT C: PROJECT OVERVIEW

Location	Bridgwater, Somerset, UK
Technology	Two UK EPR reactors
Capacity	3.2GW (2 x 1.6GW)
Operating life	60 years+
Responsible Designer	EDF
Main contractors	Framatome, GE, Bouygues/Laing O'Rourke, Alliance of Cavendish Nuclear/Balfour Beatty/Altrad/NG Bailey and Doosan Babcock
Contract for difference	CfD strike price fixed over 35 years: £$_{2012}$92.50/MWh or £$_{2012}$89.50/MWh if a FID is taken for Sizewell C (indexed to British inflation)
Investors' participation	EDF Energy: 66.5% ; CGN: 33.5%

HINKLEY POINT C

MANAGEMENT OF THE PANDEMIC

- Several measures were implemented (social distancing, fast detection of positive cases through mass testing, etc.) to ensure maximum safety for on-site staff and the local community, while keeping the site operational. These measures have been continuously adapted and strengthened since March 2020
- They made it possible to keep the site in operation throughout 2020, but have considerably impacted productivity
- Despite the impact of the health crisis, major progress was made in 2020 with priority given to works on the critical path to construction

PROGRESS ON SITE (18 OUT OF 20 MILESTONES REACHED IN 2020)

- Goal achieved in April – First safety-related pipework installed in the Unit 1 nuclear island
- Goal achieved in June – J0 milestone for Unit 2 (5)
- Goal achieved in December – Manufacturing of the secondary circuit feedwater tank for Unit 1
- Goal achieved in December – Completion of the design of the Unit 1 reactor building internal structures

REMINDER ON KEY DATA

- In the context of Covid-19 pandemic, a detailed review of schedule and costs has been finalised in January 2021 to estimate the impact of the pandemic so far. This review has concluded the following (1):
  - The start of electricity generation from Unit 1 is now expected in June 2026, compared to end-2025 as initially announced in 2016
  - The project completion costs are now estimated in the range of £$_{2015}$ 22 to 23bn (2). As a consequence, the projected rate of return (IRR) for EDF (different from the project IRR) is estimated between 7.1% and 7.2% (3)(4)
  - The risk of COD delay of Units 1 and 2 is maintained at respectively 15 and 9 months. The realisation of this risk, for which the probability is still high, would incur a potential additional cost in the order of £$_{2015}$ 0.7bn. In this case, the IRR for EDF would be reduced by 0.3%
- The agreements between EDF and CGN include a capped compensation mechanism between both shareholders in case of cost overruns or delays. Given the expected level of completion costs, this mechanism is applicable and will be triggered when the times comes. EDF's published IRR takes this compensation mechanism into account. This arrangement is part of a Shareholders' Bilateral agreement signed between EDF and CGN in September 2016 and is subject to a confidentiality clause. The project's financing needs will exceed the shareholders' contractual commitment by the end of construction, which will lead the Group to assume, by the end of construction, a portion of the financing needs that is greater than its share which would lead to difficulties in financing the project in the event of a shareholder misalignment.

The 400-ton liner was successfully lifted into position in Unit 1 reactor building in December

(1) See press release published by EDF on 27 January 2021

(2) Reminder on the costs previously announced in the Press release of 25 September 2019: £$_{2015}$ 21.5 – 22.5bn. Costs net of operational action plans, in 2015 sterling, excluding interim interest and excluding forex effect versus the reference exchange rate for the project of £1 = €1.23. Costs are calculated by deflating estimated costs in nominal terms using the British Construction OPI – Output Price Index – for all new work

(3) In addition to cost and construction schedule targets, EDF's IRR integrates other structural assumptions. In particular, it is sensitive to inflation rate and electricity price scenarios following after the Contract for Difference (CfD) period. A 0.1% variation in inflation has an impact on the IRR of +/- 0.1%; a variation in post CfD electricity prices of £$_{2015}$10/MWh has an impact on the IRR of +/- 0.1%

(4) EDF's provisional IRR is calculated at the exchange rate £1 = €1.13. Previous IRR of 7.6%-7.8% based on an exchange rate of £1 = €1.15

(5) Completion of the nuclear island common raft for Unit 2

SIZEWELL C

KEY ELEMENTS

- Project of new nuclear power station at Sizewell on the Suffolk coast
- Two UK European Pressurised Reactor (EPR) for a total generating capacity of 3.2GW
- Power supply to 6 million homes and electricity generation for 60 years
- Replication strategy from Hinkley Point C, which should enable costs to be driven down thanks to a decrease in construction costs combined with lower risks. The project would be based on EPR technology, capitalising on feedback and experience from Hinkley Point C

GOVERNANCE

- During the development phase preceding the FID (1), EDF's stake is 80% and CGN's is 20%. EDF has planned to pre-finance development up to its share of an initial budget of £458M. The FID is likely to be made by mid-2022. In the event of a postponement of the decision, an agreement should be reached on the financing of the additional costs incurred
- The project is based on the assumption that third party investors will invest a very large majority and EDF plans, at the date of the FID, to become a very minority shareholder, with corresponding limited rights and to deconsolidate the project from the Group's financial statements (including in the calculation of the economic indebtedness by the rating agencies). At this stage, it is not certain that the Group will achieve this objective
- Securing the appropriate risk-sharing mechanism and ultimately the corresponding financing structure ahead of the FID is therefore key for the project, the UK Government and the current shareholders. EDF's ability to make a FID on Sizewell C and to participate in the financing of this project beyond the development phase could depend on the operational control of the Hinkley Point C project, on the existence of an appropriate regulatory and financing framework, and on the sufficient availability of investors and funders interested in the project. To date, none of these conditions are guaranteed
- Failure to obtain the appropriate financing framework and appropriate regulatory approval could lead the Group not to make an investment decision or to make a decision under less than optimal conditions

PROGRESS

- The Development Consent Order (DCO) study would start in April 2021. A decision is expected by April 2022 from the UK's Secretary of State. The development consent order document includes a very ambitious target of savings on construction costs to take into consideration the fact that Sizewell C is a second of a kind
- UK government announcements in Q4 2020 to prepare for carbon neutrality in 2050 with the aim of taking a final investment decision on at least one large scale nuclear power station project by the end of Parliament period (2024)
- The UK government has stated that it will enter talks with EDF on the funding of Sizewell C project as it reviews options for achieving this ambition
- The UK government also stated that it continues to review financing options for new nuclear power, including the regulated asset base (RAB) nuclear financing model
- Moreover, given the scale of the financial challenge, the UK government could consider participating in financing during construction, provided there is a benefit for consumers and taxpayers

(1) Final Investment Decision

JAITAPUR

Through the Jaitapur project, the EDF group has been involved in Franco-Indian civil nuclear cooperation since 2010 within the framework of bilateral agreements signed between France and India. It is directly based on the energy transition objectives of the Indian government, set out during the Paris Conference in 2015, which aim to drive forward the increased share of renewable and nuclear energies in the country. Jaitapur is in Maharashtra state and will be the largest nuclear power site in the world

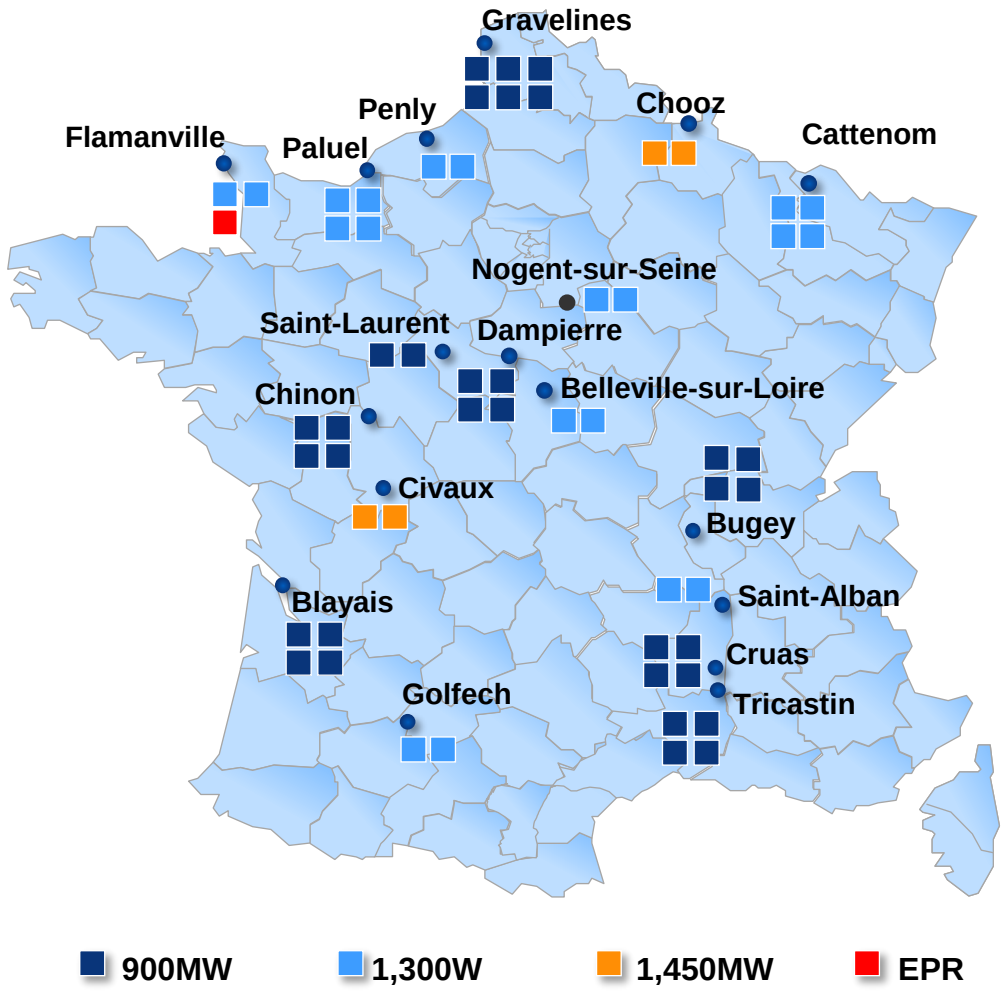
Acting as head of the French nuclear power sector, EDF entered into exclusive negotiations with NPCIL since 2016

- In March 2018, EDF signed a non-binding industrial cooperation agreement with Indian national electricity firm Nuclear Power Corp. of India Ltd. (NPCIL) for the construction of six EPR reactors in Jaitapur. This agreement sets out the industrial plan, the roles and responsibilities of partners, and the next steps in the project
- In this regard, the EDF group and its partners would supply all the studies and equipment for the nuclear island, the conventional island, the auxiliary systems, and the cooling source and galleries
- EDF will not invest in this project

- The NPCIL client will be the overall project manager and integrator in the implementation phase. In its capacity as owner and future operator of the Jaitapur Nuclear Power Station, NPCIL is expected to be responsible for obtaining all authorisations and certifications required in India, and for constructing all six reactors and site infrastructures. EDF and its industrial partners would assist NPCIL during the construction phase
- In accordance with the schedule set out in the IWFA (1), EDF submitted a non-binding complete technical-commercial offer to NPCIL on 14 December 2018. The technical and commercial convergence process continued in 2020 with the customer NPCIL in order to enable EDF to submit its binding and conditional offer in H1 2021
- EDF plans to sign a General Framework Agreement in the months following the submission of the bid, which would kick-start the project's operations

(1) Industrial Way Forward Agreement

EDF NUCLEAR FLEET IN FRANCE



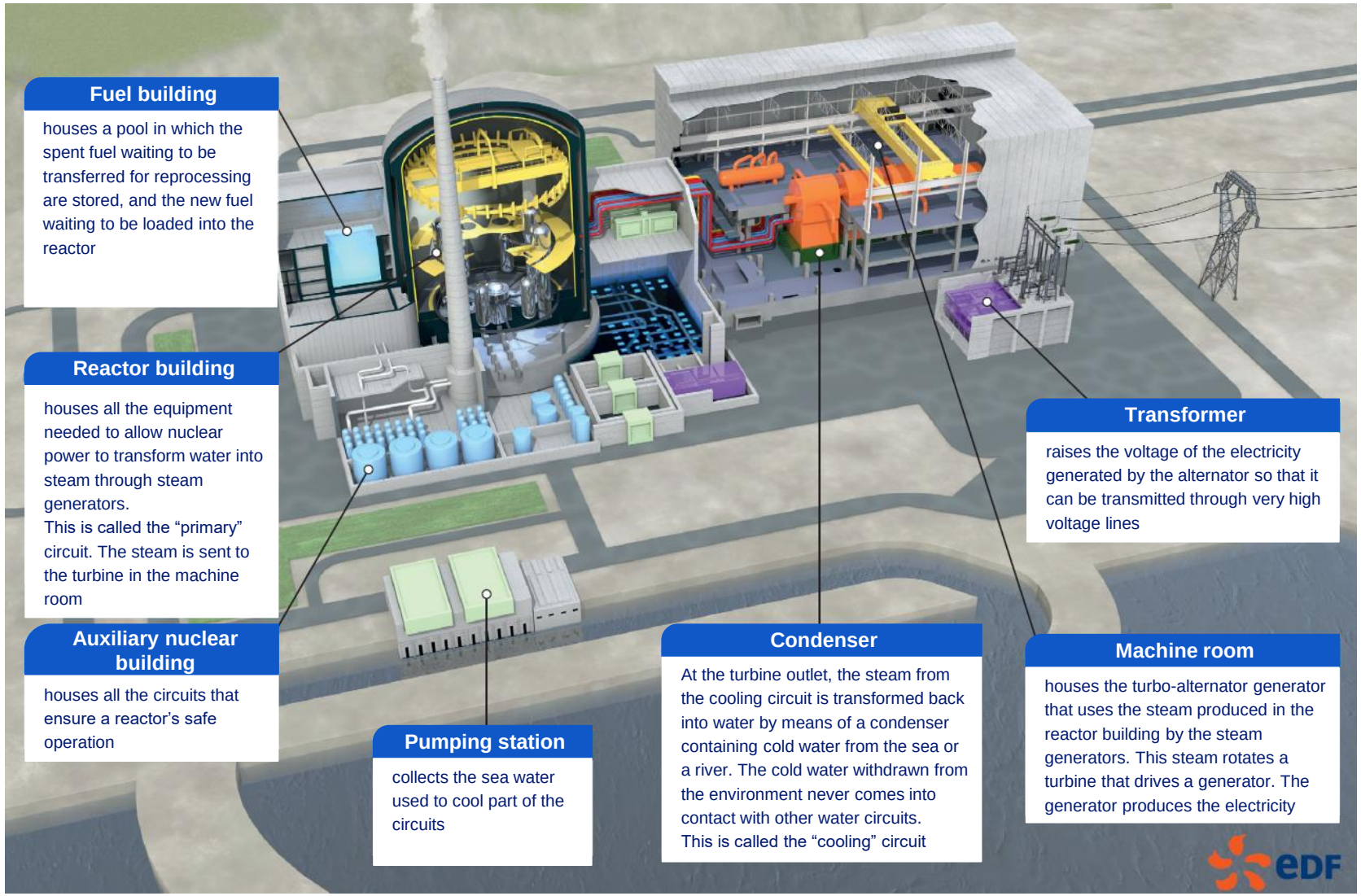
- 67.1% (1) of French power generation in 2020
- 56 reactors (2) in operation with a capacity of 61,370 MW (2)
- 18 sites
- A unique technology, PWR (Pressurised Water Reactors), 3 series:
  - 900MW 32 reactors 29GW with an average age of 38 years
  - 1,300MW 20 reactors 26GW with an average age of 32 years
  - 1,450MW 4 reactors 6GW with an average age of 20 years

Did you know ?

The whole fleet in operation today has been built using the same technology (PWR). This standardisation allows for operational synergies and greater efficiency.
EDF is responsible for the design, building and operation of the reactors and considers the safety of its facilities as an absolute priority.

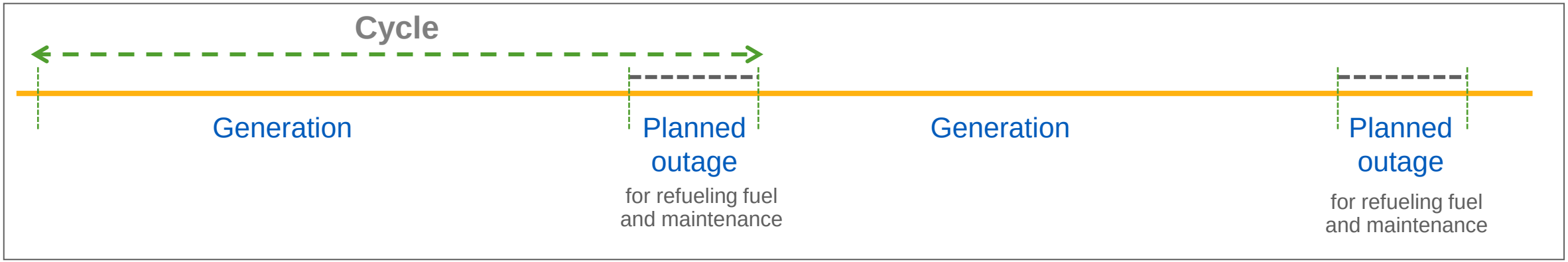
(1) The total French electricity output reached 500.1TWh in 2020 (Bilan électrique 2020 of RTE)
(2) On 31/12/2020. Closing of Fessenheim first reactor on 22 February 2020 (the second one has been closed on 30 June 2020), Cf. press release of September 30th 2019

OPERATING PRINCIPLES OF A PRESSURISED WATER REACTOR (PWR)



Nuclear power plant without air cooling

THE FRENCH NUCLEAR FLEET: OPERATING CYCLE



The outages cycle of nuclear reactors

- 900MW: **28 reactors** 12 months cycle
  4 reactors 18 months cycle
- 1,300MW: **20 reactors** 18 months cycle
- 1,450MW: **4 reactors** 18 months cycle

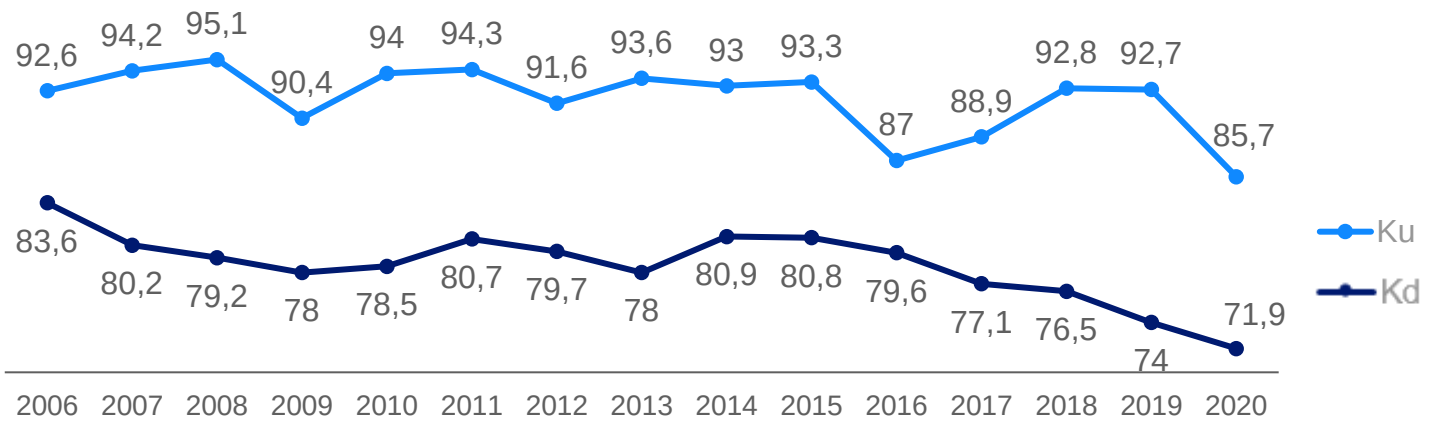
Types of planned outages

- Two types of planned outages are alternated at the end of each generation campaign:
  - Ordinary outage for refueling only (PWR): unloading spent fuel and refueling fresh fuel. **Standard period ~40 days** (1)
  - Partial inspection: refueling and maintenance **Standard period ~85 days** (1), varying according to programs for maintenance work
- 10-year inspections: **standard period ~180 days** (1)**,** varying according to programs for safety upgrades and maintenance work
  - Detailed examination of the main components relating to the safety of the facility (reactor vessel, containment building) and realisation of the upgrades aimed to reinforce the safety level of the facility

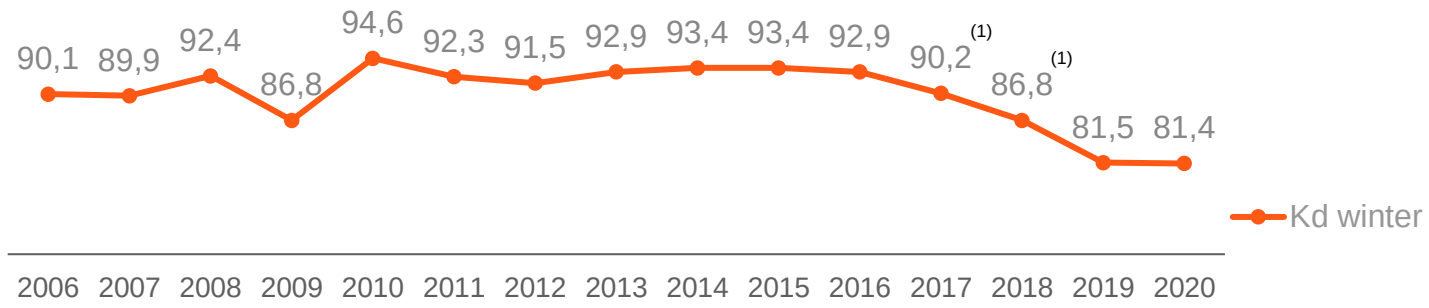
(1) In February 2020, EDF revised upwards its forecast outage durations to take into account the industrial reality observed over the 2016-2019 period

HISTORICAL AVAILABILITY OF THE FRENCH NUCLEAR FLEET

Kd and Ku (%)



Winter Kd (%)*



(*) from 1st December (N) to 14 February (N+1)

(1) Excluding the outages for regulatory reasons such as outages relating to the irregularities found at Creusot factory, that are included in Ku factor

Did you know ?

The **Kd**, or "availability factor", represents the available energy over the maximum theoretical energy corresponding to the maximum capacity all along the year. The winter **Kd** is the availability factor measured between the 1st of December and the 14th of February of the next year, when the consumption reaches its maximum levels.

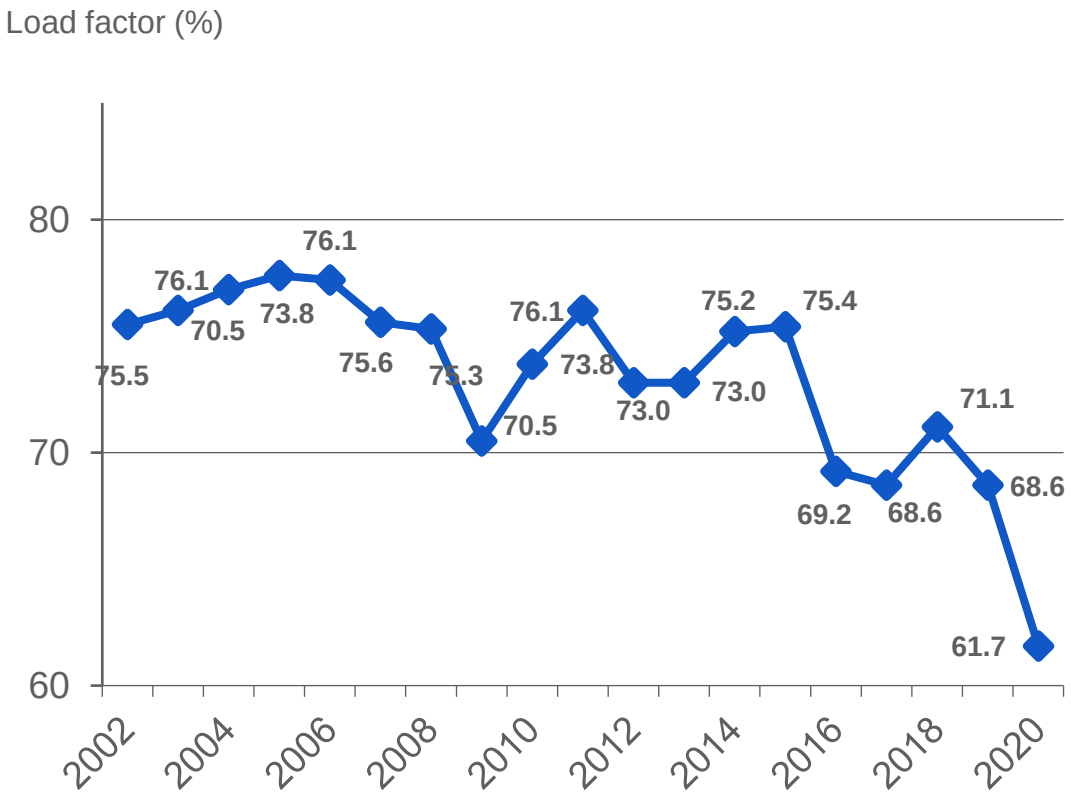
The **Ku**, or "utilisation factor", is the produced energy over the available energy. It reflects environmental, social and regulatory constraints, the consumption profile of customers, the supply of system services and the optimisation

Kp = Kd x Ku

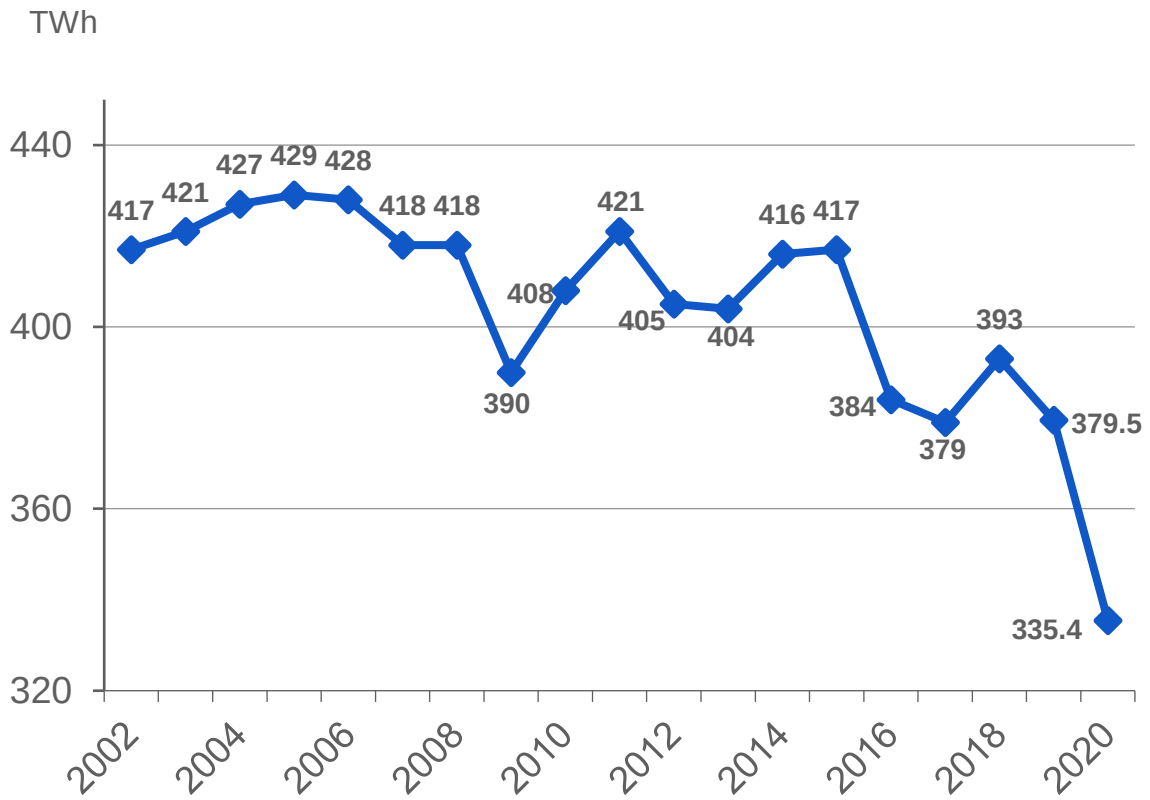
The multiplication of the Kd and the Ku leads to the **Kp**, or "load factor", defined as the generated energy compared to the maximum theoretical energy

CHANGE IN LOAD FACTOR AND NUCLEAR OUTPUT IN FRANCE

Annual load factor of nuclear fleet in France



Net output of PWR (1) fleet in France



(1) Pressurized Water Reactor

EXISTING NUCLEAR FLEET AND "*GRAND CARÉNAGE*" PROGRAMME

A COMPETITIVE ENERGY MIX

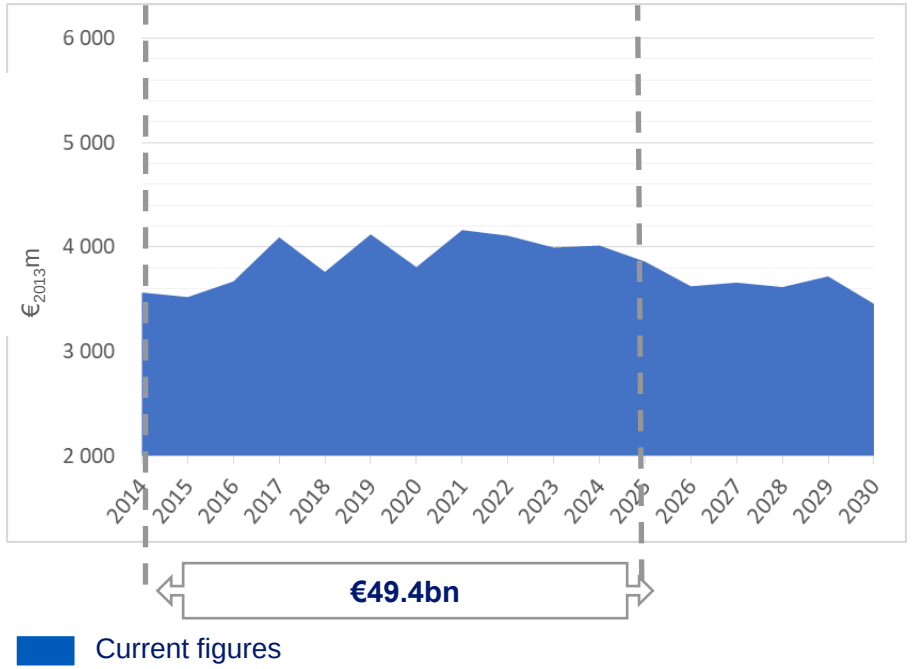
Industrial strategy to continue the operation of plants after 40 years for a competitive energy mix:

- Technical capacity of the plants to operate beyond 40 years supported by international benchmarks for similar technologies
- Extension from 40 to 50 years of the depreciation period of the 900MW nuclear fleet (except Fessenheim) accounted as of 1 January 2016: the Tricastin 1 and Bugey 2 reactors are the first to have successfully completed their 4th ten-year inspection and thereby crossed the 40-year milestone
- Strategy confirmed by the guidelines given by multi-year energy programme (PPE)

GRAND CARÉNAGE PROGRAMME

- Programme integrating the totality of the investments in the existing nuclear fleet over the 2014-2025 period, and beyond
- In 2015, initial investment programme on the 2014-2025 period was estimated at €$_{2013}$55bn (1) and was optimised and revised to €$_{2013}$45bn (€48.2bn in current euros) in 2018

- In October 2020 (2), it was adjusted at €49.4bn in current euros on the same 2014-2025 period. The new cost estimate accounts mainly for the first findings on the works to be conducted in the context of the ongoing review process related to the fourth periodic safety review of the Group's 900MW reactors which was concluded with the ASN positive decision rendered on 23 February 2021. The review focuses on studies, modification work and initially unplanned additional equipment seeking to improve safety levels. Moreover, the estimate factors in the expected increase in the duration of planned maintenance outages including ten-year and partial inspections. The costing also draws on prior year experience as well as the impact of the health crisis as estimated in 2020, applied to 2020-2022 (3).



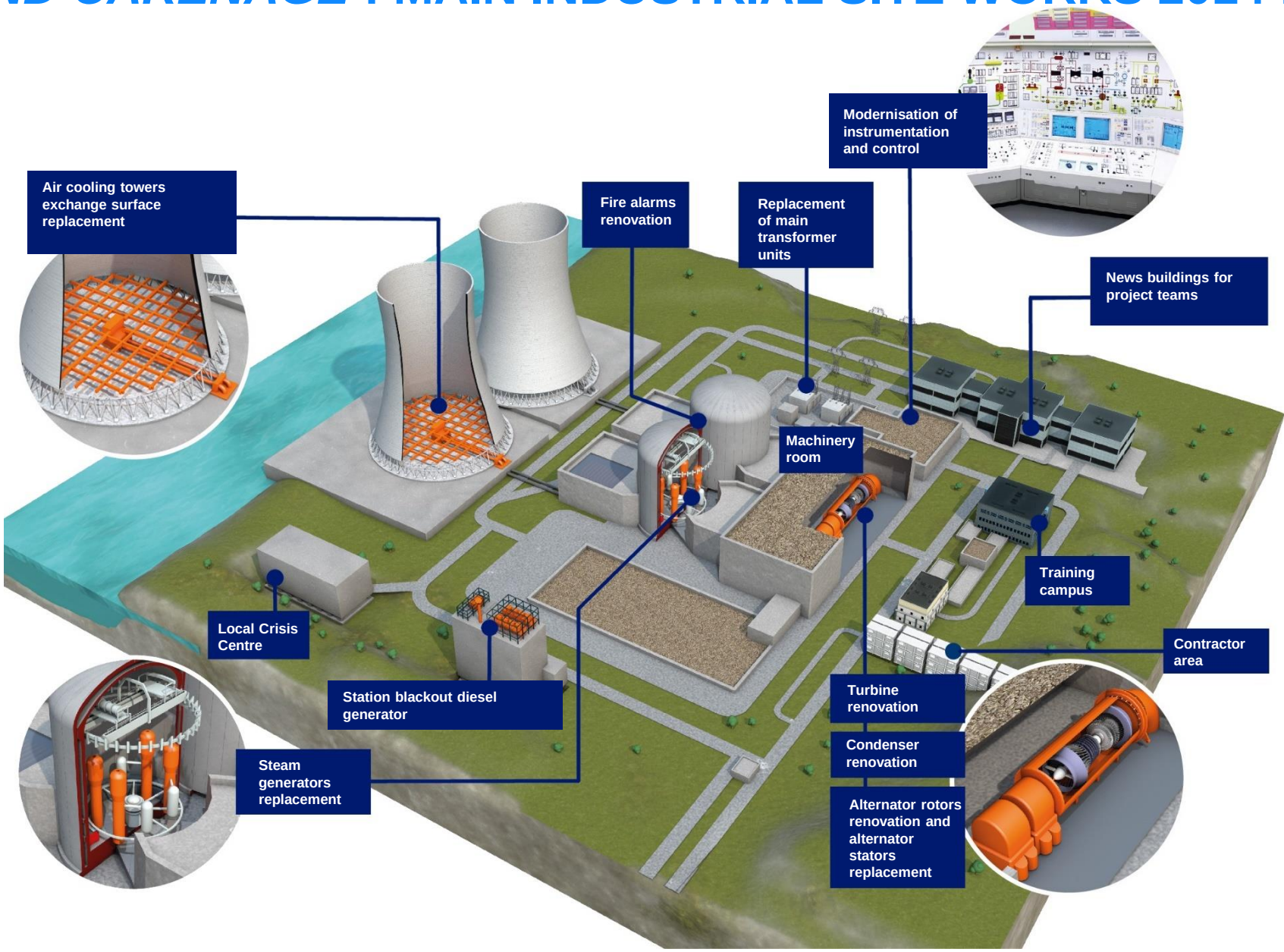
(1) The figures presented by the French *Cour des Comptes* in its report of 10 February 2016 cover a longer time horizon, up to 2030, and included, beyond the investment, operating and maintenance expenses. Both assessments are consistent, as stated by the *Cour des Comptes* in its report. Indeed, among the overall estimates calculated by the *Cour des Comptes* and amounting to close to €$_{2013}$100 billion for the 2014-2030 period, the investment - expenditures estimated at €$_{2013}$74.73 billion should be distinguished from the operating expenditures estimated at €$_{2013}$25.16 billion.

Within the €$_{2013}$74.73 billion of investment expenses between 2014 and 2030, €$_{2013}$55 billion are dedicated to the 2014-2025 period, which allows the two estimates established by the EDF group and the *Cour des Comptes* to be connected

(2) See press release of the 29 October 2020

(3) This does not include any subsequent lockdown or other restrictive measures affecting activity.

GRAND CARÉNAGE : MAIN INDUSTRIAL SITE WORKS 2014-2025



- As a major industrial program, Grand carénage incorporates all the investments made by EDF on its French nuclear fleet. It is now made up of 22 investment projects (of which 20 are active today)
- Each project covers the design and construction phases of all EDF nuclear power plants

SOME LARGE PROJECTS IN 2020

Fourth 10-year inspection of the 900 series

The fourth 10-year inspection of the Tricastin 1 lead unit was concluded on 23 December 2019, with the coupling of the plant to the network.

Third 10-year inspection of the 1300 series

10-yearly inspection (batch A): Nogent 2 was recoupled on 6 August 2020.

The 10-yearly inspections of Flamanville and Belleville 1 are under way.

Regular inspection (batch B): Saint-Alban 1 was recoupled on 16 August 2020, Cattenom 2 on 20 September 2020 and Paluel 3 on 25 October 2020.

Second 10-year inspection of the N4 series

Transmission of the first report on the conclusions of the review of the second ten-yearly inspection of N4 concerning the Chooz B2 unit on 20 January 2020.

Chooz B1 was recoupled on 19 August 2020, the satisfactory modification procedure having demonstrated the proper integration of feedback from Chooz B2.

Cooling source

The partial renovation of the heat exchanger of the air cooler at Cruas 3 was completed on 12 May 2020

The screening drum at Bugey 2 was replaced and qualified on 26 June 2020 despite issues relating to COVID-19, asbestos and civil engineering anchors, and the fall of a 90 kg pinion.

Emergency diesel

55 EBDs are in operation out of 56.

The 56th, Paluel 1 has been commissioned in February 2021.

Local crisis centre

The Internal Emergency Plan at Flamanville became effective on 1 October 2020, and the Local Crisis Centre is now the new crisis management premises.

Nuclear island components

1,300MWe industrial commissioning of the “Limited wear of thermal sleeves” at Nogent 2. Framatome has developed a solution that consists in adding a “compensator” at the top of the guide tubes, which avoids the replacement of the sleeve.

Termination of work on extracting heating rods from the pressuriser on the 900 series.

Civil engineering

The composite surface project at Belleville 1 was completed on 13 October 2020.

5,300 m2 of work was carried out on the upper surface. The containment building pressure test was successfully completed in November 2020.

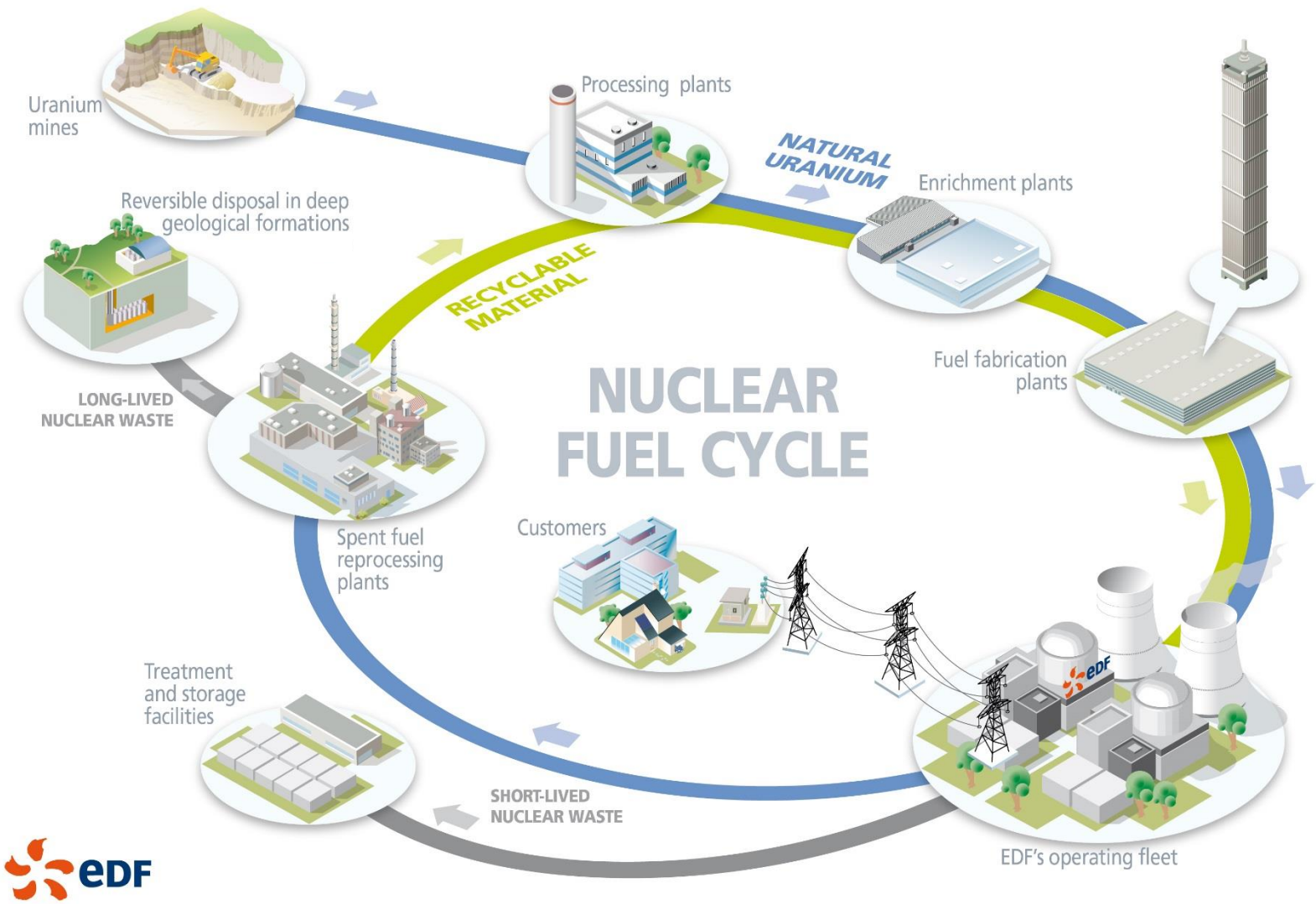
Safety Project

Integration of the Safety Project into the *Grand Carénage* programme on 1 July 2020.

10-YEAR INSPECTIONS OF THE NUCLEAR FLEET

NB: forecast data on 15 January 2021

STAGES OF THE NUCLEAR FUEL CYCLE IN FRANCE



THE PLANT DISMANTLING CYCLE: 3 KEY STEPS

Final shutdown

- The first phase consists in unloading the fuel and draining all systems (after which 99.9% of the on-site radioactivity has been eliminated), followed by decommissioning (dismantling of decommissioned non-nuclear installations)

Dismantling excluding the reactor building

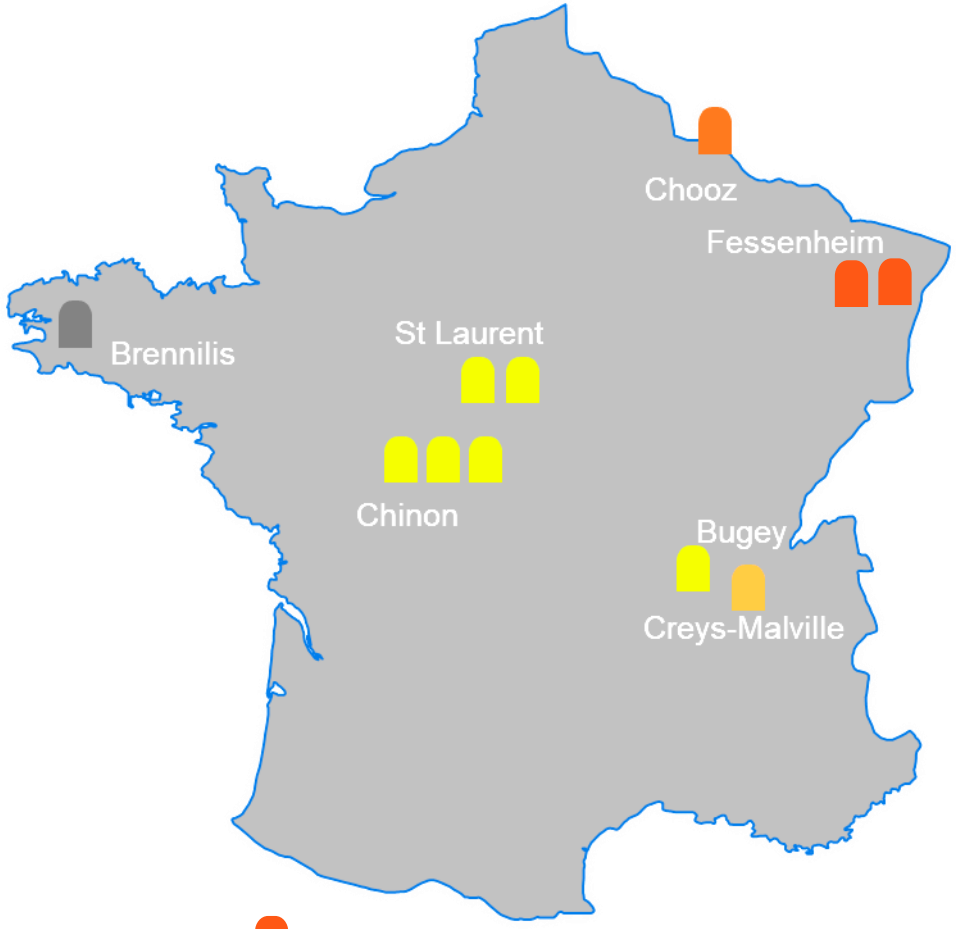
- The second phase starts after the obtaining of the dismantling decree and consists in dismantling all equipment and buildings (with the exception of the reactor building), as well as the packing and removing of all waste to appropriate storage facilities

Dismantling of the reactor building

- This final phase corresponds to dismantling of the reactor vessel, the demolition of the buildings and the soil remediation

The duration of a Pressurised Water Reactor (PWR) dismantling is 15 years starting from the dismantling decree.
The duration of the operations may vary for other technologies (NUGG, LWR, FNR) according to the complexity of works that have to be realised

DISMANTLING: A NORMAL STEP IN THE LIFE OF A PLANT



3 periods in the life of a plant

Construction - Operation - Dismantling

As the operator of the nuclear plants, EDF is in charge of these three steps and is currently dismantling first generation nuclear plants (shut down up to the 1990s) and prepares the dismantling of the two reactors of Fessenheim.

11	4	7
REACTORS UNDER DISMANTLING IN FRANCE	DIFFERENT TECHNOLOGIES	INDUSTRIAL SITES

The nuclear plants currently in operation are all "Pressurized Water Reactors" (PWR)

PREPARATION OF THE DECOMMISSIONING OF THE 2 FESSENHEIM REACTORS

Commissioned in 1977, the 2 reactors of FESSENHEIM were shut down in February and June 2020. In December 2020, EDF submitted its decommissioning file including an environmental impact assessment and a safety demonstration. The dismantling decree that authorised the start of dismantling work of the plant is expected in **2025**, after the ASN investigation**.**

2019	• Declaration by EDF of the ultimate shut down
2020	• Shut down of the 2 reactors of Fessenheim
2020-2025	• Preliminary works for the dismantling, defueling
2025-2034	• Electro-mechanical dismantling, start of the decontamination
2034-2039	• End of the decontamination, conventional demolition of the buildings, remediation of soils
2040	• End of the dismantling, decommissioning of the Basic Nuclear Facility

RADIOACTIVE WASTE MANAGEMENT (1/2)

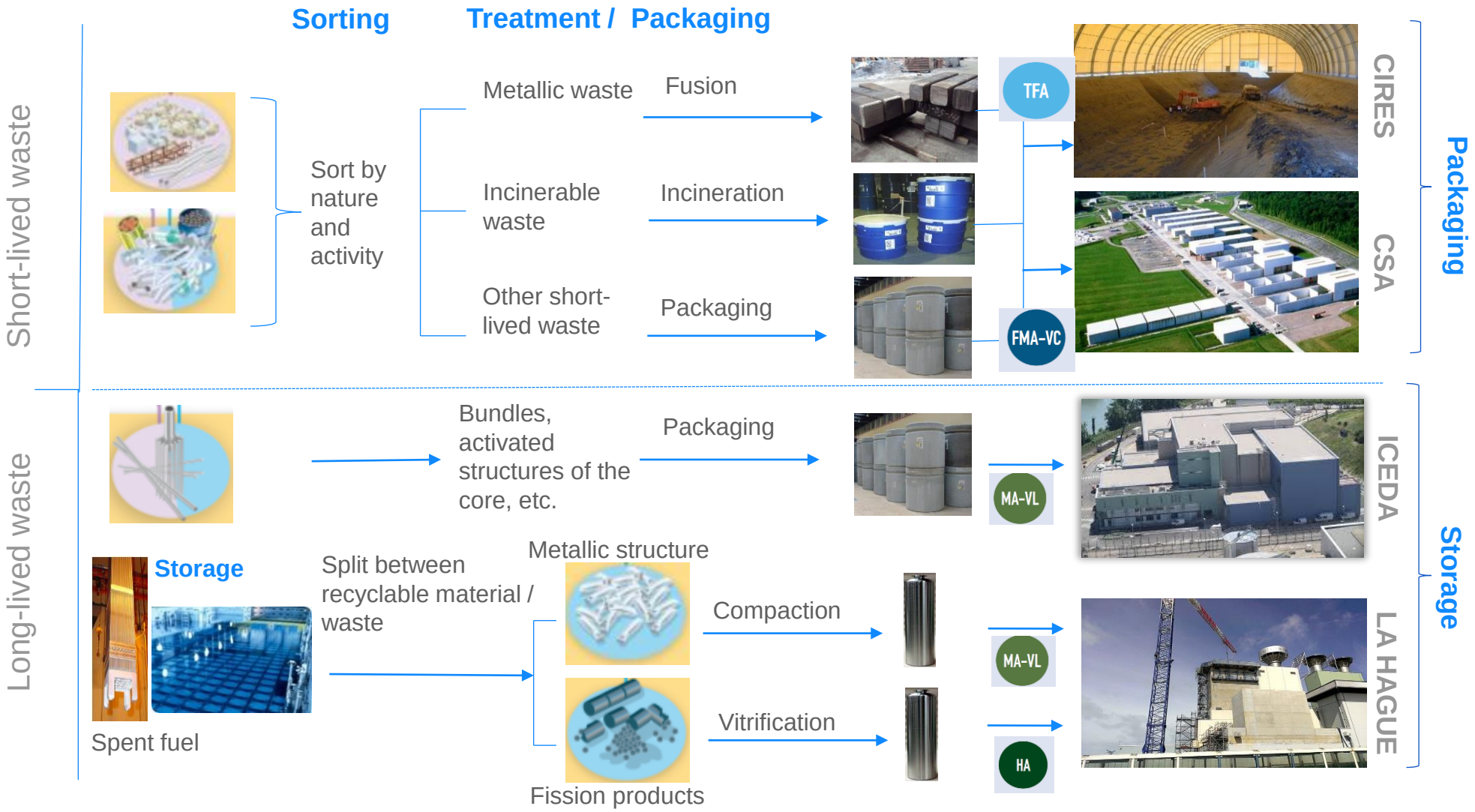
	TYPE OF WASTE	EXAMPLE	POSITION/STORAGE
SHORT-LIVED WASTE Their radioactivity is halved over a period of 31 years or below 90% of waste 0.1% of radioactivity	**VERY-LOW-LEVEL WASTE (VLLW)**	Waste from the decommissioning of nuclear installations (concrete, scrap, piping, etc.)	On the surface at the Morvilliers storage centre managed by ANDRA (1)
	SHORT-LIVED INTERMEDIATE- AND LOW-LEVEL WASTE (SL-ILW and -LLW)	Waste from maintenance work (tools, clothes, dismantled parts, etc.); waste from the processing of liquid and gaseous effluents of operating plants; other deconstruction waste	On the surface at the Soulaines storage centre, managed by ANDRA (1)
LONG-LIVED WASTE Their radioactivity is halved over a period of more than 31 years 10% of waste 99.9% of radioactivity	**LONG-LIVED, LOW-LEVEL WASTE (LL-LLW)**	They essentially are graphite waste from the dismantling of first-generation plants	Warehousing at the production site pending the construction of a storage centre. Project under review.
	LONG-LIVED INTERMEDIATE-LEVEL WASTE (LL-ILW)	Metallic structures of the assemblies separated during the processing of spent fuel, other dismantling waste	Once the fuel is removed, the metallic structures enclosing the fuel are warehoused at the plant in The Hague. Operational and dismantling waste close to the core have been sent to ICEDA since October 2020 (commissioning), pending the geological storage industrial centre (Cigéo)(2)
	HIGH-LEVEL WASTE (HLW)	Non-recyclable material from the processing of spent fuel	Warehousing at the Orano site in The Hague pending the geological storage industrial centre (Cigéo)(2).

(1) National Agency for Radioactive Waste Management (Agence Nationale pour la Gestion des Déchets Radioactifs)

(2) For more information about Cigéo, please see p.103

RADIOACTIVE WASTE MANAGEMENT (2/2)

100% OF RADIOACTIVE WASTE IS MANAGED AT OPERATIONAL AND SAFE STRUCTURES



CIGÉO – A DEEP-STORAGE INDUSTRIAL CENTRE

- French deep-storage project for Long-lived Intermediate-level and High-level radioactive waste, generated mainly by the existing French nuclear facilities (nuclear power industry, research, defense, etc.). Such waste represents 3% of the total volume of radioactive waste and is alone responsible for 99% of waste radioactivity
- The French law of 28 June 2006 tasked the National Agency for Radioactive Waste Management (ANDRA) with designing, constructing and operating Cigéo
- The authorisation request of the Cigéo creation will be submitted in 2021. It plans the site to be located in eastern France, on the border between the Meuse and Haute-Marne, near the ANDRA underground laboratory (Bure)

The principle of reversible storage in deep geological layers

- Principle adopted by the French Law of 28 June 2006 as the only safe solution for the long-term management of this type of waste, without shifting the burden onto future generations. This choice was preceded by 15 years of research, assessments (including the National Review Board and the Nuclear Safety Authority) and a public debate
- The principle of reversibility for the entire duration of the operation (at least 100 years) in order to adapt Cigéo to possible changes

Secure and robust facilities that are adaptable on two levels

- On the surface: facilities to receive and prepare waste shipments, and to undertake excavation work and the progressive construction of underground structures
- Below ground: galleries located about 500 meters deep in a stable and impermeable layer of argillaceous rock, chosen for its containment properties over very long periods
- Scalable architecture of the underground facilities during operation, depending on feedback and available technologies

Cigéo facilities on the surface

Cigéo underground galleries modelisation

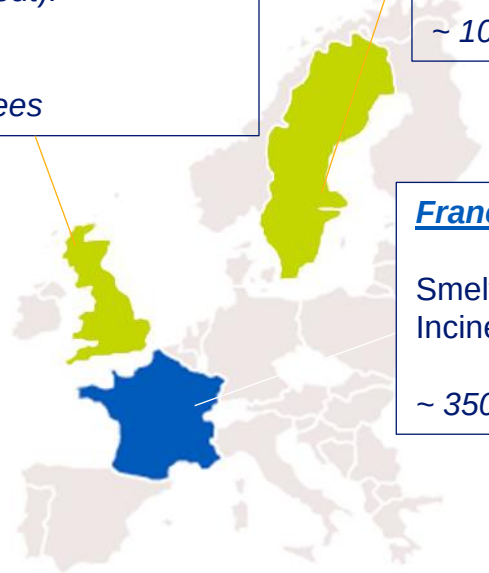
CYCLIFE: A GROUP OF SUBSIDIARIES DEDICATED TO DECOMMISSIONING AND RADIOACTIVE WASTE TREATMENT OFFERINGS

- The Group of subsidiaries **"Cyclife"** was created to centralise the Group's activities on nuclear decommissioning and waste treatment for the French and international market

cyclife Holding GROUPE EDF

- cyclife France GROUPE EDF
- cyclife Sweden GROUPE EDF
- cyclife UK GROUPE EDF
- cyclife engineering GROUPE EDF
- GRAPHITECH
- cyclife digital solutions GROUPE EDF

EDF radioactive waste treatment facilities (1)



UK

Metal waste treatment (clean up, cutout): 3,000t/year

~ 110 employees

Sweden

Smelting: 5,000t/year
Incineration: 500t/year
Pyrolysis: 50t/year

~ 100 employees

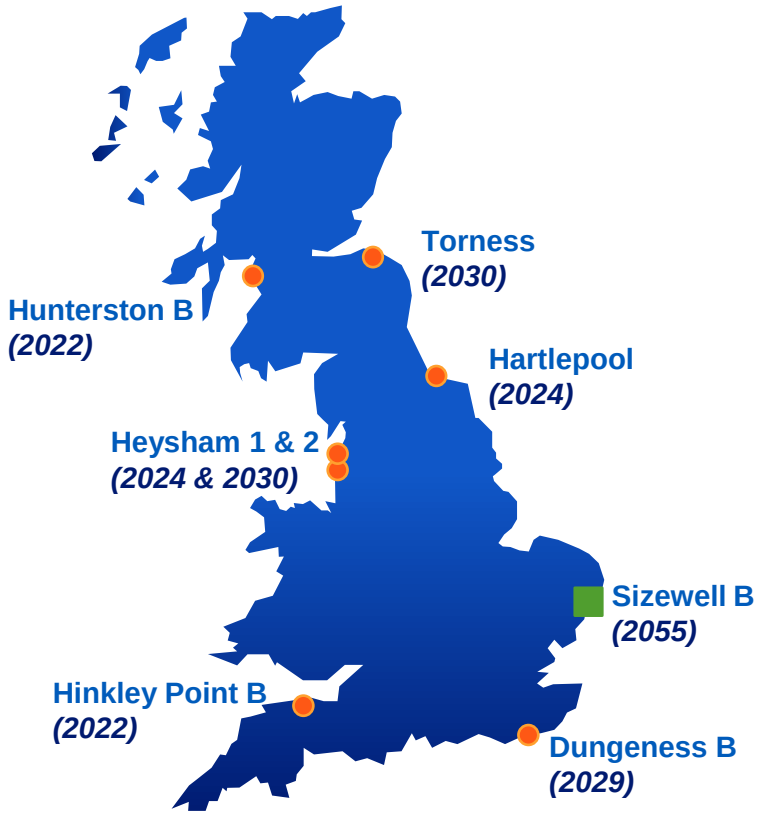
France

Smelting: 3,500t/year
Incineration: 6,000t/year

~ 350 employees

(1) Maximum authorised capacities

EDF ENERGY NUCLEAR FLEET



- Advanced Gas-cooled Reactor (AGR)
- Pressurised Water Reactor (PWR)

(2022) Planned closure date

HIGHLIGHTS

- Generated approximately 15% of UK output in 2020 (1)
- 8 nuclear power stations
- 15 reactors in operation
- 2 technologies (AGR and PWR), with total capacity of 8.9GW

Did you know ?

An AGR differs in many respects from a PWR. Whereas the AGR design is unique to the UK, the PWR design is the most common reactor type in the world.

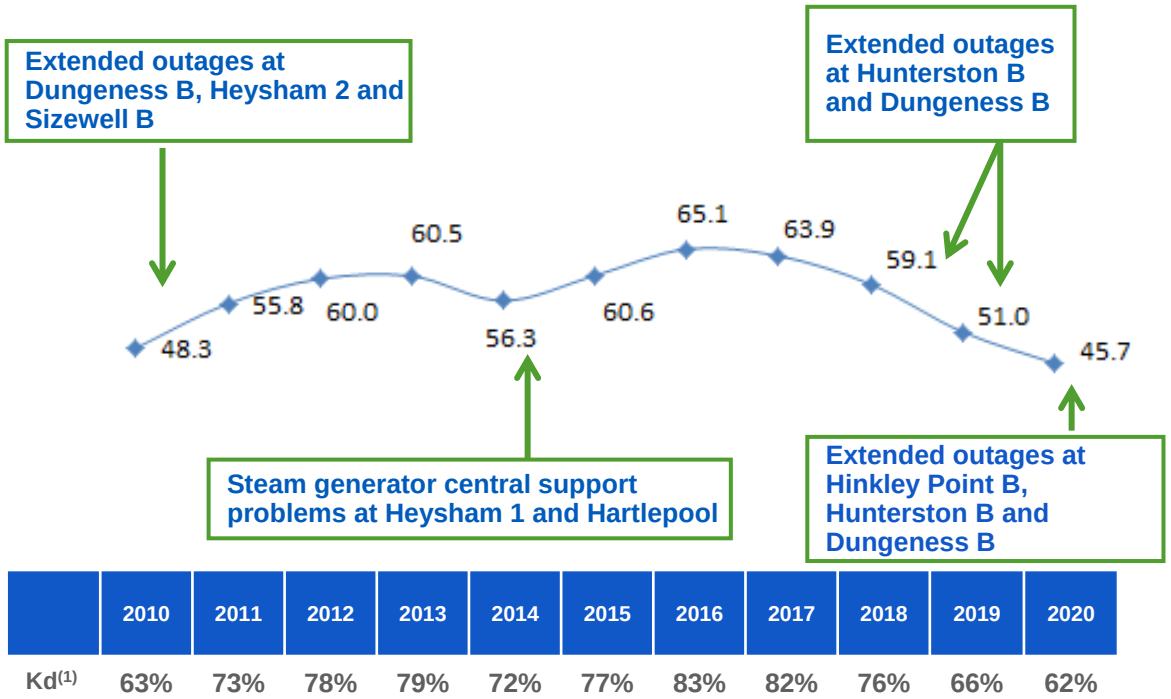
An AGR has a graphite moderator helping to control the reaction. The reactor is encased in a steel-lined pre-stressed concrete pressure vessel several meters thick which also acts as a biological shield. The steam generator in which water is heated is situated inside the pressure vessel. An AGR uses enriched uranium dioxide encased in a stainless steel pin for its fuel and CO_2 as its coolant.

A PWR is contained inside a steel pressure vessel filled with pressurised water which acts as the moderator and coolant. The fuel used is enriched uranium dioxide and is contained in zirconium alloy tubes.

(1) 100% EDF Energy Nuclear Generation output out of total UK Generation as per BEIS data

KEY CHARACTERISTICS OF EDF ENERGY'S NUCLEAR FLEET

Output (TWh)



	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Kd(1)	63%	73%	78%	79%	72%	77%	83%	82%	76%	66%	62%

Key points

➢ A nuclear fleet with an average age of 36(2) years

- Total power generation capacity of 8.9GW
- An output of 45.7TWh in 2020

➢ Nuclear safety is the over-riding priority

- Adequacy of each station confirmed at each statutory outage by the Office for Nuclear Regulation (ONR) that has to provide consent to restart after each outage
- Periodic safety review (PSR) undertaken every 10 years, also requiring ONR acceptance

➢ Expected lifetime

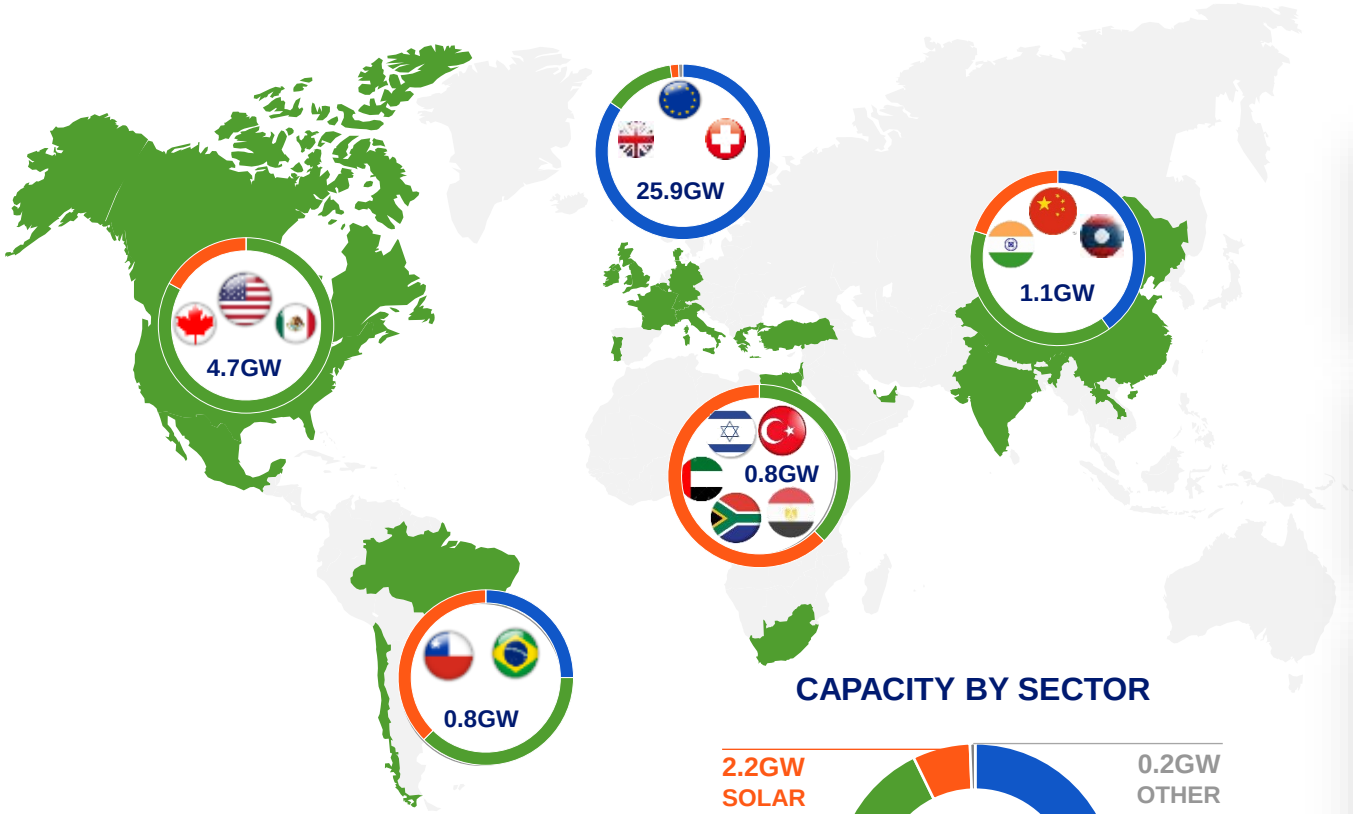
- It is anticipated that Sizewell B PWR(3) can be extended by 20 years
- The decision has been taken to end power generation at Hunterston B and Hinkley Point B no later than 7 January 2022 and 15 July 2022 respectively

(1) Unit Capability factor
(2) Average age of AGRs is 38 years and age of SZB is 26 years
(3) For more information about EDF Energy's nuclear fleet and about the AGR and PWR technologies, see p. 105

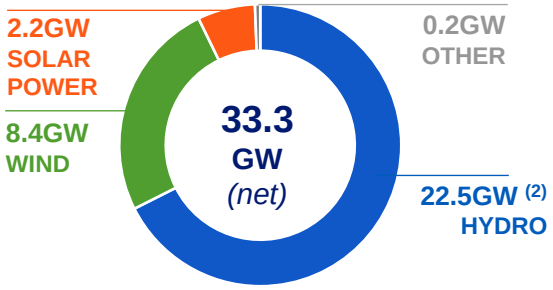
EDF GROUP MAIN BUSINESSES

EDF, THE EUROPEAN LEADER IN RENEWABLE ENERGIES

NET INSTALLED CAPACITY: 33.3GW (1)



CAPACITY BY SECTOR



A DIVERSIFIED MIX WITH 33.3GW IN OPERATION

- **22.5GW of hydropower**
- **10.6W of wind and solar power**
- **0.2GW others** (biomass, geothermy, …)

HYDROPOWER

- **Leading European producer** from hydropower
- More than **400 production sites** worldwide

A GLOBAL LEADER IN WIND AND SOLAR ENERGY

- **2.5GW gross** commissioned in 2020
- **8.0GW** currently under construction (2.5GW in onshore wind power, 1.6GW in offshore wind power, 3.9GW in solar power)

(1) Installed capacity shown as net, corresponding to the consolidated data based on EDF's participation in Group companies, including investments in affiliates and joint ventures
(2) Including sea energy: 0.24GW

RENEWABLE OUTPUT

Output from fully consolidated entities

(in TWh)	2019		2020	
Hydro (1)	44.2	*70.8 %*	49.4	*72 %*
Wind	16.0	*25.6 %*	17.2	*25 %*
Solar	1.0	*1.6 %*	1.2	*2 %*
Biomass	1.3	*2.1 %*	1.0	*1 %*
Total electricity Group	**62.5**	***100 %***	**68.7**	***100 %***
Total heat Group	**8.5**	***100 %***	**8.6**	***100 %***

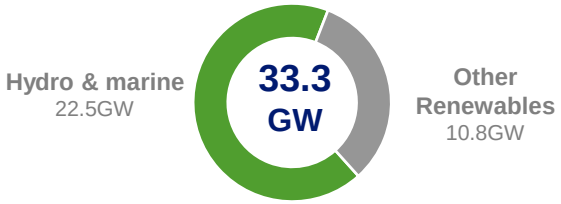
NB: The values correspond to the expression to the first decimal or integer closest to the sum of the precise values, taking into account rounding

(1) Hydro output includes tidal energy for 532GWh in 2019 and 540GWh in 2020. Hydro output after deductions of pumped volumes is 37.9TWh in 2019 and 43.2TWh in 2020

FRENCH HYDROPOWER – A DIVERSIFIED & FLEXIBLE FLEET

THE MAIN SOURCE OF RENEWABLE POWER IN FRANCE

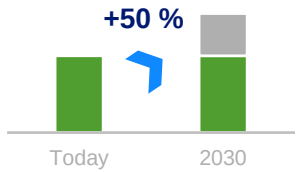
Net Renewable installed capacity (1) of the Group in France



- **432 plants** in France (mainland), average age of **75 years**
- Covering the different kinds of hydropower facilities:
  - Run-of-river / Pondage water / Reservoirs (lake-supplied) / Pumped storage / Tidal power

UNIQUE STORAGE VALUE, CRITICAL FOR THE ELECTRICITY SYSTEM

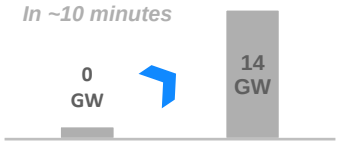
Estimated weekly flexibility needs (2)



- **Hydropower France provides ~14GW of storage**
  - Reservoirs: 8.1GW
  - Pumped storage: 5.0GW
    - Including the 1.8GW Grand'Maison facility, the largest European storage asset
- **Only sizeable & cost competitive** electricity storage technology

AMONG THE MOST FLEXIBLE AND REACTIVE GENERATION MEANS

Response time to reach full capacity of dispatchable units



- **Allows quick adjustments to within-day fluctuations in the supply-demand balance**
  - Consumption peaks
  - Non forecasted loss of generation capacity
- Hydropower is the **most significant contributor to ancillary services**

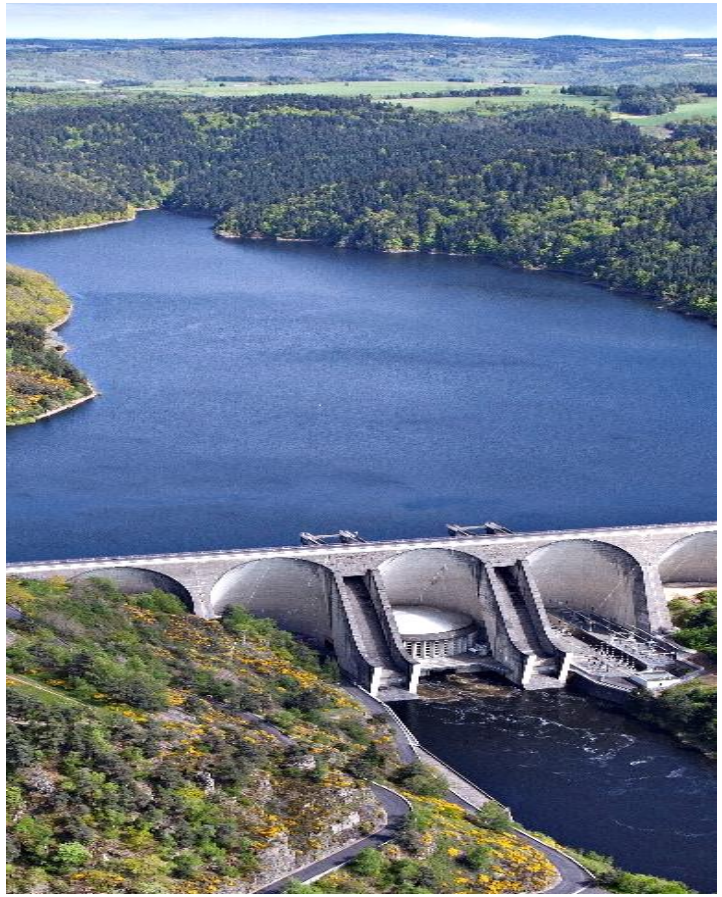
(1) Power generation capacity, in proportion of the share the EDF group held in each asset

(2) Source: RTE (*Bilan prévisionnel*)

DIFFERENT TYPES OF HYDROPOWER FACILITIES

EDF disposes of numerous hydropower facilities, able to meet base-load and peak demand, designed to optimise the use of water resources

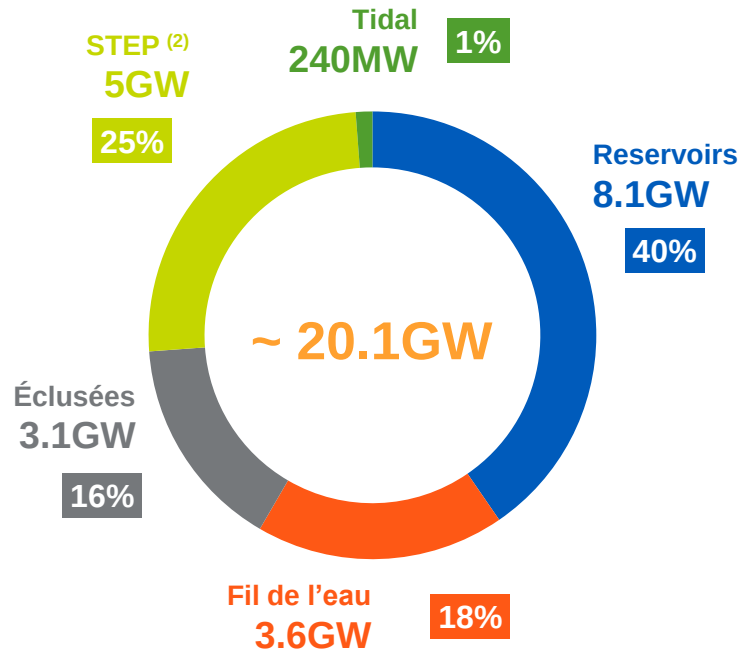
- Run-of-river
  - No storage capacity
  - Energy generation depends solely on the current water condition
- Pondage water
  - Average sized water reserve, intended for an occasional use during the week or the day
  - Generation is concentrated at peak hours
- Reservoirs
  - Large storage capacity
  - Influence on downstream power plants (located in mountain ranges) which calls for a management of valley stations
- Pumped storage (STEP)
  - Massive energy storage
  - Water is pumped from a downstream reservoir to an upstream one to create a reserve available during peak-low hours
  - Water is then turbined from the upstream reservoir to the downstream one during periods of high demand
- Tidal power
  - The tidal power plant of the Rance river uses the tides and sea currents to power the turbines and thus generate electricity (renewable)



Aerial view of the dam and of the Grandval hydro power plant (GEH Lot Truyère)

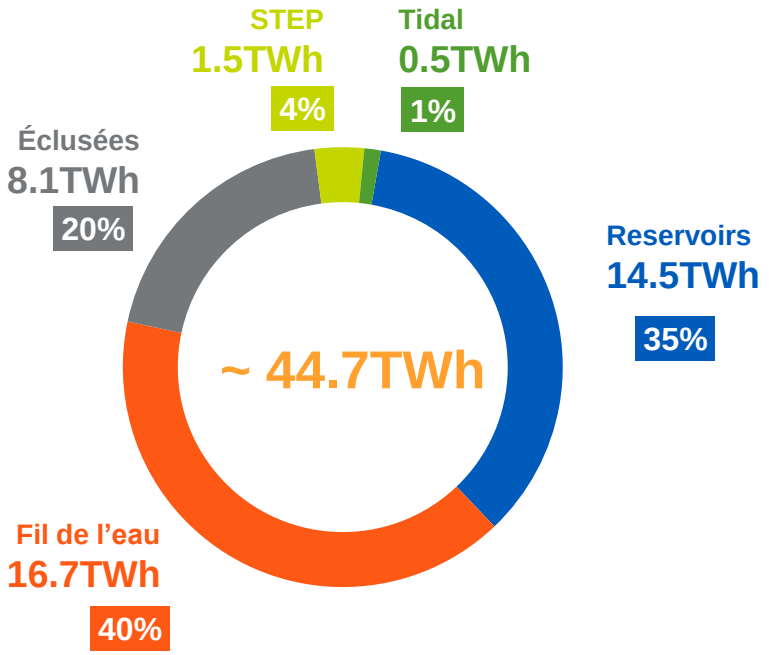
EDF'S HYDROPOWER FLEET IN MAINLAND FRANCE

Turbine capacity
in GW



Circa 23% of the overall EDF's generation capacity in France

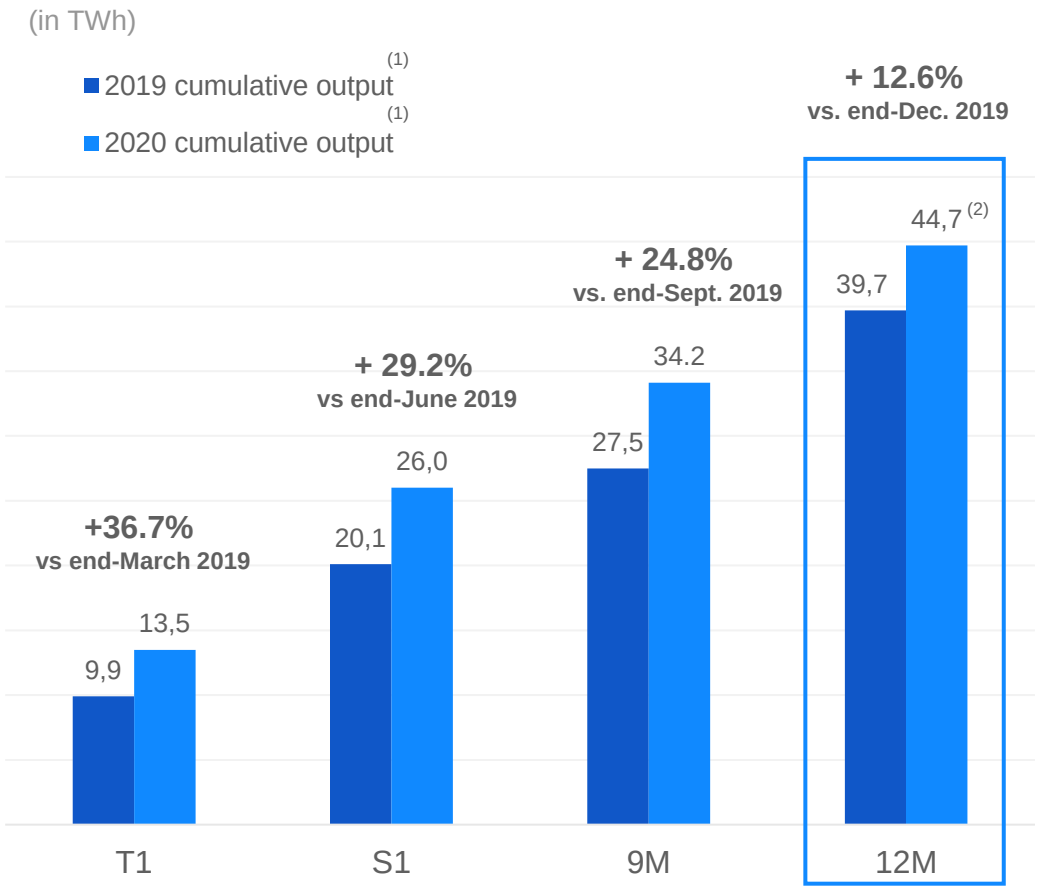
Average producible
in 50 years (1)

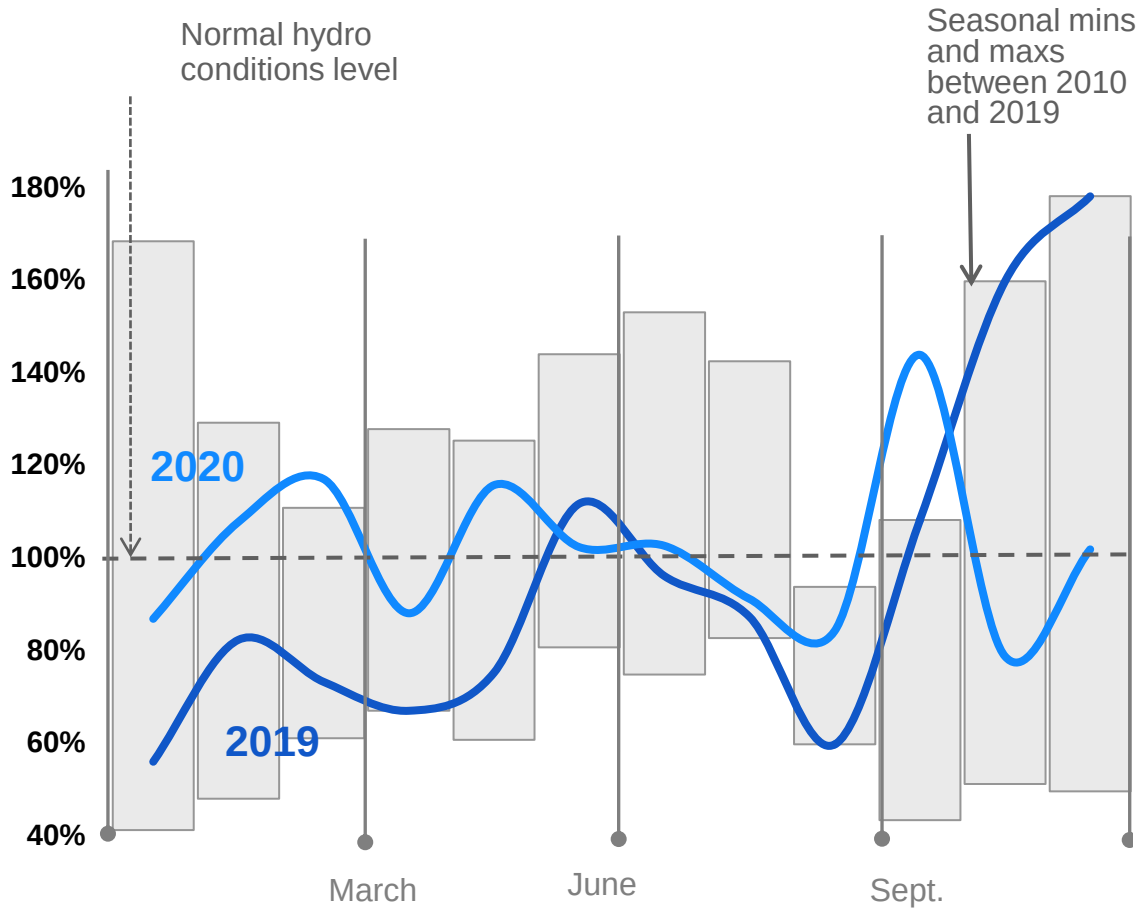


Circa 11.5% of the average EDF output in France

(1) The average production over 50 years has been re-evaluated on the basis of observed climate change
(2) Only gravity capacity is counted in the STEPs; pumped energy is not taken into account

FRANCE HYDRO OUTPUT IN MAINLAND FRANCE





1989: 30.5TWh lowest potential hydropower capacity in the last 30 years
1994: 53.2TWh highest potential hydropower capacity in the last 30 years

- **Hydraulic conditions at normal level**
- **Hydraulic reservoirs filling rate in France at 73% at the end of 2020: +10.2 points vs historical average**

(1) Hydropower excluding electrical activities on French islands, before deduction of pumped volume consumption.
(2) Production after deduction of pumped volume consumption: 33.4TWh in 2019, and 38.5TWh in 2020

DEVELOP HYDROPOWER IN FRANCE AND ABROAD

EDF operates 80% of mainland France's hydropower potential and 66% of hydroelectricity energy output. EDF is committed to developing its hydropower activities in order to increase their power and availability. EDF's expertise is also recognised internationally

➢ FRANCE

- **Romanche-Gavet (Isère): increase in hydro output**

  Launched in the Romanche valley, near Grenoble, the Romanche-Gavet site consisted of replacing six old plants with a single 93MW underground plant that is more efficient and better integrated into its environment. The new plant will ultimately generate 560GWh/year, with 30% more generation than the six old plants. The new hydropower development at Romanche-Gavet is also more respectful of the environment and restores ecological continuity over more than 10 km. The commissioning was in October 2020

- **La Coche (Savoie): commissioning of the most powerful generation unit in France**

  In 2019, EDF commissioned the most powerful generation unit in France at La Coche: 240MW. This generation unit has increased the capacity of the existing facility by 20% and produces additional 100GWh each year

➢ INTERNATIONAL

- **Sinop (Brazil):** commissioning of a 402MW dam end-2019
- **Nachtigal (Cameroun)** : construction of a 420MW dam (see p115)

NACHTIGAL HYDROELECTRIC DAM IN CAMEROON (1)

MAIN ASPECTS OF THE PROJECT

- Design, construction and operation for a period of 35 years of a 420MW run-of-the-river hydropower plant on the Sanaga river near the Nachtigal Falls
- Construction of a 50-km power transmission line
- Project will be owned and operated by NHPC (Nachtigal Hydro Power Company), currently comprising EDF (40%) (2), IFC (3) (20%), the Republic of Cameroon (15%), Africa50 (15%) and STOA (10%)
- Expected annual power generation of 3TWh, i.e. 30% of the country's electricity generation output
- Substantial economic benefits: up to 1,500 direct jobs during peak construction periods, of which 65% will be locally sourced within a 65km radius of the construction site. The project will generate dozens of permanent jobs

FINANCING STRUCTURE

- Project's expected total cost: €1.2 billion
- Shareholders' equity to fund a quarter of the project, lenders to fund the rest
- The lender group coordinated by IFC includes 11 Development Finance Institutions (DFI) and 4 local commercial banks (4)
- The largest hydropower project ever built in Africa through non-recourse project finance debt

TIMELINE

- Final and binding agreements signed on 8 November 2018, financial closing on 24 December 2018
- Start of construction in March 2019, 37% of civil engineering achieved at 31/12/2020
- Covid-19 impact: slowdown of the construction between April and June. Delay in commissioning currently estimated at 4.5 months
- Operational commissioning expected in early 2024

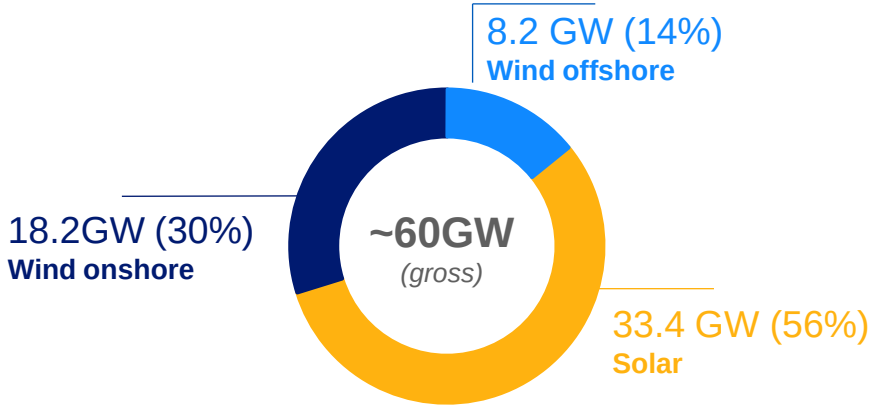
420MW run-of-the-river hydropower plant

(1) Refer to the press release published by EDF on 8 November 2018
(2) Equity consolidation method
(3) IFC (International Finance Corporation) – member of the World Bank Group
(4) Including: AfDB, IFC, CDC, European DFI coordinated by Proparco (AFD, DEG and FMO), EIB, OFID,EAIF, AFC. Local banks include: Attijari/SCB, BICEC, SG Cameroun and Standard Chartered

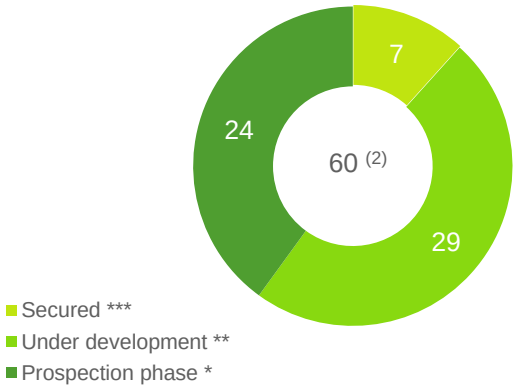
A PORTFOLIO OF WIND AND SOLAR PROJECTS OF ~ 60GW (1)

A PROJECT PORTFOLIO THAT IS **DIVERSIFIED GEOGRAPHICALLY…**

… AND **BALANCED BETWEEN WIND AND SOLAR**

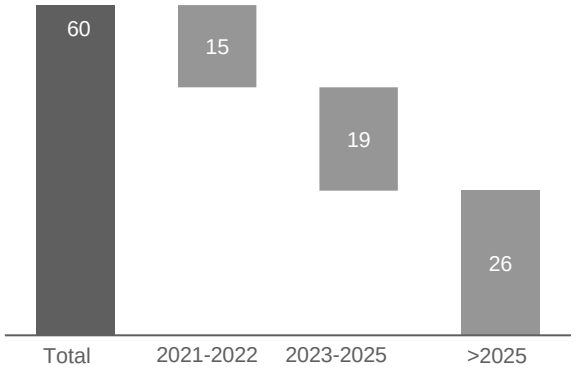


Portfolio of projects (2) in GW



* Start of land identification and preliminary studies
** Sufficient land securisation and start of technical studies
*** Securing a power purchase agreement (following a call for tenders, auction, OTC negotiation)

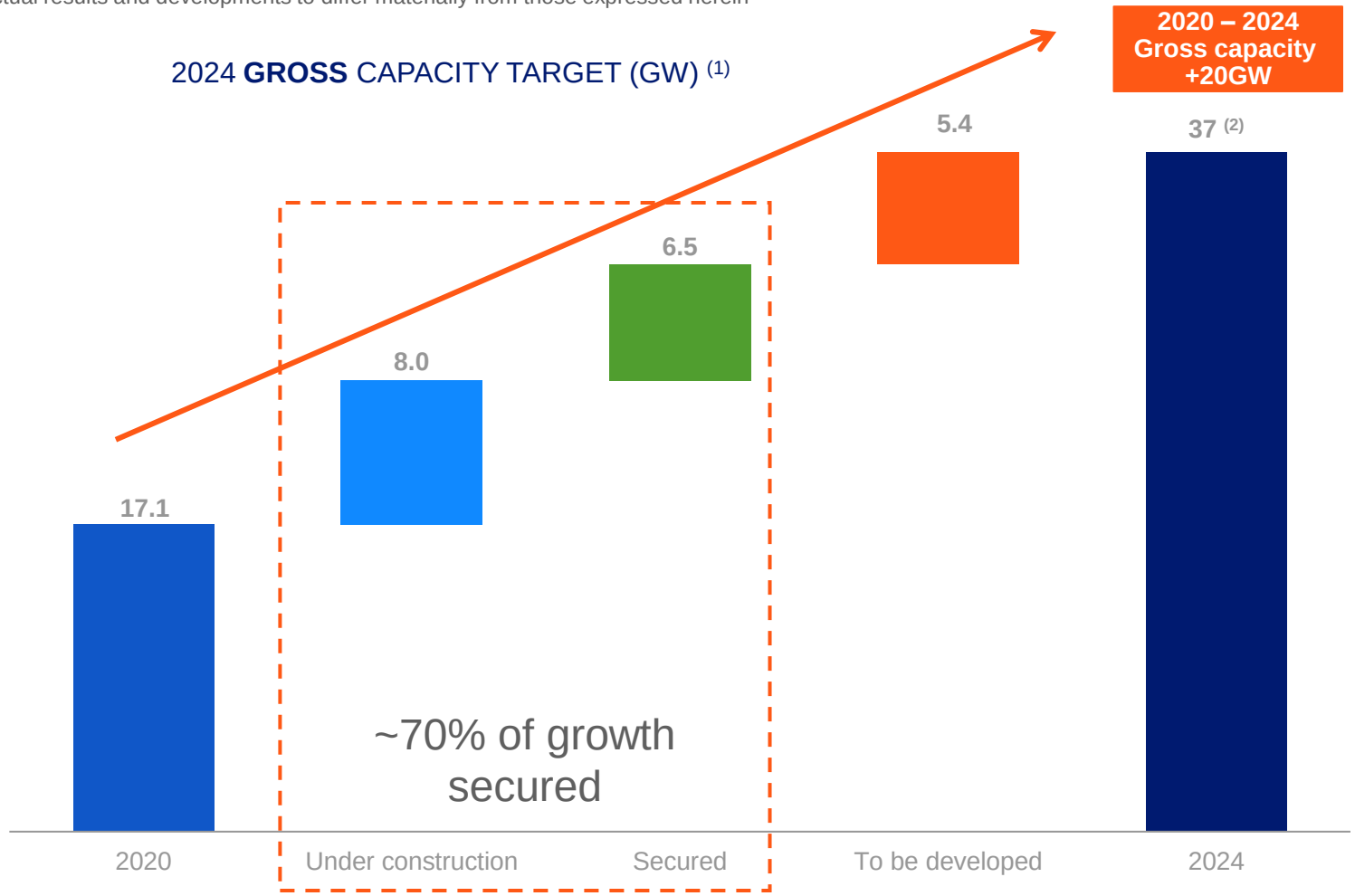
Pipeline breakdown by date of start of construction in GW (3)



(1) Pipeline excluding capacities under construction. Gross data corresponding to 100% of the capacity of the projects concerned.
(2) All the projects in prospection phase included in the pipeline, starting 2020
(3) 2020 portfolio start of construction potential, not probability-based

STRONG GROWTH EXPECTED THANKS TO MORE THAN 10GW OF PROJECTS ALREADY SECURED

NB: This financial communication contains forward-looking data based on targets. Although management believes that this data is reasonable, investors are cautioned that such data is subject to numerous risks and uncertainties that could cause actual results and developments to differ materially from those expressed herein



NB: situation at end-2020

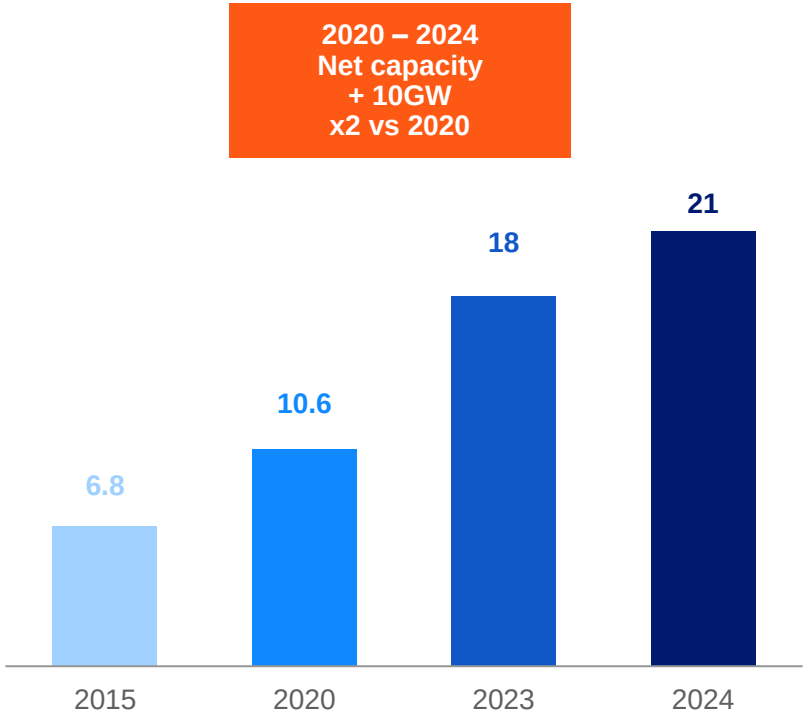
(1) Solar and wind. Gross data corresponding to 100% of the capacity of the projects concerned

(2) As a reminder, the 2023 objective fixed in 2019 was 32.4GW, raised in 2020 at 33.5GW

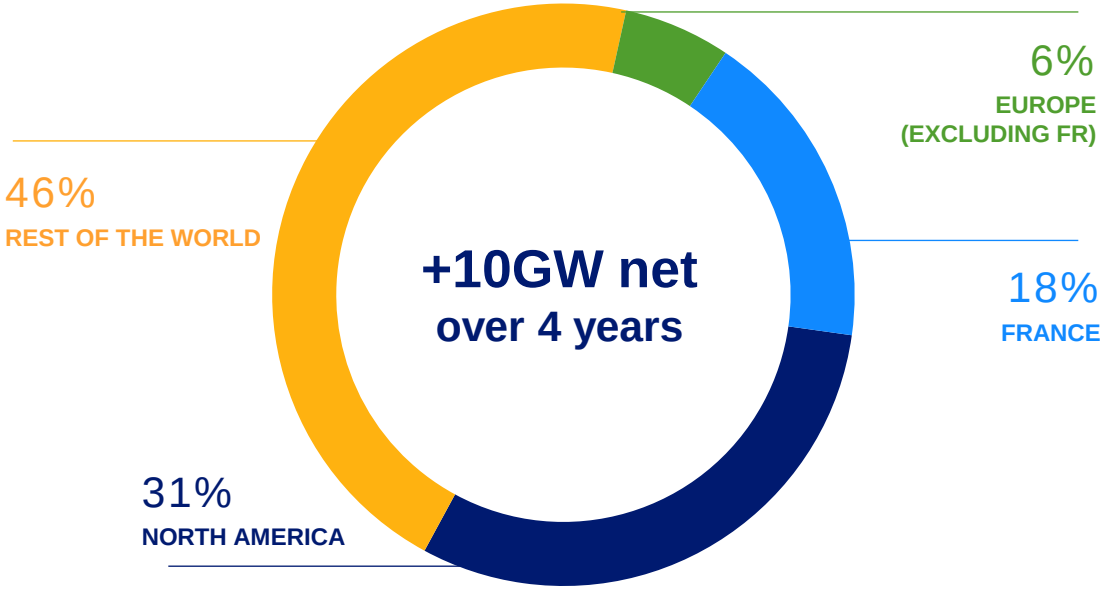
BALANCED ACCELERATION ACROSS GEOGRAPHIES AND TECHNOLOGIES

NB: This financial communication contains forward-looking data based on targets. Although management believes that this data is reasonable, investors are cautioned that such data is subject to numerous risks and uncertainties that could cause actual results and developments to differ materially from those expressed herein

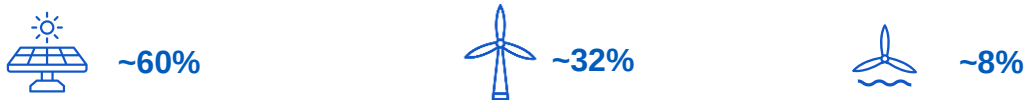
2024 **NET** INSTALLED CAPACITY TARGET (GW) (1)



2020-2024 **NET** ADDITIONAL CAPACITY BY GEOGRAPHIC REGION (GW) (1)



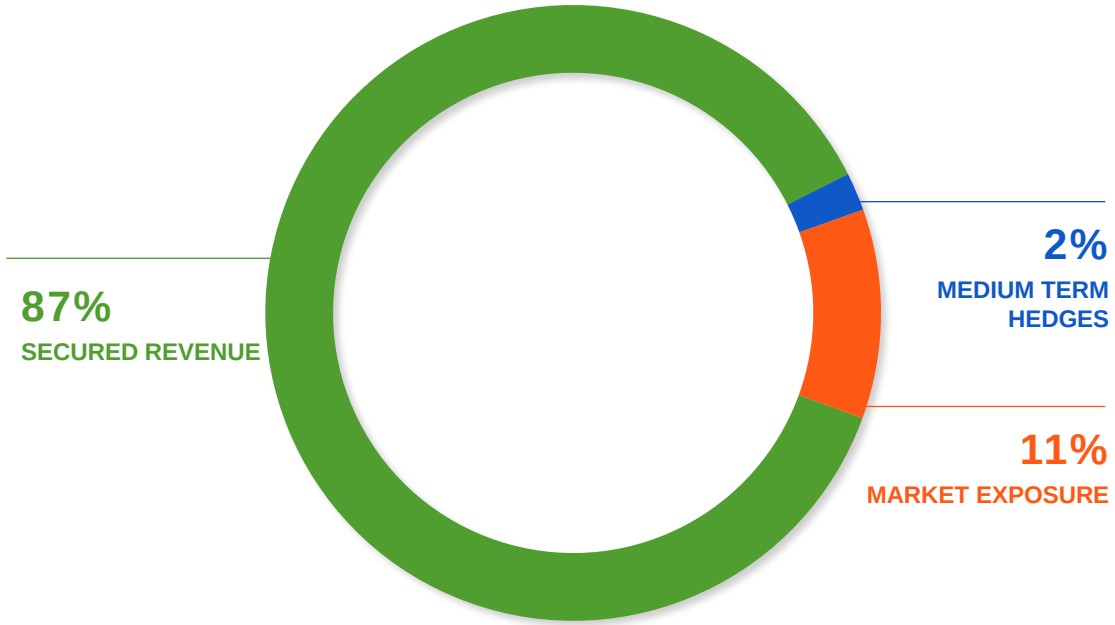
2020-2024 **NET** ADDITIONAL CAPACITY BY TECHNOLOGY



(1) Solar and wind. Installed capacity shown as net, corresponding to the consolidated data based on EDF's participation in Group companies, including investments in affiliates and joint ventures

REVENUE SECURED BY LONG-TERM CONTRACTS

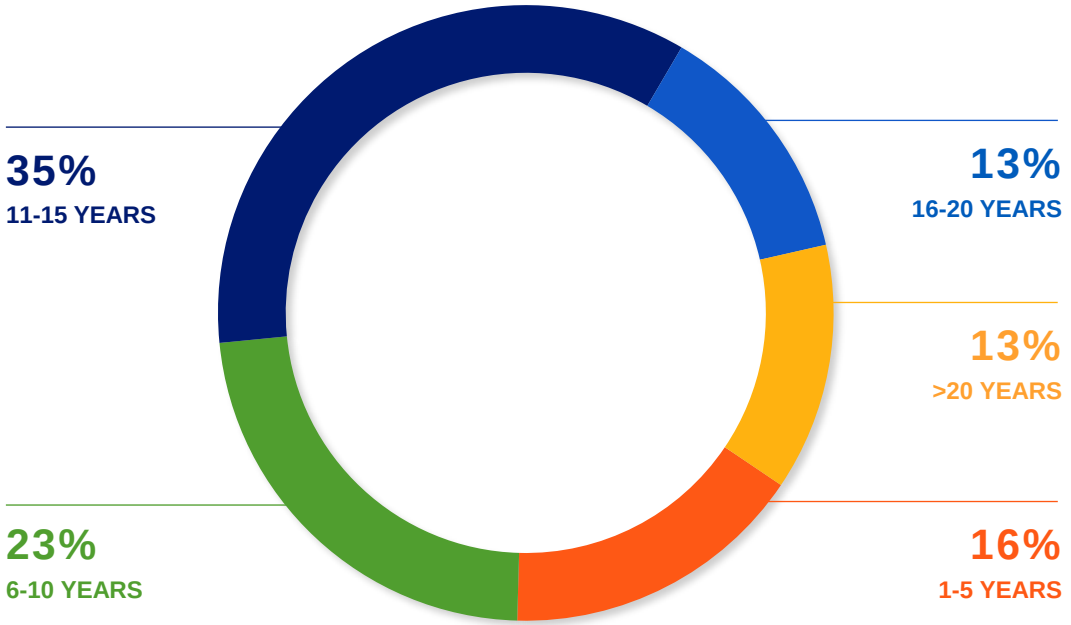
CONTRACTUALISATION OF 2021 CONSOLIDATED REVENUE FROM RENEWABLE GENERATION (in %) (1)



89% **OF 2021 REVENUE SECURED**

AVERAGE RESIDUAL DURATION OF LONG TERM CONTRACTS

(in years) (2)



THE AVERAGE REMAINING TERM OF THE CONTRACTS IS ~13 YEARS

(1) Based on the estimate of 2021 revenues from fully consolidated assets
(2) Weighting according to estimated 2021 revenues of fully consolidated assets

OFFSHORE WIND DEVELOPMENTS IN FRANCE: 5 PROJECTS FOR A TOTAL CAPACITY OF MORE THAN 2GW, INCLUDING ~ 1GW UNDER CONSTRUCTION

Ongoing construction of Saint Nazaire offshore wind farm (started in 2019, expected commissioning in 2022, ~€2bn total investments, partnership with Enbridge)

MAJOR ACHIEVEMENTS IN 2020:

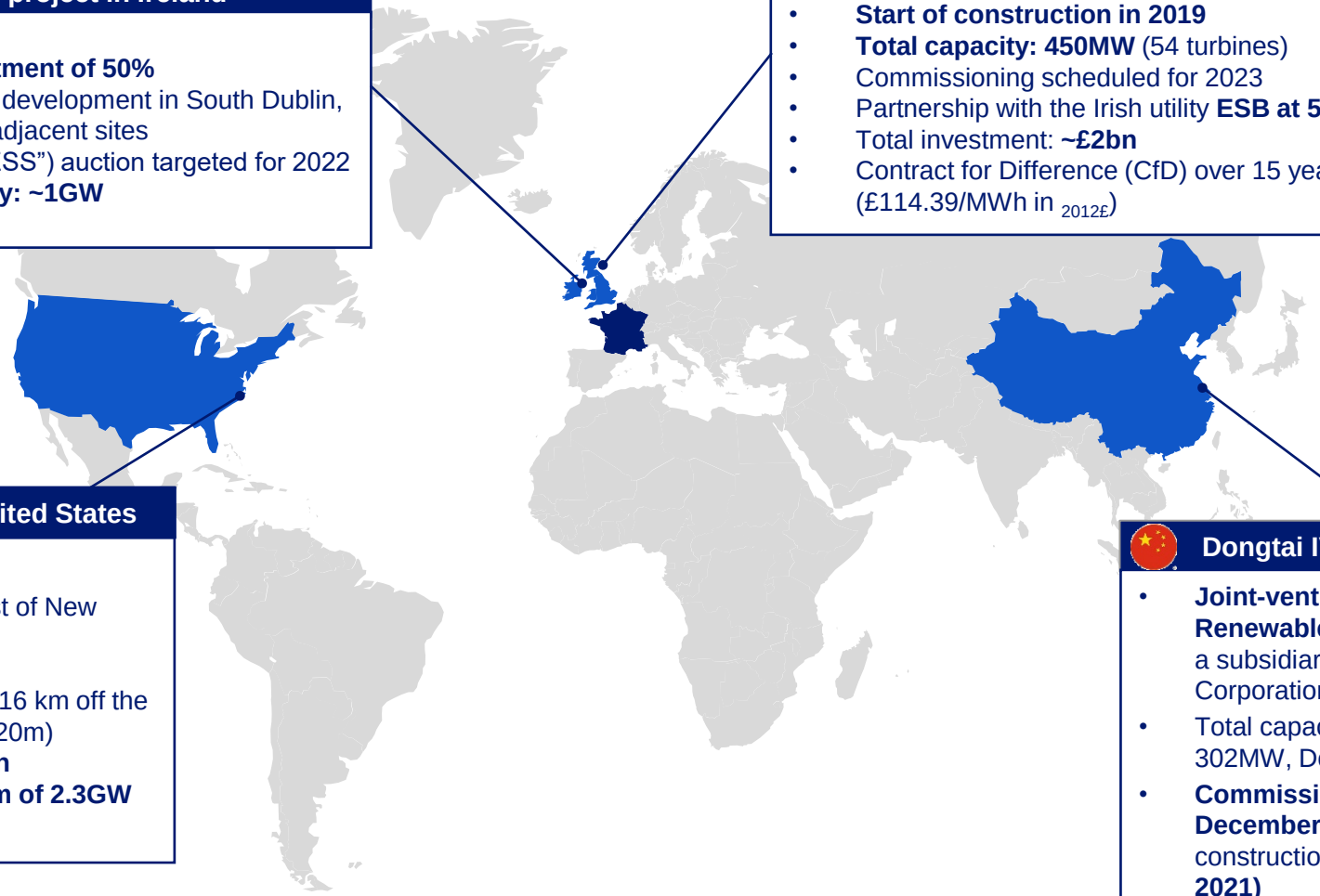
- **Fécamp offshore wind farm**
  - Start of construction in June 2020
  - Expected commissioning in 2023
  - ~ €2bn total investment, partnership with Enbrigde and WPD

Further developments:

- Expected start of construction of **Courseulles-sur-Mer offshore wind farm** (~€2bn total investments, partnership with Enbridge and WPD) in 2021 for commissioning by 2024
- Ongoing development of **Dunkirk offshore wind farm** (~1bn€ total investment, partnership with Enbridge and Innogy) : public consultation in H2 2020

Development in progress of **Provence Grand Large, a floating wind pilot project**: contract awarded to EDF Renewables for the installation of three 8MW turbines on floating foundations off the coast of Fos-sur-mer

INTERNATIONAL OFFSHORE WIND DEVELOPMENTS: NEARLY 4GW IN DEVELOPMENT, 450MW UNDER CONSTRUCTION IN SCOTLAND



Codling project in Ireland

- **Equity investment of 50%**
- Project under development in South Dublin, located on 2 adjacent sites
- Irish CfD (“RESS”) auction targeted for 2022
- **Total capacity: ~1GW**

Neart Na Gaoithe project in Scotland

- **Start of construction in 2019**
- **Total capacity: 450MW** (54 turbines)
- Commissioning scheduled for 2023
- Partnership with the Irish utility **ESB at 50%**
- Total investment: **~£2bn**
- Contract for Difference (CfD) over 15 years (£114.39/MWh in $_{2012£}$)

Atlantic Shores project in the United States

- Ongoing developments off the coast of New Jersey
- Joint-venture with Shell
- Secured a 742 km² Lease Area 12-16 km off the shoreline in shallow water depth (~20m)
- **New Jersey RFP bid submitted on 10 December 2020 for a maximum of 2.3GW**

Dongtai IV and V projects in China

- **Joint-venture** with **China Energy Renewables (ex-shenhua Renewables)**, a subsidiary of China Energy Investment Corporation
- Total capacity: **502MW** (Dongtai IV: 302MW, Dongtai V: 200MW)
- **Commissioning of Dongtai IV in December 2019**, Dongtai V under construction **(commissioning planned for 2021)**

AL DHAFRA PROJECT: CURRENTLY THE WORLD'S LARGEST SOLAR PROJECT (2GW) AWARDED TO EDF-JINKO CONSORTIUM

2020 achievements :

- **July :** EDF Renewables and Jinko Power have been awarded the Al Dhafra solar project in Abu Dhabi (UAE) by EWEC (Emirates Water and Electricity Company)
- **December :** Financing secured

Al Dhafra project key features

- Location: 35km south of Abu Dhabi City.
- Capacity: 2GW (largest single-project solar plant in the world, equivalent electricity to power over 160,000 local households)
- Shareholding: Public-Private Partnership (PPP). EDF Renewables and Jinko Power will hold 20% each. The 60% remaining shares will be owned by TAQA and Masdar
- Technology: bifacial modules

A SUSTAINABLE BUSINESS MODEL BASED ON KEY COMPETITIVE ADVANTAGES

DEVELOPMENT

~1,300 employees (1)

— **Key competitive advantages for the development of a strong project portfolio**
  - A large and diverse international presence with seasoned development teams in Europe and North America and dedicated development hubs in Asia Pacific, Latin America, Middle East North Africa
  - Expertise in site security, engineering, procurement, structured financial arrangements and participation in tenders
  - Key local partnerships in order to share investments, country risk and maximize competitive advantages
  - Strong portfolio, in renewal and with a good transformation rate (current construction rate at c.20%)
— **Synergies** within EDF for **customer-tailored solution** (PPAs for commercial and industrial customers, off-grid or decentralised offers)

ENGINEERING & CONSTRUCTION

— **Strong engineering expertise**
— **Significant expertise in the construction of industrial-scale projects and operational excellence in delivering at** budgets and deadlines
— **Continued technical innovation** to seize opportunities in new markets (floating PV, floating offshore wind, etc.)

O&M AND ASSET MANAGEMENT

— **Integrated skills in O&M** supporting **operational excellence, optimised production, technological expertise**

ASSET ROTATION

— Maximised value creation via **an acquisition and selective asset rotation approach**

VALUE CREATION:

+150-200 bps

DIFFERENCE (1) BETWEEN THE FORECAST RETURN RATE AND THE WACC

(1) EDF Renewables Development, Engineering and Construction internal teams. Excluding contractors and partners capabilities

(2) Historical average performance estimated as part of a profitability analysis of EDF Renewables projects (scope: 81% of installed capacity, 6.6GW net, 118 projects, 14 countries). The IRR calculation takes into consideration the various assumptions, in particular the evolution of market prices, excluding volumes and periods covered by the PPAs

TECHNOLOGICAL INNOVATION: A KEY COMPETITIVE ADVANTAGE

PHOTOVOLTAIC SOLAR

- **Increase the capacity of installations thanks to bifacial PV modules** (technology selected for Al Dhafra project – 2GW)
- **Unlock new potentials in solar PV in geographically constrained areas thanks to floating photovoltaic solar installations …**
  - Beginning of the construction of the first floating photovoltaic power plant of 20MW in France (Lazer, Hautes-Alpes)
  - Winning a tender in Israel (50MW)
- **… and Agri-PV**
  - 1st co-developed pilot project with EDF R&D and INRA, in operation at EDF R&D center « les Renardières »
  - Signature of a charter with the FNSEA to develop and better supervise ground-based photovoltaic projects on agricultural lands in France

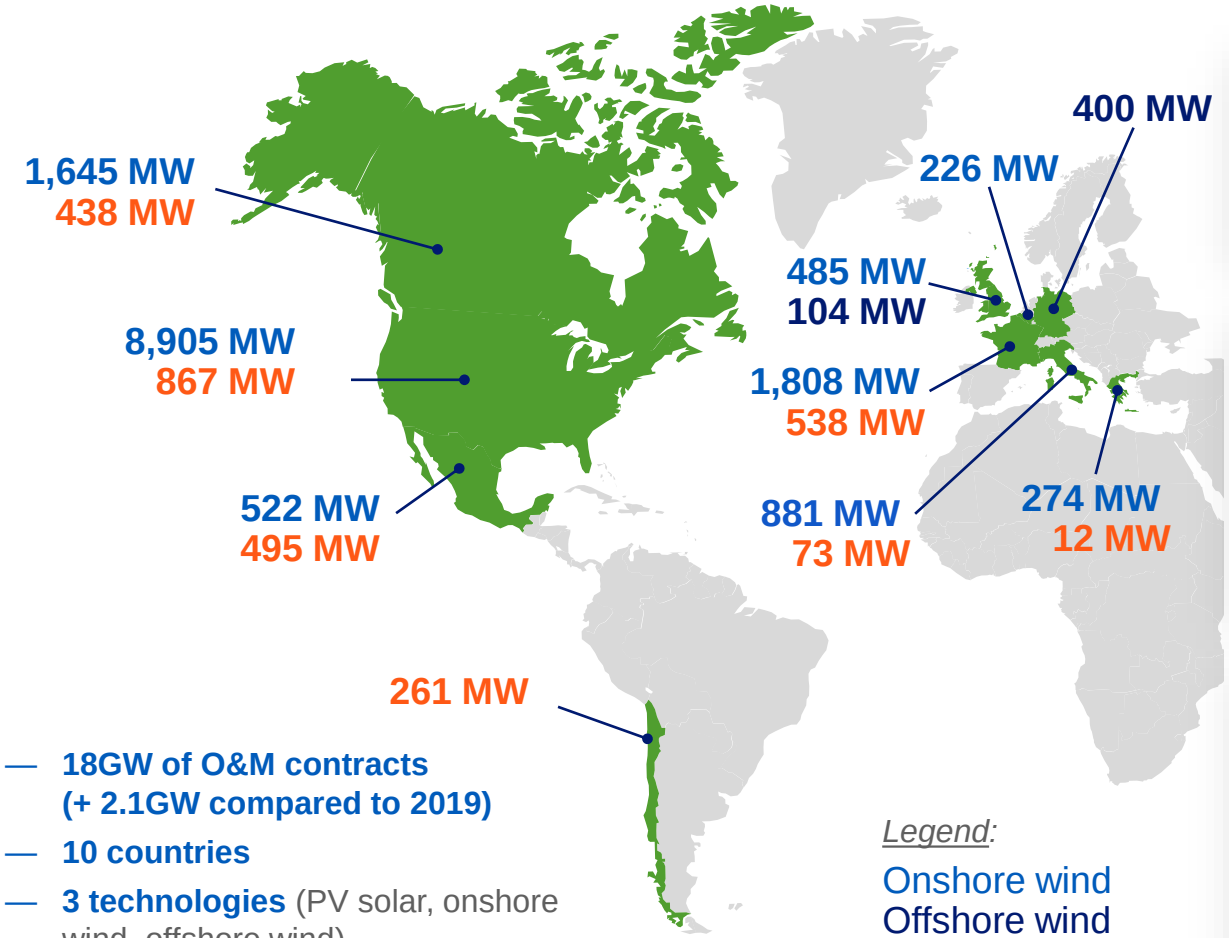
OFFSHORE WIND

- **Exploiting new offshore potential with floating:** Provence Grand Large (France, a floating project of 3 x 8.4MW located off the coast of Fos-Sur-Mer)

STORAGE

- **Development of flexibility on the grid using Li-ion batteries coupled to generation assets:** Toucan 2, French Guyana (solar PV) and Chuckwalla, United States (solar photovoltaic)
- **Development of storage projects** (acquisition of Pivot Power in the UK in 2019, with 2 projects to be commissioned in Q1 2021) **and charging systems for electric vehicles** (acquisition of PowerFlex in the United States in 2019, installation of 2,500 EV charging stations in 2020)

~ 18GW OF O&M: STRONG EXPERTISE, DIFFERENTIATING FACTOR



- **18GW of O&M contracts (+ 2.1GW compared to 2019)**
- **10 countries**
- **3 technologies** (PV solar, onshore wind, offshore wind)
- Remote control and optimisation in real time via a state-of-the-art operations control centre and technical teams in the field

OPTIMISED ASSET PERFORMANCE

- **Digitalisation and supervision in real time, continuous innovation and predictive maintenance**
- Ongoing data lake creation for asset performance optimisation

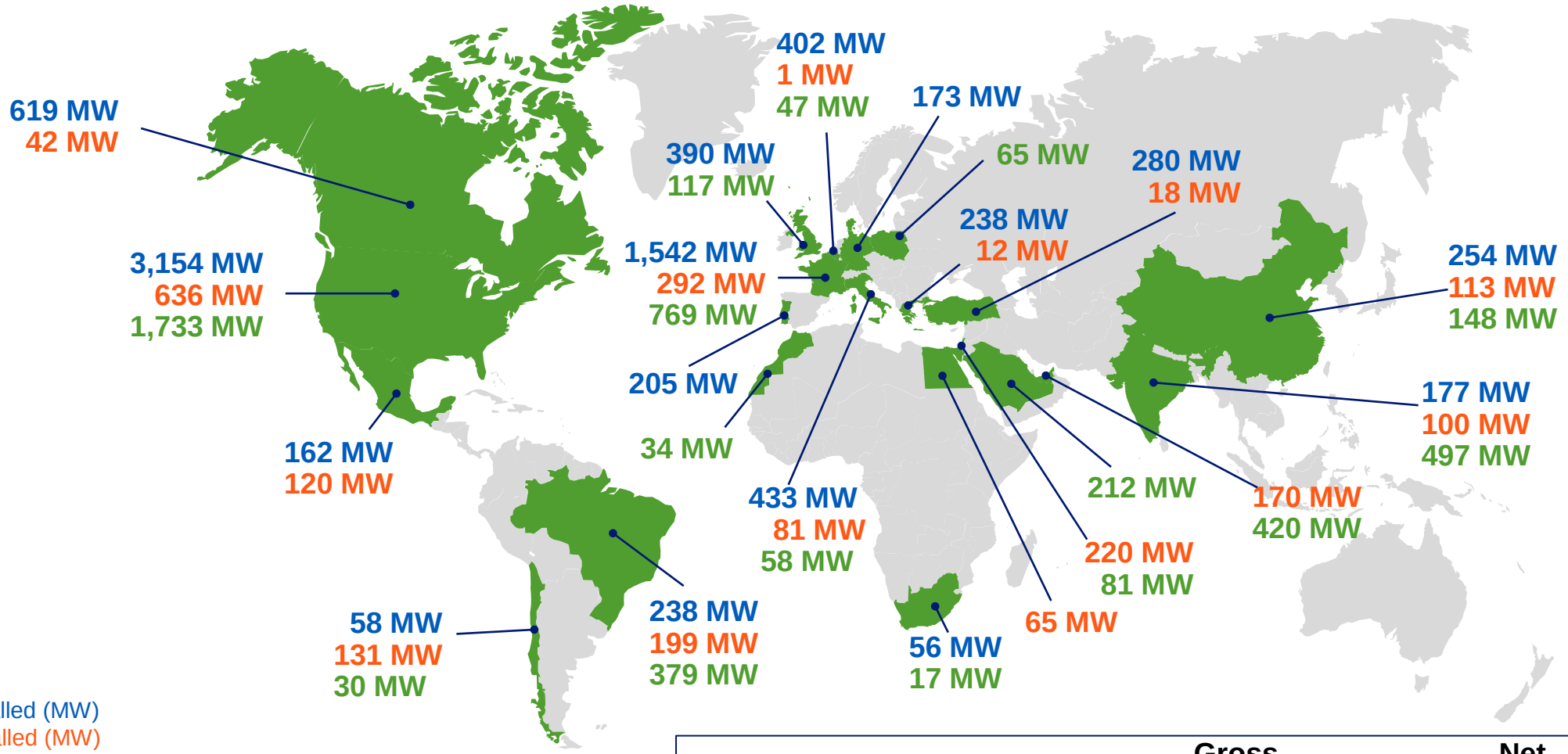
ENHANCED TECHNICAL EXPERTISE

- Continuous feedback on technical issues via O&M monitoring **strengthening knowledge and understanding of industrial technologies**
- A **strong credibility** vis-à-vis turbine manufacturers and third-party investors

REINFORCED COMPETITIVENESS DURING THE DEVELOPMENT PHASES

- **Optimised price positioning in competitive processes**
- **Contract optimisation** thanks to the competition between turbine suppliers for initial or renewal O&M contracts
- **Early stage project optimisation** (development, construction, etc.)

NET CAPACITY INSTALLED AND UNDER CONSTRUCTION - DECEMBER 2020(1)



Legend:
Wind installed (MW)
Solar installed (MW)
Wind and solar under construction (MW)

	Gross	Net
Installed capacity	17,142 MW	10,578 MW
Capacity under construction	7,991 MW	4,608 MW
Total	**25,133 MW**	**15,186 MW**

INSTALLED CAPACITY AND CAPACITY UNDER CONSTRUCTION, WIND & SOLAR, AS OF 31 DECEMBER 2020

(in MW)	Gross (1)		Net (2)	
	31/12/2019	31/12/2020	31/12/2019	31/12/2020
Wind	12,416	13,266	7,827	8,379
Solar	2,900	3,876	1,750	2,199
Total installed capacity	**15,316**	**17,142**	**9,577**	**10,578**
Wind under construction	3,531	4,126	2,131	2,680
Solar under construction	1,525	3,865	1,166	1,928
Total capacity under construction	**5,056**	**7,991**	**3,297**	**4,608**

(1) NB: The values correspond to the expression to the first decimal or integer closest to the sum of the precise values, taking into account rounding
(2) Gross capacity: total capacity of the facilities in which EDF Renewables has a stake
(3) Net capacity: capacity corresponding to EDF' stake

OPERATION & MAINTENANCE (1)

(En MW)	31/12/2019	31/12/2020	Δ MW	Δ %
United States	8,214	9,847	1,633	+19.9
Canada	2,043	2,083	40	+2.0
Mexico	1,085	1,017	- 68	-6.3
Chile	146	261	115	+8.8
Total America	**11,488**	**13,208**	**1,720**	**+15.0**
France	2,032	2,345	313	+15.4
United Kingdom	568	589	21	+3.7
Greece	286	286	-	+0.0
Italy	770	954	184	+23.9
Germany	400	400	-	+0.0
Belgium	226	226	-	+0.0
Total Europe	**4,282**	**4,800**	**518**	**+12.1**
Total O&M	**15,770**	**18,008**	**2,238**	**+14.2**

(1) MW generated by renewable energy power plants that EDF operates and maintains (plant supervision, monitoring of production, preventive and corrective maintenance, etc.) on its own behalf or for a third party

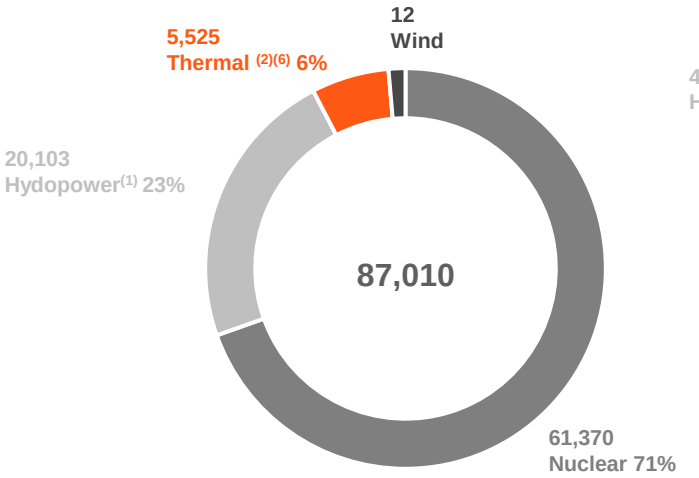
EDF GROUP MAIN BUSINESSES

ADJUSTMENT OF THERMAL POWER TO EDF'S LOW CARBON STRATEGY

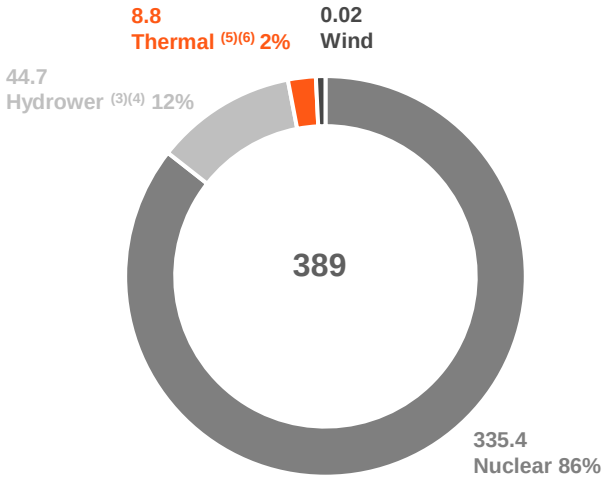
Modernisation of the EDF's fleet in mainland France to improve its technical and environmental performance

- The vast program to modernize EDF's thermal power plants, which runs from 2007 to 2016, has significantly improved the Group's carbon footprint. Over the period, the Group carbon intensity in gCO_2/kWh decreased by 32.5%
- The Group plans **to phase out coal-fired power generation by 2030**, in all geographical areas.
  I**n France, coal-exiting targeted in 2022.** Closing of the coal-fired powerplant in Le Havre in April 2021 (6)
- Commissioning of 4 Combined Cycle Gas Turbines (CCGT) between 2011 and 2016 to replace coal-fired plants that have been permanently shut down
- Thermal represents ~ 6% of the EDF group's installed capacity. The share of thermal in the energy mix of the Group varies from one country to another: in 2019, it reached ~ 2% of electricity generation in France and ~ 78% in Italy

Installed capacity in mainland France at end-2020 *(in MW)*



Electricty output in mainland France in 2020 *(in TWh)*

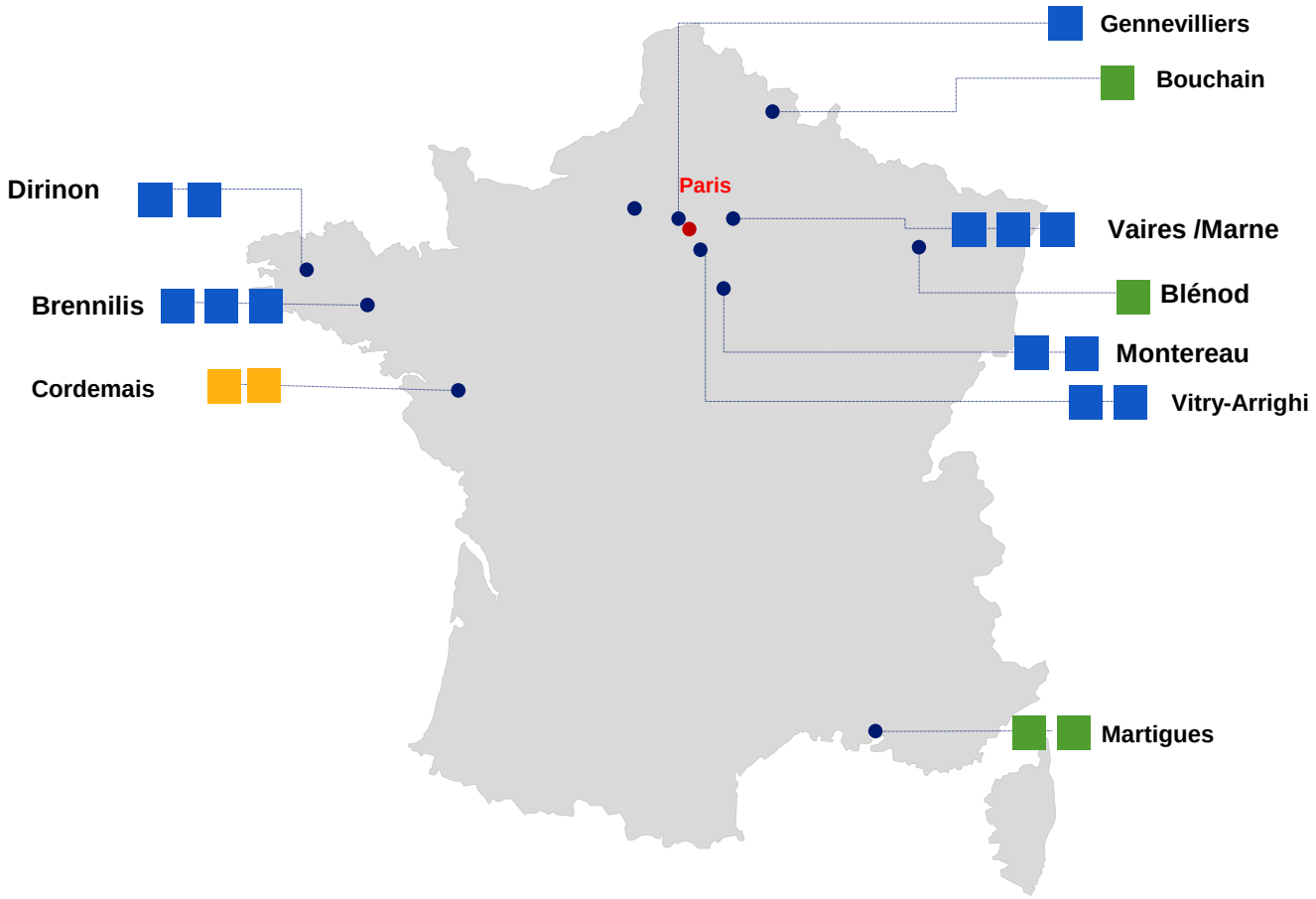


(1) Excluding Corsica and overseas departments, 439MW in 2020 and including tidal generation capacity of 240 MW
(2) Excluding Corsica and overseas departments, 1,567 MW in 2020
(3) Excluding Corsica and overseas departments, 1.3TWh in 2020
(4) Generation including pumped storage consumption
(5) Excluding Corsica and overseas departments, 4.4TWh in 2020
(6) Incl. Le Havre coal power plant, shut down and mothballed (AGP - multi-year guaranteed shutdown) since 01/04/2021, and which will be disconnected from the network by end-2021

Source : Universal Registered Document 2020 EDF

- In 2015 EDF launched the **Ecocombust** project, aimed at developing green fuel (biomass) by recycling wood waste. A decision should be made on launching the industrialization phase of this project. Fuel manufacture could begin from 2023 onwards. This fuel would be used for industrial heating and/or steam generation installations. It could also be used in co-combustion with a smaller proportion of coal in the Cordemais power plant boilers, thus helping to halt the use of coal for electricity generation.

EDF THERMAL PLANT FLEET IN MAINLAND FRANCE



~ 10 production sites > 5GWe (1)

- **Coal-fired plants**
  - Two units totalling 1,160MW (1)
- **Combined-Cycle Gas turbines (CCGT)**
  - Four CCGTs totalling 1,950MW
- **Combustion turbines (TAC)**
  - Thirteen TACs totalling 1,850MW

(1) Latest figures including the shutdown of the coal-fired power plant in Le Havre, mothballed (AGP - multi-year guaranteed shutdown) since 01/04/2021, and which will be disconnected from the network by end-2021

EDF GROUP MAIN BUSINESSES

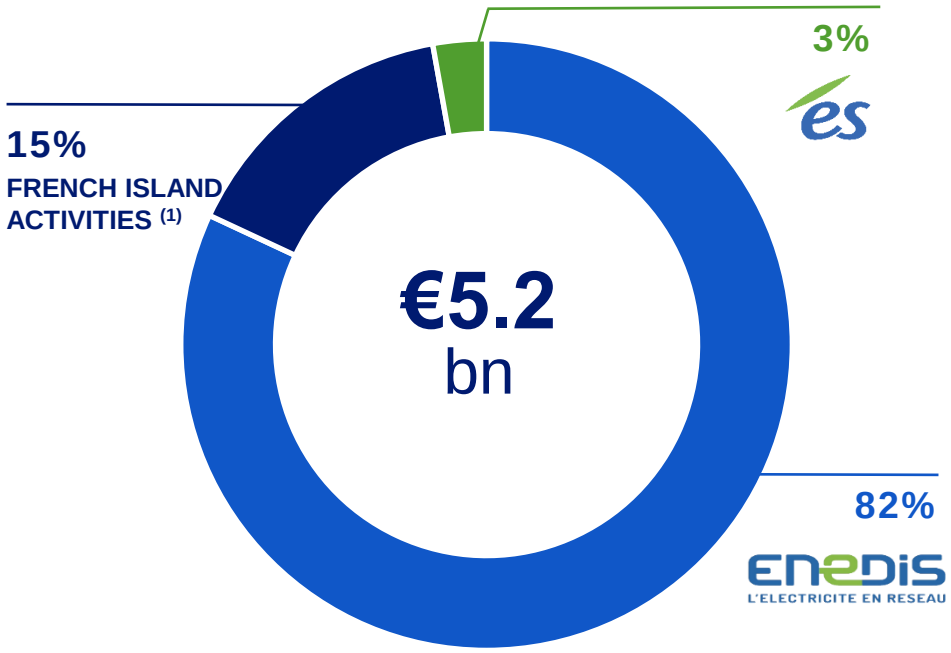
ENEDIS (1): KEY FIGURES

In millions of euros	2019	2020	Δ%
Sales	14,161	14,211	+0.4
EBITDA	4,140	4,285	+3.5
Net income excl. Non-recurrent items	779	835	+7.1
Gross operating investments (2)	4,270	3,874	-9.3

(1) Enedis, an independant EDF subsidiary as defined in the French energy code; local data
(2) Including Linky

A REGULATED BUSINESS MODEL IN A SOLE AUTHORIZED STATE CONCESSION OPERATOR MODEL

Breakdown of EBITDA for EDF's regulated activities in 2020



(1) French island electrical activities include Corsica, Martinique, Guadeloupe, French Guiana, Reunion and Saint Pierre and Miquelon, Saint Barthélémy, Saint Martin and Ponant islands

ENEDIS
L'ELECTRICITE EN RESEAU

- **The biggest distribution grid in Europe**
- The main distribution grid in France: **connected to 95% of the mainland metropolitan population** (the remaining 5% covered by ~170 local distribution companies)
- A **regulated business model**: ENEDIS has the national monopoly on 421 concession contracts. A large majority of contracts have already been renewed for a period of 25 to 30 years
- Represents about **a quarter of EBITDA, investments and headcount** of EDF Group

French island activities (1)

- **Integrated business model** including generation, electricity purchases, distribution (via concessions) and supply at the regulated tariff
- Grid activities: **similar remuneration to that of Enedis**
- Generation activities: for assets commissioned before 06/04/2020, remuneration of 11%. For assets commissioned after 06/04/2020, between 7% and 12%

- **Grid of around 15,000 km** (Strasbourg region)
- **560,000 delivery points**
- Around 70% of EBITDA from regulated distribution activities

ENEDIS(1) : DISTRIBUTION NETWORK LEADER IN EUROPE

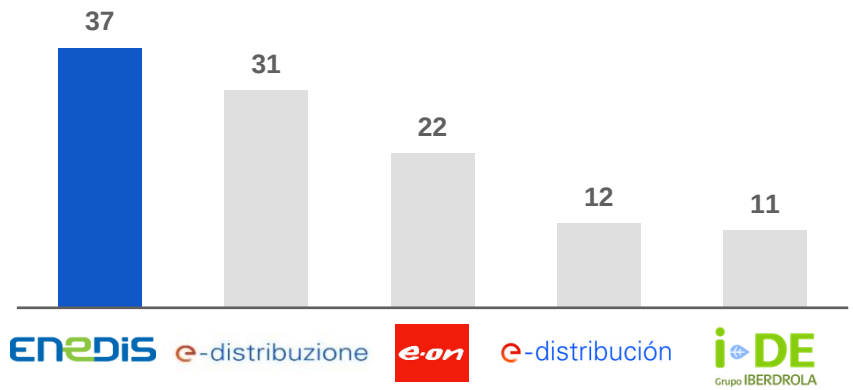
MAJOR DISTRIBUTION NETWORK PLAYER IN EUROPE

- ~1.4 M km of lines
- ~37 M customers (2)
- 333 TWh distributed
- #1 electricity network in Europe
- 30 millionth Linky meter installed in January 2021
- 475k of connected ENR generation installations
- ~38,600 employees

WELL POSITIONED VS PEERS...

… in terms of number of customers …

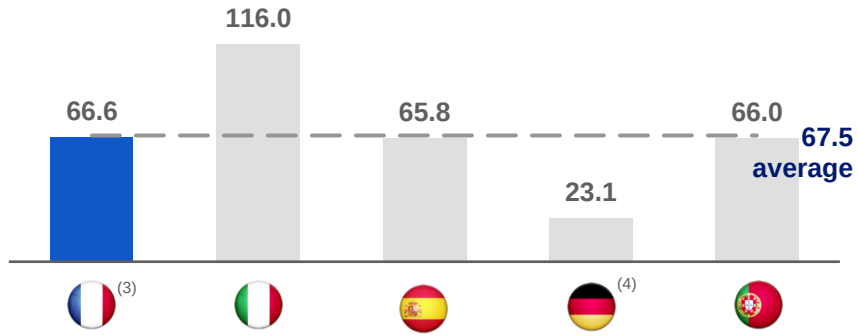
In millions of delivery points



Data from operators' 2019 annual reports

… as in quality of supply

SAIDI – Outage time, excluding exceptional events, in minutes per customer per year



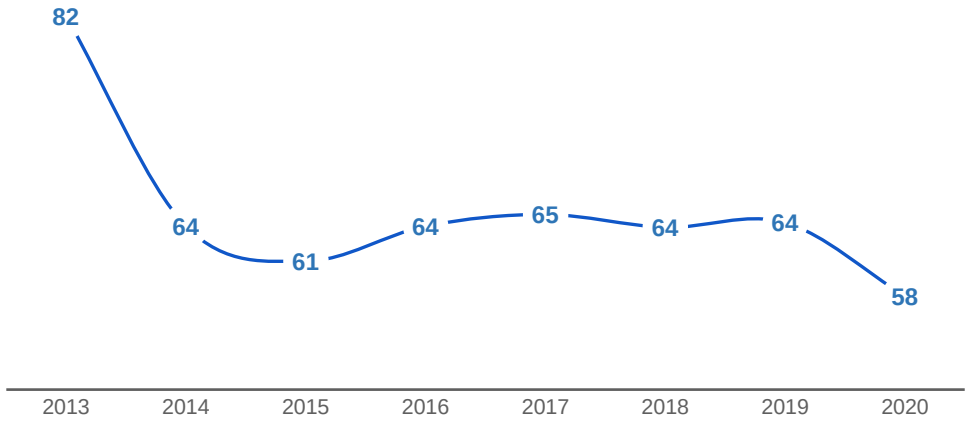
2016 CEER data including transport outage time

(1) Enedis is an independent EDF subsidiary as defined in the French Energy Code
(2) Corresponds to the number of delivery point
(3) Indicator including transport, excluding local distribution companies. The outage time in ENEDIS scope was 64 minutes
(4) Specific to Germany, whose network is much denser than in other countries

ENEDIS(1) : TOP-TIER OPERATIONAL PERFORMANCE

Top-tier operational performance...

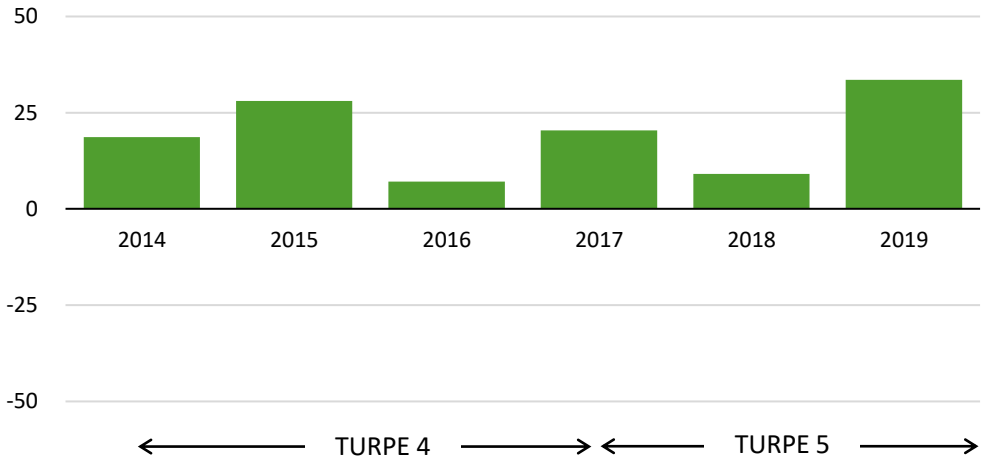
Outage time (2)



Outage time stable since 2014 at around 64 minutes

… which means it is frequently awarded the regulatory incentive bonus

The regulatory incentive bonus has been systematically obtained since 2014 (in €m)



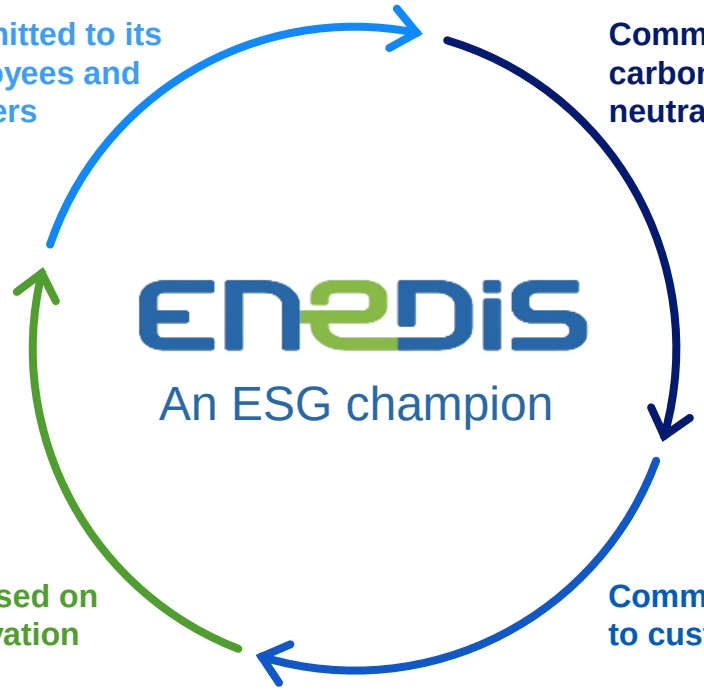
Increase in MIN/MAX from TURPE 5, from €80m for TURPE 4 to €194m for TURPE 5: this increases the remuneration potential in the event of good operational performance.

(1) Enedis is an independent EDF subsidiary as defined in the French Energy Code
(2) Excluding exceptional events and transport grid incidents

ENERGY TRANSITION AT THE SERVICE OF THE TERRITORIES

2020-2025 INDUSTRIAL AND HUMAN PROJECT BASED ON EIGHT COMMITMENTS ALIGNED WITH UN OBJECTIVES

- **Achieve 70% of the employee commitment index** by 2024 (vs 58% in 2019)
- **Aiming for zero serious** or fatal accidents for teams and service providers
- **Create 20 new activities** (energy communities, electric transport solutions, data services, etc.) as part of projects and/or partnerships

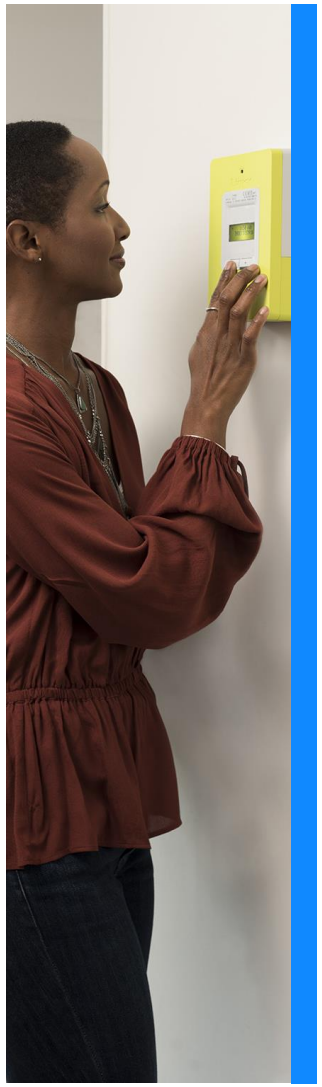


- **Enabling 100% of customers to monitor their consumption so as to better control it** thanks to the smart meter, as well as to benefit from an innovative offer from their supplier.
- **Reduce Enedis' carbon footprint by 20%** by 2025 and achieve carbon neutrality in 2050
- **Have one of the best value-for-money propositions in Europe**
- **Halve the time it takes to connect customers by 2022 compared to 2020**
- **Reconnecting 90% of customers within two days in the event of a major climate incident on the grid**

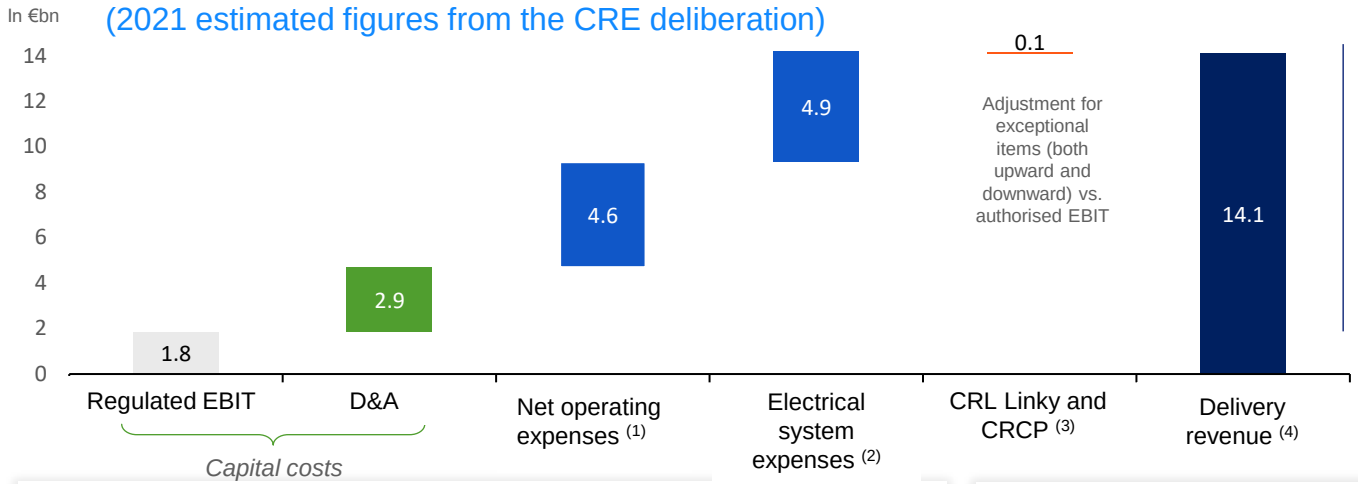
TARIFF FOR USING THE PUBLIC ELECTRICITY TRANSMISSION AND DISTRIBUTION NETWORKS (TURPE) GENERAL PRINCIPLES

- **TURPE is based on general principles...**
  - **“Postage stamp”:** network access pricing is dependent on distance
  - **Tariff equalisation:** the same rates apply throughout the national territory
  - **No discrimination:** tariffs reflect the costs generated by each category of users
  - **Time-seasonality:** tariffs are designed to encourage customers to limit their consumption during peak periods
- **... complemented by criteria to best meet the expectations of stakeholders**
  - **Efficiency:** the tariff signal leads users to modify their behaviour and encourages the reduction of costs over the long term
  - **Readability:** level of complexity appropriate to the type of user and the voltage level considered
  - **Feasibility:** tariffs must be able to be implemented
  - **Progressivity:** a change in tariffs must generate progressive effects

ENEDIS: TURPE 6, A MATURE REGULATORY FRAMEWORK



Key elements of the remuneration: A cost + remuneration approach
(2021 estimated figures from the CRE deliberation)



No exposure to variations in distributed volumes (number of customers, TWh distributed including weather impact) vs trajectory defined by the regulator

Incentive regulation: productivity gains, quality of service and continuity of supply, R&D and smart grids

Tariff indexation principle (TURPE 6)

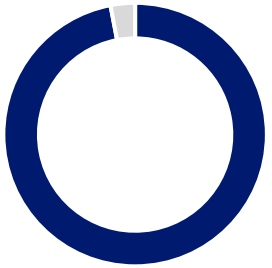
Change in the consumer price index (criteria: inflation)

→ *Inflation rate for the year + 0.31%*

CRCP balance (3): difference for non-controllable expenditure between forecast and actual + incentive regulation

→ *Calculating the k factor (5) capped at +/-2%*

Income and expense (6) largely secured by the mechanism of the Income and Expense Adjustment Account (CRCP):



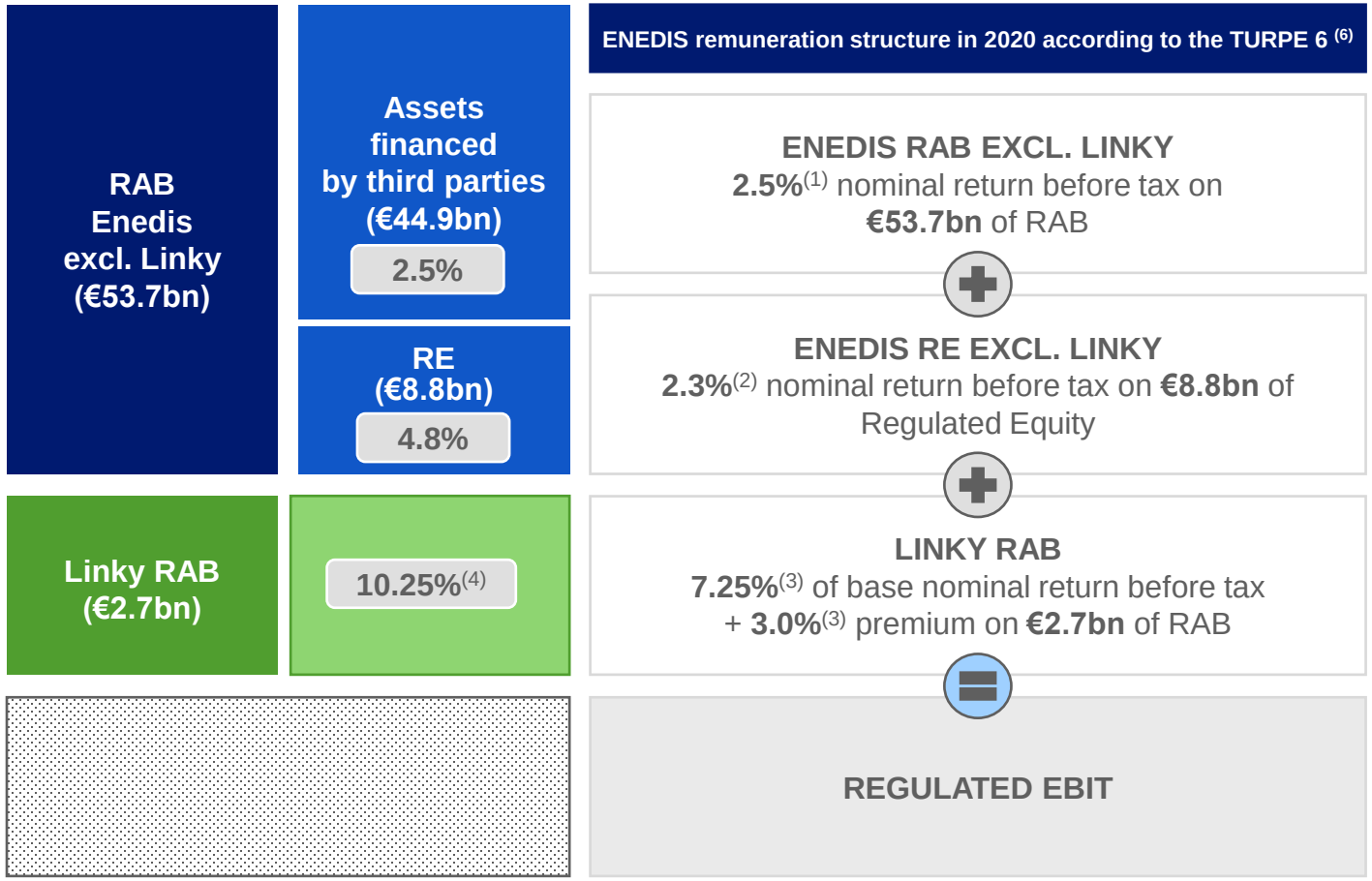
% of revenues covered by the CRCP:

% of expenses covered by the CRCP:

(1) Net revenue excluding transport
(2) Power system charges = transport purchase from RTE + purchase of network losses
(3) CRCP = expense and income adjustment account; CRL Linky = Linky regulated levelling account (Compte Régulé de Lissage [CRL])
(4) French standard data. The difference with IFRS mainly corresponds to Enedis' contribution to the Electricity Equalization Fund
(5) k factor = percentage change in the fee table resulting from the clearance of the CRCP balance
(6) Capital charges + operating charges + electric system charges

TURPE 6 REMUNERATION STRUCTURE: A FAVOURABLE RISK PROFILE

A remuneration mechanism based on a guaranteed return



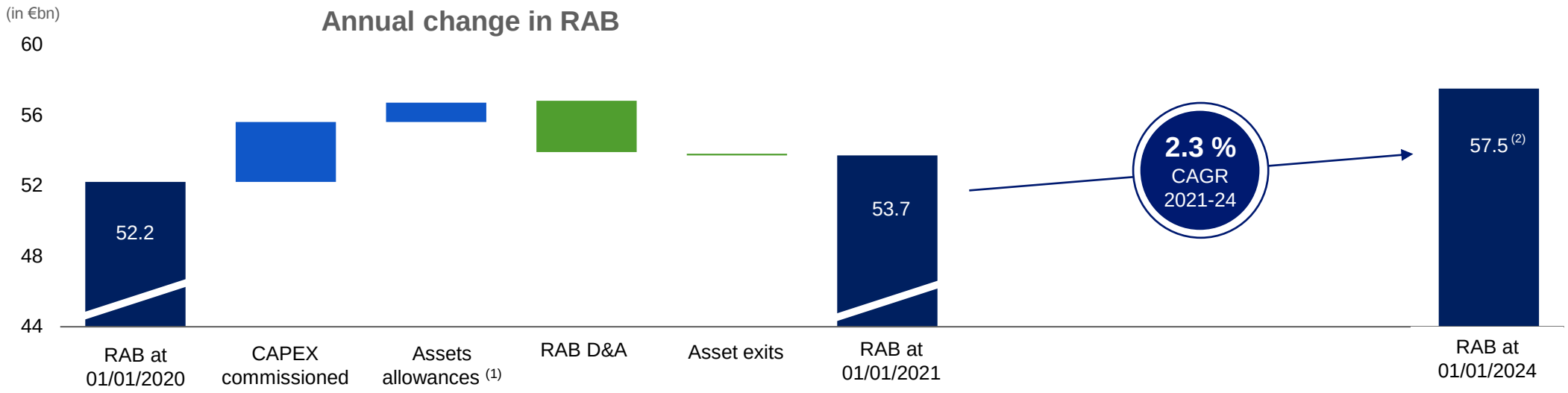
TURPE 6 in continuity with the previous TURPE

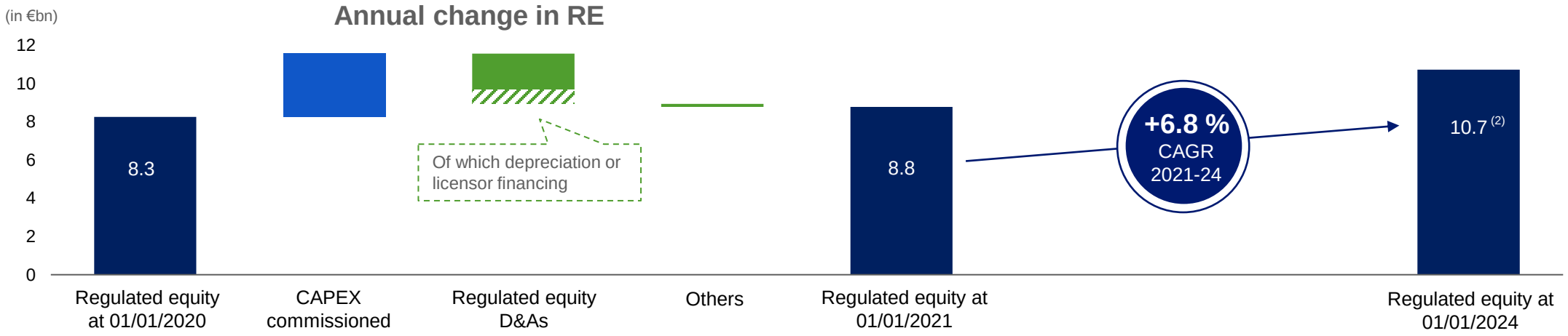
- **Return on capital depends little on interest rate trends: stable at 2.5%** since TURPE 4
- Return on **regulated equity:** decrease from **4 to 2.3%** to take into account the reduction of the risk-free rate and the corporate tax rate in France
- **CRCP: mechanism globally validated.** The entry CRCP of TURPE 6 represents a receivable of €588m (7) to be spread over the four years of TURPE 6
- **Incentive regulation: targets raised**, notably quality of service
- Main new features: **annual tariff indexation** includes **0.31%** remuneration above inflation.

01/01/2021 figures

(1) Asset margin = Asset beta x Market risk premium / (1 - tax rate) = 0.36 x 5% / (1 – 26.47%) = 2.5%
(2) Additional rate of remuneration applied to RE = Risk-free rate/ (1 - Tax rate) = 1.7% / (1 - 26.47%) = 2.3%
(3) Remuneration rate for Linky assets = Base rate + expected remuneration bonus = 7.25% + 3% = 10.25%
(4) Assuming award of the expected remuneration bonus
(5) Capital costs + operating costs + electrical system costs
(6) Applicable from 1 August 2021
(7) CRE deliberation

STEADY GROWTH IN RAB AND REGULATORY EQUITY





(1) Work by concession-granting authorities and transferred to Enedis + c.€4bn for the integration of growing columns excluding concession in 2020 (ELAN law)

(2) Estimated figures from the CRE deliberation

LINKY (1) : AN INCENTIVISING TARIFF FRAMEWORK

LINKY: THE ROLLOUT PROGRAM FOR NEW SMART METERS

~34.2M customers equipped at end-2021

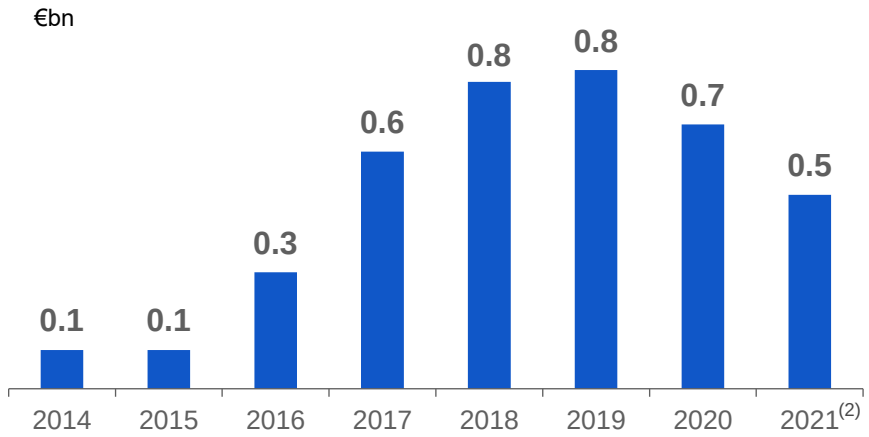
~ 87% of 2021 target achieved at end-2020

~€4bn (4) investment over 2014-2021

Specific regulation over 20 years (Linky-dedicated RAB)

AN ATTRACTIVE REMUNERATION STAGGERED OVER TIME

2014-2021 Investment pattern



Linky – Remuneration

7.25%
Nominal rate of return on assets before tax

+

3%
Additional premium(3)

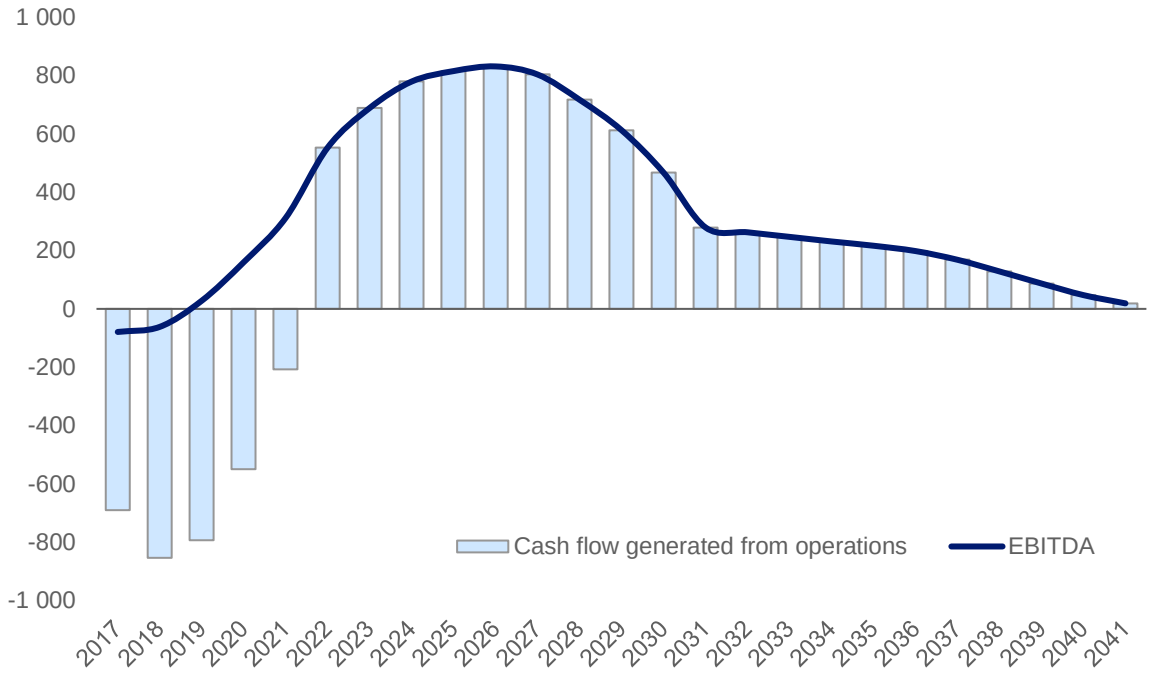
→ almost guaranteed

(1) Linky is a project led by Enedis, an independent EDF subsidiary as defined in the French Energy Code
(2) Estimated figures
(3) Additional premium of 3% / Penalties of -2 %, depending on the respect of costs, deadlines and performance of the system during the deployment phase
(4) At completion of the program, costs were revised downwards after latest negotiated prices

LINKY: A SIGNIFICANT CONTRIBUTION TO CASH-FLOW FROM 2022

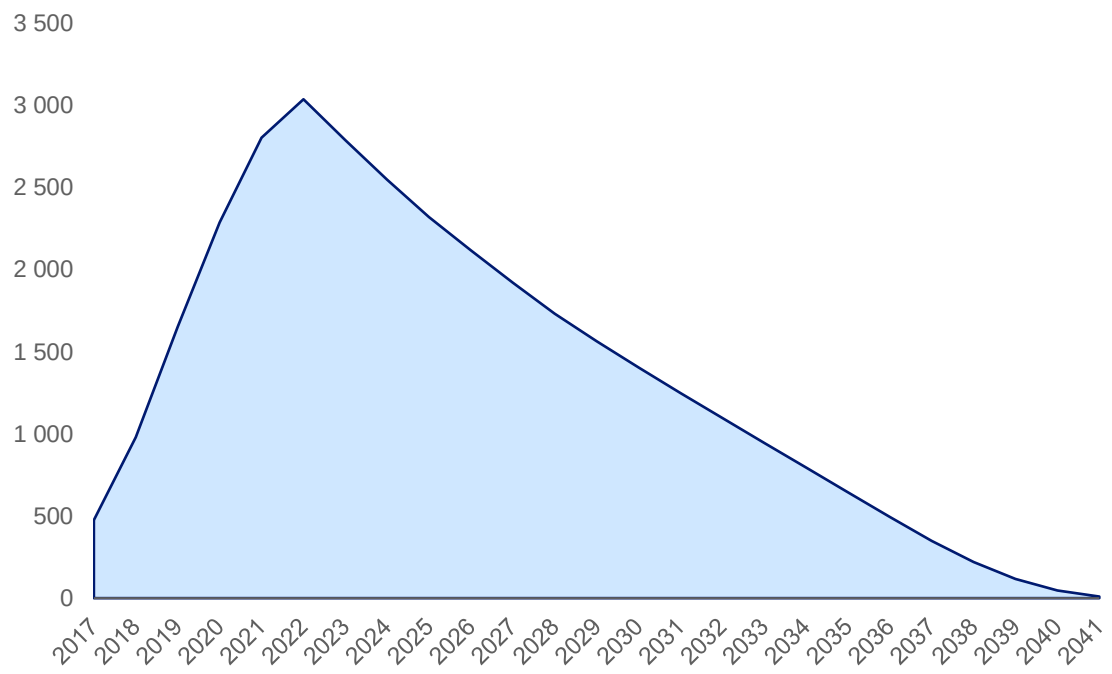
A significant contribution to cash-flow from 2022...

EBITDA (1) and cash flow generated from Linky operations (€m)



… in line with the Linky RAB trend

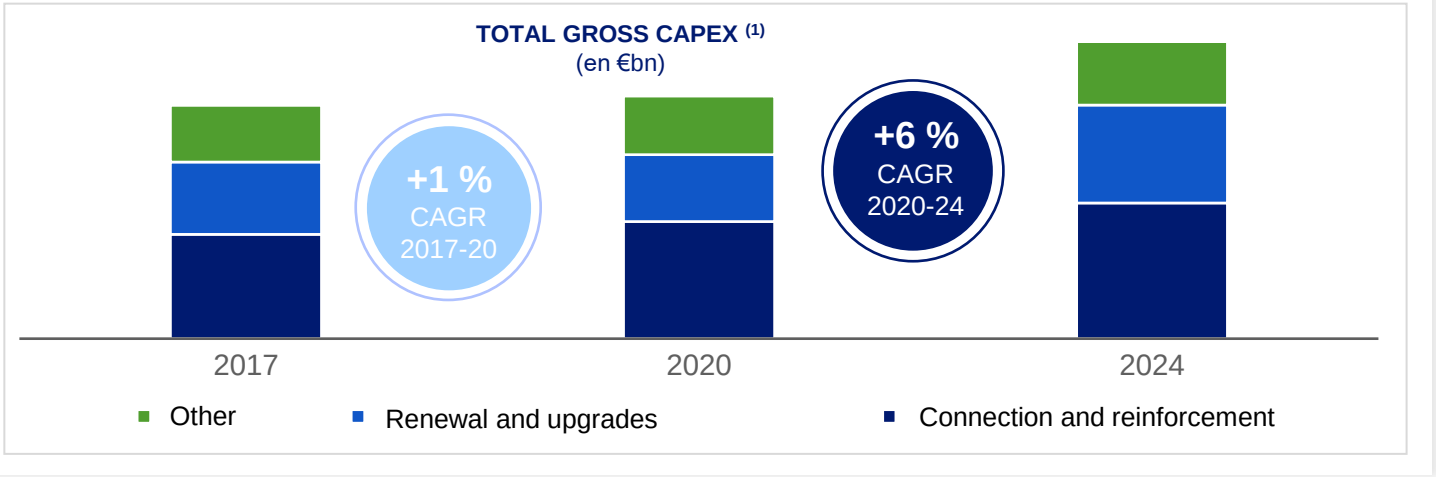
Linky RAB trend (€m)

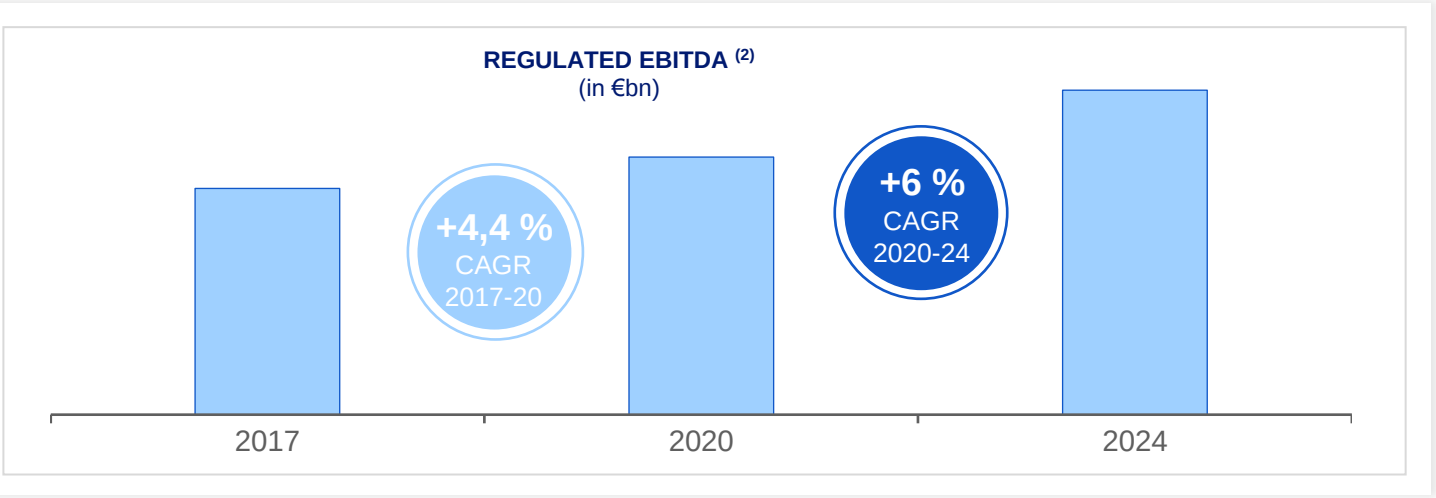


(1) According to current accounting standards

- **Linky's cash flow is negatively impacted until 2021 as a result of the roll-out and the Regulated Deferred Account mechanism (CRL).**
- **Significant contribution from 2022 before peaking around 2025-2027**

INVESTMENTS ACCELERATION SUPPORTING EBITDA GROWTH





… in a context of development of new uses and ecology transition

- **Electric vehicles**
- **Centralised and distributed solar**
- **Onshore and offshore wind power**
- **Storage**
- **Consumer connections**

(1) Excl. Linky
(2) Regulatory EBITDA excluding weather impacts, etc., which are offset in subsequent years by the CRCP mechanism

ELECTRICITY SMART METERING REGULATORY FRAMEWORK IN FRANCE, GREAT BRITAIN AND ITALY

	FRANCE(1)	GREAT BRITAIN	ITALY
DEPLOYMENT RESPONSIBLE ENTITY	**Distributors**	**Energy Suppliers**	**Distributors**
REGULATORY ENTITY	**CRE** (deliberation of 17 July 2014) Specific regulation over a 20-year period	**Department for Business, Energy & Industrial Strategy** (BEIS) responsible for policy making with **Ofgem** responsible for monitoring performance and compliance	Since 2000: business-driven process, led by Enel Since 2006: process fully regulated by the **Authority for Electricity and Gas**
TARGETS	**34 million meters (or 90% of the LT fleet) to be installed at end-2021.** Incentive-based regulation focusing on 3 parameters (installation schedule, costs management and service quality) with bonuses and penalties	Take **"all reasonable steps"** to achieve 100% of residential and small business customers by **30 June 2021**. 53 million meters(2) to be installed, and 'In-Home-Displays' must be offered to customers. Ofgem will review all suppliers progress as at 30 June 2021 and are likely to investigate and fine some suppliers for non-compliance	**Already reached:** Italy has been a pioneer and deployment rate of smart meters exceeds 95% by the end of 2011
PROJECT STATUS	Start of the **large-scale deployment in December 2015.** **29.7 million customers equipped** with Linky meter at end-2020	As of 30 September 2020, there were 22.2 million smart and advanced meters installed in homes and small businesses in UK, of which 18m were smart in smart mode or advanced meters. <50% of customers will have smart meters by 30 June 2021 nationally. BEIS have announced a new four year regulatory framework will commence on 1 July 2021 – this is a live Ofgem consultation	In April 2017, **the Authority approved Enel's plan to roll out, from 2017 to 2031, the 2nd generation smart meters**, replacing all the 1st generation and having additional functionalities, to provide innovative services. The roll out is on going. Meanwhile, other distributors also started their roll-out plans. In 2020 the regulator allowed a slow down due to the pandemic and the related difficulties in accessing the house of people to change the existing meter
REMUNERATION	Tariff model, based on a specific remuneration rate and an incentivizing regulation applicable for the whole life of assets, until 2040	2019 Impact Assessment published by BEIS shows the cost of the national programme (from 2013 to 2034) at £13.5bn vs. £19.5bn benefits, leading to a net present value of c£6bn based upon the rollout up to June 2021. BEIS have put a provisional Impact Assessment in place for the July 2021-June 2025 rollout period. This highlights £1bn costs vs £2bn benefits, leading to a net present of £1bn.	Investment and installation costs of meters for distributors are remunerated on the basis of the tariff set by the Authority

(1) For more information on France, please see p.142
(2) Electricity and gas meters

ISLAND ACTIVITIES (1): SPECIFIC REGULATION AND OPERATIONAL PERFORMANCE SUPPORTING STABLE REVENUES

MAJOR ASSETS AT THE HEART OF THE TERRITORIES

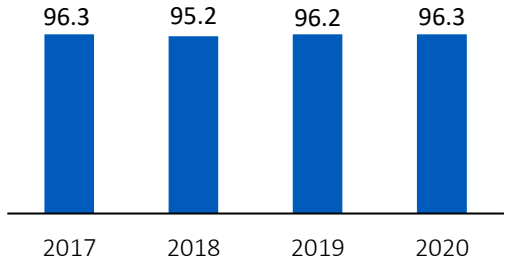
- **c.3,500** employees
- **1.2 million** customers
- **38,234 km** of grid
- **5,659 GWh** of generation

REGULATED ASSETS, OPERATED EFFICIENTLY, GENERATING A STABLE EBITDA

Generation assets: 11% remuneration for assets commissioned between 2006 and April 2020 (7.25% before) / between 7% and 12% thereafter (decision expected in Q2 2021)

Networks: (FPE [3])
- 6.4% return on regulated equity (€0.7bn)
- 2.5% remuneration on the RAB (€2.5bn)

EDF PEI availability rate as a %



Normalised EBITDA *

Range of €780M / year **

* Restated for the effect of the regularisation account [4]
** o/w about a third related to grid activity, and excluding regularisation account

A CONTRIBUTION TO THE ENERGY TRANSITION IN ZNI [2]

Smart meter programme: install and operate 1.2 million smart meters by end 2024. Around 400k smart meters were already installed and operated by the end of 2020: roll-out on schedule.

Energy efficiency: sustainable energy-saving measures (insulation, solar water heaters, etc.) with a 2% reduction in consumption in 2019, for example.

Decarbonation: integration of renewable energy sources, development and operation of ~30 smart grids, electrification programme in isolated areas. Conversion to liquid biomass of the power plants operating in Port Est, Pointe Jarry and Bellefontaine, as well as the future Larivot plant.

(1) French island electrical activities include Corsica, Martinique, Guadeloupe, French Guiana, Réunion and Saint Pierre and Miquelon
(2) ZNI = non-interconnected zones
(3) FPE: Electricity Equalization Fund [Fonds de Péréquation de l'Electricité], current four-year period from the beginning of 2018 to the end of 2021
(4) CRCP of the FPE

ÉLECTRICITÉ DE STRASBOURG

€741m in sales
€65.5m in net income (1)

ÉS is an Alsatian energy producer which is committed to long-term energy and economic performance of its territory through its four activities:

- **Electricity distribution** (Strasbourg Électricité Réseaux)
  - 15,000 km of lines (including 740 km in HVB) in more than 400 Alsatian municipalities having conceded their network
  - 566,000 delivery points and 5,700 injection points, 6.6TWh distributed
- **Supply of energies** (ÉS Énergies Strasbourg)
  - 555,000 customers for electricity (5.1TWh) and 113,000 for gas (4.0TWh) : residentials, businesses and local authorities
  - associated services (corrective maintenance, digital services), as well as support services for residential customers in home renovation and construction
- **Energy services** (ÉS Services Énergétiques)
  - realisation and operation of installations for local governments, homes, healthcare, the tertiary sector and industry
  - operation of the three large-scale Eurométropole heat networks and 2,500 thermal installations
- **Renewable energy generation by ES group: 429 GWh of RE, o/w 294 GWh thermal and 135 GWh electric**
  - **deep geothermal: 182 GWh** fossil-fired and **4 GWh** electric via two plants in Alsace.
  - **biomass: 112GWh** fossil-fired and **70GWh** electric via one cogeneration plant in Strasbourg
  - **hydropower: 56GWh** through four hydropower plants, (2 in Alsace, 1 in the Alps and 1 on the Garonne), and a 35% share in SEHRY (15 hydropower plants for annual generation of 145 GWh).
  - **solar and wind: 5GWh** from two proprietary solar power plants at two Group activity sites, and the share in SEHRY for wind

120 years of local anchorage

- **1899** — Creation of ÉS
- **1927** — Stock listing
- **2009** — Development of the supply activity (ÉS Énergies Strasbourg)
- **2012** — Acquisition of the gas supplier from SEM Réseau GDS (Gaz de Strasbourg brand)
- **2016** — ÉS becomes ENR producer
  - 2 Deep geothermal plants
  - Biomass cogeneration at Strasbourg
- **2017** — Development of the distribution activity; Launch of the Illkirch Graffenstaden geothermal project
- **2018** — Equity investment (34%) in EMEM SEM (Erstein ELD)
- **2019** — Commissioning of the hydropower plant in Alsace (Framont) and a solar facility in Mundolsheim

(1) Net Result proforma excluding depreciations

EDF GROUP MAIN BUSINESSES

OPTIMISATION AND TRADING: LEVERAGING THE VALUE CHAIN

The main role of the optimiser is to:

- **ensure the balancing** between EDF's upstream resources and markets in France,
- **secure and maximise the gross electricity margin** of the "generation-supply" entity by constantly seeking the best opportunities to buy or sell on the wholesale markets.

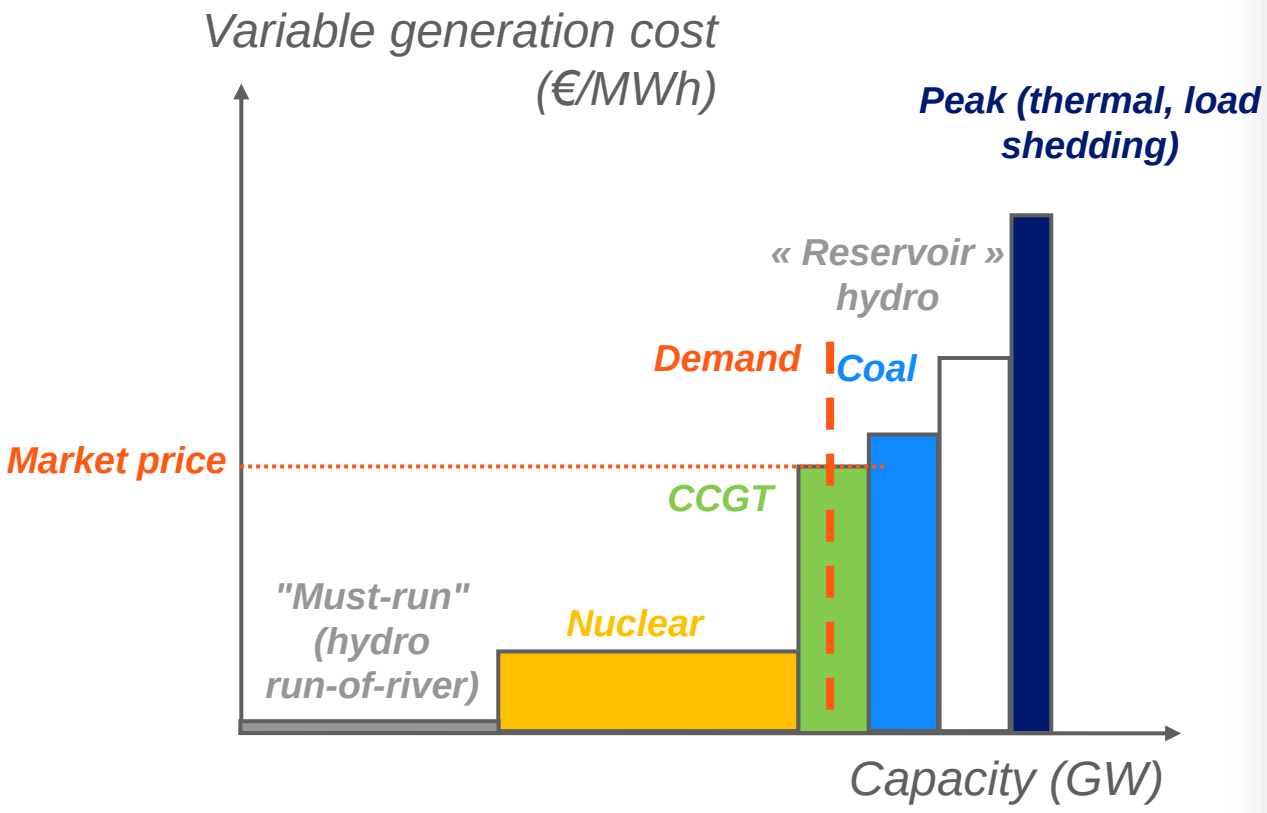
Upstream resources: generation fleet, purchases on wholesale markets, contractual demand-side response capacity

Markets: sales to end customers, long-term supply contracts, sales on wholesale markets, sales to competitors in France (ARENH), partnership contracts

The optimizer programs the use of physical assets, secures gross electric margin of the set "production consumption", operates on the wholesale market (through EDF Trading)

The supply-demand balance is forecasted over different time horizons

DAILY OPTIMISATION: THE MERIT ORDER



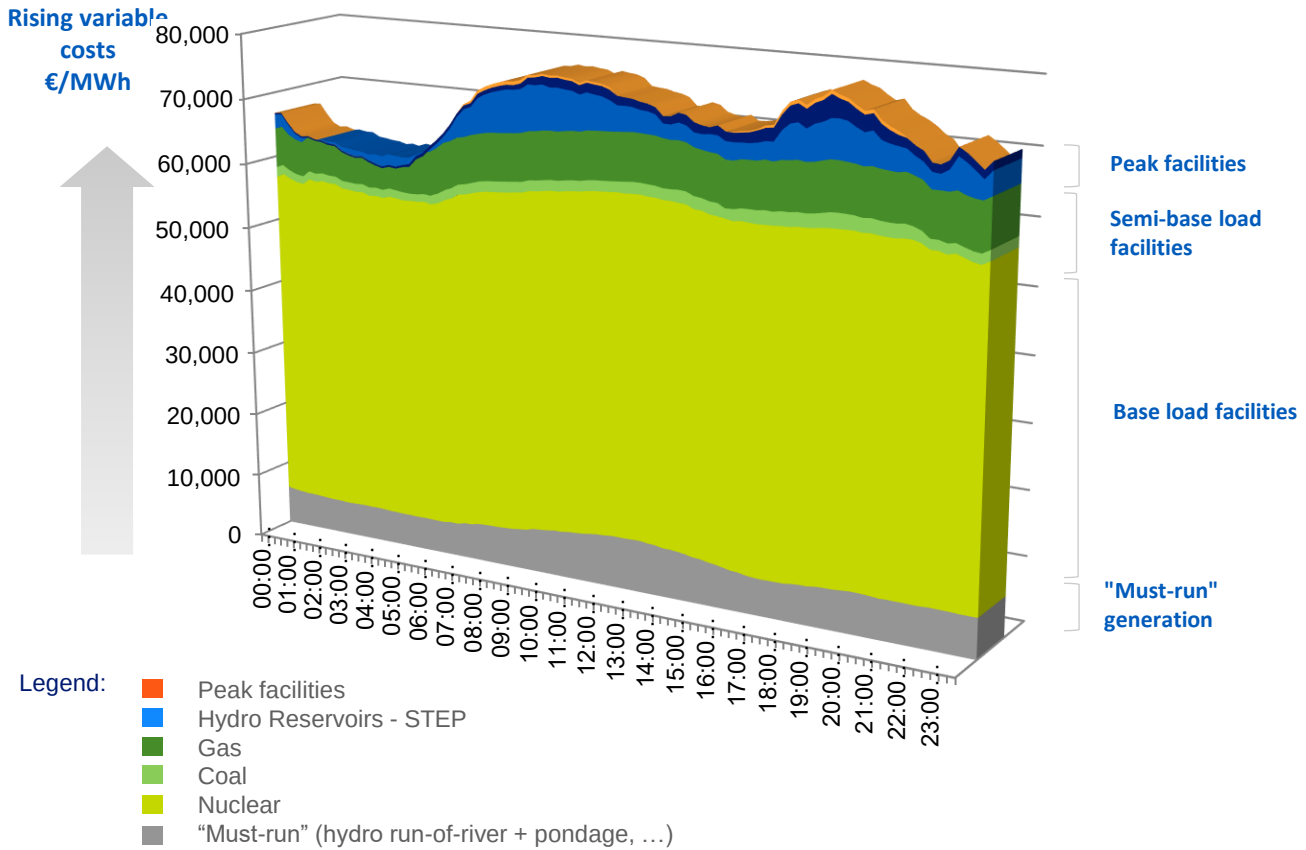
- **For each moment**, the optimiser schedules the operation of available means of generation, mobilising them according to the merit order of variable costs(1) until the estimated demand is met
- Before using the market, each producer determines the resources required to meet a given level of demand. It classifies them from the least expensive to the most expensive
- It then determines the marginal cost, which is the variable cost of the most expensive means of generation called to meet the supply/demand balance of its own portfolio
- Given this marginal cost, it determines the sales and purchases volumes
- Spot power price (day ahead) is based on the marginal cost that forms the intersection of the supply of all producers with the overall demand to meet

(1) Variable costs: operating costs proportional to the generated energy, fuel costs, CO2, costs of injection into the grid

COST OPTIMISATION – SCHEDULING OF GENERATION FACILITIES BASED ON VARIABLE COSTS

Stack chart of generation facilities

Example of one high consumption day in winter in France



- Every day, the optimiser sets up for the next day the functioning tool of the generation facilities, reflecting their dynamic constraints

Did you know?

The merit order is a way of ranking available sources of energy, especially electrical generation, in ascending order of their short-run marginal costs of generation, so that those with the lowest marginal costs are the first ones to be brought online to meet demand, and the plants with the highest marginal costs are the last to be brought on line

EDF TRADING, ACCESS PLATFORM TO WHOLESALE ENERGY MARKETS

A PLATFORM

- EDF Trading operates on all wholesale markets, in Europe, North America and in the worldwide LNG market through its partnership with JERA

SPECIALIST IN THE WHOLESALE ENERGY MARKET

- EDF Trading offers a full range of services and products on the wholesale markets: primary energy supply, management of generation, transport, regasification and storage assets, forward purchases/sales of energy, environmental products (carbon, guarantees of origin certificates, certified emission reductions, etc.)

VALUE CREATOR FOR EDF...

- As the exclusive market interface, EDF Trading maximises the value of the assets of EDF Group entities and implements their hedging strategy

... AS WELL AS FOR THIRD-PARTY CUSTOMERS

- EDF Trading extends its services to all EDF Group customers, large companies and industrial customers, as well as to many producers and suppliers of energy

EDF Trading 2020 EBITDA

€633m

Did you know?

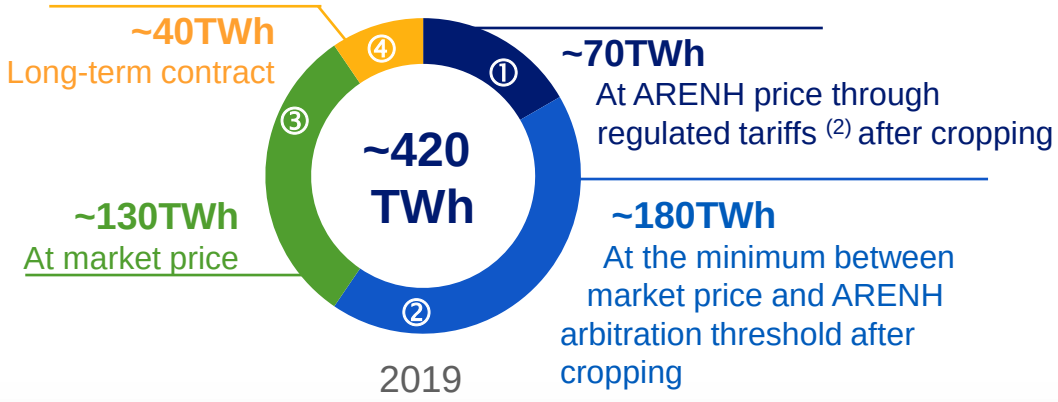
The optimiser, via EDF Trading, accesses the **wholesale markets**, which can take different forms:

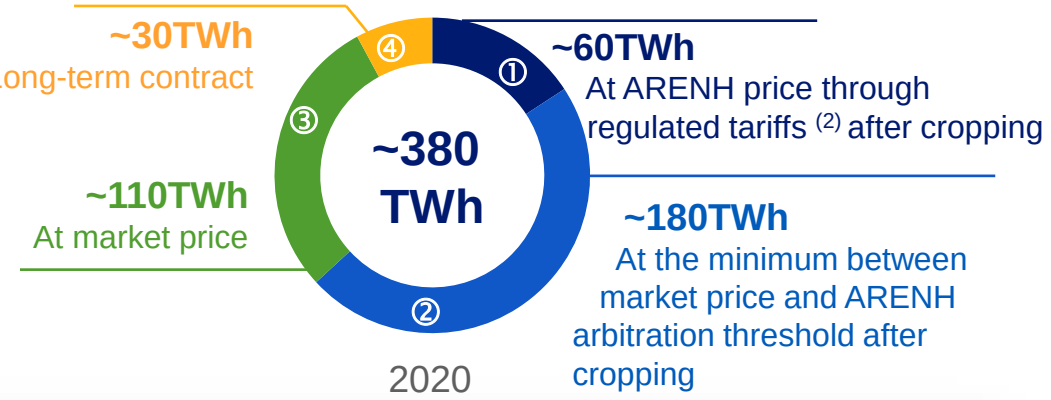
- OTC (over the counter) bilateral agreements: direct trade with counterparty
- Regulated/market exchanges: pooling of supply and demand by a market organiser and settlement of trades (Epexspot in France, Belpex in Belgium, etc.)

Well positioned with a broad geographical presence

- One of the largest suppliers of gas and electricity in North America
- A leading player in the European gas and electricity markets
- Growing global LNG trading in the Atlantic and Pacific Basins through its partnership with JERA

DISTRIBUTION OF ELECTRICITY SALES (1) ACCORDING TO THEIR MARKET PRICE EXPOSURE





❶ Volumes sold at the ARENH price following the cost-stacking formula in the regulated sales tariffs (essentially blue residential and non-residential tariffs)

❷ Volumes sold at the market price if this price is lower than ARENH arbitration threshold (ARENH price - capacity price) and ARENH price otherwise (3), which include:

- The ARENH volumes that can be requested by alternative suppliers and network operators for their purchases of losses
- Part of the volumes (4) sold to EDF final customers under market-based contracts

❸ Volumes sold at the market price, whatever the price, which include:

- Part of the volumes sold to EDF final customers: “market complement supply” in the regulated tariffs (4), balance of the volumes sold to clients under market-based contracts
- Volumes sold on wholesale power markets

❹ Contracts at negotiated prices that do not follow a market-indexed structure

(1) Sales excluding purchase obligations volumes and volumes under long-term supply contracts. Estimated distribution based on the respective situations in 2019 and in 2020, in particular in terms of EDF downstream market shares. In 2019 and 2020, the level of cropping corresponding to ARENH over subscription (respectively 133 and 147 TWH) by alternative suppliers has been applied to downstream offers

(2) Regulated electricity sales tariffs

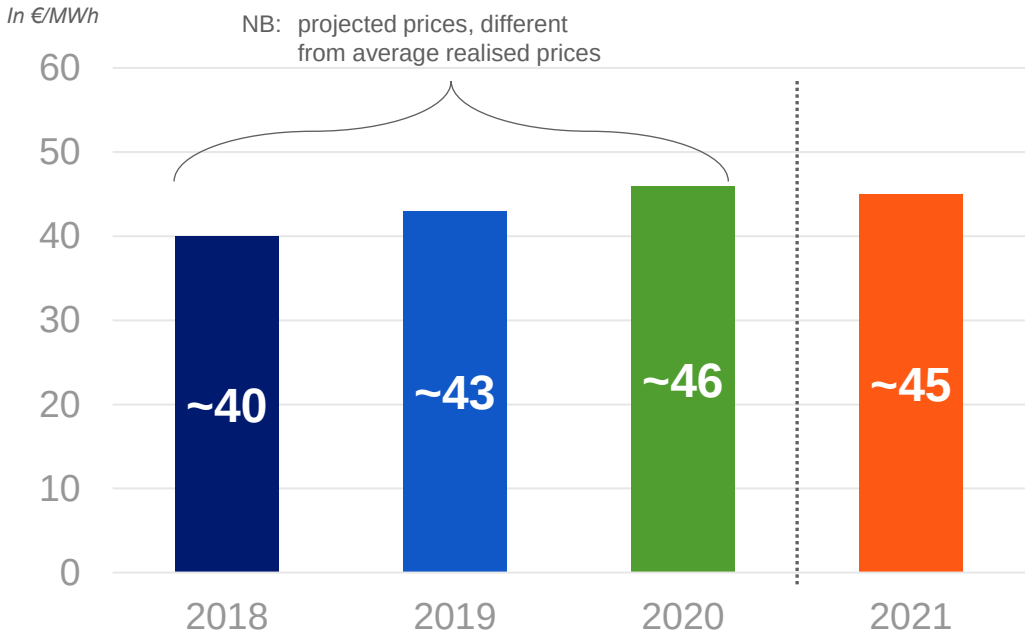
(3) EDF is subjected to the arbitrage between the two prices and its date of exercise is variable depending on the volumes (it takes place at the latest at the time of the ARENH end of year subscription window for a delivery the following year)

(4) Related to the replication of the sourcing cost structure of alternative suppliers: shares of the volumes corresponding to the "ARENH rights”

(5) Related to the replication of the sourcing cost structure of alternative suppliers: the balancing volumes sourced on the market which exceed the “ARENH rights”

FRANCE: ESTIMATED AVERAGE FORWARD HEDGED PRICE

Average hedged price (1)
France – Generation & Supply activities



Notional volume of fixed-cost generation output of **~413TWh** (2)

Average price captured through hedging activities on forward contracts before the beginning of the delivery year (3)

Estimation based on:

- Forecasted distribution of electricity sales volumes
- 'Shaped demand' (baseload vs peakload, seasonality)

This average price does not take into account purchases and sales on wholesale markets that may take place during the delivery year depending on unexpected generation or consumption events
It is not the average realised sale price

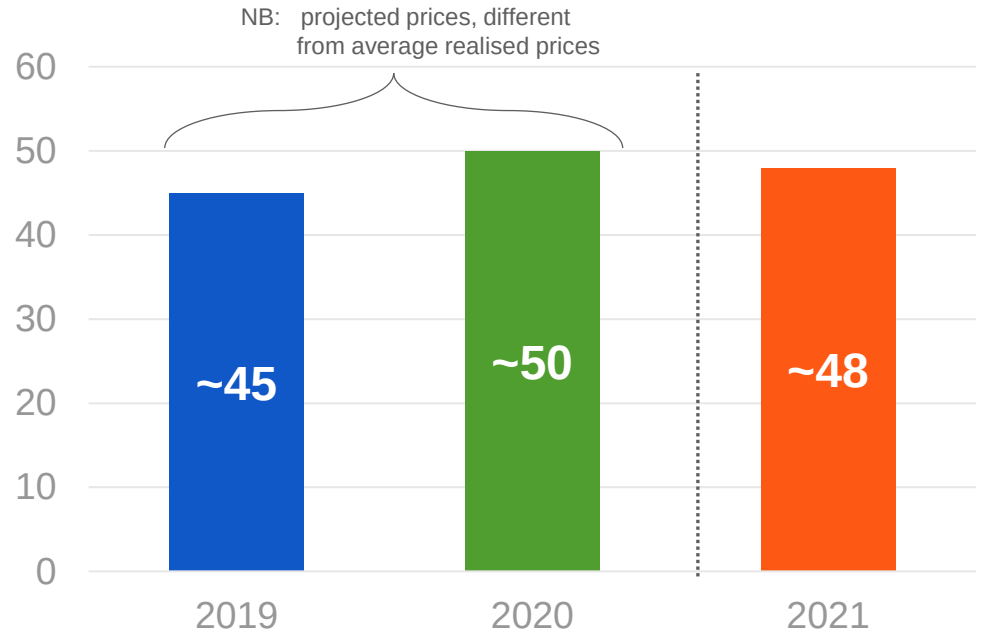
(1) Rounded to the nearest whole number. Excluding revenue associated with capacity certificates.
(2) Only from nuclear and hydro generation means, on the basis of normal hydro conditions

(3) Based on a principle of gradual closing of net positions before the end of the delivery year, based on a predefined hedging trajectory (typically 2 years for the wholesale power market in France) that captures an average price, potentially with overweighting of year Y-1 in view of liquidity constraints on the forward markets. Subject to very high uncertainty over EDF's net exposure due to the fact that the ARENH system is optional (the option cost is embedded in the market hedges).

EDF ENERGY: ESTIMATED AVERAGE FORWARD HEDGED PRICE

Average hedged price (1)
United Kingdom

In £/MWh



Notional volume of fixed-cost generation output of **~48 TWh for 2019-2020**

Average price captured through hedging activities in relation with wholesale prices before the beginning of the delivery year (2)

Estimation based on:

- Notional generation volumes
- Season contracts prices

This average price does not take into account purchases and sales on wholesale markets that may take place during the delivery year depending on unexpected generation events.
It is not the average realised sale price.

(1) Rounded to the nearest whole number. Excluding revenue associated with capacity certificates.
(2) Based on a principle of gradual closing of net positions before the end of the delivery year, based on a predefined hedging trajectory in view of liquidity constraints on the forward markets.

ARENH: CURRENT MECHANISM

- The **regulated access to historic nuclear power** (ARENH) mechanism entered into effect in 2011 to allow alternative suppliers who so request, for the supply to end customers, to benefit from a supply "under economic conditions equivalent to those for EDF resulting from the use of its nuclear power plants" through an annual product, which may be requested twice a year (in November and May), within the limit of an annual ceiling of 100TWh (excluding network losses). This mechanism is open to network operators to cover their technical losses. The Energy Regulation Commission (CRE) is responsible for managing the mechanism and calculating the quantities of which it informs the alternative suppliers individually, and EDF in an aggregated manner

- **The ARENH price has been fixed at €42/MWh** since 1 January 2012(1). Since 2017, the delivered product includes 1MW of capacity certificates per megawatt of subscribed ARENH

- **The law of 8 November 2019 on energy and climate** granted the ministers responsible for the economy and energy the power to set:
  - to set by decree the ceiling of the ARENH, as of 2020, within the limit of 150TWh; this ceiling having to be set "with the aim of contributing to price stability for the end consumer";
  - until the entry into force of the decree establishing the method for calculating the ARENH price, to set the ARENH price by decree; among the elements that may be taken into account to revise this price are in particular the changes in the consumer price index and the ARENH ceiling.

- **The government recently announced that it had been in discussions with the European Commission regarding the conditions for exercising this option,** in that any change to ARENH parameters, such as an increase in volume to 150TWh, even without a change in price, would require the government to modify its 2012 decision approving the ARENH mechanism**. Explaining that negotiations had been initiated with the Commission to devise a new regulatory mechanism for the existing nuclear power fleet, the government said that the question of a change in ARENH parameters would hinge on the outcome of negotiations on the future regulation and that it was not envisioning any change in the mean time,** as ARENH continues to protect French consumers from increases in the market price, despite the ceiling effect.

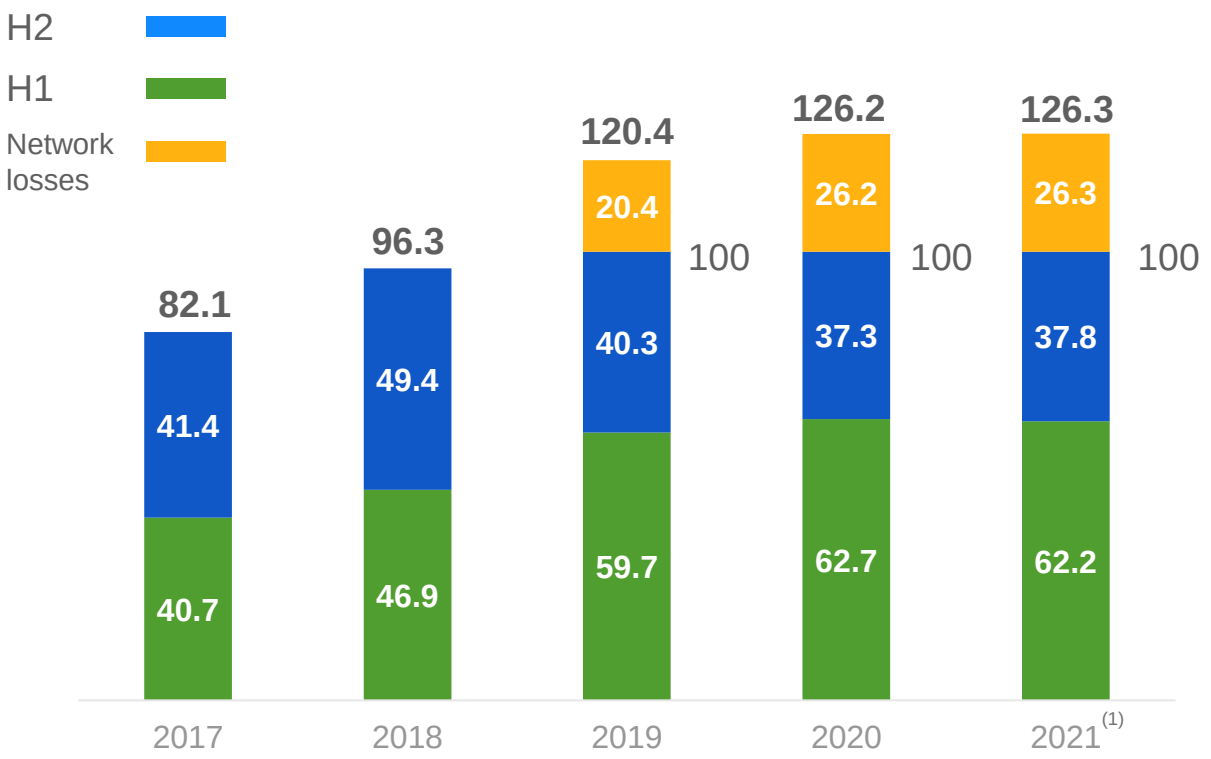
- **A structural reform, however, remains necessary to ensure a balanced regulatory framework for the current nuclear facilities**, particularly with regard to the remuneration of the generation affected by ARENH and its asymmetrical nature
  - In the French Strategy for Energy and Climate presented at the end of November 2018, the government indicated that it would propose, in view of supporting the energy transition in France, *"modalities for a new regulation of the current nuclear fleet, making it possible to guarantee the protection of consumers against market price increases beyond 2025 by allowing them to benefit from the competitive advantage linked to the investment made in the existing nuclear fleet, while giving EDF the financial capacity to ensure the economic sustainability of its generation facilities to meet the needs of PPE (French multi-year energy programme) in low price scenarios"*

(1) Order of 17 May 2011

ARENH: VOLUMES ALLOCATED TO ALTERNATIVE SUPPLIERS

- Maximum annual sales volume of 100TWh (2) by EDF to alternative suppliers and ~25TWh to network losses coverage.
- In November 2020, ARENH requests from alternative suppliers for 2021 amounted to 146.2TWh.
- The volume to deliver in 2020 and 2021 was therefore cropped to the legal ceiling of 100TWh
- Volume sold for the year 2021, including 26.3TWh sold for network losses coverage:
  - 62.6TWh for H1
  - 63.7TWh for H2

VOLUMES ALLOCATED IN TWH



Source: CRE

(1) Difference between half year estimated by EDF, from the annual data provided by the CRE, and likely to change during the year through the application of legal, regulatory and contractual provisions (sub-annual window, cancellations, defaults, etc.)

(2) The Energy and Climate Change law of 8 November 2019, provides the government with the possibility of raising the cap for global maximal volumes via a ministerial order, from 100 to 150TWh as of 1 January 2020. The law also allows the government to revise the ARENH price. However, the government announced early November 2020 a status quo for both ARENH volumes and ARENH price for 2021

ARENH: FORCE MAJEURE LITIGATION

- The Covid-19 health crisis and the emergency measures taken by the French government as of 17 March 2020, have led to a decrease in electricity consumption by non-residential customers and a decrease in electricity wholesale market prices, affecting all suppliers, including EDF.
- Certain suppliers have asked the Presiding Judge of the Paris Commercial Court to order, as a matter of urgency, the total suspension of deliveries of volumes from ARENH and/or their partial suspension up to the amount of the drop in electricity consumption of their customer portfolio during the crisis, invoking the *Force Majeure* clause provided for in the ARENH framework agreement concluded with EDF.
- The Summary Judge has decided that the conditions for *Force Majeure* have been met and has ordered EDF not to oppose the suspension of the agreement, entailing thereby the total interruption of the annual electricity transfer program.
- EDF has appealed the ruling. On 28 July 2020, the Paris Court of Appeals upheld the urgent application judge's decision, considering that the *Force Majeure* clause in the framework agreement has an automatic effect and that *Force Majeure* could not be excluded with the evidence required in summary proceedings. EDF filed an appeal on 24 September.
- To safeguard its rights, EDF announced on 2 June the termination, as a precautionary measure, of the ARENH contracts binding it to these energy suppliers, as provided for in the event of a suspension of these contracts beyond a two-month period. Total Direct Energie (TDE) contested this termination before the judge in charge of summary proceedings. The latter ruled on 1 July 2020 and provisionally suspended the effects of EDF's termination announcement. EDF has appealed this ruling. On 19 November 2020, the Paris Court of Appeals overturned the ruling of the summary judge.
- As the French Energy Regulatory Commission (CRE) has not complied with EDF's request to suspend ARENH deliveries to TDE (1) starting on 23 November for the end of 2020 in accordance with the ruling of the Paris Court of Appeals, EDF filed an appeal with the French State Council for ultra vires on 10 December 2020 with a view to obtaining the revocation of the CRE's ruling.
- In September, an alternative supplier (Ohm Energie) also urgently appealed to the Presiding Judge of the Paris Commercial Court to suspend payments due for ARENH volumes delivered during the force majeure event, arguing that delivery should not have continued during the period of *Force Majeure*. On 23 October, the Summary Judge dismissed the application.
- These rulings were taken under an urgent procedure, on a provisional basis; only a procedure on the merits will make it possible to establish definitively the merits of the respective positions of the parties.
- To date, several alternative suppliers filed a claim against EDF before the Paris Commercial Court in order to obtain compensation for the damages allegedly caused by EDF's refusal to suspend ARENH deliveries on the basis of *Force Majeure.*

(1) TDE = Total Direct Energie

PURCHASE OBLIGATION AND SALE ON WHOLESALE MARKET

Public service mission: EDF and the LDCs(1) must buy electricity generated by certain electricity generation facilities (or pay them an "additional remuneration") whose development the French government would like to encourage, at rates set by the government (by decree or through tenders)

Pursuant to Article L. 121-7 of the French Energy Code, EDF is compensated for the additional costs resulting from the purchase obligations (PO) on the basis of a reference to prices from wholesale electricity markets, known as “avoided cost” (compensation). Starting from 1 January 2017, the costs of managing these contracts are also compensated.

EDF-Purchase obligations:

According to the CRE ruling of 16 December 2014, the energy of purchase obligations is resold on the markets:

- the near certain component (*i.e.* predictable over the medium term) directly by tenders under transparent and non-discriminatory conditions
- the variable component (*i.e.* predictable for the day ahead) on EPEX Spot via EDF Trading (in the dedicated book).

Since the capacity mechanism has been set up, EDF has in charge the certification of the facilities under the purchase contract and resells these capacities at the auctions (nearly 6GW)

420,000

Annual growth: +20,000 contracts

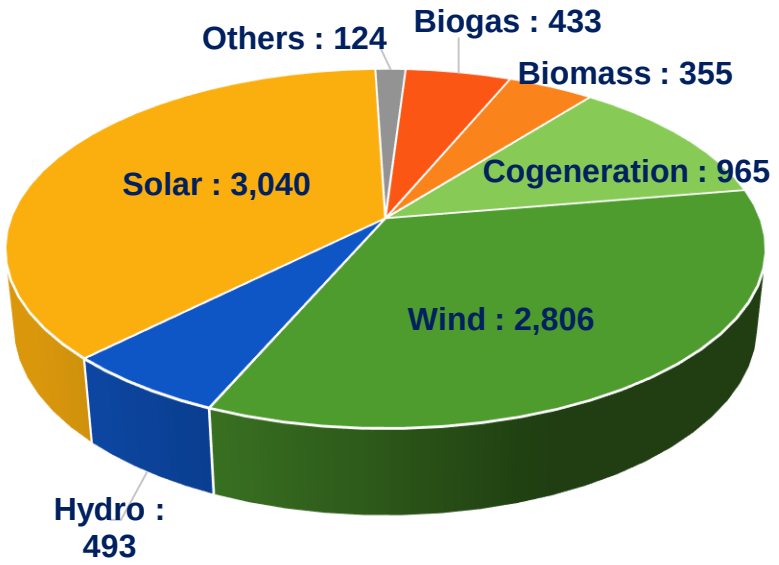
~€50m

in management fees for EDF

2020 Key figures(2)

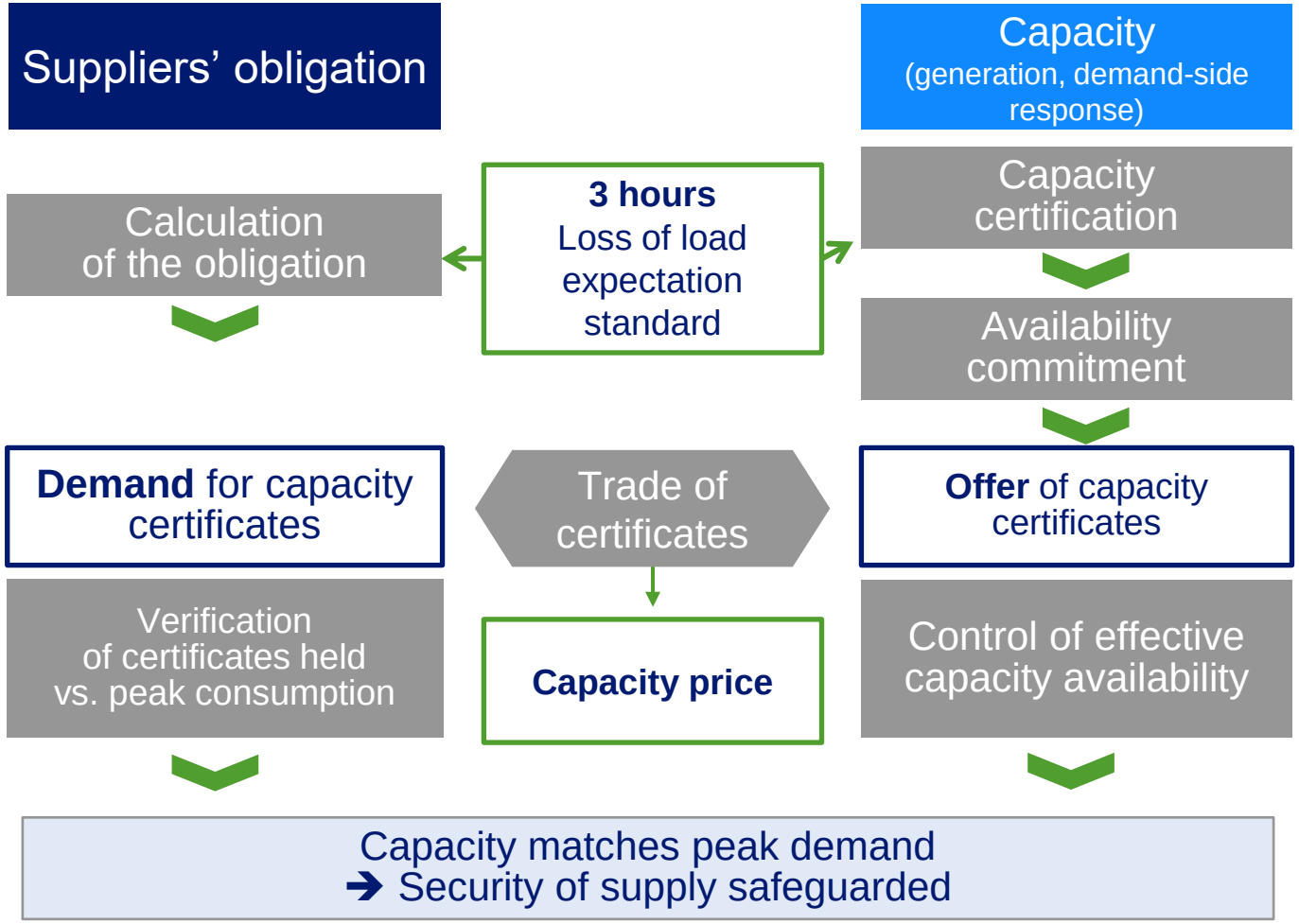
OA	CR
61.8TWh of purchased electricity	6.2TWh of sustained electricity
€8.2bn of purchases	€0.3bn of support

Purchasing breakdown by sector in 2020 (in €m)



(1) Local distribution company
(2) Excluding Corsica and French overseas departments

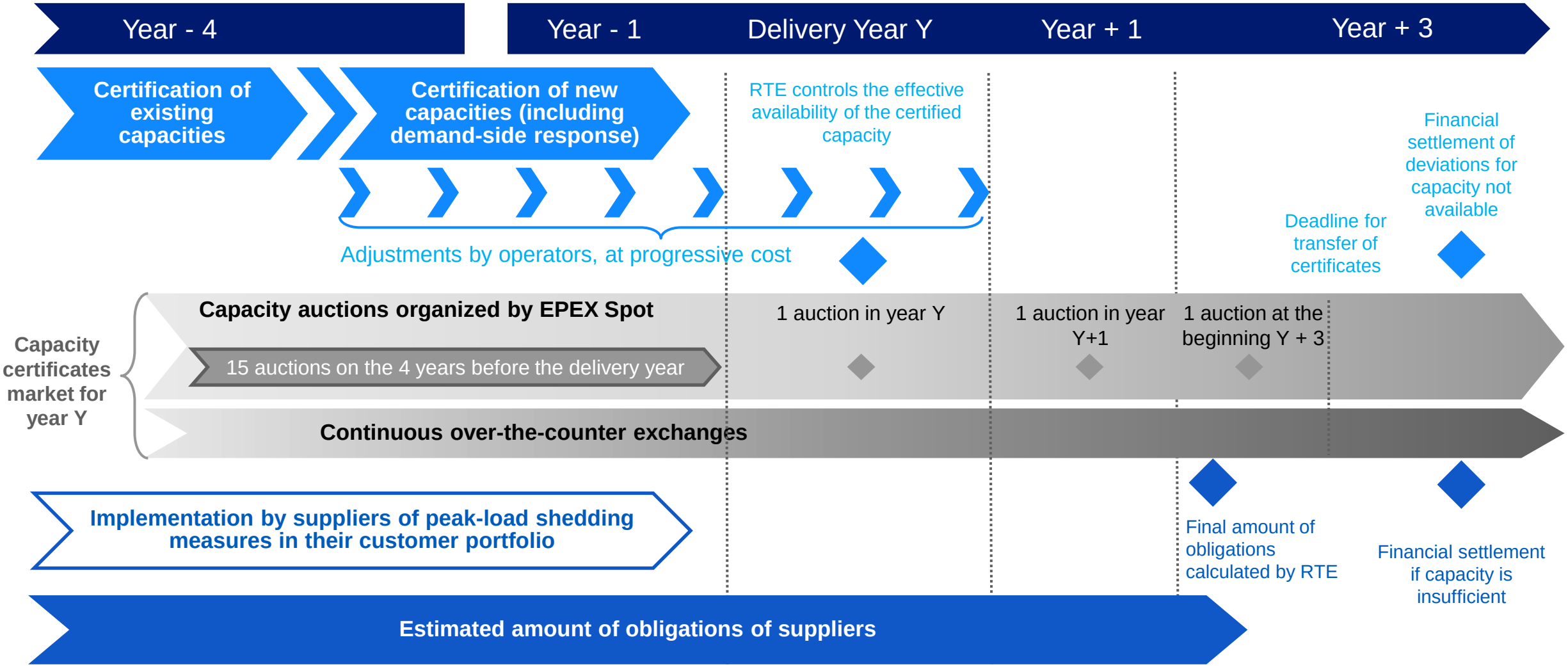
CAPACITY MECHANISM IN FRANCE: STARTING IN 2017



- Established by the NOME law, approved by the European Commission on 8 November 2016
  - Objective: to remunerate the means of generation and load shedding useful to security of supply
  - Definition of the criterion of security of supply by the public authorities: 3 hours of shedding on average per year
- Operated by RTE
  - Definition of calculation methods and identifying peaks
  - Issue of capacity certificates, control and management of capacity registry and settlement of gaps
  - Ex-post calculation of each supplier's obligations and the actual availability of certified facilities
  - Provision of information on supply and demand for certificates

(1) Source: DGEC, RTE

CAPACITY MECHANISM IN FRANCE: STANDARD CALENDAR



Source: RTE

CAPACITY MARKET IN FRANCE: IMPACT ON EBITDA (YEAR Y)

Valuation method for certificates	Timing of EBITDA impact	Certificates concerned	Price	Volumes concerned (1)
Pass through of the capacity price to end customers (market component of supply contracts and tariffs)	At the time of energy delivery	Certificates for delivery year Y	Calculated from auction prices	From 25 to 45GW (depending on the ARENH volumes subscribed and included in the supply contracts)
Transfers related to ARENH volumes (incl. ARENH share of supply contracts and tariffs)	At the time of energy delivery	Certificates for delivery year Y	ARENH price at €42/MWh includes delivery of associated capacity guarantees	~115MW per TWh of ARENH
Certificate sales on the market (via auctions or OTC)	At the time of closing of the transactions	Any certificate	Auction price (or negotiated price for OTC sales)	Variable (according to ARENH volumes)
Certificate purchases on the market (via auctions or OTC)	At the time of energy delivery	Certificates for delivery year Y	Auction price (or negotiated price for OTC sales)	Variable (according to ARENH volumes and needs of final customers)

2 years of auctions booked in 2020

(1) The volume of certified capacity certificates in France may be higher than RTE's estimate of demand. In such a case, a certain amount of the certificates held by EDF would not be sold

CAPACITY MECHANISM IN FRANCE: IMPACT FOR EDF

	Capacity auctions	Volume of EDF certified capacities (at end-2020)	Impact on EBITDA (1)
2017	➢ Market Reference Price (PRM): €10/kW (EPEX session on December 2016)	73GW	+580M€ Cumulative impacts on regulated sales tariffs (2), offers at market prices and purchases/sales on the wholesale market
2018	➢ Market Reference Price (PRM): €9.34 €/kW (average of the sessions of November and December 2017)	72GW	+591M€ The 2018 MRP applies to the billing of the vast majority of the customers on market-price contracts in 2018 and has been incorporated into the new February 2018 schedules for customers on regulated tariffs (3)
2019	➢ Market reference price: €17.37/kW, (unweighted average bid price before delivery year)	71GW	+701M€(4) The 2019 MRP applies to the billing of the vast majority of the customers on market-price contracts in 2019 and has been incorporated into the new February 2019 schedules for customers on regulated tariffs (5)
2020	➢ Market reference price: €19.5/kW, (unweighted average bid price before delivery year)	63GW	+€952m The 2020 MRP applies to the billing of the vast majority of the customers on market-price contracts in 2019 and has been incorporated into the new schedules for customers on regulated tariffs (6)
2021	➢ Market reference price: €31.2/kW, (unweighted average bid price before delivery year)	63 GW	The 2021 MRP will apply to the billing of the vast majority of the customers on market-price contracts in 2019 and has been incorporated into the new schedules for customers on regulated tariffs (7)

Not all of these capacities are directly usable. In particular, the ARENH subscriptions have a negative impact on capacity revenues insofar as the ARENH product at €42/MWh includes the delivery of capacity guarantees by EDF: 14.3GW of capacity was thus transferred to suppliers having subscribed to the NWRA for 2020

(1) Includes sales on the market of Capacity Guarantees for the year related to all delivery years.
(2) The PRM for the 2017 capacity of €10/kW has been included in the July 2017 tariff schedule.
(3) Cf. CRE deliberation of 11 January 2018.
(4) Theoretical figure: the capacity on the DCo side has not been fully passed on in the TRVs in 2019 (tariff freeze).
(5) Cf. CRE deliberation of 7 February 2019.
(6) Cf. CRE deliberation of 16 January 2020.
(7) Cf. CRE deliberation of 14 January 2021.

GREAT BRITAIN CAPACITY AUCTION RESULTS FOR EDF ENERGY (1)

All capacity agreements for 1 year unless otherwise stated	Clearing price £/kW/an	Nuclear	Coal	CCGT (2)	OCGT (3)	Battery	Demand-side Response (DSR)
2014 Q4 (2018/2019)	19.4 (2012/2013 prices)	All 16 units (7.9GW)	7 of 8 units (4) (3.1GW)	All 3 units (1.2GW)	All 2 units (38MW)	N/A	N/A
2018 Q1 (2018/2019)	6.0 (no indexation)	N/A	1 unit (0.4GW)	N/A	N/A	1 unit (10.5MW) (5)	2 units (12.8MW)
2015 Q4 (2019/2020)	18.0 (2014/2015 prices)	All 16 units (6) (7.6GW)	0 unit	All 3 units (1.2GW)	2 units (37MW)	N/A	N/A
2016 Q4 (2020/2021)	22.5 (2015/2016 prices)	All 16 units (7.9GW)	3 of 8 units (1.8GW)	All 3 units (1.2GW)	All 2 units (38MW)	1 unit (7) (47MW)	N/A
2018 Q4 (2021/2022)	8.4 (2016/2017 prices)	All 16 units (7.9GW)	0 unit	All 3 units (1.2GW)	0 unit	N/A	5 units (32.1MW)
2020 Q3 (2022/2023)	6.4 (no indexation)	12 units (5.9GW)	0 unit	All 3 units (1.2GW)	0 unit	N/A	0 unit
2021 Q1 (2023/2024)	16.0 (2018/2019 prices)	8 units (4.0GW)	0 unit	All 3 units (1.2GW)	0 unit	N/A	4 units (21.5MW)

(1) Following a judgment by the General Court of the Court of Justice of the European Union which removed the European Commission's State aid approval of Great Britain's Capacity Market (CM) on 15 November 2018, the UK Government suspended the operation of the scheme. It was subsequently re-approved and reinstated on 24 October 2019.

The slide includes capacities for which agreements were awarded (de-rated capacity).
For DSR this equates to bidding capacities

(2) Combined Cycle Gas Turbine
(3) Open Cycle Gas Turbine
(4) 3-year refurbishing agreements that were reverted to 1-year agreements
(5) Battery further de-rated to 21% from 96%
(6) Q4 2015 had a lower total connection capacity for Nuclear units
(7) 15-year capacity agreement for new build battery
N/A: Not applicable

CAPACITY MECANISM IN ITALY

By the end of 2019, the capacity market was established in Italy, with the launch of two consignment auctions in 2022 and 2023.

Edison won 2.8GW of existing capacity for both years, and a total of 1.4GW of new capacity benefiting from a fixed contribution of €75,000/MW/year for 15 years.

Thanks to its contribution to the capacity market, Edison's margins will increase appreciably and become more foreseeable.

OUTLINE

A capacity mechanism was launched in Italy in 2019: it was validated as state aid by the European Commission on 14 June 2019 (State Aid number SA.53821) until the end of 2028; an implementing decree was issued for this mechanism by the Minister for Economic Development on 28 June 2019. Terna, the Transmission Network Manager, defined the rules after consultation with stakeholders, and the first auctions took place in November 2019 for the 2022 and 2023 delivery years. The capacity mechanism implemented in Italy is a "Market Wide" mechanism (remunerating all capacity required to meet security of supply criteria), with centralised "pay as clear" auctions, price zones in case of potential congestion and carbon emission limits. Capacity availability is primarily encouraged through the "reliability option" system specified below.

FIXED PREMIUM

Selected capacity is remunerated by a fixed annual premium stated in Euros/MW/year (paid monthly during the delivery year). Prices are established by cross-referencing a demand curve produced by Terna with a supply curve (bids at auctions).

A bid cap for existing capacity is set within a range of between €25,000/MW/year and €45,000/MW/year (€33,000/MW/year for the 2022 and 2023 delivery years).

A bid cap for new capacity is set within a range of between €75,000/MW/year and €95,000/MW/year (€75,000/MW/year for the 2022 and 2023 delivery years).

INCENTIVES FOR CAPACITY AVAILABILITY

The "reliability option" scheme adopted by Italy involves a "repayment obligation": the selected capacities must pay Terna the positive difference between a reference price and a predetermined strike price, whether or not the capacity is available at that time.

The reference price is based on the day-ahead market price and the balancing (adjustment) price of the price zone where the capacity is located. The strike price is set at the level of the standard hourly variable cost of the technology with the highest variable costs (i.e. the peak technology). The peak technology chosen by the Authority for 2022 and 2023 is the OCGT (open-cycle gas turbine), with a variable production cost of €125/MWh in 2017.

CARBON EMISSION LIMITS

New and refurbished capacity is only eligible for the capacity mechanism if it does not emit more than 550g of fossil-fuel carbon emissions per kWh of electricity. Existing generation capacity is only eligible for the capacity mechanism if it does not emit more than 550g of fossil-fuel carbon emissions per kWh of electricity. If this limit is not respected, existing capacity may still be eligible if it commits not to emit more than 350kg of fossil-fuel carbon emissions on average per installed kWe for a given delivery year.

EDF GROUP MAIN BUSINESSES

A RECOGNISED, INNOVATIVE AND DIGITAL CUSTOMER RELATIONSHIP

28.7 million of EDF customer accounts (1) including more than 1.5 million in gas

In the electricity market, 243.3TWh sold (1) in 2020

In the gas market, more than 32TWh sold (1) in 2020

High customer satisfaction in France

Satisfied customers

BUSINESSES AND PROFESSIONALS

LOCAL AUTHORITIES

RESIDENTIAL CUSTOMERS

9 out of 10 customers

Did you know ?

All **EDF Customer Relationship Centers are located in France**. They help to maintain employment areas throughout the territory. EDF is committed to promoting the choice of this social model. A choice shared by the French since 94% of them consider that a customer service based in France is important (2).

EDF reaffirms its commitment to continue its labeling process that has been in place for more than 10 years and is an essential component of its strategy as a responsible employer. In 2019, EDF opted for **Afnor's "Engagé RSE"** (CSR committed) certification based on highly demanding guidelines derived from the ISO 26000 standard. The assessors awarded EDF's customer relations centres with a "Confirmed" level in terms of CSR. The certification highlights the quality of the company's social practices in terms of customer relations, notably through the training of customer advisors and the attention paid to their working conditions

Close customer relations based on personalised, human and digital services

- **6,200 customer advisers serving customers**
- **250 "inclusion" advisers**
- **Sales teams in 8 Regional Directorates serving Businesses and Local Authorities**

➔ **All teams based in France, close to customers**

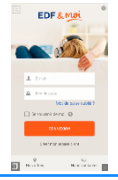
A continuous evolution of our offers and services: to innovate both for and with our customers

(1) Scope "*Direction Commerce*" + *Électricité de Strasbourg*

(2) Source AFRC 2017 Consumer Survey

EDF CUSTOMER SOLUTIONS IN FRANCE: RESIDENTIAL CUSTOMERS

5,000
customers advisors, all located in France



13.8 million
EDF & Moi app downloaded

182
million of visits to websites and the EDF & Me app

edf pulse & you
France's first co-innovation site*

* Faber Novel Study 2019

EDF innovates in order to be the supplier for the well-being of its customers with a high quality services and reference offers

Energy offers tailored to customer expectations

The regulated sales tariff and new market offerings:

- **"Mes jours Zen"** launched in 2019, the first electricity offer that adapts to the needs of consumers (choice a day in addition to the weekend when the price is lower)
- **The "*Gamme Vert Electrique*"** with:
  - ***Vert Électrique***
  - ***Vert Électrique Week-end*** (for customers equipped with Linky)
  - ***Vert Électrique Auto*** (… with an electric vehicle)
  - ***Vert Électrique Régional*** (launched in 2020)
- **An online offer with attractive prices: Digiwatt**
- **The "*Gamme Avantage Gaz*" (4-year fixed price):**
  - ***Avantage Gaz***
  - ***Avantage Gaz Durable*****,** incorporating carbon offsetting
  - ***Avantage Gaz Connecté*****,** integrating the management of the individual boiler
- ***Avantage Gaz Optimisé*** launched in 2020**,** with attractive price

Services and support to reduce energy consumption

- **Check,** a moving assistant on smartphones with advantageous deals negotiated with partners

- **An offer of troubleshooting assistance.** Three options of troubleshooting assistance, for a rapid intervention
- **« Assurénergie » offer** to help the customers to pay their invoice in the event of hardship
  The **IZI by EDF** local services platform for home improvements, particularly in terms of energy renovation and electric mobility
- The website **Prime-energie-edf.fr** to receive financial assistance for renovation work
- The network of **Energy Saving Partners** qualified RGE (Recognized Environmental Guarantor).
- The **"Mon chauffage durable"** offer for the replacement of oil, gas or coal boilers by a heat pump, in order to reduce energy bills and CO_2 emissions.

Innovative digital solutions

- The digital solution **Mes écos et moi enables all customers to better understand and control their consumption** (monitoring their actual daily or 30-minute consumption in euros and kWh)

- **The Fil d'Actu solution**, on the EDF & Moi application, also provides access to information to understand your consumption and make energy savings.

EDF CUSTOMER SOLUTIONS IN FRANCE: BUSINESS MARKET (COMPANIES, PROFESSIONALS AND LOCAL AUTHORITIES)

EDF is positioned as local *business partner* to assist its customers in the energy transition and their competitive challenges

Energy offers for all consumption profiles

- **Electricity and gas supply offers tailored to every customer segment:**
  - Tailor-made offers, guaranteed price offers, differentiated prices offers by time-slots and by season (off-peak hours/peak hours, Matina, Estivia)
  - Customisable offers are proposed to multi-sites and large tertiary and industrial customers
- **Packaged offers for simplicity** with the Performance package (Guaranteed contract and SuiviConso service
- Possibility to choose a **Renewable Energy option**, for any offer chosen

An extended range of services

- **Services to facilitate contract management:** electronic billing, consolidated billing…
- **Tools to control and monitor energies and fluids for industrial and tertiary customers**: *SuiviConso, AnalyseConso,* Expertise Conso, et Pilotage Intelligent du Bâtiment
- **Troubleshooting assistance** offer for electrical, gas and plumbing issues, enriched with guarantees for window glass and locksmithing
- **Local services for business customers:** when they set-up, with *Bénéfices-Pro, Pack redémarrage* and at all times on *Izi-by-edf* platform for works
- **Assistance services in the energy transition**: self-consumption, electric mobility and Energy Saving Certificates (CEE)

An omnichannel and personalised relationship

- **A personalised, human and digital customer relationship:** advisors in France, information at every stage of the customer journey, websites and a dedicated Customer Space
- **SMS interactions and Web Call Back**
- **Specific tools for large customers:** Business Board to track sourcing optimisation and send purchase orders with one click

Key figures

4.3 million
of visitors on websites and client areas

900,000
sheets of Frequently Asked Questions consulted

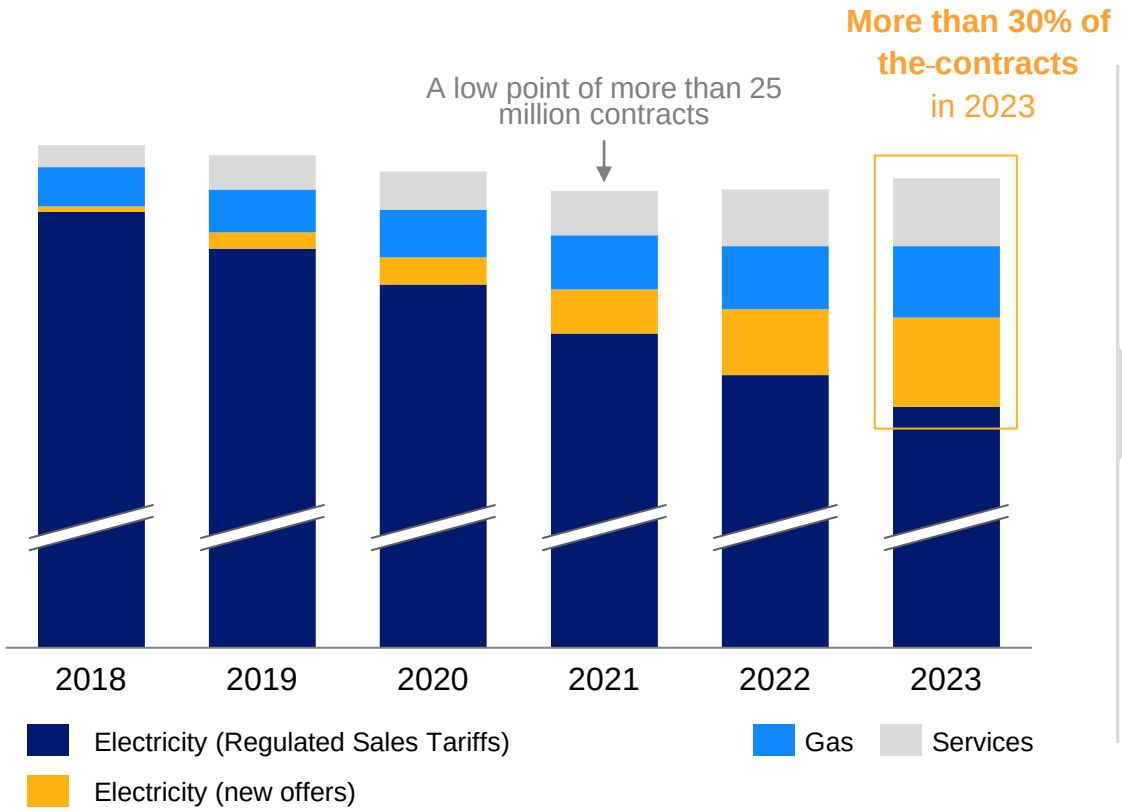
750,000
downloaded invoices

Specific support for local authorities and social housing lessors

EDF has developed offers tailored to the needs of **local authorities and private actors:** local energy offers and services, advices for the *smartcity* (energy policy, renewable energy, lighting, mobility) ; or contribution **to combat energy insecurity**. Special measures for social landlords are also proposed to improve the energy efficiency of social housing: it is the CEE (energy efficiency certificate) production tool “amount of charges”

CUSTOMERS AND SERVICES SOLUTIONS IN FRANCE (1/2): RESIDENTIAL CUSTOMERS

Erosion of the portfolio at Regulated Sales Tariffs is leading EDF to target growth over a large commercial sector



2023 TARGETS

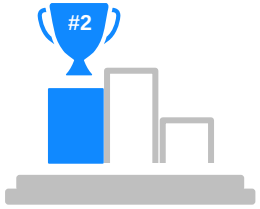
- Remain the leading supplier of electricity
- Market offering of 3 million electricity contracts
- 25% market share in gas
- Doubling of the number of service contracts

CUSTOMERS AND SERVICES SOLUTIONS IN FRANCE (2/2): BUSINESSES AND LOCAL AUTHORITIES

The Group is strengthening its leading positions

Positioning in 2019

Electricity supply	**57%** market share (non residential)
Heating networks (1)	**340** heating networks
Customer satisfaction	**~ 90%** customers



Gas supply	**115,000** business sites delivered
Energy services	**2,000** industrial sites **21,900** tertiary & commercial sites **4,200** healthcare facilties

2023 TARGETS

A contribution to a carbon-free world:

- 50% renewable energy and energy recovery in facilities operated by Dalkia

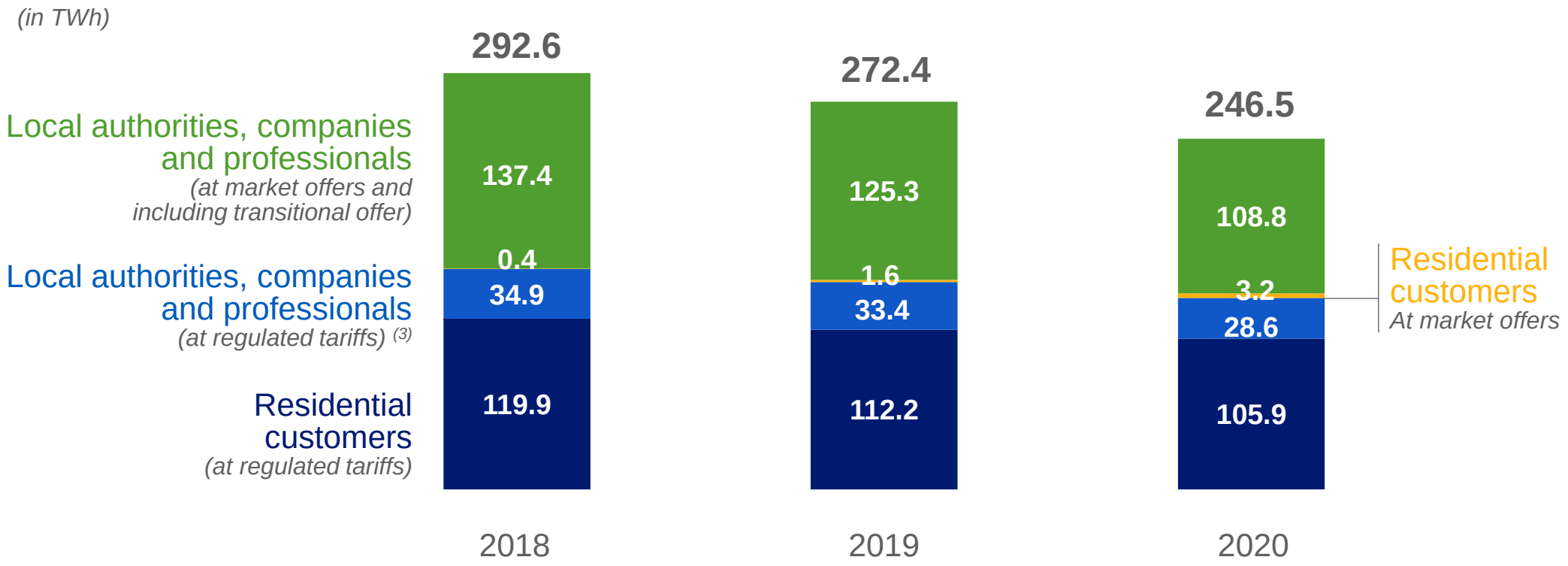
A strong digital ambition for our customers:

- 90% of customers with an active customer account
- 90% of customers with an electronic bill
- 100% of Dalkia-managed installations connected

(1) In number of heating networks
Source: Enetwork

ELECTRICITY SUPPLY IN FRANCE

SALES TO END CUSTOMERS (1)(2)

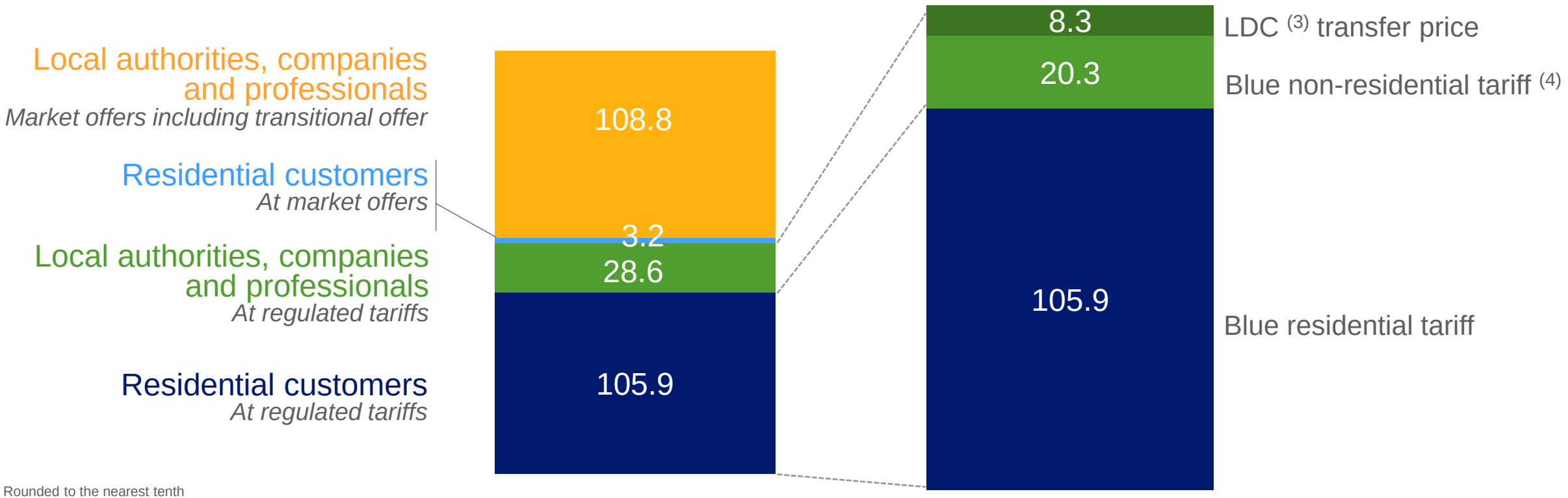


(1) Rounded to the nearest tenth
(2) Including EDF's own consumption
(3) Blue professional tariff, LDC (Local Distribution Companies) at transfer price and Green tariffs, below 36kVA that persist beyond 2015

ELECTRICITY SUPPLY IN FRANCE – SALES UNDER REGULATED TARIFFS SPLIT

(in TWh)

SALES TO END CUSTOMERS FOR 2020 (1) (2)



(1) Rounded to the nearest tenth
(2) Including EDF's own consumption
(3) Local Distribution Companies (LDCs)
(4) Of which Yellow and Green tariffs for 0.1TWh - Tariffs lower than 36 kVA

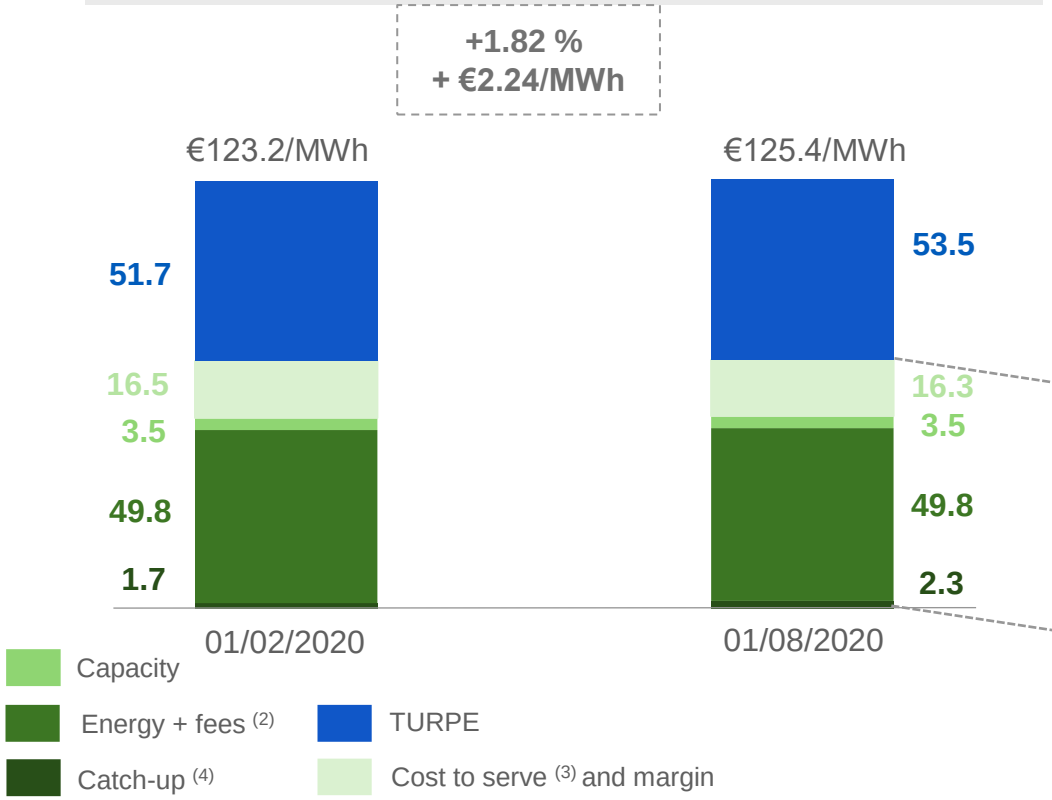
REGULATED SALES TARIFFS IN FRANCE (1/3)

Change in Blue tariff

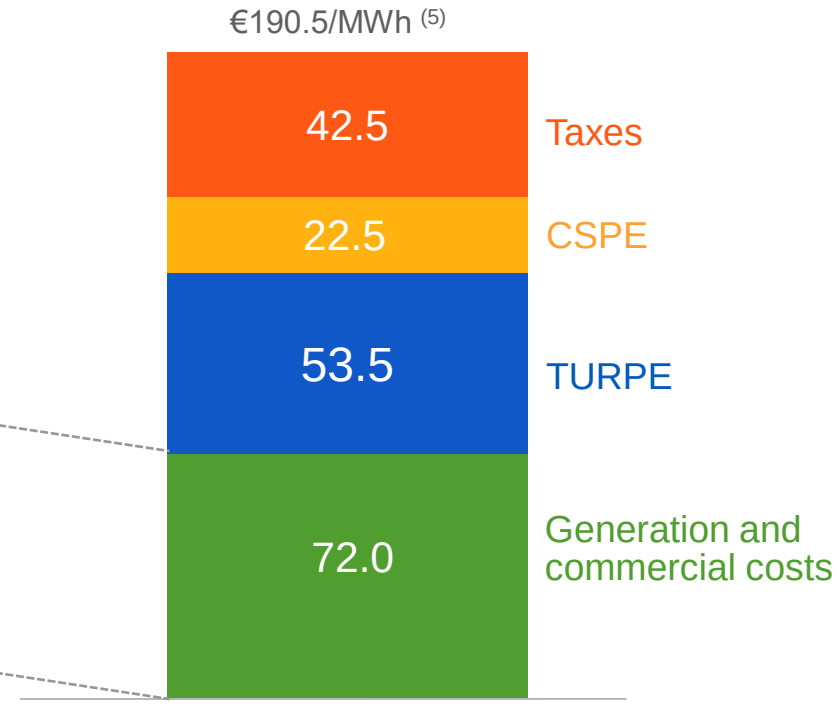
Date	Change in Residential Blue tariff		Change in Non-Residential Blue tariff	
	(VAT excluded)	(including VAT)	(VAT excluded)	(including VAT)
01/02/2018	+0.7%	+ 0.6%	+1.6%	+ 1.3%
01/08/2018	-0.5%	- 0.3%	+1.1%	+ 0.9%
01/06/2019	+7.7%	+ 5.9%	+7.7%	+ 5.9%
01/08/2019	+1.49%	+ 1.26%	+1.34%	+1.1%
01/02/2020	+3.0 %	+2.4%	+3.1%	+2.4%
01/08/2020	+1.82%	+1.54%	+1.81%	+ 1.58%
01/02/2021	+1.93%	+1.61%	+3.23%	+2.61%

REGULATED SALES TARIFFS IN FRANCE : CHANGE IN AUGUST 2012020 (2/3)

RESIDENTIAL BLUE TARIFF EXCLUDING TAXES (1)



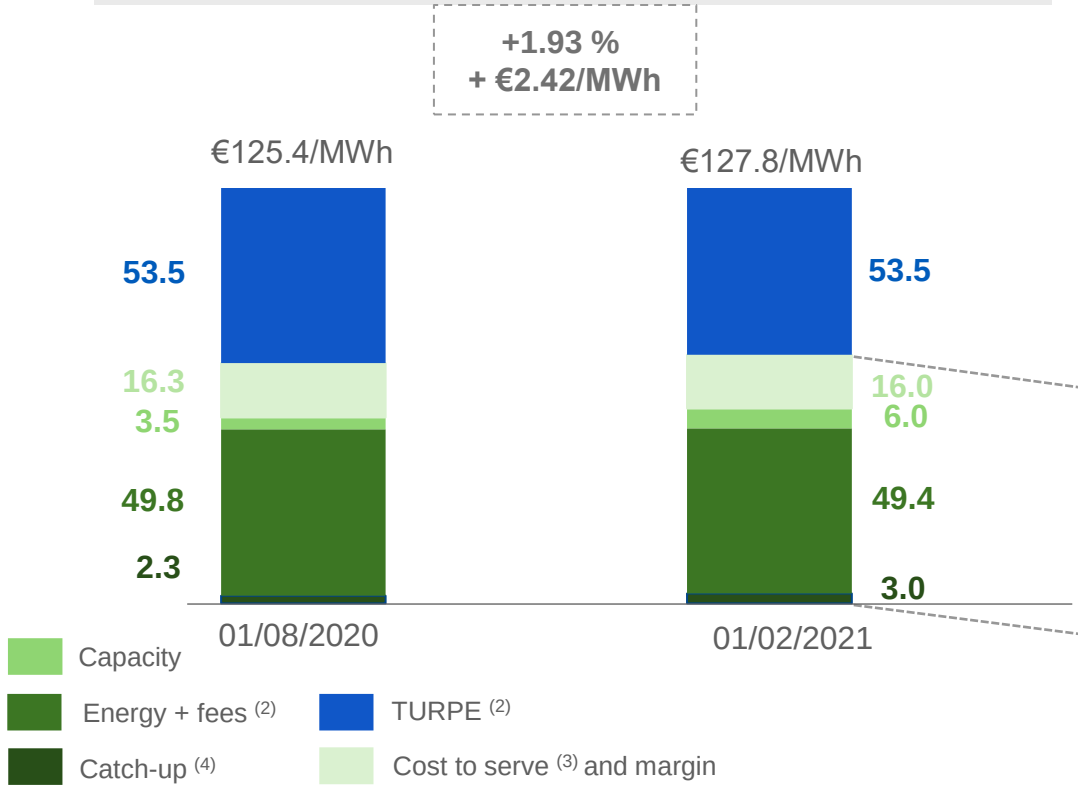
AVERAGE BILL BREAKDOWN. VAT INCLUDED
(BLUE RESIDENTIAL CUSTOMER)



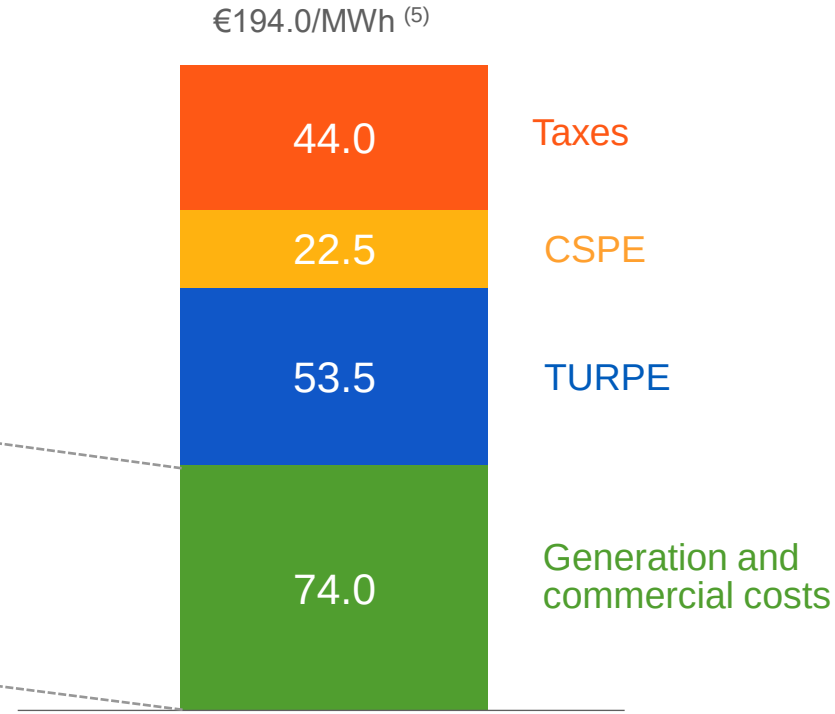
(1) Source: Data from the 2 July 2020 deliberation of the CRE approved by official decision published at the Journal Officiel on 31 July 2020
(2) In February 2020, the “Energy + fees” and “TURPE” figures were based on an average calculation on customers portfolio at the Regulated Sales Tariffs at end-2018 (base calculation for the CRE deliberation of 16/01/2020)
(3) Including cost of Energy Efficiency Certificates
(4) Catch-up due to tariffs freeze at the beginning of 2019
(5) Half-rounded figures

REGULATED SALES TARIFFS IN FRANCE : CHANGE IN FEBRUARY 2021 (3/3)

RESIDENTIAL BLUE TARIFF EXCLUDING TAXES (1)

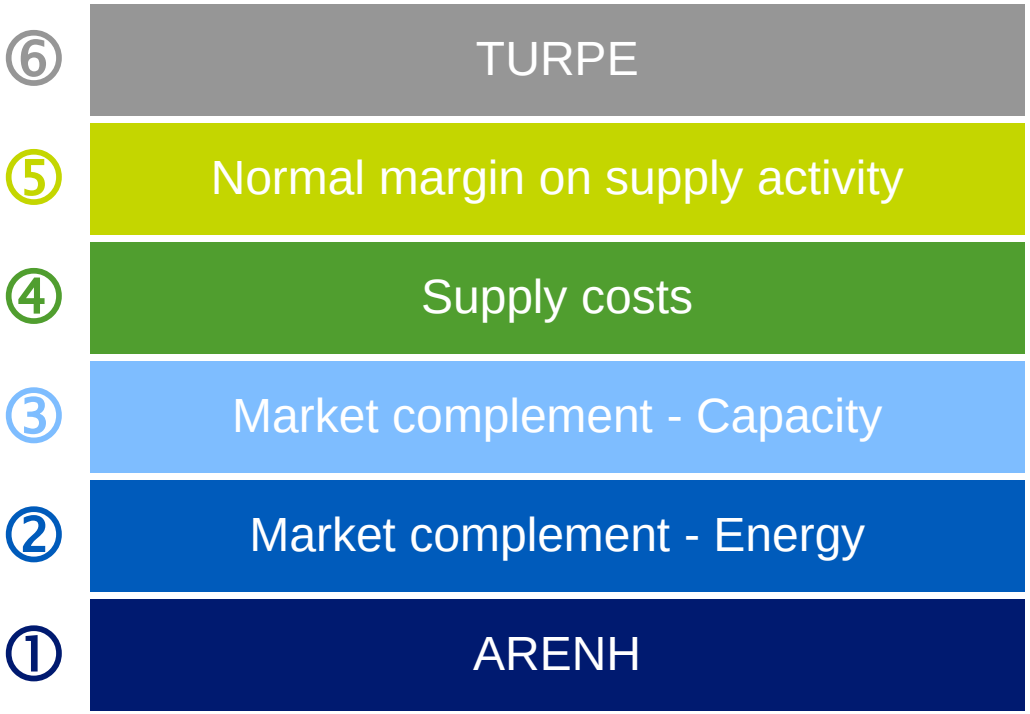


AVERAGE BILL BREAKDOWN. VAT INCLUDED
(BLUE RESIDENTIAL CUSTOMER)



(1) Source: Data from the 14 January 2021 deliberation of the CRE
(2) In August 2020 and February 2021, the “Energy + fees” and “TURPE” figures are based on an average calculation on customers portfolio at the Regulated Sales Tariffs at end-2019 (base calculation for the CRE deliberation of 14/01/2021)
(3) Including cost of Energy Efficiency Certificates
(4) Catch-up due to tariffs freeze at the beginning of 2019 + balance of cost to serve 2020
(5) Half-rounded figures

FRANCE: COMPONENTS OF THE COST STACKING METHOD FOR THE BLUE TARIFF



① Cost of regulated access to historical nuclear electricity taking into account the NWRA ceiling

② Cost calculated according to average consumption characteristics and observed forward market prices

③ Cost of the capacity guarantee from the mechanism requiring suppliers to have capacity guarantees as from 2017 covering their customers' peak consumption

④ Commercial costs of a supplier at least as efficient as EDF in the business of supplying electricity to those customers having subscribed contracts under regulated tariffs

⑤ Margin earned on electricity supply activity:

- Return on capital employed in marketing activity
- WCR coverage

⑥ Delivery cost, which reflects the cost of using the electricity transmission and distribution systems

(1) Source: Decree no. 2014-1250 of 28 October 2014 modifying the decree no. 2009-975 of 12 August 2009 on regulated tariffs

ENERGY SAVING CERTIFICATES SYSTEM

Implemented in 2006 Confirmed in 2015	The French response to requirements of the European Directive 2012/27/EU on energy efficiency. Article 30 of the energy transition law for Green Growth of 17 August 2015: a new Energy Efficiency Certificate (EEC) obligation benefiting households suffering from energy poverty, in addition to the traditional EEC obligation starting in 2016
Enhanced targets, a greatly increased scheme cost 5th consultation period	The national obligation for the 4th period (2018-2021) is set at 2,133TWhc by the decree of 11 December 2019 ➢ Including 533TWhc for the benefit of households that suffer from energy poverty and 1,600TWhc of obligation of classic EEC. This represents a doubling over the 3rd period 2015-2017 (700TWhc classic EEC, 150TWhc energy poverty EEC). Between the two periods, the cost of the EEC scheme is multiplied by 7 and now exceeds €5bn/year. Launch of several “Coup de Pouce" operations at a fixed EEC price during the 4th period, so that the obligated parties can answer to their contract obligations at reasonable cost The draft texts defining the 5th period were put for consultation on February 1, 2021. In particular, they provide for an increase in the CEE obligation to 2,400 TWhc accompanied by a change in the breakdown of energies (27% for electricity against 32% in P4, 20% for gas against 15% in P4), a sharp reduction in volumes linked to bonuses and Programs as well as a strengthening of the system for very modest households
Involved parties	An obligation imposed on energy suppliers to achieve energy savings for customers called “obligated parties”. ➢ Electricity, gas, heating, refrigeration, domestic fuel and automotive fuel In order to promote the issuance of energy efficiency operations to their customers ➢ Households, local authorities, social housing landlords or business/professionals
EDF and the mechanism	EDF is the first obligated party and intervenes in several areas (2020 data): ➢ Residential (265,000 renovation operations, up 20% due to the increase in insulation work and the replacement of heating equipment thanks to the subsidies provided by the “Coups de Pouce” schemes via the "Mon chauffage durable" offer), social-housing lessors (180,000 subsidised housing units), industry and services (7,000 actions) ➢ Financing of national programmes (*Toits d’abord* with the Abbé Pierre Foundation, ADVENIR for electric vehicle recharging stations, FEEBat for training craftsmen, *Habiter mieux* from ANAH to fight against energy poverty, ACTEE with the FNCCR, etc.).

POD POINT, ELECTRIC MOBILITY

ONE OF THE UK'S LARGEST ELECTRIC VEHICLE CHARGING COMPANIES

- Acquisition of Pod Point (1) performed through a joint venture with Legal & General Capital which took a stake of around 23% in Pod Point alongside EDF
- EDF Group's largest investment in the EV market forms part of its plan to become the leading energy company for electric mobility in France, the UK, Italy and Belgium

POD POINT IN A NUTSHELL (2)

- Operates 86,000 charging point in the UK and a further 9,000 in Norway
- c.35,000 charging points installed or sold during in 2020
- Developed an extensive public network connecting EV drivers with 3,000+ charging bays
- Offers smart home charging points for individual customers

TWO SIGNIFICANT ENABLERS FOR THE UK'S GOALS TO REACH NET ZERO BY 2050

- Enhancing the flexibility and reliability of the electricity grid to facilitate the integration of renewable energies
- Developing electric vehicles as a substitute for petrol thanks to a network of rapid and smart charging stations throughout the country (across Home, Work, Destination and En-route charging solutions)

(1) Please refer to press release published by EDF on 13 February 2020
(2) Data as of 31/12/2020

CUSTOMER SOLUTIONS IN THE UK: EDF ENERGY

RESIDENTIAL CUSTOMERS

- **Highly competitive market with ~39 suppliers (1).** The combined market share of small and medium suppliers is now around 19% (end October 2020)
- During 2020, **EDF Energy** supplied 11.3TWh of electricity and 28.9TWh of gas for the domestic segment
- As at 31 December 2020, EDF Energy had 2.9 million electricity accounts and 1.9 million gas accounts on this segment
- Despite industry wide challenges with customer bill shock, debt and complaints, EDF expects to maintain a Trust pilot score of 4.3, which equates to 4.5 stars and a rating of Excellent.
- EDF Energy continued to improve its digital offering. App penetration has increased from 17% to 33% over the course of 2020.
- Ofgem has published its decision to increase the domestic tariff caps from April 2020. The main drivers for the increase are the increase in wholesale costs, but also increase in policy and network costs and a COVID-19 adjustment for the additional bad debt costs suppliers have or will incur.

BUSINESS CUSTOMERS

- In 2020, the non-domestic segment supplied a total of 29.5TWh of electricity, 1.6TWh to 214k small business customers (“SME”) and 27.9TWh to medium and large business customers ("I&C") accounts
- In Large Business Sales, a targeted new-business approach has led to the successful acquisitions of 6 new customers in 2020 (a 100% increase on previous years).

INNOVATION

EDF Energy: fairness and convenience for customers; efficient operations; innovation (digital technology & smart metering)

- **EDF Energy has brought innovative concepts to market** through a rapid development approach. A high focus is on the Internet of Things (IoT) with multiple applications being developed
- Powervault – a smart way to store free solar or cheap energy from the grid to reduce energy bills
- PowerShift aims to be a platform for aggregating and commercialising demand side response, as well as optimizing batteries in opportunities such as the Capacity Market, Balancing Mechanism and Fast Frequency Response
- EDF Energy acquired the Electric Vehicles (EV) charge point operator PodPoint in the UK. It’s the UK group largest investment in EV technology to date and will allow EDF to offer even more attractive EV deals to their customers
- 343k smart-meters installed by EDF Energy for its customers in 2020

(1) Cornwall Insight data

CUSTOMER SOLUTIONS IN ITALY: EDISON

- Edison, through its 100% controlled company **Edison Energia** is involved in the electricity and gas supply to Italian customers
- The acquisition of the Italian activities of Gas Natural/Naturgy in 2018, and its integration into Edison Energia, allowed to increase Edison's customer base and to enlarge the company's presence in Central and Southern Italy

Business market (B2B)

- Edison is a **leader in the B2B market** both in power and gas
- Second operator in terms of volumes to final customers, after the incumbents (Enel and Eni)
- Agreement with Envitec for the development of the biomethane and bioLNG business segment to make the transport sector more sustainable

Retail market (B2C)

- **Late 2008: Edison entered the retail free market** in power and gas, positioning itself as the new real alternative to incumbents (Enel, Eni, ex-Municipalities)
- **July 2019:** Completion of the acquisition **of Assistenza Casa**, company active in maintenance and domestic fault repair services, also allowed the development of further value-added services and an expansion of the offer

	POWER SALES IN 2020	GAS SALES IN 2020
Business market (B2B)	13.3TWh	6.6bcm (1) o/w 1.5bcm resellers 5.1bcm business
Retail market (B2C)	2.2TWh	635Mm3 (2)
	0.6m contracts (3)	0.9m contracts (3)

New innovative offers and services

- **Edison World Platform:** a suite of products and services for a connected, safe and confortable home
  - **Edison Casa Relax:** 24 h x 365 assistance for electricity system, Unlimited interventions, Monthly fee.
  - **Edison My Comfort:** Sale, Installation, Maintenance, Insurance of cooling and heating systems.
  - **Edison Energy Control (4):** device which enables families to supervise, through a data reader and a digital platform, their energy spending in real time.
  - **My Sun:** a new innovative service that combines a photovoltaic system, a storage and a commodity offer
  - **Edison Plug & Go:** electric cars long rental (2-5 years) , installation of a charging wall box and app (for public recharges).
- **EdisonRisolve:** new offer a wide-ranging offer of domestic services: house cleaning, laundry, appliance repair, plant interventions, renovations and virtual closet and box

(1) Billion of cubic meters
(2) Million of cubic meters
(3) Data at end 2020
(4) Already launched in 2013

CUSTOMER SOLUTIONS IN BELGIUM: LUMINUS

- **The second largest player in the Belgian energy market, Luminus** supplies electricity and gas to more than **1.6 million** residential and professional **customers** (1) and local authorities.

- **Energy services:**
  - The company is involved for **residential customers** through its subsidiaries Rami Services, Dauvister, Leenen, and Insaver, mainly by providing **boiler installation and maintenance, installing solar panels, and providing "Home Assistance"** services in the event of unexpected damage at home.
  - Sales of **boiler and PV installations** remain at a high level, with around 2,800 installations in 2020. The launch of new combined service/maintenance offers for boilers.
  - At end-2020, the B2C portfolio for those services have more than 165,000 contracts
  - For its **industrial customers**, Luminus together with ATS, Vanparijs, Dauvister and Newelec, **offers integrated electricity and heating solutions**. In addition, its subsidiary Luminus Solutions (in which Luminus and Dalkia own a 51% and 49% stake respectively) provides energy efficiency services for administrative buildings, hospitals, schools, … based on an energy performance contract.
- In 2020, further **LED renovation works on street lighting equipment** for the major roads in the Walloon region (with the consortium Luwa, including **Citelum**, **Luminus**,…).

Key figures

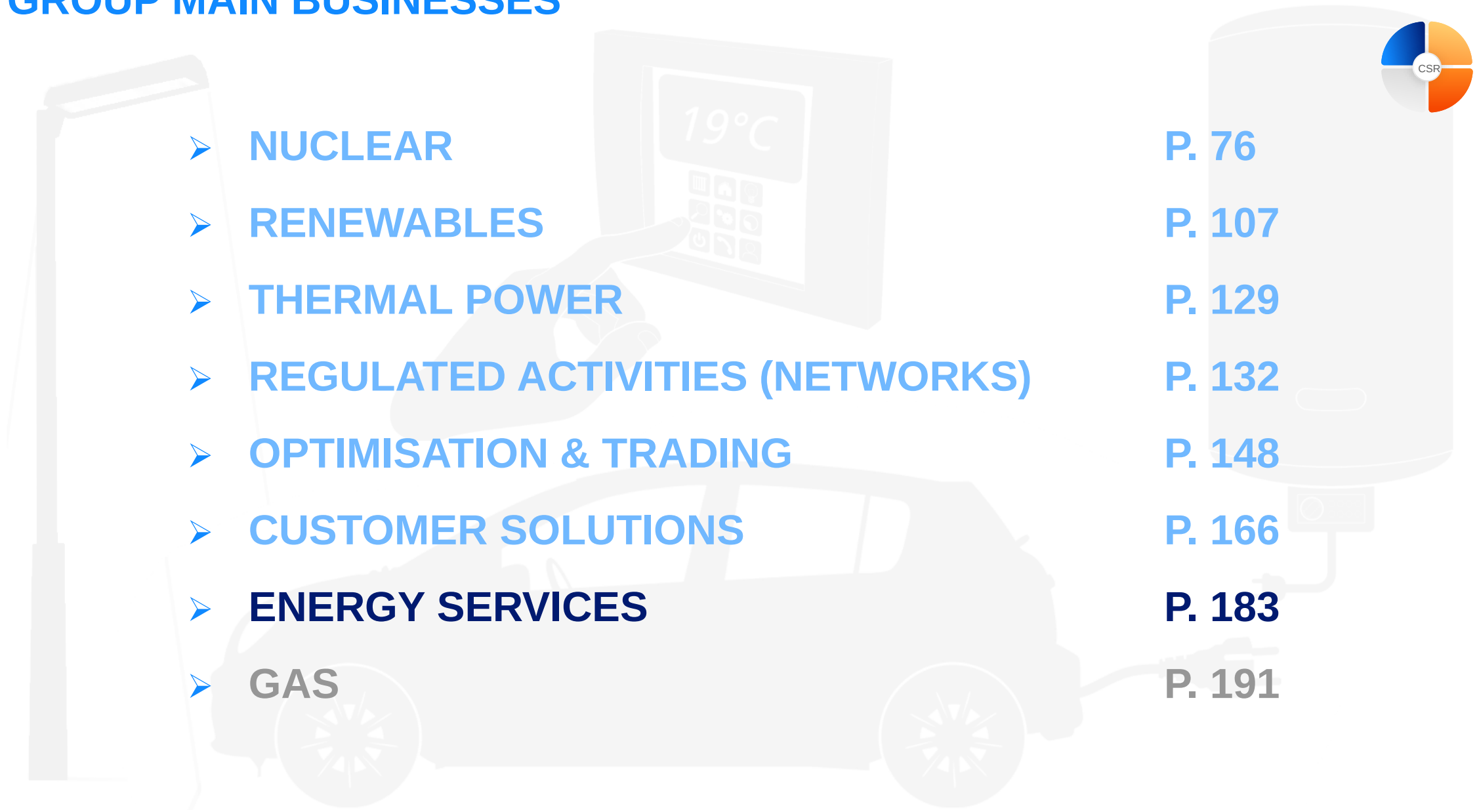
- **2,283MW** installed
- **7.6TWh** of electricity generation
- **1.6 million delivery points**
- **~20%** market share
- **~97 %** B2C

Did you know?

- 2019 and 2020, Luminus continued its **strategy of expansion into energy services**, broadening its presence upstream in the value chain with the acquisition of design firm De Klerk Engineering and ERVAC (via Newelec), specialising in **heating, ventilation, and air conditioning control** (HVAC)

(1) Number of delivery points

EDF GROUP MAIN BUSINESSES



ENERGY SERVICES: SUPPORTING ALL THE CUSTOMERS IN THE ENERGY TRANSITION

- EDF is developing a wide range of services to support all their customers in the energy transition with the goal of consuming less, but consuming better

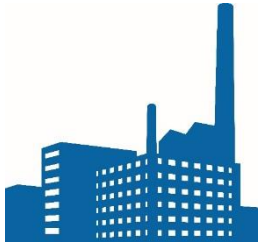
- Group's beliefs:
  - Energy efficiency is a major driver of the energy transition
  - The proposed solutions must adapt to each customer's situation and must be sustainable over the long term
  - The development of digital technology allows more innovation and performance

Smart home

Smart City

Smart Building

Smart Factory



SERVICES FOR THE GROUP'S INDIVIDUAL CUSTOMERS

- Strong expectations of Group's individual customers:
  - homes are becoming increasingly connected,
  - customers want to control their consumption and limit their impact on the environment, in search of reliable solutions and at the right price
- **Our range of service offers is growing, for more serenity and to support the challenges of today and tomorrow:**

sowee

The control of heating, air quality, the charging station of the electric vehicle, etc. by voice and by touch

cham GROUPE EDF

Maintenance and troubleshooting of heating and hot water equipment

EDF ENR

Solar photovoltaic solutions « Mon Soleil & moi » for self-consumption

izivia GROUPE EDF

Electric mobility at home and when traveling with the Izivia Pass

izi by EDF

Services to improve your daily comfort: small jobs, renovation projects, installation of equipment, heating pumps (linked to Cham)

SERVICES FOR THE B2B CLIENTS

- The EDF Group, through its expertise, can support companies, industries and territories throughout the entire energy chain and on projects as different as heat networks, intelligent lighting, low-carbon decentralized generation, energy management, sustainable mobility or eco-neighborhoods

- Combining digital expertise, economic and low carbon performance, EDF and its subsidiaries invent innovative solutions tailored to each need, as a sustainable energy partner

Smart Building

Energy efficiency, buildings, energy management, self-consumption, heat recovery, ...

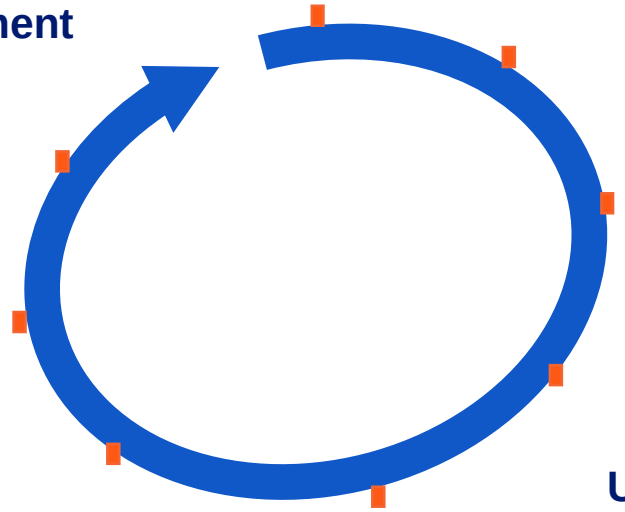
Smart Factory

Data, artificial intelligence, predictive maintenance, energy efficiency, circular economy, economic performance, ...

Smart City

Local production, heat networks, renewable and recovery energy, thermal and electrical smart grids, collective self-consumption, urban services, ...

SERVICE SUBSIDIARIES: EXPERTISE ON THE ENTIRE B2B ENERGY CHAIN



The heating and cooling networks

dalkia GROUPE EDF

dalkia wastenergy GROUPE EDF

The energy management system

The valuation of local resources

EDF ENR

netseenergy GROUPE EDF

Decentralised low carbon production

dalkia GROUPE EDF

Financing

perfesco GROUPE EDF

citelum GROUPE EDF

Urban services

Electrical engineering

izivia GROUPE EDF

EDF electrotechnics haute tension

Energy efficiency solutions

dalkia froid solutions GROUPE EDF

dalkia smart building GROUPE EDF

A creator of services and solutions to support customers and regions in the shift towards carbon neutrality

A benchmark in the low-carbon transition of society, EDF creates value for its customers through the energy and **innovative solutions it provides to them.**

CAP 2030 target:

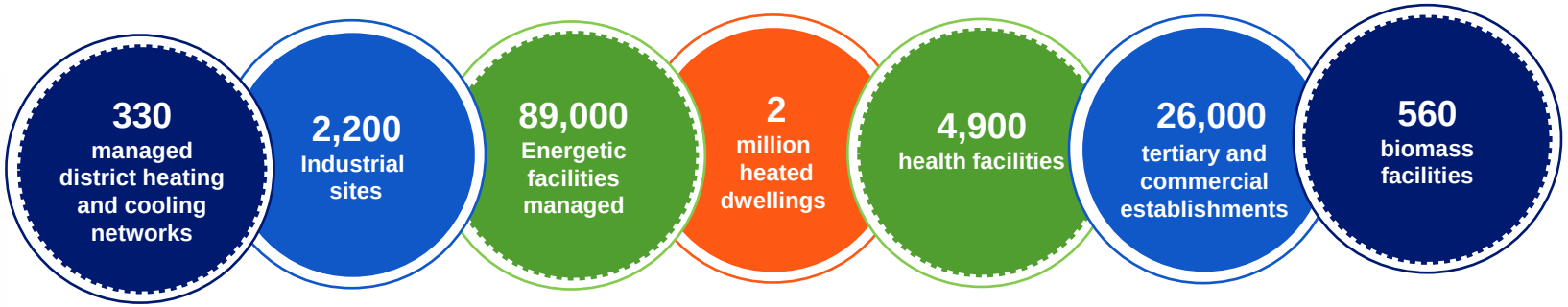
> 15 Mt of CO_2 avoided*

Scope:
* The business activities of the Customer Services and Territories division - EDF estimate, including CO_2 savings stemming mainly from heating and cooling networks, the development of electric vehicles and energy saving certificates.

DALKIA: A MAJOR PLAYER IN THE ENERGY TRANSITION AT THE SERVICE OF ITS CUSTOMERS

EDF'S AMBITION IS TO DEVELOP SIGNIFICANT POSITIONS IN ENERGY SERVICES, THANKS TO THE KNOW-HOW AND EXPERTISE OF DALKIA AND ITS SUBSIDIARIES

- **A leader in energy services in France, Dalkia has been helping regions accelerate their sustainable energy performance for 80 years**
- **Two major business from decentralised generation to demand-side management:**
  - Development and upgrading of renewable energies and recovery through heating and cooling networks.
  - Energy savings through Energy Performance Contracts and management of the energy consumption of the installations by an interactive platform: DESC.
- **Multiple skills at the very heart of the industry decarbonation and of the energy efficiency:** climatic and electric engineering, cooling, compressed air,…

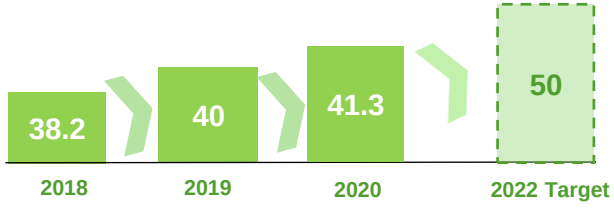


CHANGE IN ENVIRONMENTAL PERFORMANCE IN 2020

Dalkia enables its customers to reduce their greenhouse gas emissions while developing renewable and recovery energies locally

CO_2 savings (millions of tons)

6.7TWh
of energy savings in 2020



Renewable energy and energy mix recovery rate (%)

DALKIA: TAILOR-MADE SOLUTIONS IN FRANCE AND ABROAD

SPECIALTY SUBSIDIARIES

dalkia wastenergy GROUPE EDF
Valorisation of energy waste

dalkia froid solutions GROUPE EDF
Industrial and commercial refrigeration

dalkia biogaz GROUPE EDF
Valorisation of biogas

dalkia smart building GROUPE EDF
Design and realization of energy efficiency solutions

dalkia air solutions GROUPE EDF
Nitrogen compressed air and air production

dalkia EN GROUPE EDF
Industrial and tertiary maintenance in nuclear sector

Other subsidiary

Cram L'EFFICACITÉ ÉNERGÉTIQUE
Building energy services

INTERNATIONAL SUBSIDIARIES

UNITED KINGDOM IRELAND	Dallkia Wasternergy , IMTECH et Breathe in UK Suir Engineering on Ireland
RUSSIA	Dalkia Rus
POLAND	Dalkia Polska Energia Dalkia Polska Solutions
UNITED STATES	Dalkia Energy Solutions Aegis Energy Services

CITELUM: SMART LIGHTING AND CONNECTED SERVICES

- **Smart and efficient lighting reference,** Citelum has developed a whole range of connected services to meet the new challenges of its public and industrial customers: **energy saving, security, mobility, attractiveness, sustainable development, *etc.***

- Projects and expertise across the value chain, **from design to operation**

- **An innovation pole based on:**

  - Reliable technological partners: manufacturers in lighting, security, mobility, IoT sectors…, start-ups

  - the collaborative platform for urban space management, MUSE®, developed by Citelum subsidiary Citégestion, now available on the Microsoft Azure Cloud

25 years of international experience

3 million lighting points managed

1,000 references including Copenhagen, Mexico, Dijon

100% subsidiary of EDF

Citelum Services

Ranges to suit all needs and customer profiles:

- **Smart lighting:** renovation, interior lighting, remote management, artistic lighting *etc.*
- **Security:** Video protection, traffic light and speed radars, warning systems, *etc.*
- **Mobility:** traffic light system, smart parking, electric vehicle charging solutions, *etc.*
- **Communication and information:** variable message signs, Wi-Fi, Li-Fi *etc.*
- **Quality of life:** air quality, noise sensors, *etc*.

Smart and connected infrastructures

Citelum builds, with and for its customers, Smart City projects that are tailored to their needs and focused on the quality of life of citizens.

In 2020, Dijon Métropole continued to operate its connected management station (CMS). The CMS, based on the MUSE® platform, connects the urban equipment of 23 municipalities in the metropolitan area.

The single station for managing everyday incidents and events has proved crucial in the management of the health crisis.

Providing for the modernisation of public services and infrastructure (including lighting, video surveillance and access stations), the contract will in the long term generate energy savings of 65%

EDF GROUP MAIN BUSINESSES

EDF IS WELL POSITIONED ON THE GAS VALUE CHAIN

Commerce

Dual-fuel offers (electricity and gas) and value added services to clients

Trading

Supply of EDF's gas fired power plants

Seeking arbitrages and optimising supply strategies

Storage

Control the cost of flexibility and regulated activity in Italy

- Examples: Cellino, Collalto and San Potito & Cotignola (Italy), Etzel storage (Germany)

Supply

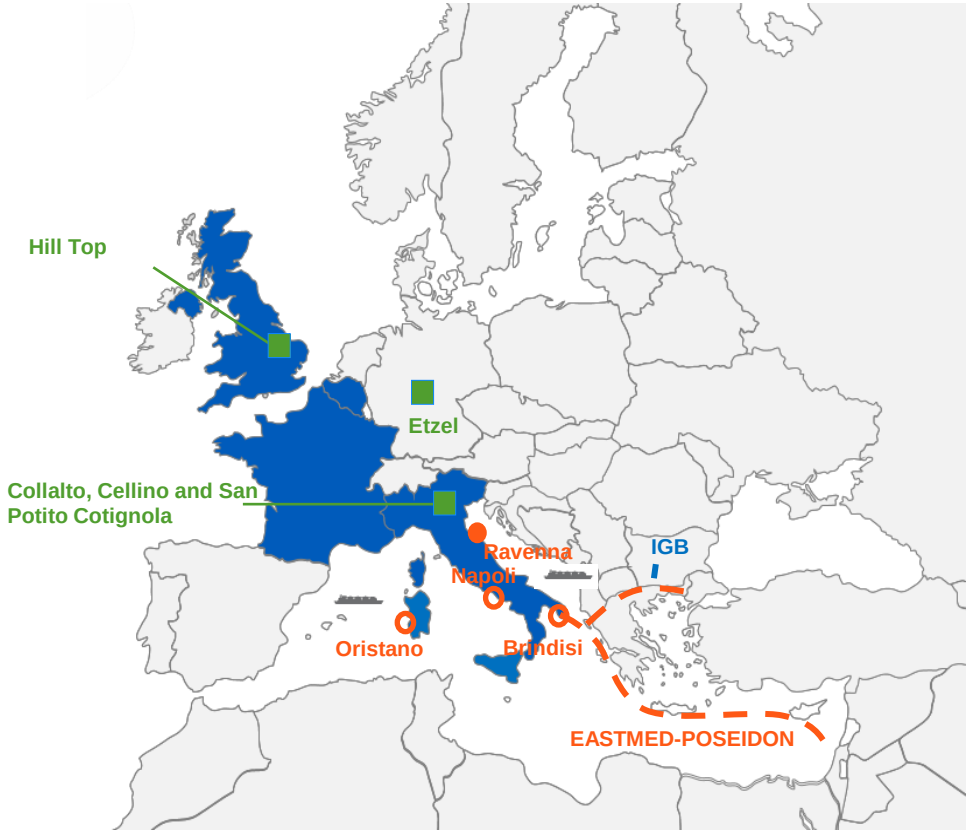
6 gas import contracts

Infrastructures

- Small scale LNG to support the development of sustainable heavy-duty and maritime transport
- LT LNG regassification capacity available in France, Italy and Belgium
- Development of import infrastructures to secure diversification of gas supply sources

Exploration & Production

- E&P activities (Italian, Egyptian, Greek, UK and Croatian assets, excluding Norwegian and Algerian [1] ones) sold to Energean in December 2020.
- Norwegian E&P assets sold to Sval Energi in March 2021.

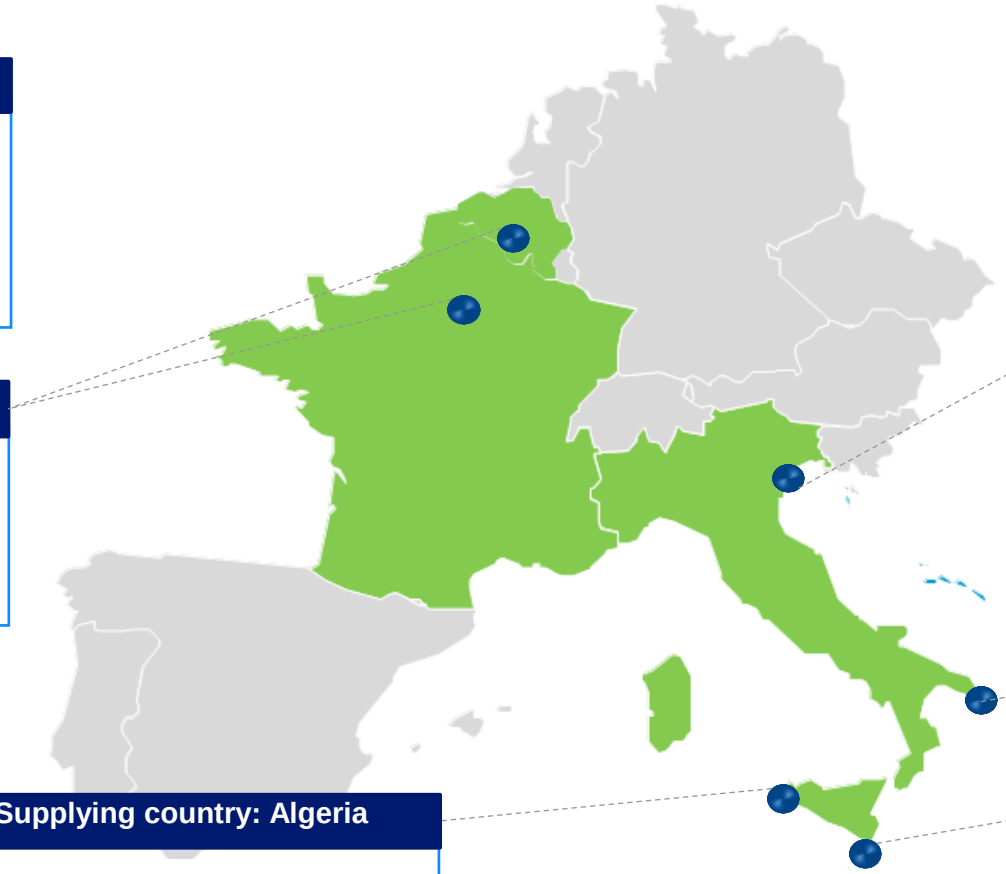


(1) The divestment of Algerian assets is planned at a later date

GAS SUPPLY SOURCES AS OF TODAY

Gas supply contracts

- The total volume of EDF's long-term gas contracts is 13.9bcm/year(1), of which 12.4bcm imported by Edison



Supplying country: USA

- Counterpart: **Cheniere (Corpus Christi – Texas)**
- Delivery: **LNG**
- Quantity(1): **1Bcm/y**
- Expiration: **2040**

Supplying country: Norway

- Counterpart: **Equinor ASA**
- Delivery: **Pipe**
- Quantity(1): **0.5Bcm/y**
- Expiration: **2025**

Supplying country: Qatar

- Counterpart: **RasGas II**
- Delivery: **LNG**
- Quantity(1): **6.4Bcm/y**
- Expiration: **2034**

Supplying country: Azerbaidjan (2)

- Counterpart: **AGSC**
- Delivery: **Pipe**
- Quantity(1): **1Bcm/y**
- Expiration: **2044**

Supplying country: Algeria

- Counterpart: **Sonatrach**
- Delivery: **Pipe**
- Quantity(1): **1Bcm/y**
- Expiration: **2027**

Supplying country: Libya

- Counterpart: **Eni NA**
- Delivery: **Pipe**
- Quantity(1): **4Bcm/y**
- Expiration: **2028**

(1) Annual contracted quantities
(2) Starting date: 2021

GAS END-MARKET

DOWNSTREAM CUSTOMER PORTFOLIO IN EUROPE AS OF 31 DECEMBER 2020

	Number of Customers	TWh sold
FRANCE (EDF SA)(1)	~ 1.9 million	33.0
ITALY (EDISON)	~ 0.9 million	83.0
UK (EDF ENERGY)(2)	~ 1.9 million	30.0
BELGIUM (LUMINUS)	~ 0.6 million	11.0

- EDF is present on the European gas market for over 10 years, with ~5.3m clients and ~157TWh sold
- Dual fuel offer with value added services

(1) Excluding Corsica and the French overseas department
(2) Excluding Northern Ireland

TABLE OF CONTENTS

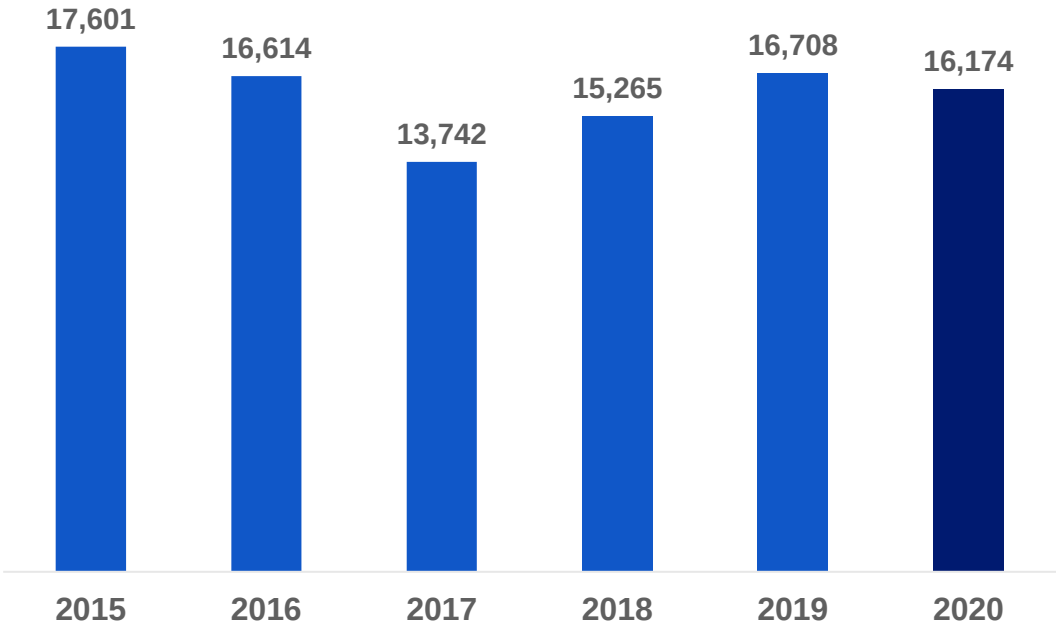
Sustainable finance is core to the Group's financing strategy. EDF is a leading issuer in the Green Bonds market. In September 2020, the Group launched an issue of green convertible bonds (OCEANEs) for a nominal amount of €2.4 billion to finance its development in renewable energies, energy efficiency and projects contributing to the protection of biodiversity. The Group is investing massively in the energy transition through investments in decarbonised production methods (nuclear and renewable), networks, the development of energy services, the deployment of smart meters, etc.

FINANCE

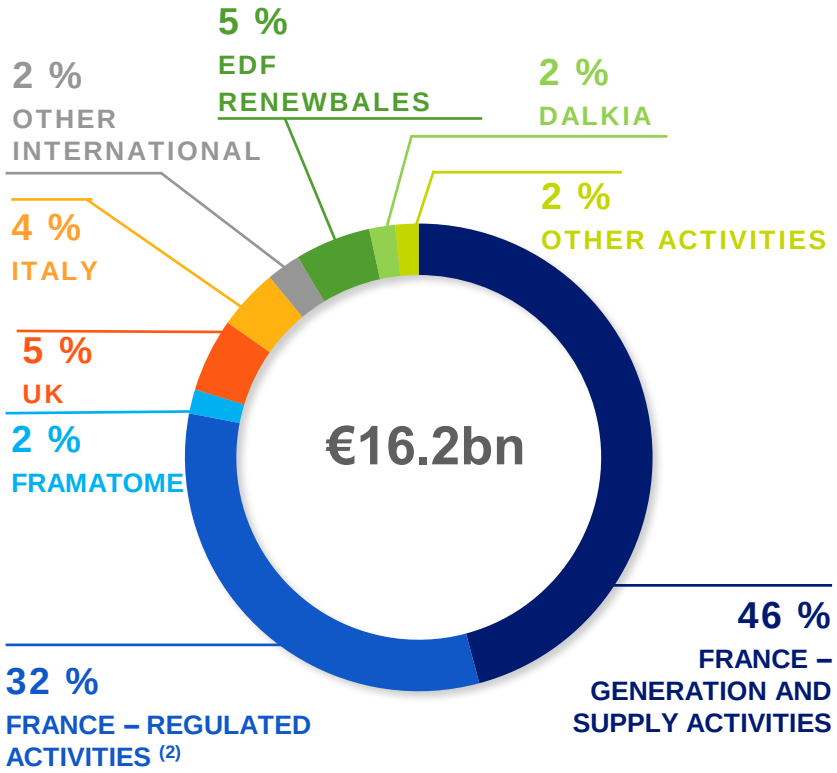
HISTORICAL FINANCIALS: EBITDA

EBITDA growth

In millions of euros



2020 Group EBITDA by segment



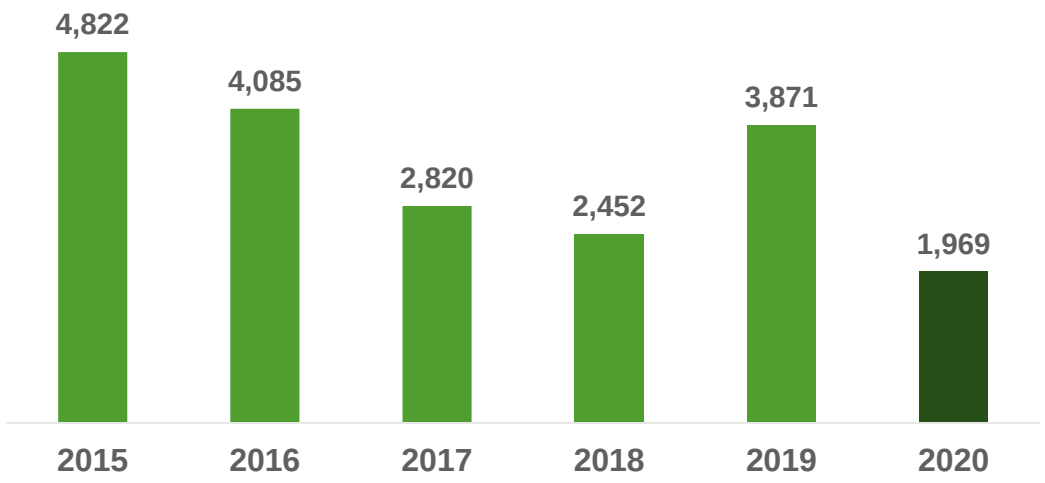
Note: presented figures are pro forma data from one year to another, but are not restated consistently throughout all years

(1) Regulated activities: Enedis, ÉS and island activities; Enedis, an independent EDF subsidiary as defined in the French energy code

HISTORICAL FINANCIALS: NET INCOME

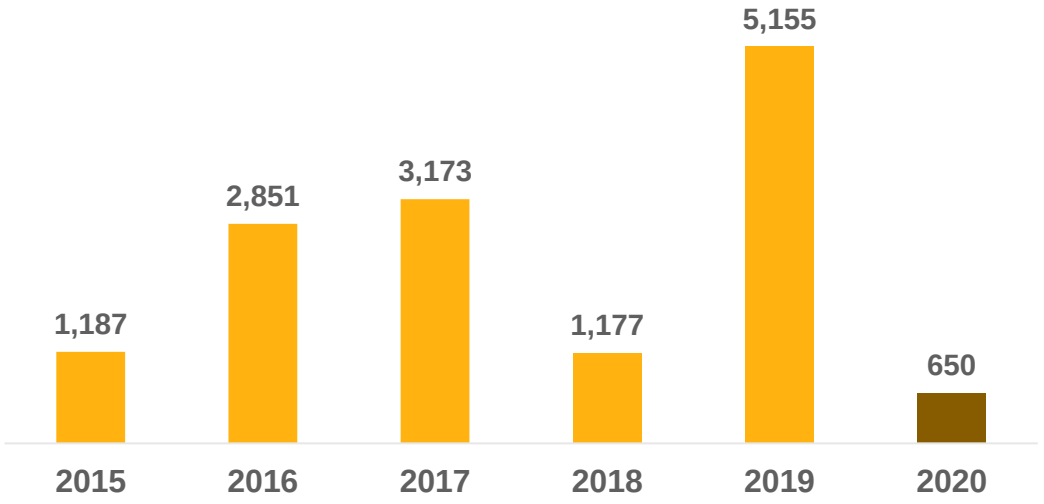
Evolution of Net income excluding non-recurring items

In millions of euros



Evolution of Net income – Group share

In millions of euros



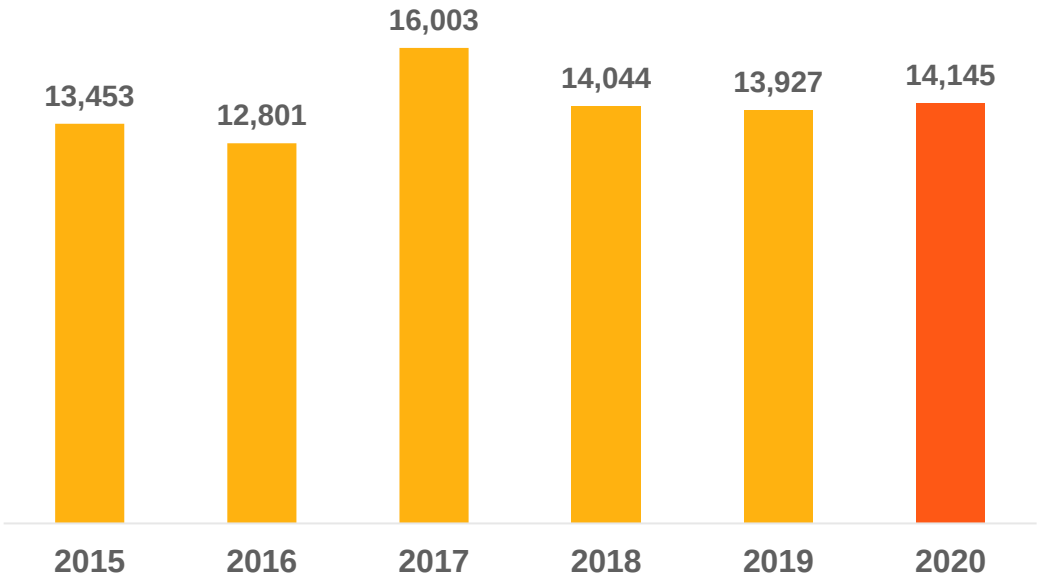
Net income excluding non-recurring items = Net income Group share excluding non-recurring items

Note: presented figures are pro forma data from one year to another, but are not restated consistently throughout all years

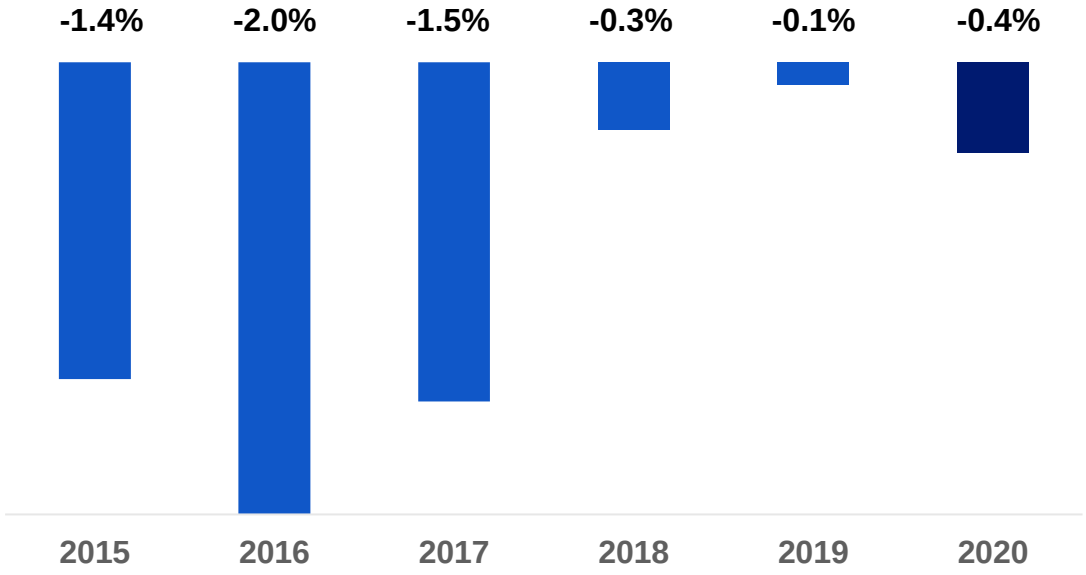
HISTORICAL FINANCIALS: INVESTMENTS AND OPEX

NET INVESTMENTS[1] SINCE 2015

In millions of euros



OPEX[2] ORGANIC CHANGE[3] FROM 2015



Note: presented figures are pro forma data from one year to another, but are not restated consistently throughout all years

(1) Total net investments (as defined for each year) excluding disposals of strategic assets

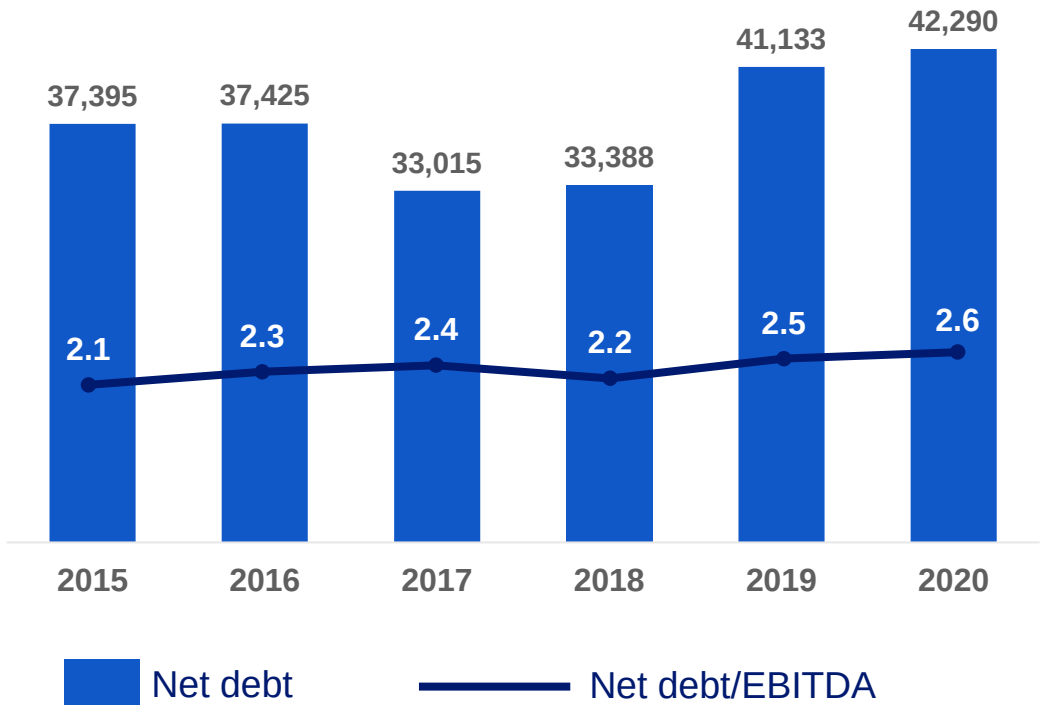
(2) Aggregate of personnel expenses and other external expenses

(3) Data published with organic change at constant scope and exchange rates

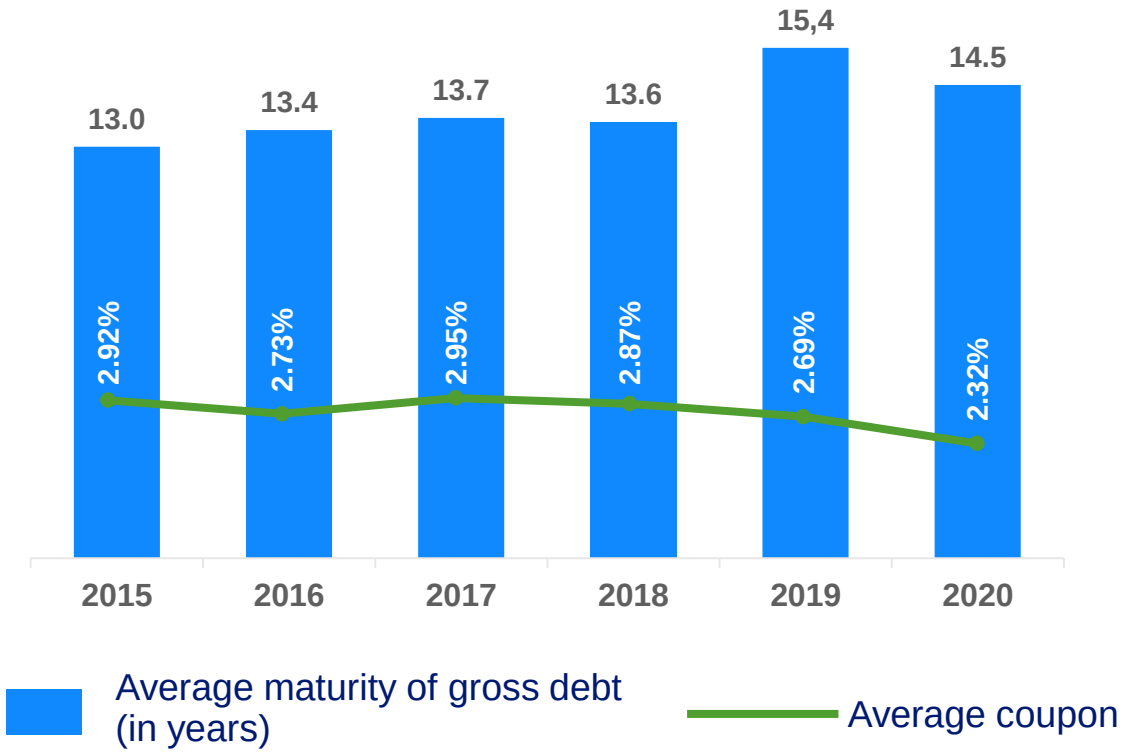
HISTORICAL FINANCIALS: DEBT

Net debt and net debt/EBITDA evolution

In millions of euros

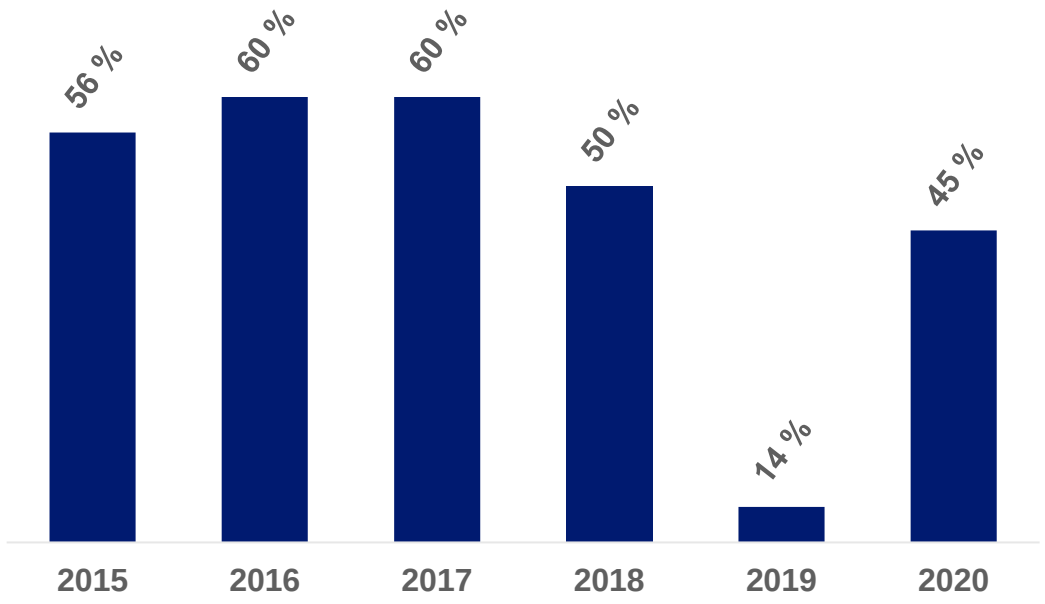


Debt maturity and coupon evolution



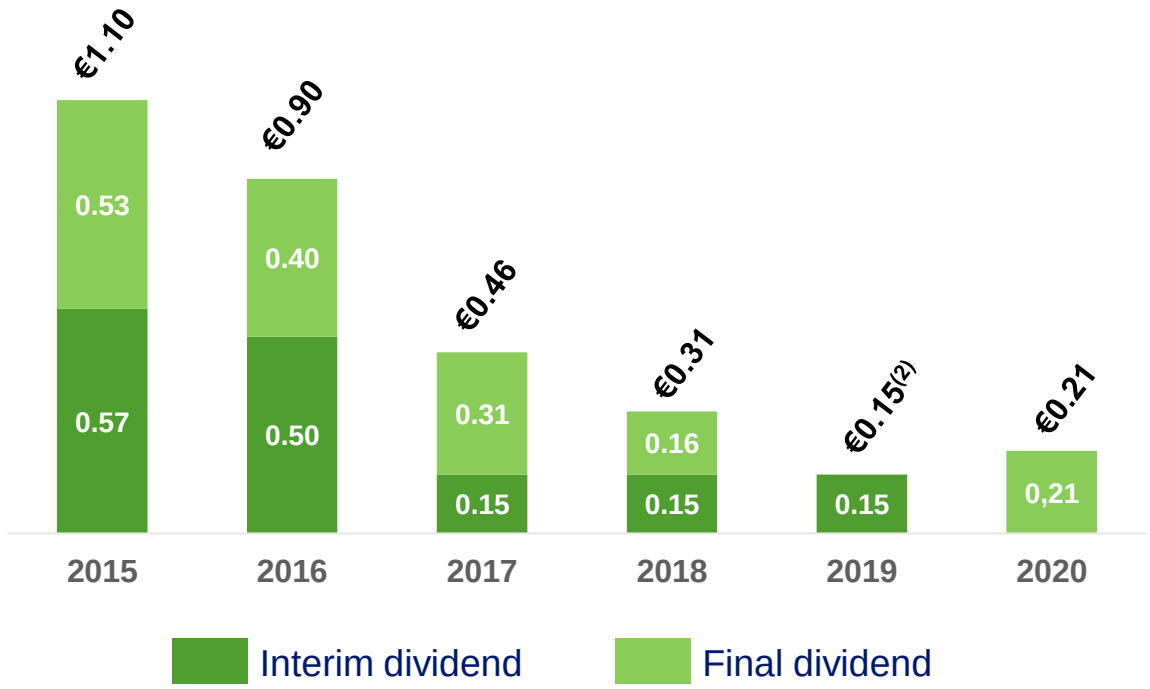
HISTORICAL FINANCIALS: DIVIDEND

Dividend payout ratio since 2015 (1)



Dividend per share since 2015

In € per share



(1) Payout ratio applied to the Net result excluding non-recurring items adjusted for interest payments on hybrid issues booked in equity

(2) Cf Press release of 2 April 2020 : Board of Directors decision not to carry out the distribution of the balance of the dividend due to Covid-19 health crisis

FINANCE

2020 KEY FIGURES

In €m	2019 restated (1)	2020	Δ%	Δ% Org.(2)
Sales	71,347	69,031	*-3.2*	*-3.4*
EBITDA	16,723	16,174	*-3.3*	*-2.7*
Net income excluding non-recurring items	3,871	1,969	*-49.1*	
Net income – Group share	5,155	650	*-87.4*	

	31/12/2019	31/12/2020
Net financial debt (in €bn)	**41.1**	**42.3**
Net financial debt/EBITDA ratio (1)	**2.46x**	**2.61x**

PROPOSED DIVIDEND

€**0.21** per share

PAYOUT RATIO OF 45% (3)

The French State has committed to scrip dividend

(1) The 2019 published data (except NFD) has been restated for the impact related to the change in scope from the E&P disposal.
(2) Organic change at comparable scope, standards and exchange rates.
(3) Payout ratio based on net income excluding non-recurring items, adjusted for the remuneration of hybrid bonds accounted for in equity.

SIMPLIFIED INCOME STATEMENT

In millions of euros	2019 restated (1)	2020
Sales	**71,347**	**69,031**
Fuel and energy purchases	(35,091)	(32,425)
Other external expenses	(8,625)	(8,461)
Personnel expenses	(13,797)	(13,957)
Taxes other than income taxes	(3,798)	(3,797)
Other operating income and expenses	6,687	5,783
EBITDA	**16,723**	**16,174**
Impact of the commodities volatility	642	(175)
Amortisation/depreciation expenses and provisions for renewal	(10,020)	(10,838)
(Impairment)/reversals	(403)	(799)
Other income and expenses	(185)	(487)
EBIT	**6,757**	**3,875**
Financial income	(364)	(2,582)
Income before taxes of consolidated companies	**6,393**	**1,293**
Net income – Group share	**5,155**	**650**
Net income excl. non-recurring items (2)	**3,871**	**1,969**

(1) The 2019 published data has been restated for the impact of the change in the scope of the E&P disposal
(2) Excluding non-recurring items & commodities volatility

CHANGE IN SALES (1)

In millions of euros	2019 restated (2)	Forex	Scope	Organic growth	2020	Δ% org. (3)
France – Generation and supply activities	27,870	-	285	206	28,361	0.7
France – Regulated activities (4)	16,087	-	-	141	16,228	0.9
Framatome	3,377	(11)	34	(105)	3,295	-3.1
United Kingdom	9,574	(126)	(220)	(187)	9,041	-2.0
Italy	7,597	-	20	(1,650)	5,967	-21.7
Other international	2,690	(144)	10	(136)	2,420	-5.1
EDF Renewables	1,565	(33)	(69)	119	1,582	7.6
Dalkia	4,281	(7)	337	(399)	4,212	-9.3
Other activities	2,728	(17)	(16)	(568)	2,127	-20.8
Inter-segment eliminations	(4,422)	-	36	184	(4,202)	-4.2
Total Group	**71,347**	(338)	417	(2,395)	**69,031**	-3.4

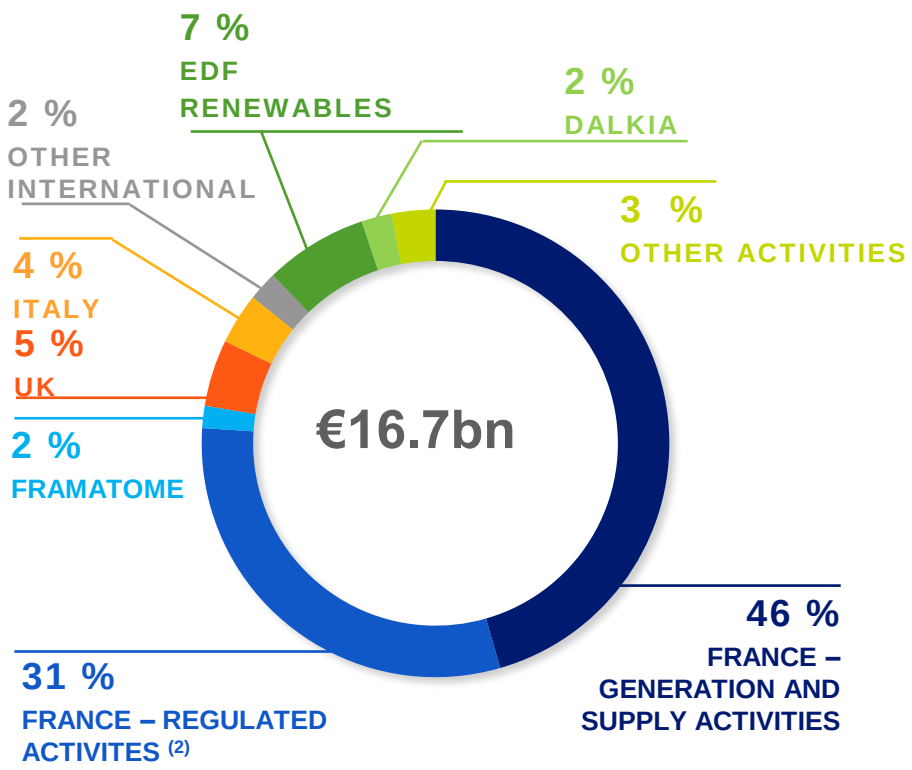
(1) Breakdown of sales across the segments, before inter-segment eliminations
(2) The 2019 published data has been restated for the impact of the change in the scope of the E&P disposal
(3) Organic change at constant scope and exchange rates
(4) Regulated activities: Enedis, éS and island activities; Enedis, an independant EDF subsidiary as defined in the French energy code

CHANGE IN EBITDA (1)

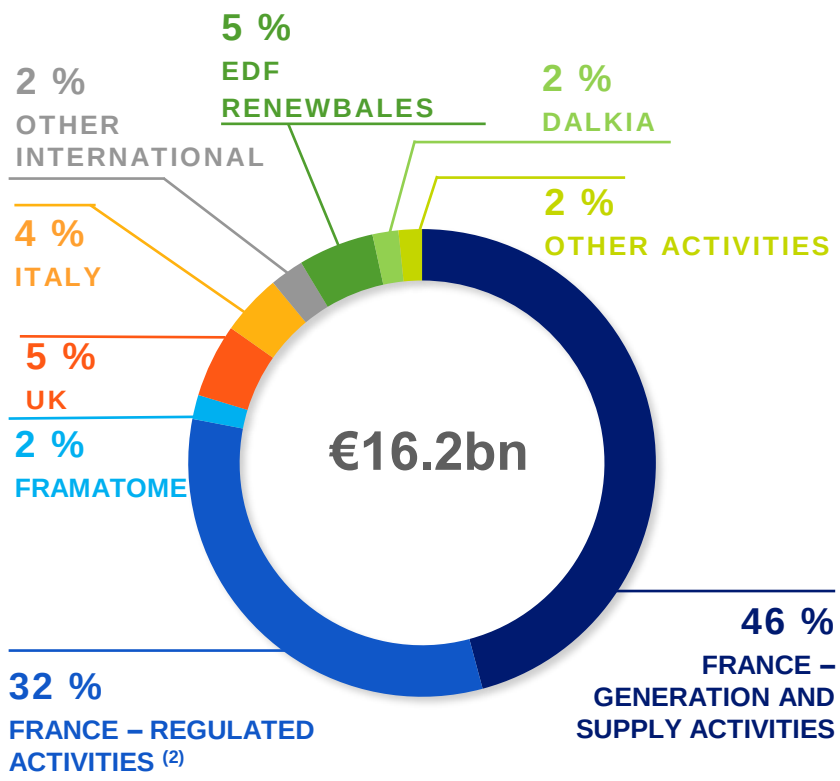
In millions of euros	2019 restated (2)	Forex	Scope	Organic growth	2020	Δ% org. (3)
France – Generation and supply activities	7,615	-	-	(203)	7,412	-2.7
France – Regulated activities (4)	5,101	-	-	105	5,206	2.1
Framatome	256	(1)	4	12	271	4.7
United Kingdom	772	(10)	(15)	76	823	9.8
Italy	593	-	40	50	683	8.4
Other international	339	(32)	2	71	380	20.9
EDF Renewables	1,193	(27)	(44)	(274)	848	-23.0
Dalkia	349	(1)	3	(61)	290	-17.5
Other activities	505	(4)	(14)	(226)	261	-44.8
Total Group	**16,723**	(75)	(24)	(450)	**16,174**	-2.7

(1) Contribution to the Group
(2) The 2019 published data has been restated for the impact of the change in the scope of the E&P disposal
(3) Organic change at constant scope, standard and exchange rates
(4) Regulated activities: Enedis, éS and island activities; Enedis, an independant EDF subsidiary as defined in the French energy code

BREAKDOWN OF GROUP EBITDA



2019 (1)



2020

(1) The 31/12/2019 annual published amounts were restated of the impact linked to the E&P activity presentation as a discontinued operation

(2) Regulated activities: Enedis, éS and island activities; Enedis, an independant EDF subsidiary as defined in the French energy code

CHANGE IN OPEX (1)

In millions of euros	2019 restated (2)	2020	Δ	Δ %
France – Generation and supply activities	8,458	8,377	(81)	-1.0
France – Regulated activities	4,696	4,792	96	2.0
Framatome	1,691	1,617	(74)	-4.4
United Kingdom	2,108	1,910	(198)	-9.4
Italy	879	843	(36)	-4.1
Other international	612	612	-	-
EDF Renewables	932	982	50	5.4
Dalkia	2,558	2,794	236	9.2
Other activities	488	491	3	0.6
Total Group	**22,422**	**22,418**	**(4)**	**-0.0**

(1) Opex (operational expenses) corresponding to the sum of personnel expenses and other external expenses after inter-segment eliminations
(2) The 2019 published data has been restated for the impact of the change in the scope of the E&P disposal

CHANGE IN NET INCOME

In millions of euros	2019 restated (1)	2020	Δ
Income before taxes of consolidated companies	**6,393**	**1,293**	**(5,100)**
Income tax	(1,532)	(945)	587
Share in income of associates and joint ventures	818	425	(393)
Net income of the discontinued operations	(497)	(158)	339
Net income – consolidated	**5,182**	**615**	**(4,567)**
Deducting net income from minority interests	27	(35)	(62)
Net income – Group Share	**5,155**	**650**	**(4,505)**
Neutralisation of non-recurring items including commodities volatility	(1,284)	1,319	2,603
Net income excl. non-recurring items	**3,871**	**1,969**	**(1,902)**

(1) The 2019 published data has been restated for the impact of the change in the scope of the E&P disposal

SIMPLIFIED BALANCE SHEET

ASSETS (in millions of euros)	31/12/2019	31/12/2020
Intangible and tangible assets	174,345	179,658
Other non-current assets	55,120	57,574
Non-current assets	**229,465**	**237,232**
Inventories and trade receivables	29,655	29,259
Other current assets	36,568	30,834
Cash and cash equivalents	3,934	6,270
Current assets	**70,157**	**66,363**
Assets held for sale	3,662	2,296
Total assets	**303,284**	**305,891**

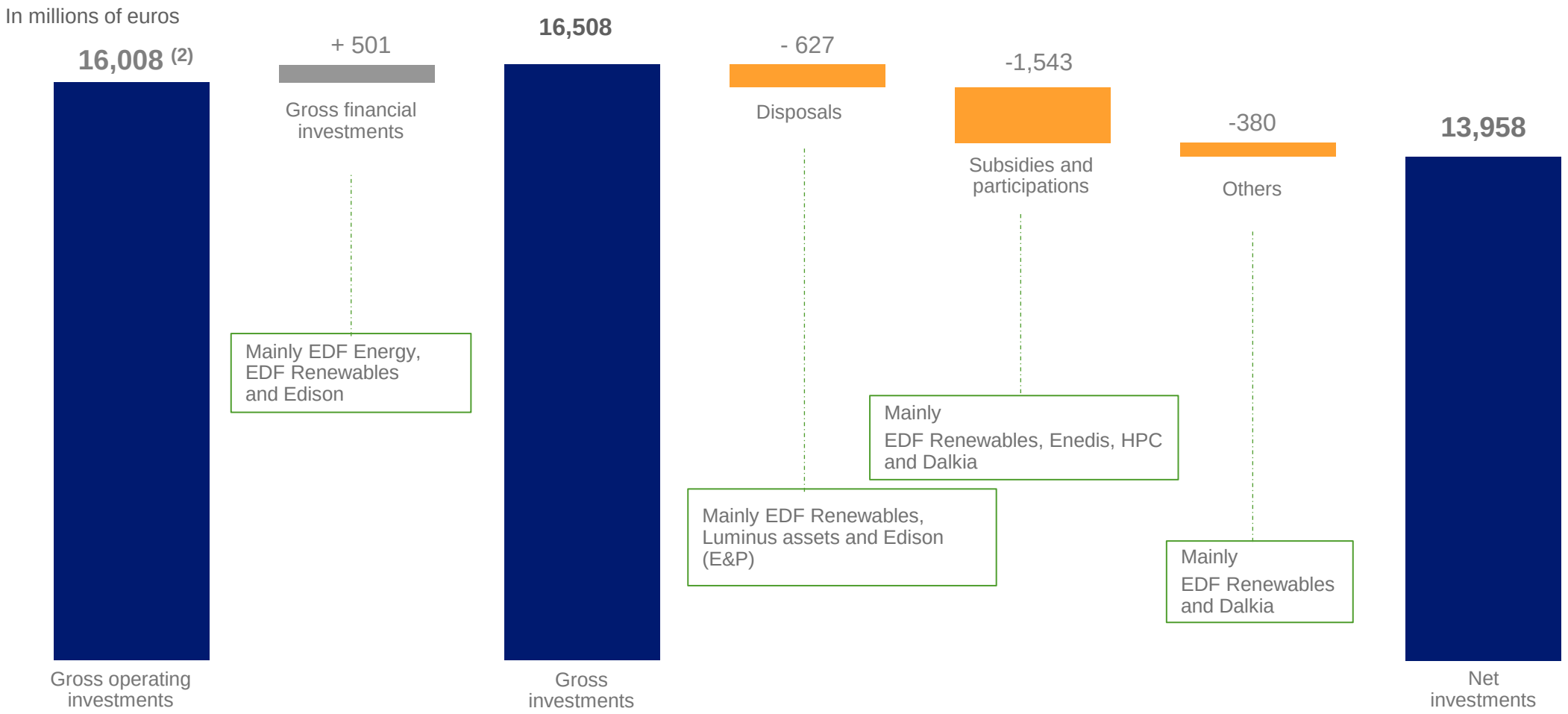
LIABILITIES (in millions of euros)	31/12/2019	31/12/2020
Equity (EDF's share)	46,466	45,633
Equity (non-controlling interests)	9,324	9,593
Total equity	**55,790**	**55,226**
Non-current provisions	80,760	85,837
Special distribution concession liabilities	47,465	48,420
Non-current other liabilities	64,225	63,888
Non current liabilities	**192,450**	**198,145**
Current liabilities	**54,001**	**52,412**
Liabilities related to assets classified as held for sale	1,043	108
Total liabilities	**303,284**	**305,891**

CHANGE IN CASH FLOW

In €m	2019 restated (1)	2020
EBITDA	**16,723**	**16,174**
Non-cash items	(1,930)	328
EBITDA Cash	**14,793**	**16,502**
Δ WCR	475	(1,679)
Net investments *(excluding Group assets disposal plan, HPC et Linky (2))*	(11,433)	(11,570)
Other items o/w dividends received from associates and group ventures	303	(17)
Cash flow generated by operations	**4,138**	**3,236**
Group assets disposal plan	531	187
Income tax paid	(915)	(983)
Net financial expenses disbursed	(802)	(1,008)
Dedicated assets	(394)	(798)
Dividends paid in cash (including hybrid bonds remuneration)	(801)	(768)
Group Cash flow excluding Linky (2) and HPC	**1,757**	**(134)**
Linky (2) and HPC	(2,582)	(2,575)
Group cash flow	**(825)**	**(2,709)**

(1) The 2019 published data has been restated for the impact of the change in the scope of the E&P disposal.
(2) Linky is a project led by Enedis, independent subsidiary of EDF under the provisions of the French energy code.

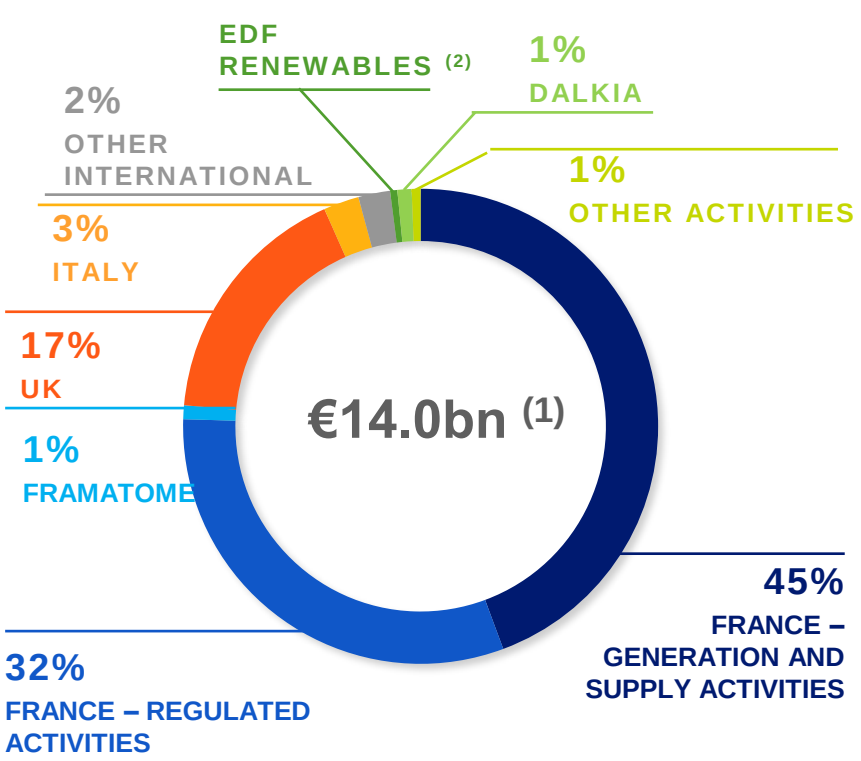
INVESTMENTS: FROM GROSS TO NET (1)



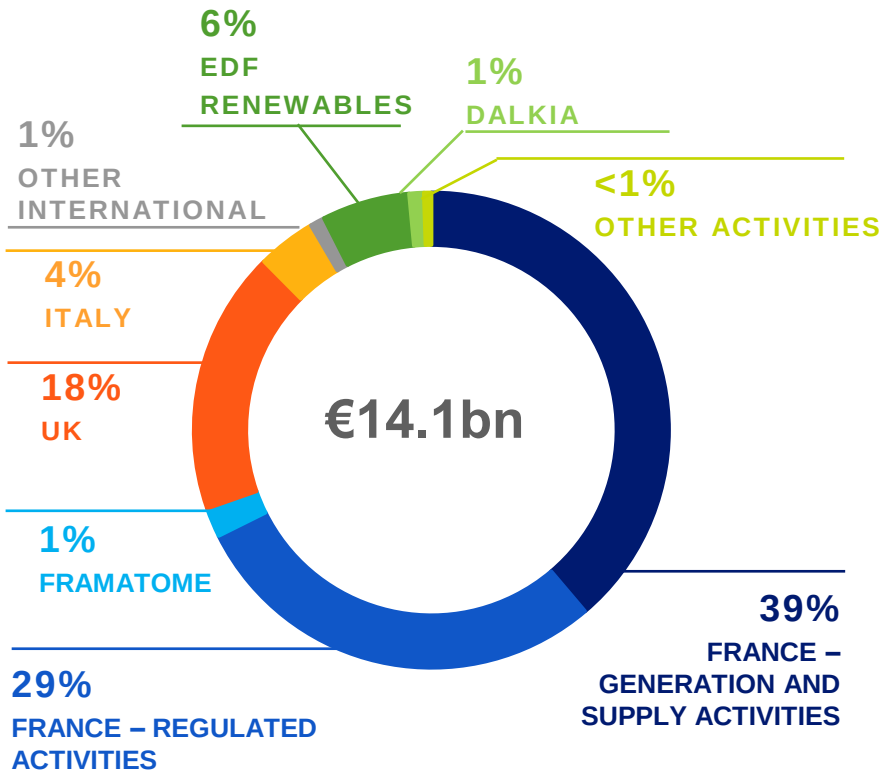
(1) Net investments in the Change in NFD statement including Linky, HPC and assets disposals

(2) Investments in intangible assets and property, plant and equipment in consolidated cash flow statement

NET TOTAL INVESTMENTS INCLUDING ACQUISITIONS, EXCLUDING 2015-2020 DISPOSAL PLAN



2019



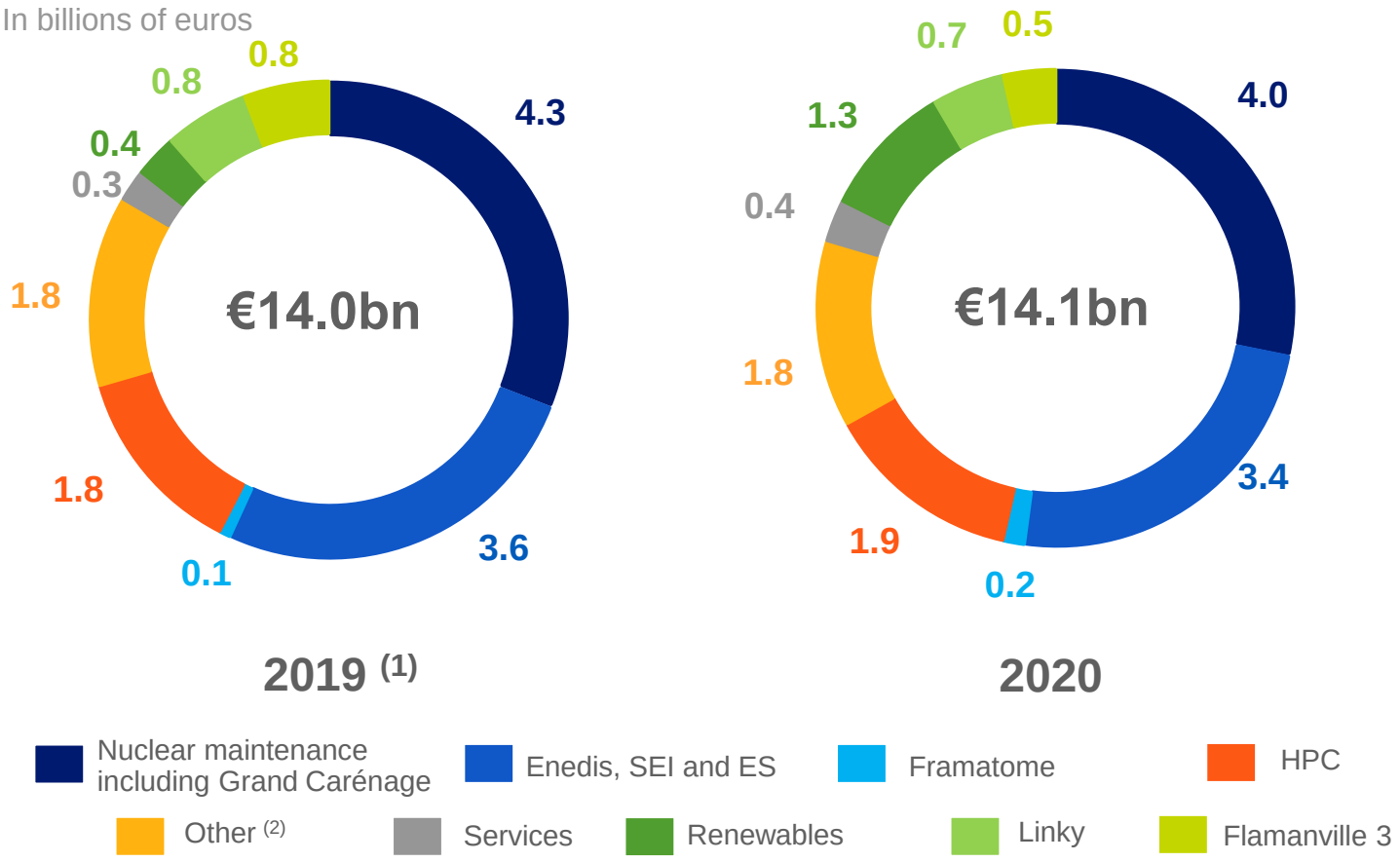
2020

(1) The 2019 published data has been restated for the impact of the change in the scope of the E&P disposal

(2) (2)% of net investments for EDF Renewables due to the debt deconsolidation associated to the offshore wind projects NnG following the disposal of 50% of the shares

NET INVESTMENTS INCLUDING ACQUISITIONS EXCLUDING 2015-2020 DISPOSAL PLAN

In billions of euros



2020 data

In billions of euros	Maintenance	Development	TOTAL
Renewables	0.3	1.0	1.3
Nuclear maintenance including Grand Carénage	4.0	-	4.0
Enedis, SEI and ES	1.4	2.0	3.4
Framatome	0.2	-	0.2
Project Flamanville 3 (3)	-	0.5	0.5
Services	0.3	0.2	0.4
Other (2)	0.2	1.6	1.8
Net investments	**6.4**	**5.1**	**11.6**
Linky	-	0.7	0.7
HPC	-	1.9	1.9
TOTAL	**6.4**	**7.7**	**14.1**

(1) NB: figures rounded up to the nearest decimal number
(2) The 2019 published data has been restated for the impact of the change in the scope of the E&P disposal
(3) Mainly nuclear maintenance excluding France, thermal maintenance, France and UK nuclear development
(4) See note 10 of the FY 2020 consolidated statements

FINANCE

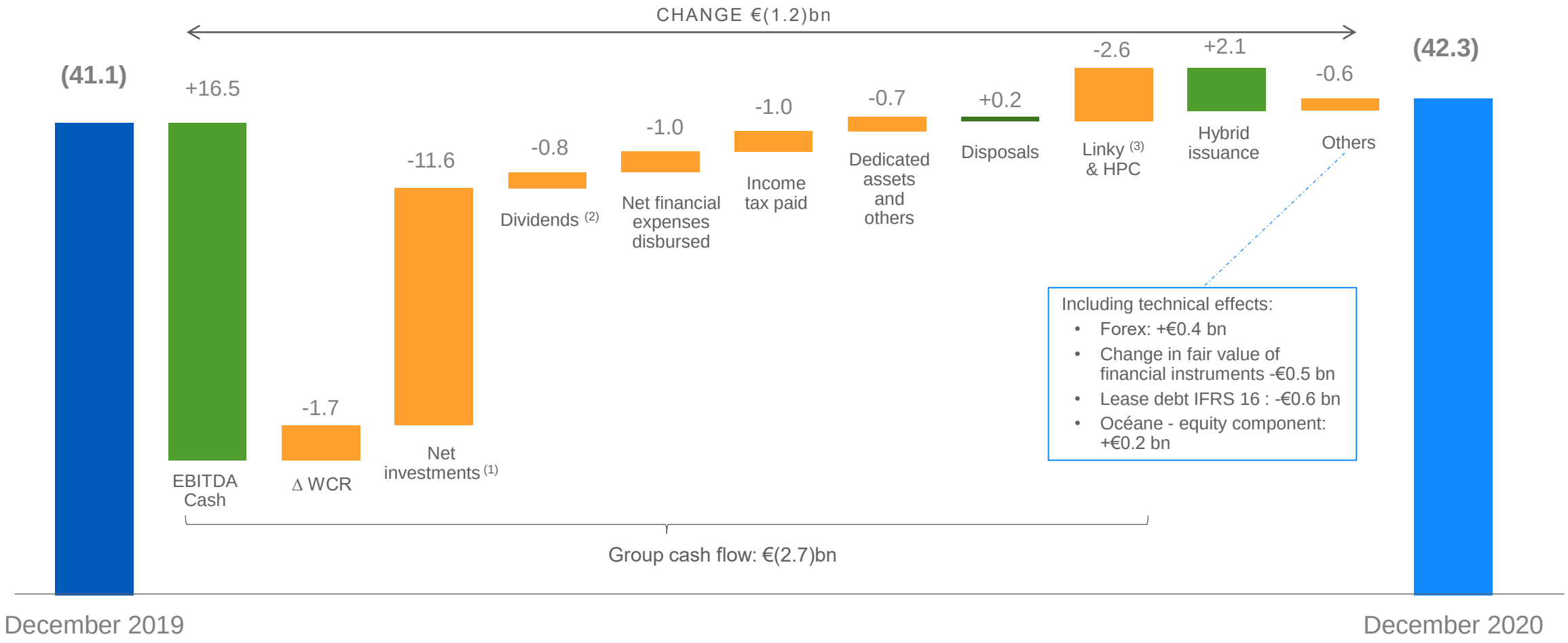
DEBT AND LIQUIDITY

In billions of euros	31/12/2018	31/12/2019	31/12/2020
Net financial debt (1)	33.4	41.1	**42.3**
Net financial debt/EBITDA	2.24x	2.46x	**2.61x**
Debt			
• Bonds	50.4	52.4	**50.2**
• Average maturity of gross debt (in years)	13.6	15.4	**14.5**
• Average coupon	2.87%	2.69%	**2.32%**
Gross liquidity (2)	35.2	33.4	**32.4**

(1) Significant impact on net financial debt of the entry into force of IFRS 16 on 1 January 2019 (€4.5 billion)
(2) With cash and cash equivalents, liquid assets, and undrawn lines of credit

NET DEBT

In €bn



NB: figured rounded up to the nearest whole number.

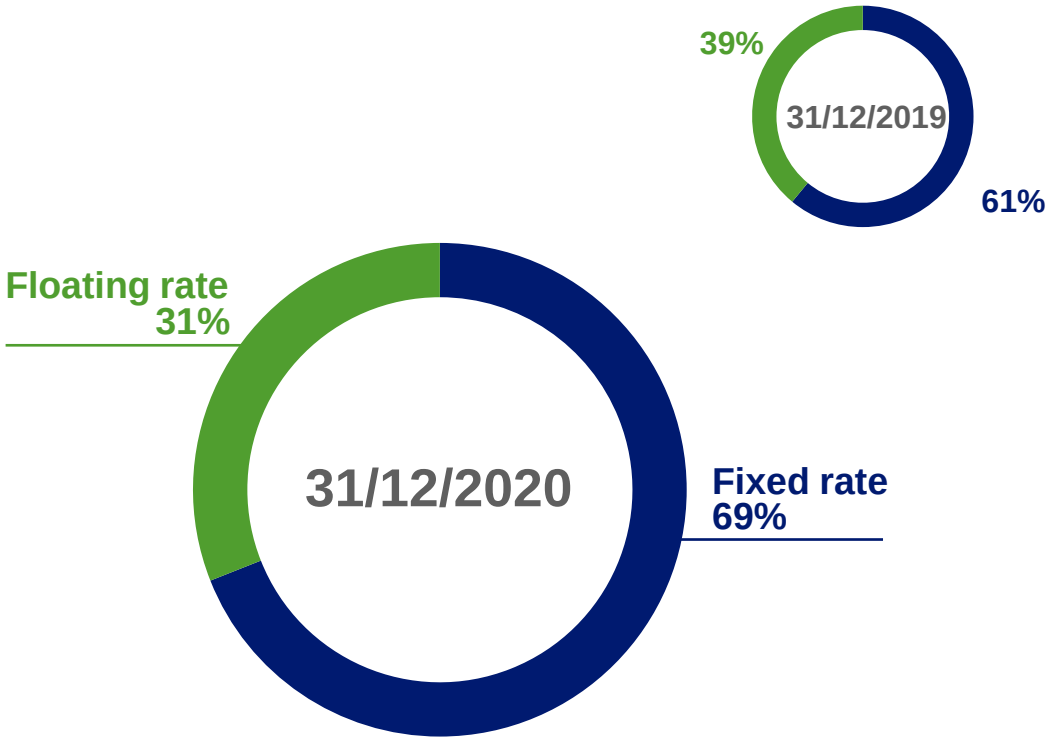
(1) Net investments excluding Linky, HPC and disposals.

(2) Dividends paid including hybrid bonds remuneration.

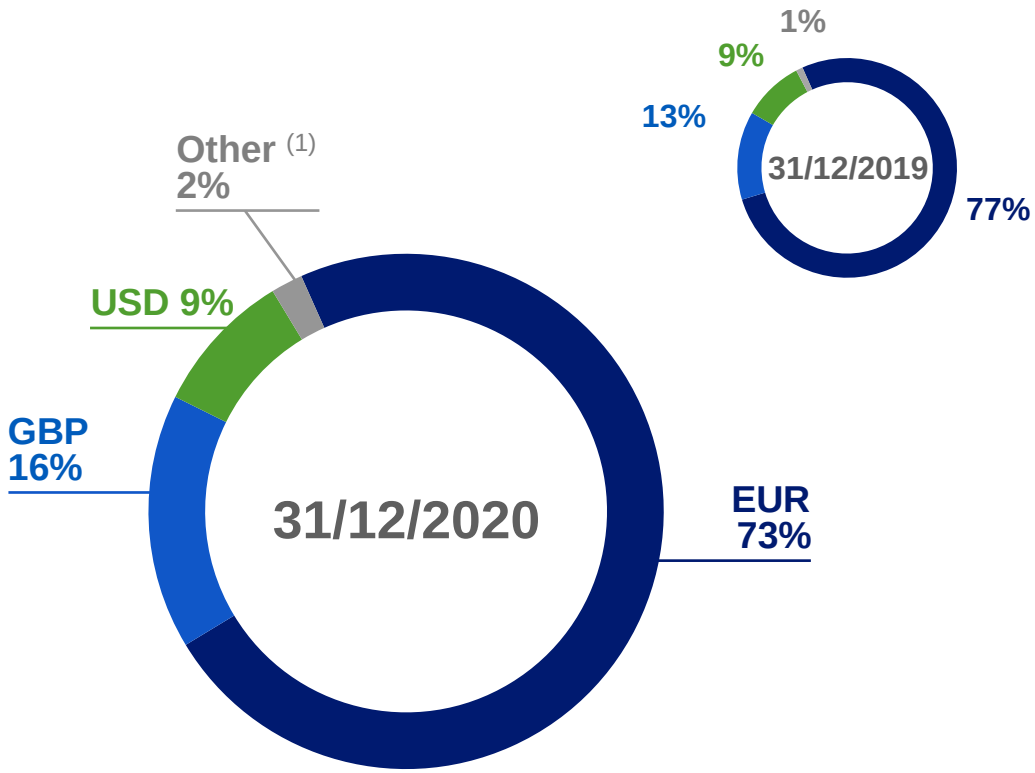
(3) Linky is a project led by Enedis, independent subsidiary of EDF under the provisions of the French energy code.

GROSS FINANCIAL DEBT AFTER SWAPS

BREAKDOWN BY TYPE OF RATE



BREAKDOWN BY CURRENCY

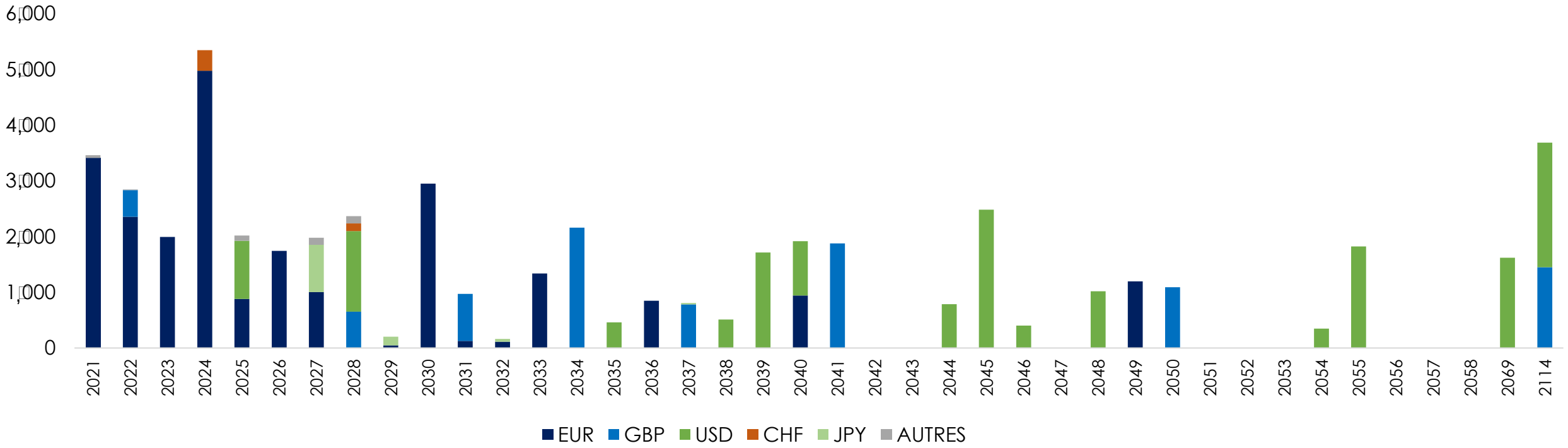


(1) Mainly CHF, PLN, CAD and JPY

BREAKDOWN OF BOND DEBTS BY CURRENCY

In millions of euros, before swaps

Including *(In €m equivalent)*	2021	2022	2023	2024
EUR	3,410	2,355	1,996	4,978
GBP	-	479	-	-
USD	-	-	-	-



MAIN OUTSTANDING BONDS AS OF 31 DECEMBER 2020 (1/2)

	Issue date [1]	Maturity	Nominal amount *(in millions of currency units)*	Currency	Coupon
	01/2009	01/2021	2,000	EUR	6.25%
Green Bond	11/2013	04/2021	1,400	EUR	2.25%
	01/2012	01/2022	2,000	EUR	3.88%
	09/2012	03/2023	2,000	EUR	2.75%
	09/2009	09/2024	2,500	EUR	4.63%
OCEANE Green Bond	09/2020	09/2024	2,400	EUR	0.00%
Green Bond	10/2015	10/2025	1,250	USD	3.63%
	11/2010	11/2025	750	EUR	4.00%
Green Bond	10/2016	10/2026	1,750	EUR	1.00%
	01/2017	01/2027	107,900	JPY	1.09%
	03/2012	03/2027	1,000	EUR	4.13%
	09/2018	09/2028	1,800	USD	4.50%
	04/2010	04/2030	1,500	EUR	4.63%
	10/2018	10/2030	1,000	EUR	2.00%

(1) Date of funds reception

MAIN OUTSTANDING BONDS AS OF 31 DECEMBER 2020 (2/2)

Issue date (1)	Maturity	Nominal amount *(in millions of currency units)*	Currency	Coupon
07/2001	07/2031	650	GBP	5.88%
02/2003	02/2033	850	EUR	5.63%
06/2009	06/2034	1,500	GBP	6.13%
10/2016	10/2036	750	EUR	1.88%
09/2018	09/2038	650	USD	4.88%
01/2009	01/2039	1,750	USD	6.95%
11/2010	11/2040	750	EUR	4.50%
10/2011	10/2041	1,250	GBP	5.50%
01/2014	01/2044	1,000	USD	4.88%
10/2015	10/2045	1,500	USD	4.75%
10/2015	10/2045	1,150	USD	4.95%
09/2018	09/2048	1,300	USD	5.00%
12/2019	12/2049	1,250	EUR	2.00%
09/2010	09/2050	1,000	GBP	5.13%
10/2016	10/2056	2,164	USD	4.99%
11/2019	12/2069	2,000	USD	4.50%
01/2014	01/2114	1,350	GBP	6.00%

(1) Date of funds reception

FOCUS ON HYBRIDS SECURITIES

Hybrid issue

OVERVIEW OF KEY ELEMENTS

Hybrid issues contribute to strengthening the balance sheet through their qualification as equity under IFRS and 50/50 as debt and equity by rating agencies

Two new issues in September 2020 of Euro-denominated hybrid notes for a total nominal amount of €2,100 million, consisting of:
- a €850 million perpetual 6.5 years non-call hybrid notes issue with an initial coupon of 2.875%,
- a €1,250 million perpetual 10 years non-call hybrid notes issue with an initial coupon of 3.375%

These issues allowed to extend the maturity of the stock of hybrids and to reduce the average coupon

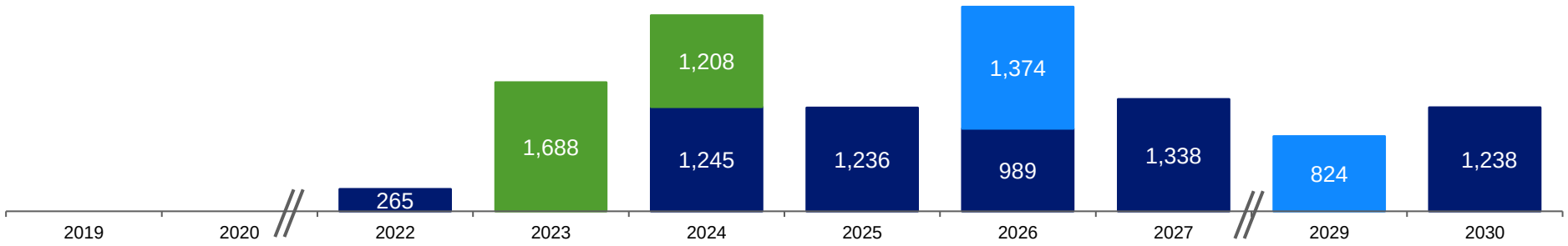
Hybrid Securities Snapshot Following new issues (in millions of euros) (1)

Total amount: **€11.41bn** (1)

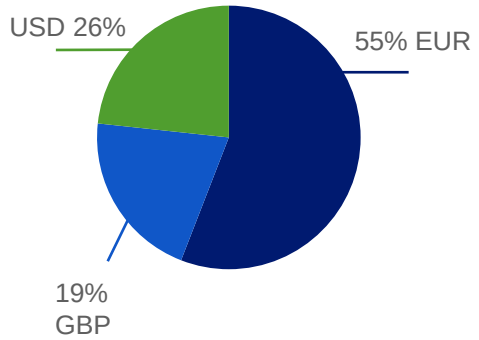
Average tenor: **5.28 years**

Average cost: **4.78%**

Hybrid Debt Maturity Schedule Based On First Call Dates

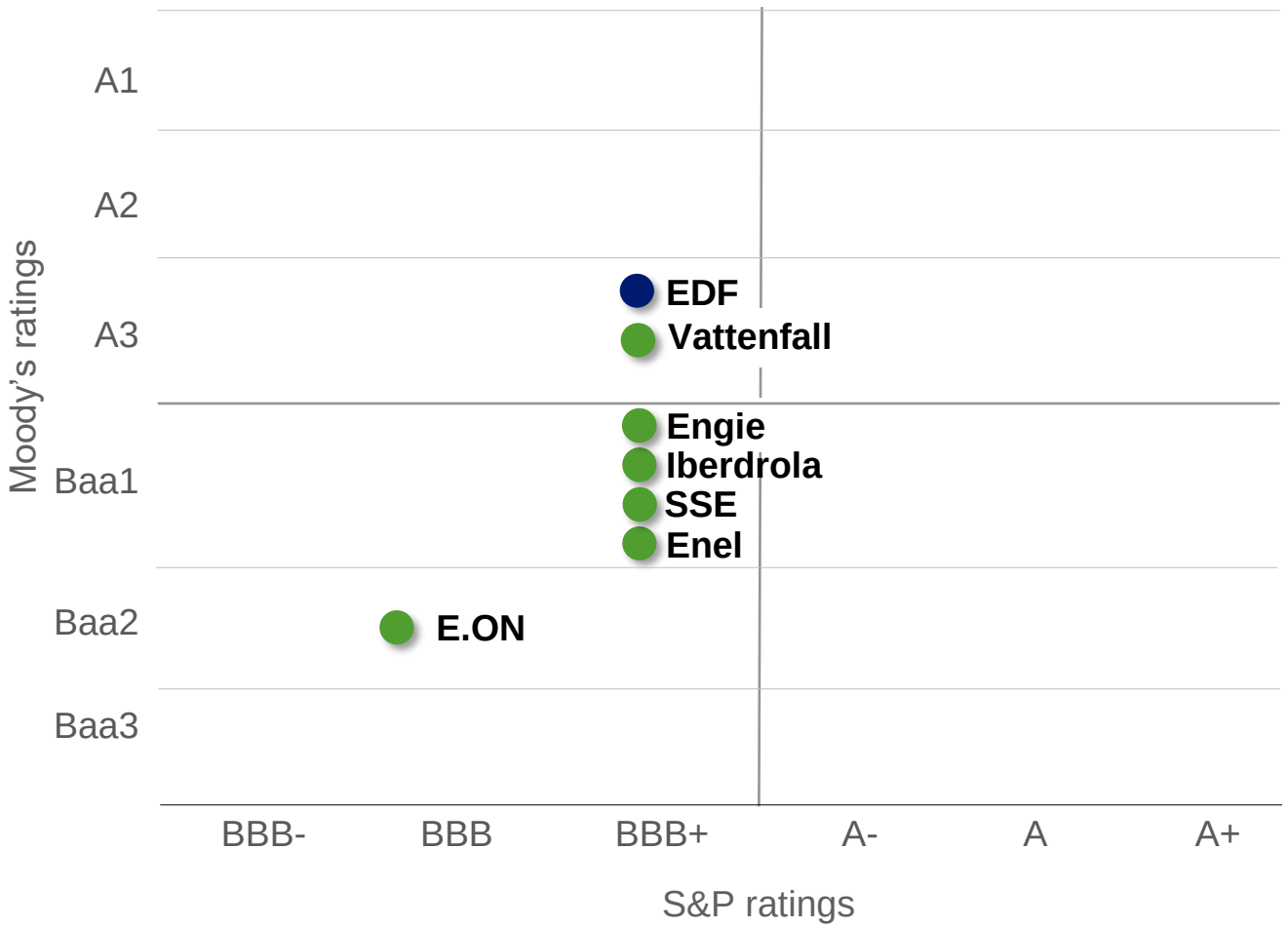


Breakdown by currency



(1) Exchange rate as of operation date

COMPARATIVE CREDIT RATINGS



	S&P ratings	Moody's ratings	Fitch ratings
EDF	**BBB+ stable (1)**	**A3 negative (2)**	**A- negative (3)**
Engie	BBB+ stable	Baa1 stable	A- stable
Vattenfall	BBB+ stable	A3 negative	n.d.
SSE	BBB+ stable	Baa1 negative	BBB stable
Iberdrola	BBB+ stable	Baa1 stable	BBB+ stable
Enel	BBB+ stable	Baa1 stable	A- stable
Innogy	n.d.	Baa2 stable	n.d.
E.ON	BBB stable	Baa2 stable	BBB+ stable
Uniper	BBB negative	n.d.	n.d.
RWE	n.d	Baa3 positive	BBB+ stable

Sources: rating agencies as of 16/04/2021

(1) Update of the rating and outlook of EDF Group by S&P on 10 March 2021

(2) Update of the rating and outlook of EDF Group by Moody's on 24 April 2020

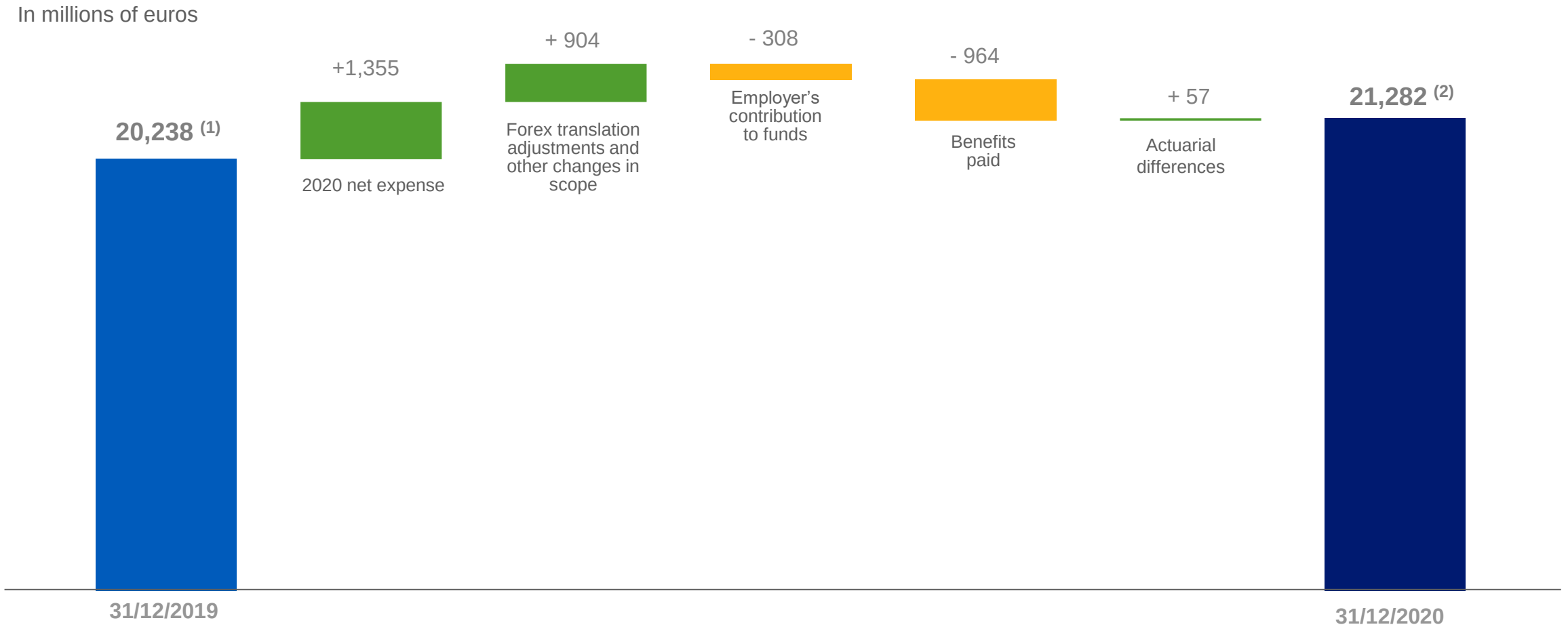
(3) Update of the rating and outlook of EDF Group by Fitch on 3 September 2020

FINANCE

GROUP PROVISIONS

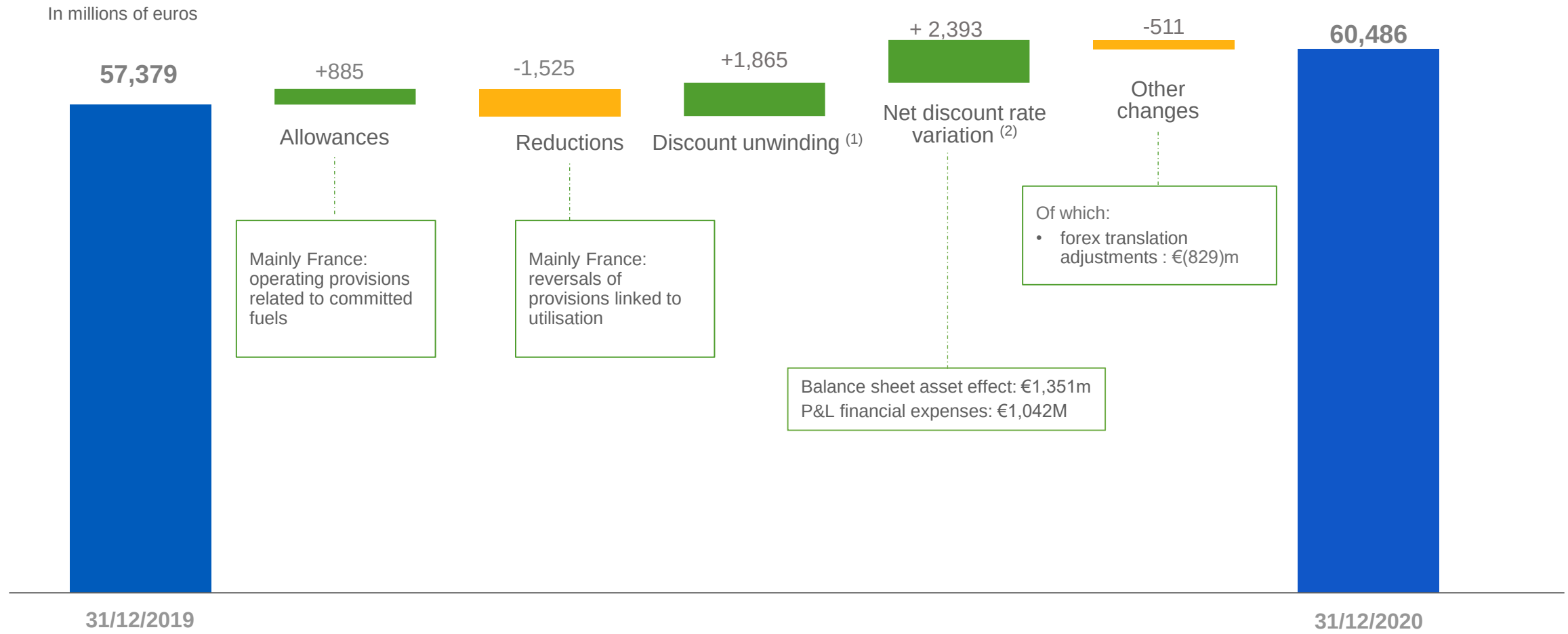
In millions of euros	31 December 2019 Current	31 December 2019 Non Current	31 December 2019 **Total**	31 December 2020 Current	31 December 2020 Non Current	31 December 2020 **Total**
Provisions for back-end nuclear cycle	1,432	23,822	**25,254**	1,430	26,137	**27,567**
Provisions for nuclear decommissioning and last cores	364	31,761	**32,125**	723	32,196	**32,919**
Other provisions for decommissioning	105	1,573	**1,678**	120	1,744	**1,864**
Provisions for employee benefits	945	20,539	**21,484**	879	22,130	**23,009**
Other provisions	2,710	3,065	**5,775**	2,675	3,630	**6,305**
Total Provisions	**5,556**	**80,760**	**86,316**	**5,827**	**85,837**	**91,664**

GROUP PROVISIONS FOR EMPLOYEE BENEFITS: CHANGE IN NET LIABILITY



(1) Including: provisions for employee benefits €21,484m and non-current financial assets €(1,246)m
(2) Including: provisions for employee benefits €23,008m and non-current financial assets €(1,726)m

GROUP NUCLEAR PROVISIONS



(1) Of which France +€1,520m and United Kingdom +€336m

(2) Effects of a change in net discount rate for France:
- for provisions with no related assets: impact on P&L
- for provisions with related assets: impact on balance sheet

FRANCE NUCLEAR PROVISIONS

In millions of euros	31/12/2019	Net allowances	Discount effect (1)	Other changes (2)	31/12/2020
Total provisions for back-end nuclear cycle	**22,159**	**(258)**	**1,688**	**1,033**	**24,622**
Provisions for management of spent fuel	10,823	(119)	626	(8)	11,322
Provisions for waste removal and conditioning	805	(19)	46	(832)	0 (3)
Provisions for long-term management of radioactive waste	10,531	(120)	1,016	1,873	13,300
Total provisions for nuclear dismantling and last cores	**19,561**	**(147)**	**874**	**(88)**	**20,200**
Provisions for dismantling power stations	16,937	(48)	780	(180)	17,489
Provisions for last cores	2,624	(99)	94	92	2,711
TOTAL FRANCE NUCLEAR PROVISIONS	**41,720**	**(405)**	**2,562**	**945**	**44,822**

(1) NB: Regarding the allocation to Dedicated Assets for nuclear provisions coverage, please refer to the slide "Dedicated Assets" on p.237

(2) Financial expenses booked to the income statement of which cost of unwinding the discount: €1,520m and impact of actual changes to discounting rates for provisions not backed by assets on the balance sheet: €1,042m.

(3) Other changes include changes in asset-backed provisions. These changes are not included in the income statement.

(4) Reclassified as Long-term radioactive waste management at 31/12/2020 to ensure consistency with the latest nomenclature (breaking down nuclear charges into defined operations) as annexed to the amended decree of 21 March 2007 on securing the financing of nuclear expenses.

FRANCE NUCLEAR PROVISIONS

(1) Effects of a change in net discount rate for France:
- for provisions with no related assets: impact on P&L
- for provisions with related assets (matching assets and underlying assets): impact on balance sheet

FRANCE NUCLEAR PROVISIONS: 2015-2020 CHANGES

<table>
<tr><th></th><th>2015</th><th>2016</th><th>2017</th><th>2018</th><th>2019</th><th>2020</th></tr>
<tr><td>Decommissioning costs plants in operation</td><td>Conclusions of the external audit commissioned by the DGEC on the cost of dismantling published in January 2016 (1), stating that the overall audit confirms EDF's estimate of the cost of decommissioning its nuclear fleet
Three-year review of the cost assessment for dismantling first-generation plants to incorporate lessons learned from current sites.</td><td>Extensive revision of the cost estimate for the decommissioning of the plants in operation, taking into account the DGEC audit recommendations
Limited changes of the cost estimate and related provisions: -€0.5bn (2)</td><td colspan="4">Having thoroughly revised the estimate, EDF continues to undertake an international comparison to back up its analyses taking care to identify and characterize a number of factors that could distort direct comparisons. These include differences in the scope of the estimates or in the national (for example in France, this includes the number of plants) and regulatory contexts.
Since its revision, the estimate has been subject to an annual review which, in 2017, 2018, 2019 and 2020 resulted in not-material adjustments.</td></tr>
<tr><td rowspan="2">Decommissioning costs closed plants</td><td rowspan="2">Update to the industrial dismantling scenario for GCR reactors (3) :
✓ Dismantling of the caissons (reactor buildings) in the open air, and no longer under water
✓ Lessons learned from dismantling a first caisson before commencing operations on the five others
Provisions increased by €0.3 billion</td><td rowspan="2">Update of the evaluation of the decommissioning costs of the 1st generation plants
These annual studies confirm the changes previously made and do not lead to a significant change in the provisions.</td><td colspan="4">GCR: Annual estimate review → non-material adjustments</td></tr>
<tr><td>Independent expert review required by the French nuclear safety authority (ASN). EDF's main choices were ratified
Hearing by the ASN college in June
Strategy dossier, DOS (5) on the secure configuration and detailed 2017-2032 schedule sent at the end of December</td><td>The ASN sent its main questions and conclusions on the UNGG strategy dossier. Dismantling in the air, advantage of industrial demonstrator and the schedule for the first dismantled reactor (Chinon A2) seem to be approved.
Discussions continue on the schedule for dismantling the five other reactors.</td><td>GCR: Annual estimate review → non-
ASN draft decisions submitted for public consultation from July to November 2019.
The ASN recognises the complexity of the operations to be carried out and the merits of the EDF risk control strategy. It calls for a slight acceleration of the work on the five reactors following the first series.
Taking into account the decision projects → + € 108M in the IA decommissioning provisions.material adjustments</td><td>ASN decisions published on 17 March 2020, without affecting the principles set out in the draft decisions for 2019.
External audit launched in December 2020 at the request of the French Department for Energy and Climate (Direction générale de l'énergie et du climat [DGEC]) to assess the decommissioning of shut down EDF nuclear facilities. The audit should be complete in July 2021.
Health crisis impact on decommissioning provisions for approximately €45m</td></tr>
<tr><td>Cost of the Cigéo project</td><td>Cost of the Cigéo project set at €25bn (4) by the Ministerial Order (1), which substitutes the 2005 estimated benchmark cost of €20.8bn on which EDF group used to rely.
€0.8bn increase in provision</td><td colspan="2">Continuation of the design studies (ANDRA)</td><td>Continued design studies (ANDRA)
On 15th January 2018, the ASN gave its recommendation on the Cigéo DOS: satisfactory technological maturity, request for a study on an alternative for storing bituminous waste
September 2018: expert group engaged by the French Directorate General of Energy and Climate (DGEC) to draw up an inventory of how bitumen is managed
Application dossier to build the facility by 2019 (for a permit in 2022)</td><td>Continuation of design studies (ANDRA).
The group of experts mandated in September 2018 concluded in September 2019 on the a priori feasibility of the various bitumen management options but stresses the importance of continuing the studies undertaken to identify the most appropriate option.
ANDRA planning → request for the creation of CIGEO in 2020, industrial pilot phase by 2030, reception of the first waste packages maintained for 2031.</td><td>Continued design studies (ANDRA).
French Finance Act for 2021 (the Finance Act) provides for a change in project taxation (transition from common law taxation to a storage tax). The French government still needs to clarify and administer the related legal provisions.
ANDRA planning→ request for the creation of CIGEO in 2021, intake of first waste packages maintained for 2031.</td></tr>
</table>

(1) Please refer to the release from the French Ministry for Ecology, Sustainable Development and Energy from 15 January 2016

(2) Lower provision for counterparty of underlying assets

(3) GCR: Gas-cooled reactor

(4) At the economic conditions of 2011

(5) Safety Operations Record « Dossier sur les Opérations de Sûreté »

DISCOUNT RATE OF NUCLEAR PROVISIONS IN FRANCE (1/5)

	December 2019	December 2020
Regulatory ceiling rate – nominal	3.8 % (1)	
Regulatory ceiling rate – real		2.7 % (2)
Nominal discount rate	3.7 %	3.3 %
Real discount rate	2.3 %	2.1 %
Inflation	1.4 %	1.2 %

The real discount rate resulting from the evolution of the calculation methods applied at 31 December 2020 is 2.1%, with an inflation assumption of 1.2%

The real discount rate is down 20bp vs. 2.3% at the end of 2019

(1) 3.75 % rounded to 3.8 %
(2) 2.66% rounded to 2.7%

DISCOUNT RATE OF NUCLEAR PROVISIONS IN FRANCE (2/5)

REGULATORY CEILING

— The **discount rate** for nuclear provisions in France must respect a regulatory ceiling calculated using a formula determined by ministerial order in accordance with the French Environmental Code (Art. D594-4)

— A **new regulatory ceiling**, applying from second-half 2020, has been determined by the ministerial order of 1 July 2020 (Art. 3)

— The **formula for the current regulatory ceiling** is expressed as a real value (including inflation) and equal, after a four-year transition period starting from end-2020, to the representative value of expectations of the real long-term interest rate selected for the calculation published by the European Insurance and Occupational Pensions Authority (EIOPA) of the ultimate forward rate (UFR) applicable on the date in question and increased by 150 basis points

— The application of the formula at 31/12/2020 gives a **regulatory ceiling for the discount rate of 2.66%** (rounded up to 2.7%)

DISCOUNT RATE OF NUCLEAR PROVISIONS IN FRANCE (3/5)

EVOLUTION IN DISCOUNT RATE CALCULATION METHODS

— The discount rate is now established on the basis of an interest-rate curve. This curve includes:

  — a sovereign yield rate, based on market data at the end of trading for liquid time frames (0 to 20-year OAT rate curve) and subsequently converging, by using an interpolation curve, towards the ultimate forward rate (UFR) (1);

  — to which is added a spread curve for A to BBB-rated corporate bonds.

  On the basis of the disbursement cash flows expected for nuclear engagements, an equivalent single discount rate is deducted from the rate curve thus constructed.

— The inflation rate assumption is established on the basis of an inflation rate curve, built using inflation-linked market products and taking account of economic forecasts, and consistent in the long term with the inflation rate assumption underlying the UFR (2%).

— This new discount rate calculation method led, at 31 December 2020, to the same discount rate and inflation rate as those established on the basis of the methodology used until 30 June 2020

(1) The UFR was determined by the EIOPA for extremely long-term insurance liabilities comprising disbursements beyond market time frames. It is selected in the calculation methodology consistent with the decision of the administrative authority, which, in its order of 1 July 2020 amending the order of 21 March 2007 on the securing of financing for nuclear expenses, changed the formula for the regulatory ceiling of the discount rate, henceforth taking the UFR as a reference rather than the arithmetic average of the last 48 months of the TEC 30, the reference to the UFR being considered as more relevant for nuclear provisions given the extremely long-term maturities.

DISCOUNT RATE OF NUCLEAR PROVISIONS IN FRANCE (4/5)

SENSITIVITIES

— All other things being equal, depending on discount rate and inflation rate assumptions, **the sensitivity (1) to a 0.2% decrease in the real discount rate (excluding the corresponding tax effect) would be:**

- For balance sheet provisions: €2,032m (2) (of which €1,772m for provisions covered by dedicated assets)
- For income before tax: €(1,221)m

— This increase in nuclear provisions, and in particular those to be covered by dedicated assets, **does not imply a direct transposition of this effect to the Group's net debt** on the dates under consideration, as the amount to be allocated to dedicated assets in respect of each financial year varies, notably according to (given the order of 1 July 2020):

- the profitability of the dedicated assets and the resulting coverage rate (no need to allocate once the coverage rate reaches 100%)
- of the period within which the allocation is made, with regulation allowing ministers to determine a maximum period of five years for making the allocation

(1) As published in the consolidated statements at 31 December 2020
(2) Including €881M recorded against assets

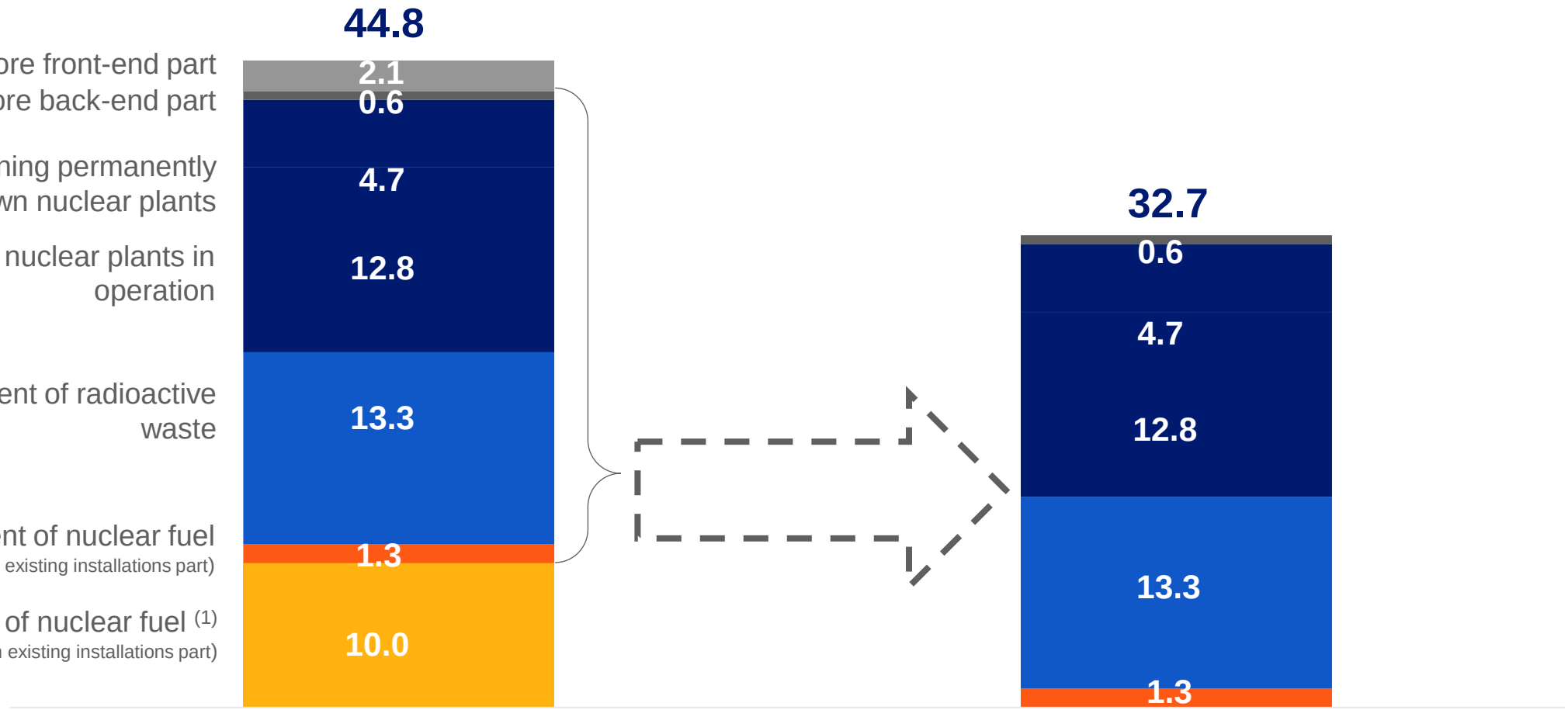
DISCOUNT RATE OF NUCLEAR PROVISIONS IN FRANCE: SENSITIVITY ANALYSIS OF THE DISCOUNT RATE BASED ON PROVISIONS AT 31/12/2020 (5/5)

For a variation of 20 base points	Provisions (discounted value)	Sensitivity to the discount rate			
		On balance sheet provisions		On pre-tax earnings	
In millions of euros		+0.20 %	-0.20 %	+0.20 %	-0.20 %
Back-end nuclear					
Management of nuclear fuel	11,322	(261)	287	*229*	*(253)*
Provisions for waste removal and conditioning	-	-	-	-	-
Long-term management of radioactive waste	13,300	(793)	954	*646*	*(796)*
Dismantling and last cores					
For decommissioning permanently shut-down nuclear plants	12,775	(498)	522	-	-
For decommissioning nuclear plants in operation	4,714	(160)	172	*160*	*(172)*
Last cores	2,711	(91)	97	-	-
Total	**44,822**	**(1,803)**	**2,032**	***1,035***	***(1,221)***
o/w part of the coverage base for dedicated assets	***32,676***	***(1,564)***	***1,772***	***875***	***(1,043)***

(1) Reclassified as long-term radioactive waste management at 31/12/2020 to ensure consistency with the latest nomenclature (breaking down nuclear charges into defined operations) as annexed to the amended decree of 21 March 2007 on securing the financing of nuclear expenses.

PROVISIONS RELATED TO NUCLEAR GENERATION IN FRANCE PART TO BE COVERED BY DEDICATED ASSETS

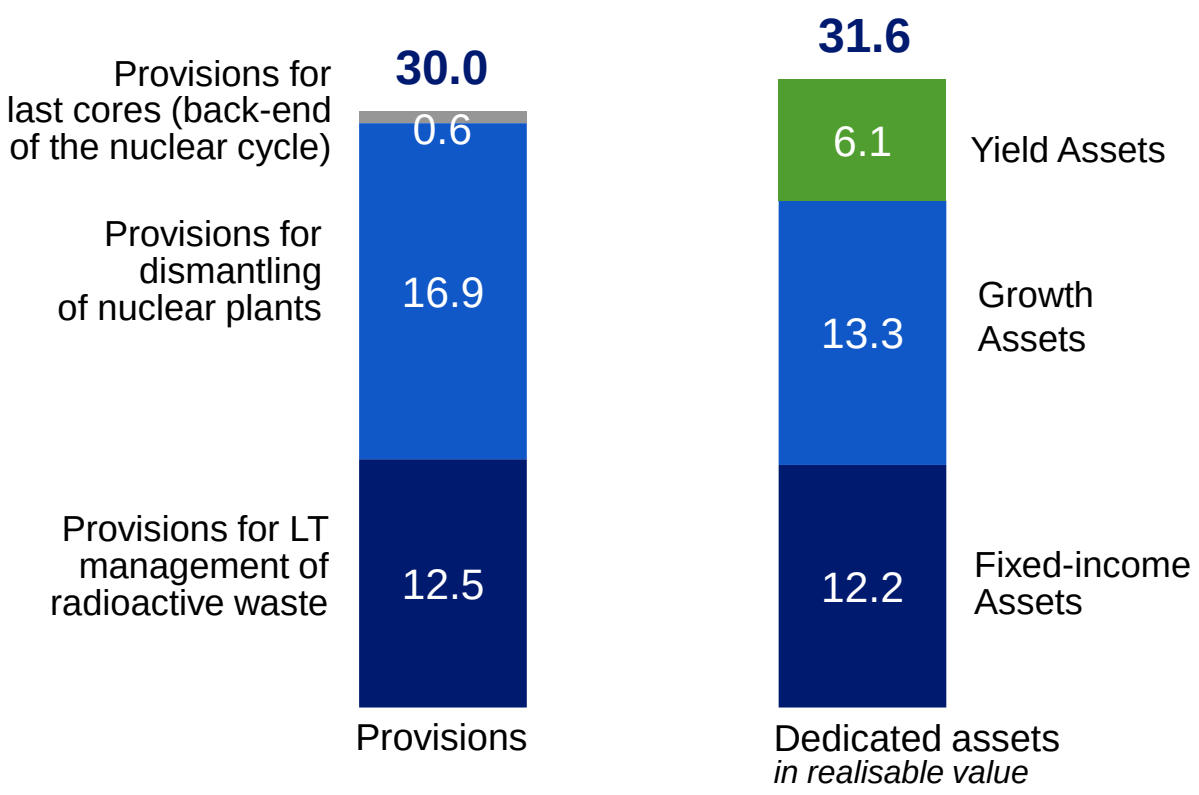
In billions of euros



(1) Related to the operating cycle

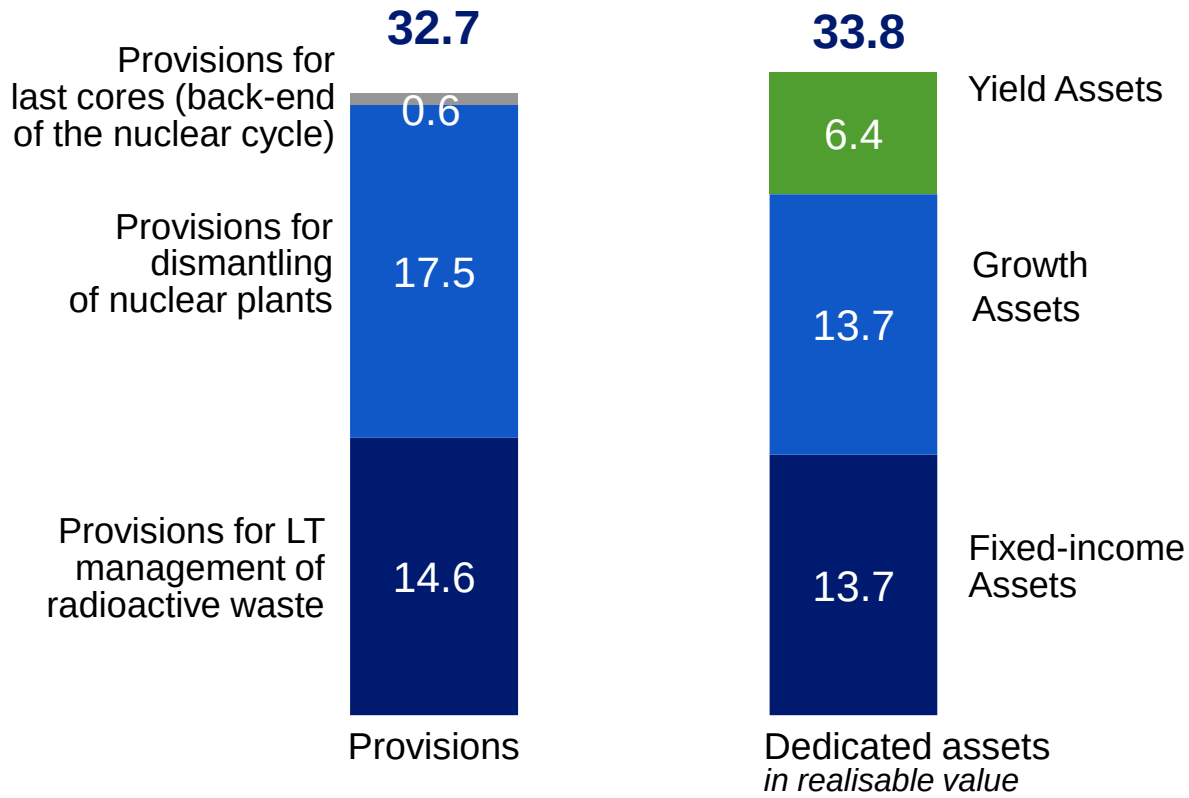
EDF SA DEDICATED ASSETS

In billions of euros



31/12/2019

- At 31 December 2019, the degree of coverage of provisions according to the regulations by dedicated assets was 105.5%



31/12/2020

- At 31 December 2020, the regulatory degree of coverage is 103.6%
- No allocation to DAs to be made in 2021 in respect of 2020 owing to a coverage rate of over 100%, in accordance with the regulation applicable since 1 July 2020

PERFORMANCE OF EDF SA DEDICATED ASSETS (1)

YIELD ASSETS: +2.3%

Yield assets, comprising **real estate and infrastructure assets**, generated dividends **consistent with expectations** in 2020. However, this performance was mitigated in 2020 by a decrease in the value of some assets, particularly transport infrastructure, impacted by containment measures in various countries

GROWTH ASSETS: +10.3%

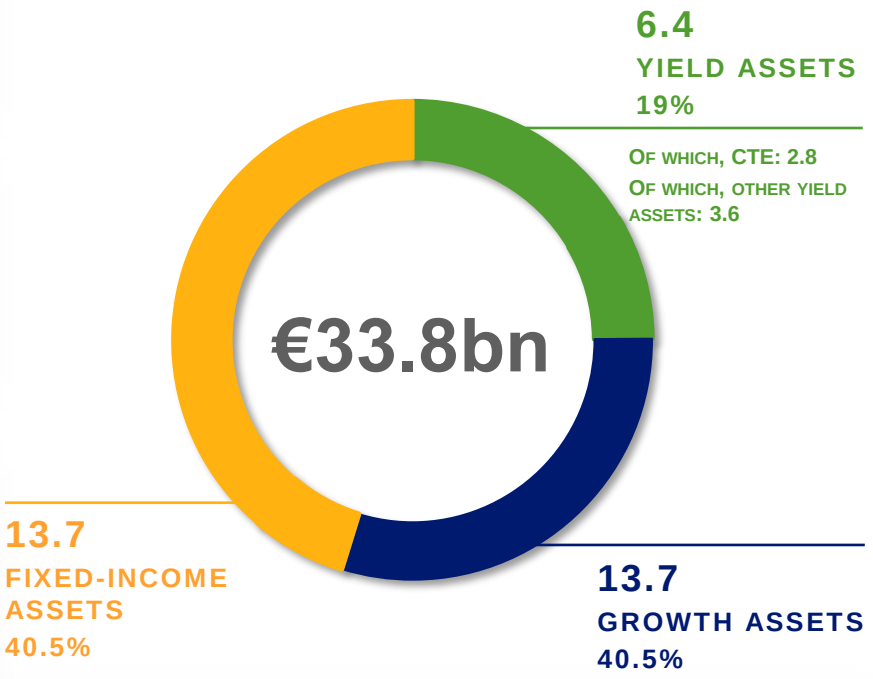
The portfolio of growth assets benefited from a major equity market rebound following the sharp contraction in the first quarter. The selection of assets in regions of limited volatility was favourable to performance

FIXED-INCOME ASSETS: +4.1%

Fixed-income assets posted a good performance, thanks to geographical exposure choices and an adapted selection of funds, especially in Q1 2020

The CSPE receivable was fully reimbursed at end-2020 in accordance with the provisional schedule

In billions of euros



2020 PERFORMANCE: 5.9% (1)

Performance +6.2% on an annualised basis since 2004

(1) Pre-tax, non-annualised performance

A new strategic allocation was defined in 2018 to improve the adequacy of the profile of dedicated assets to the long-term nature of the disbursements to be covered (Growth assets: 40%, Fixed-income assets: 30%, Yield assets: 30%). The targets of the new allocation will be met progressively, as investments are made, entailing a gradual rebalancing from fixed-income assets to yield assets

EDF INVEST, THE INVESTMENT PLATFORM FOR NON-LISTED ASSETS

MANAGEMENT OF DEDICATED ASSETS …

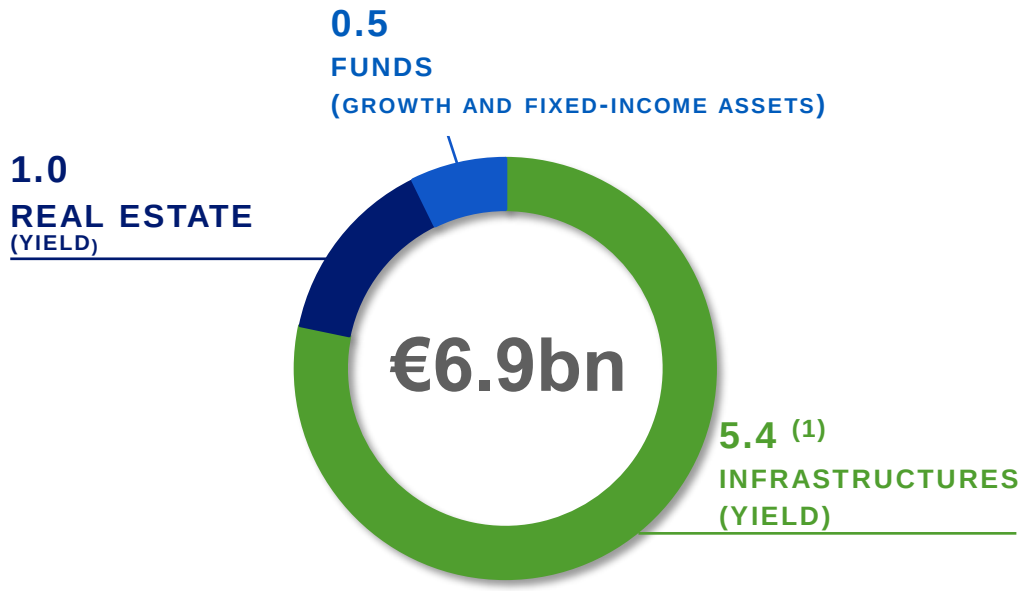
- EDF Invest is **the unlisted investment arm of EDF's Dedicated Assets** ; this portfolio amounts to **6.9 billion euros at 31 December 2020**
- The contribution of unlisted assets is the key to improve the Dedicated Assets return / risk profile and the perspective of long-term management is consistent the liabilities to be covered
- Among Dedicated Assets, unlisted assets contribute to yield assets, growth assets and fixed-income assets, invested in underlying Infrastructure, Real Estate and other Funds portfolios

… FOR A DIVERSIFIED PORTFOLIO

- EDF Invest **aims at raising the amount of the non-listed assets** portfolio up to the **reference target fixed in the Strategic allocation defined in June 2018**
- In 2020, EDF Invest continued to diversify its portfolio with **the addition infrastructure in renewables energy** (United States, Canada, and Portugal), an investment in **smart meters in the United Kingdom and** an investment in **real estate in the health care sector in Europe**

PORTFOLIO BREAKDOWN AT 31 DECEMBER 2020

In billions of euros



FINANCE

PUBLIC SERVICE COSTS (1/3): STABLE MECHANISM FOR COMPENSATING PUBLIC SERVICE COSTS AND TAXES SINCE 2016

- The 2015 amended French finance act and the 2016 French finance act introduced the principles of a new mechanism for compensating energy public service costs, effective as of 1 January 2016, with the following specific characteristics:
  - The French government budgets the public service costs for energy (electricity and gas) which are still calculated by the French Energy Regulatory Commission (CRE) and will be finalized as of 1 January 2021 by the “Public Energy Service” account in the French general budget. The 2019 French finance act allocates €9,149 million

- Repayment achieved at the end of 2020 of EDF’s historical compensation deficit, in accordance with the Ministers’ letter of 26 January 2016, enacted in the Decree of 18 February 2016 and the Orders of 13 May and 2 December 2016

- The CSPE (French contribution to electricity public service) tax has remained stable at €22.5/MWh since 2016 (full rate). Since early 2017, the tax is paid into the French general budget and not to the Energy Transition special purpose account, as was the case in 2016

PUBLIC SERVICE COSTS (2/3) : CHARGES FOR EDF

Article L121-6 of the Energy Code stipulates that the charges attributable to the public service tasks assigned to the electricity operators are fully compensated by the State

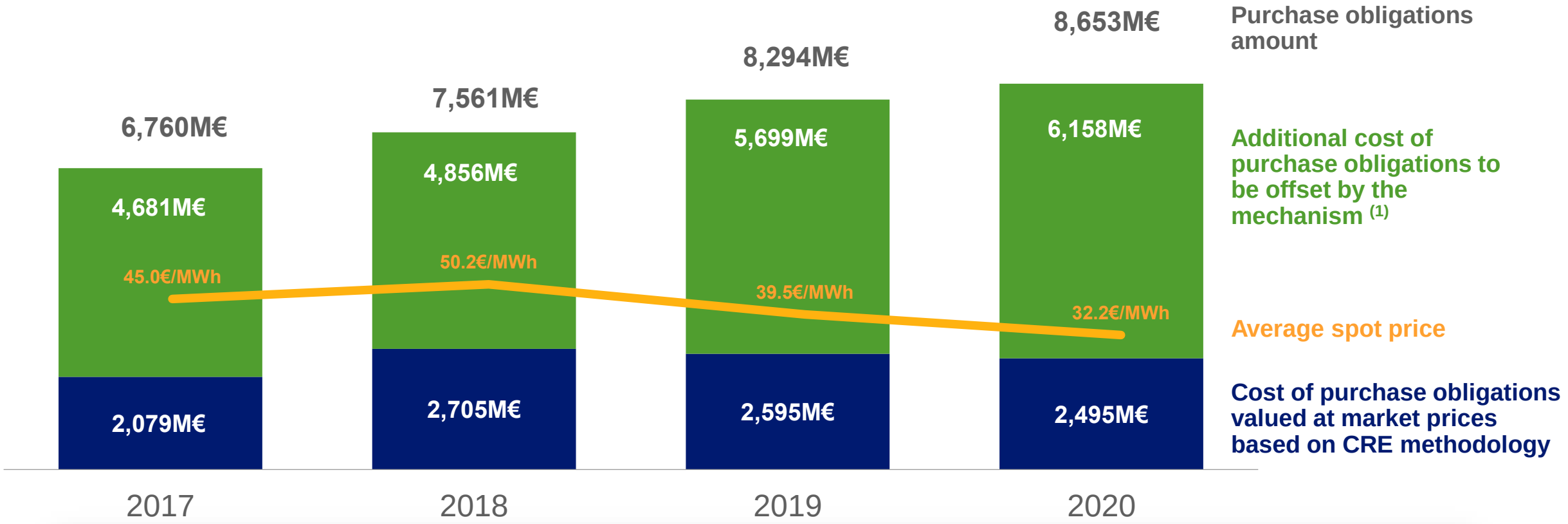
En millions d'euros	2018		2019		2020	
Purchase obligation (1)	4,856	74 %	5,699	74 %	6,158	76 %
Other (2)	1,698	26 %	1,963	26 %	1,923	24 %
Total EDF CSPE	**6,554**	**100%**	**7,662**	**100%**	**8,081**	**100%**

The trend in public service charges between 2019 and 2020 can be attributed to two distinct factors:

- Purchase obligation charges in metropolitan France increased between 2019 and 2020. This resulted from weather conditions favourable to the generation of wind capacity and photovoltaic power (sunshine) and from the growth in renewable power output in France. The rise in volumes was accompanied by a decline in electricity spot prices of -€7.3/MWh between 2019 (€39.5/MWh) and 2020 (€32.2/MWh). As with the volume effect, this decrease increased charges by widening the gap between the purchase obligation price and the market valuation.
- Charges relating to ZNIs (3) fell between 2019 and 2020. The decrease in electricity consumption in ZNIs stemming from the health crisis in 2020 led to a contraction in power generation and, hence, to a decline in CSPE charges.

(1) Purchases obligations include electricity generated from: hydropower (less than 12MW), biomass, wind power, PV power, cogeneration, recovery of household waste and energy recovery, with the exception of ZNI (3)
(2) Additional generation costs and purchase obligations in ZNI(3), the TPN (First Necessity Tariff) and the FSL (Housing Solidarity Fund)
(3) ZNI: Zones non interconnectées corresponding to overseas departments and Corsica and some of the Breton islands

PUBLIC SERVICE COSTS (3/3): CHANGE IN PURCHASE OBLIGATIONS IN MAINLAND FRANCE FOR EDF



Principle: The compensation mechanism of public energy services (2) charges offsets the difference between the cost of purchase obligations in mainland France and market prices

(1) EDF SA excluding island activities

(2) The compensation mechanism of public energy services charges also covers the tariff equalization costs in the ZNI (Zones Non Interconnectées), and the solidarity programs.

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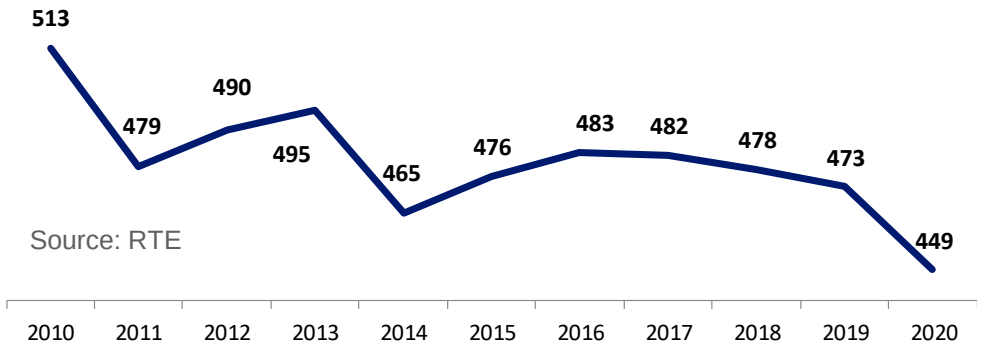
MARKETS: ELECTRICITY CONSUMPTION
(DATA NOT ADJUSTED FOR WEATHER AND CALENDAR)

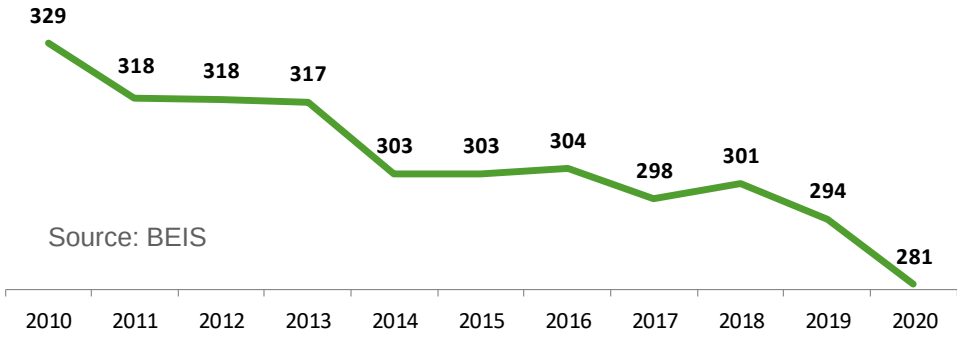
In TWh

France



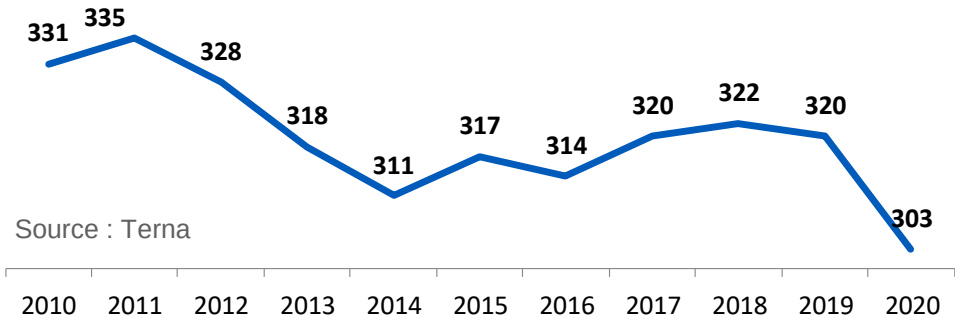
Source: RTE

The United Kingdom



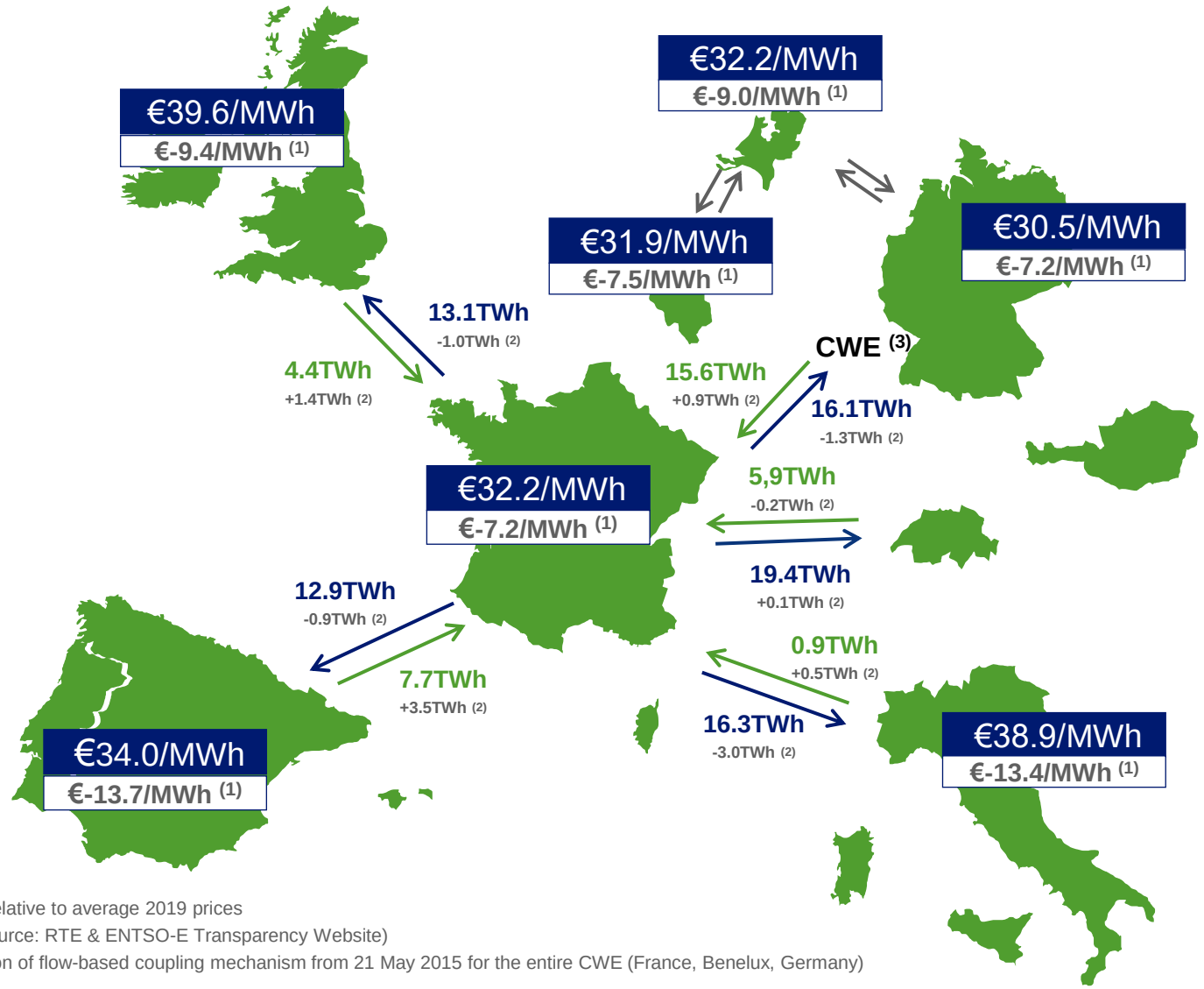
Source: BEIS

Italy



Source : Terna

AVERAGE SPOT PRICES IN 2020



(1) Change relative to average 2019 prices
(2) Trade (Source: RTE & ENTSO-E Transparency Website)
(3) Introduction of flow-based coupling mechanism from 21 May 2015 for the entire CWE (France, Benelux, Germany)

The decrease came in H1, the result of three combined factors:

- A fall in demand in winter 2019/2020 in France (rise in temperatures) and then across Europe (lockdowns)
- A sharp contraction in gas spot prices in the spring owing to substantial inventories and COVID-weakened demand
- An increase in wind capacity generation in France and, more broadly, Europe

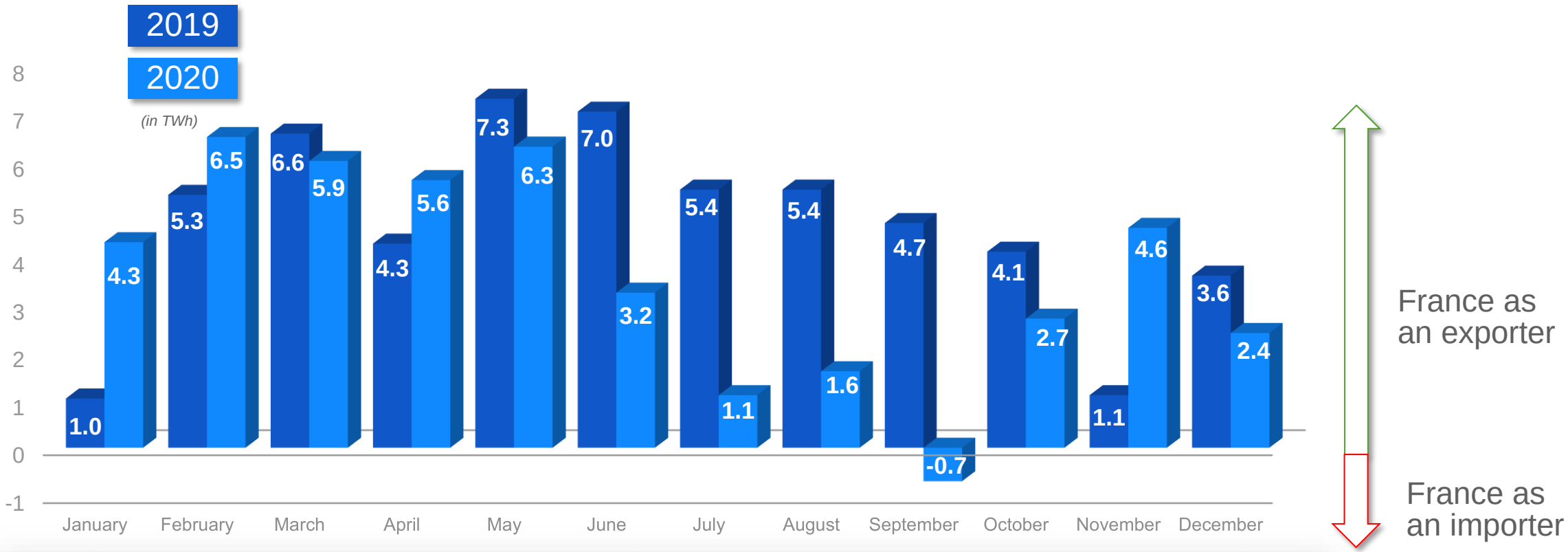
In H2, however, spot prices recovered in most countries, driven by the increase in gas prices and less stringent lockdown measures than in the spring having a lesser impact on demand

The coupling of the markets has enabled a certain degree of price convergence, though still limited by available capacities at borders

Average observed spot market price for 2020:

- *EPEXSPOT: France & Germany*
- *N2EX: United-Kingdom*
- *OMIE: Spain*
- *GME: Italy (Prezzo Unico Nazionale)*
- *APX: Netherlands*
- *BELPEX: Belgium*

CROSS-BORDER ELECTRICITY TRADE BALANCE



France's export balance stood at 43.4TWh in 2020 (-12.2TWh vs. 2019). The decrease mainly results from the health crisis, which changed the availability of the French nuclear fleet and reduced nuclear generation in France and electricity demand in several neighbouring countries. The export balance was positive but contracted across all borders except to Switzerland: 15.4TWh to Italy (-3.5TWh vs. 2019), 13.5TWh to Switzerland (+0.3TWh vs. 2019), 8.8TWh to the UK (-2.5TWh vs. 2019), 5.2TWh to Spain (-4.5TWh vs. 2019) and 0.6TWh to CWE (-2.1TWh vs. 2019)

(1) Source : RTE until August 2020 et from September 2020 : ENTSO-E data

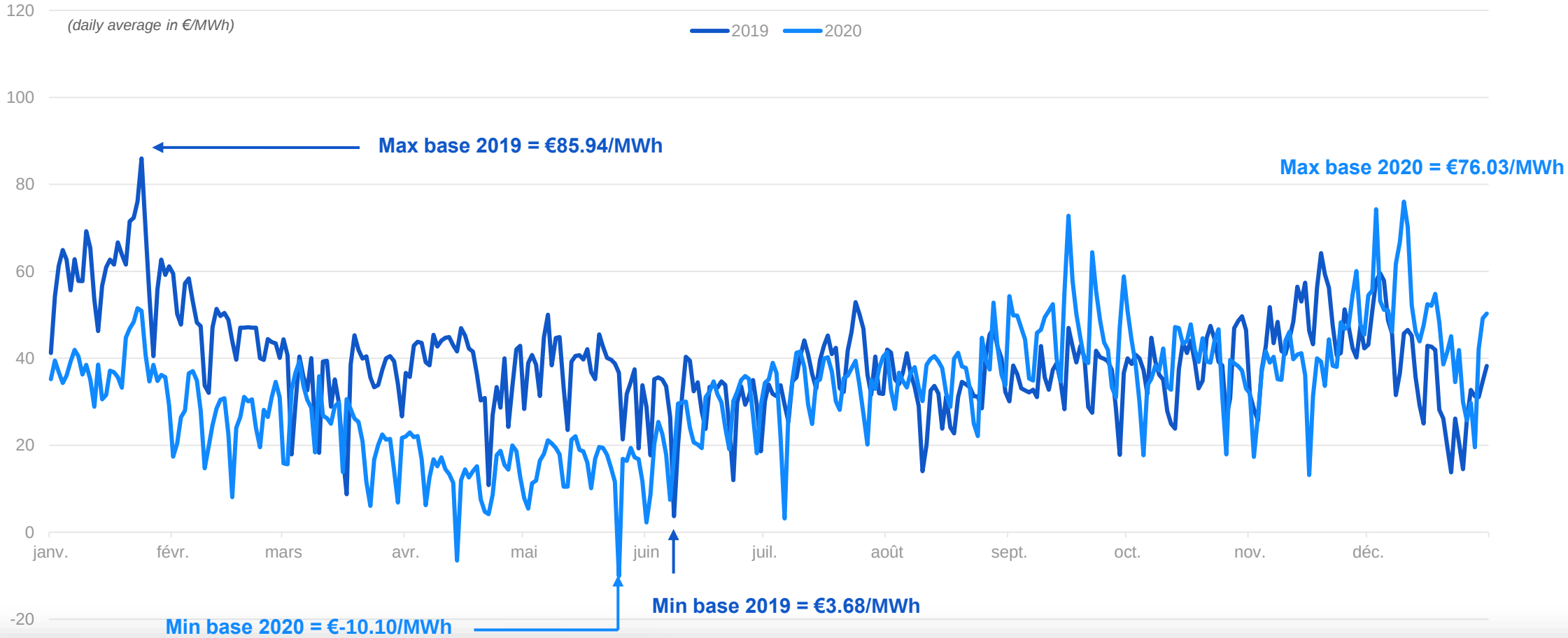
(2) CWE flow-based coupling zone composed of Germany, Belgium, France, Luxembourg and Netherlands, set up in May 2015

FRENCH POWER TRADE BALANCES AT ITS BORDERS

(In TWh[1])		2019					2020				
		Q1	Q2	Q3	Q4	Total	Q1	Q2	Q3	Q4	Total
United Kingdom	exports	4.0	3.1	3.8	3.4	**14.2**	3.7	3.7	2.3	3.5	**13.1**
	imports	0.4	0.4	1.1	1.0	**2.9**	0.6	1.4	1.7	0.7	**4.4**
	balance	3.6	2.7	2.6	2.4	**11.2**	3.1	2.3	0.6	2.8	**8.8**
Spain	exports	4.9	3.6	3.0	2.3	**13.8**	4.1	4.1	2.2	2.6	**12.9**
	imports	1.1	0.4	0.4	2.3	**4.2**	1.2	1.2	2.6	2.8	**7.7**
	balance	3.9	3.2	2.6	0.0	**9.6**	2.9	2.9	-0.4	-0.2	**5.2**
Italy	exports	5.2	4.6	4.8	4.6	**19.2**	5.9	2.1	3.1	5.2	**16.3**
	imports	0.1	0.0	0.0	0.2	**0.4**	0.1	0.2	0.4	0.2	**0.9**
	balance	5.1	4.6	4.8	4.4	**18.9**	5.8	1.9	2.6	5.1	**15.4**
Switzerland	exports	5.4	4.8	4.2	4.9	**19.3**	6.4	4.8	2.5	5.7	**19.4**
	imports	1.4	1.3	1.8	1.6	**6.1**	1.3	1.2	2.2	1.3	**5.9**
	balance	4.0	3.5	2.4	3.3	**13.1**	5.2	3.6	0.3	4.4	**13.5**
CWE [2]	exports	2.3	6.7	5.1	3.3	**17.4**	3.9	6.5	2.7	3.1	**16.1**
	imports	6.0	2.3	2.1	4.8	**14.7**	4.3	2.1	3.8	5.4	**15.6**
	balance	- 3.6	4.7	3.2	-1.5	**2.7**	-0.3	4.4	-1.1	-2.3	**0.6**
TOTAL	exports	21.7	23.0	21.0	18.6	**83.9**	24.0	21.1	12.7	20.1	**77.9**
	imports	8.8	4.3	5.2	9.9	**28.2**	7.3	6.1	10.8	10.3	**34.5**
	balance	12.9	18.5	15.6	8.7	**55.7**	16.7	15.1	2.0	9.7	**43.4**

(1) Source: RTE
(2) Rounded to the nearest tenth
(3) CWE flow-based coupling zone composed of Germany, Belgium, France, Luxembourg and Netherlands, set up in May 2015

FRANCE: BASELOAD ELECTRICITY SPOT PRICES

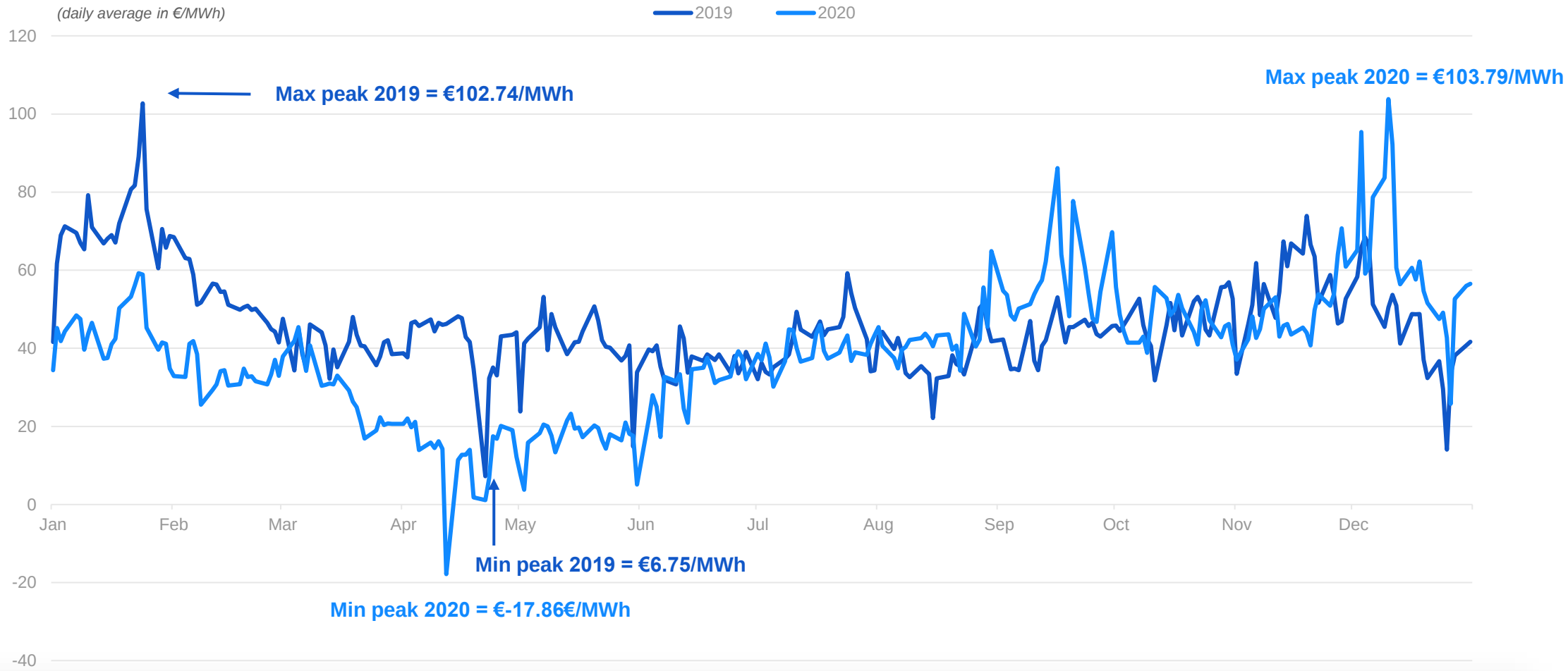


Baseload electricity spot prices came out at an average €32.2/MWh (-€7.2/MWh vs. 2019)
The year-on-year decrease resulted from the sharp fall in prices in the first half, down €17.3/MWh on average compared with H1 2019. The trend can be explained by three combined factors: the decrease in commodities prices (gas and coal for the entire period, CO_2 from March); the substantial contraction in demand owing to higher winter temperatures (+1°C vs. Q1 2019) and subsequently to the lockdown and its consequences (record drop of 7.1TWh in April vs. 2019); and the considerable increase in French wind capacity generation (+4.8TWh)

In the second half, prices were slightly higher than in H2 2019, bolstered by the recovery in gas prices and electricity demand

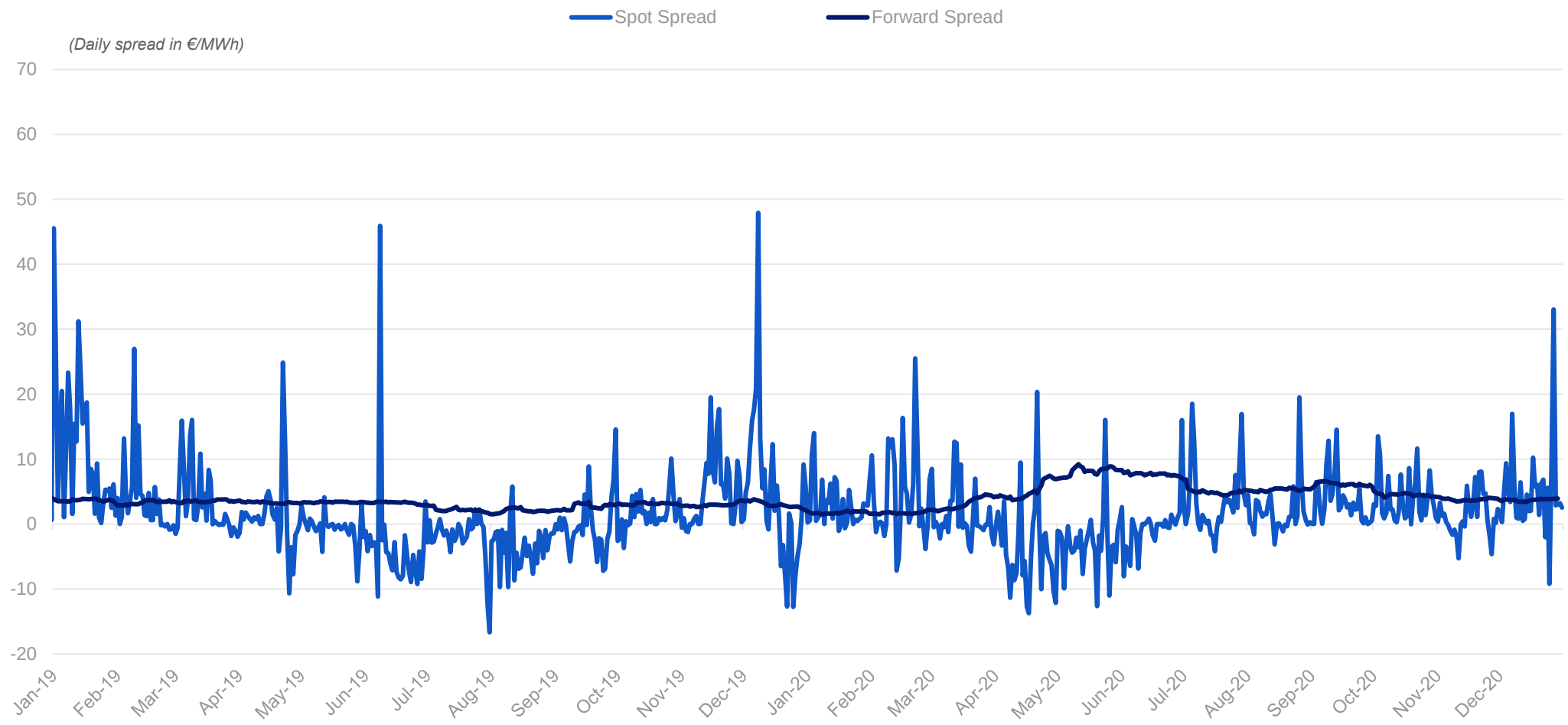
Source : EPEX

FRANCE: PEAKLOAD ELECTRICITY SPOT PRICES



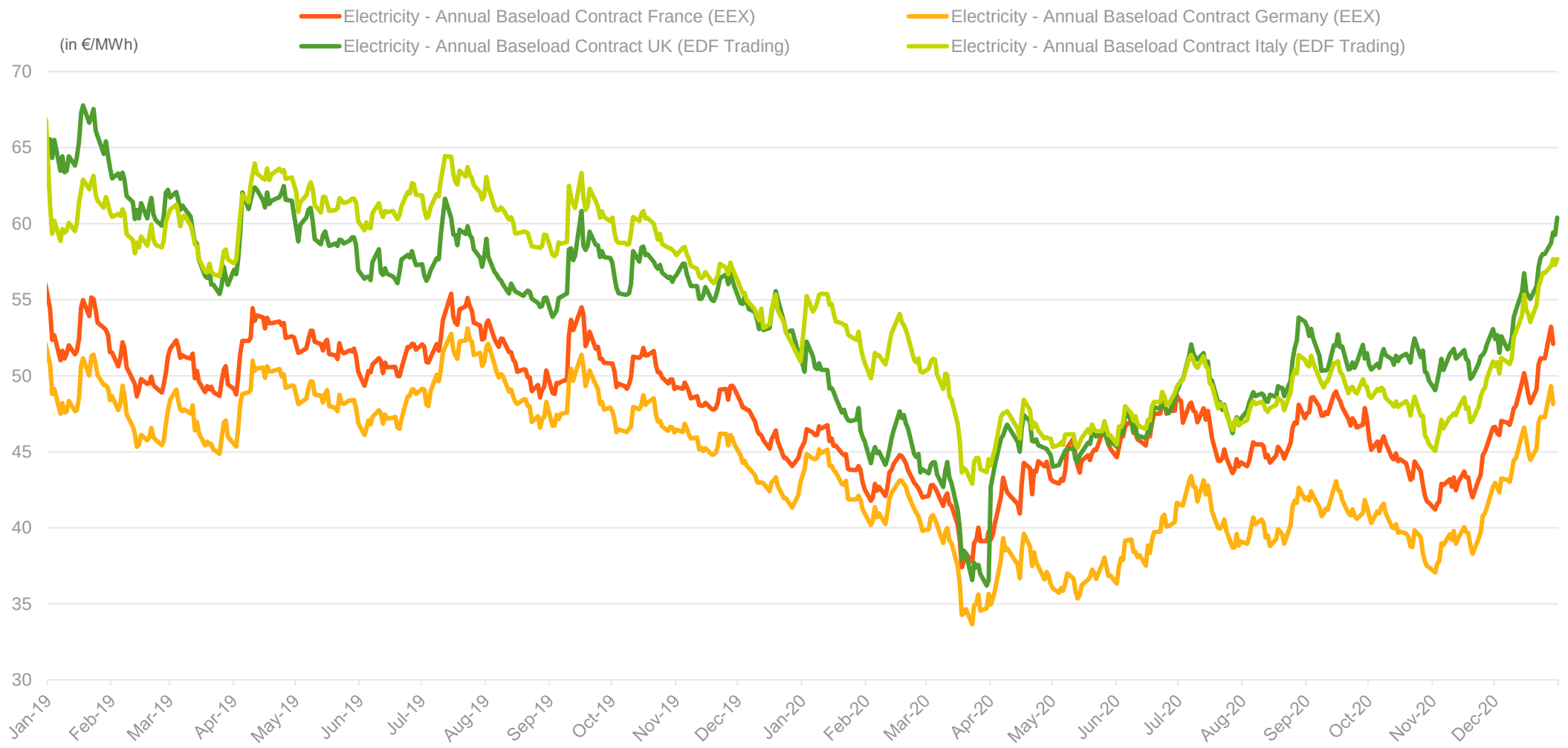
Peakload electricity spot prices averaged €39.0/MWh in 2020 (-€7.4/MWh vs. 2019). As with baseload prices, the decrease can be ascribed to H1 2020, resulting from the dip in demand and commodities prices as well as the rise in wind capacity generation over the period. Prices recovered in H2 on an increase in gas prices and a rebound in electricity demand

FRANCE/GERMANY SPREAD FROM 01/01/2019 TO 31/12/2020

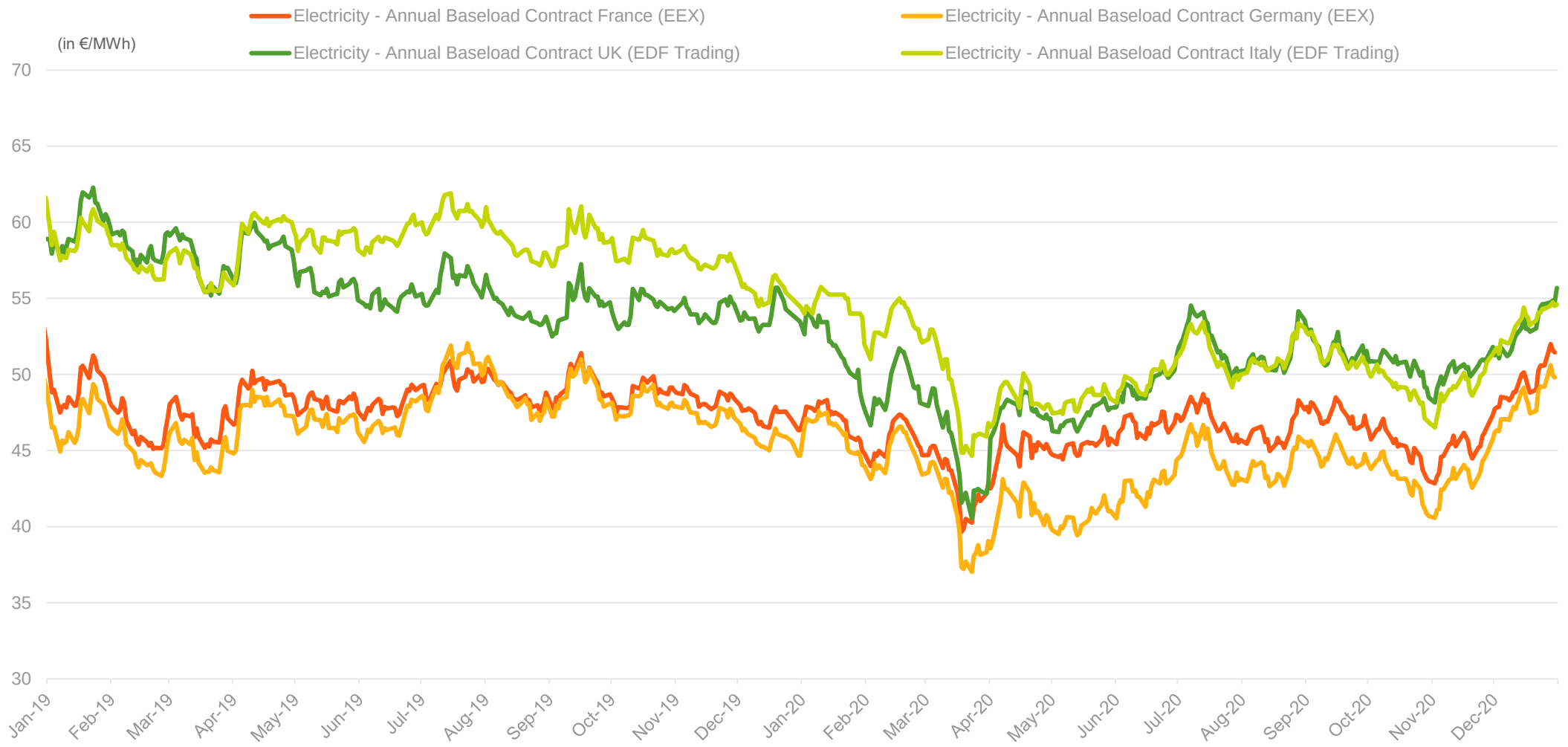


Note: Over the period, the France/Germany spread reached its minimum on 31 July 2019 at €-16.67/MWh, and its maximum on 8 December 2019 at €47.92/MWh

FORWARD ELECTRICITY PRICES IN FRANCE, THE UK, ITALY AND GERMANY (Y+1) FROM 01/01/2019 TO 31/12/2020



FORWARD ELECTRICITY PRICES IN FRANCE, THE UK, ITALY AND GERMANY (Y+2) FROM 01/01/2019 TO 31/12/2020



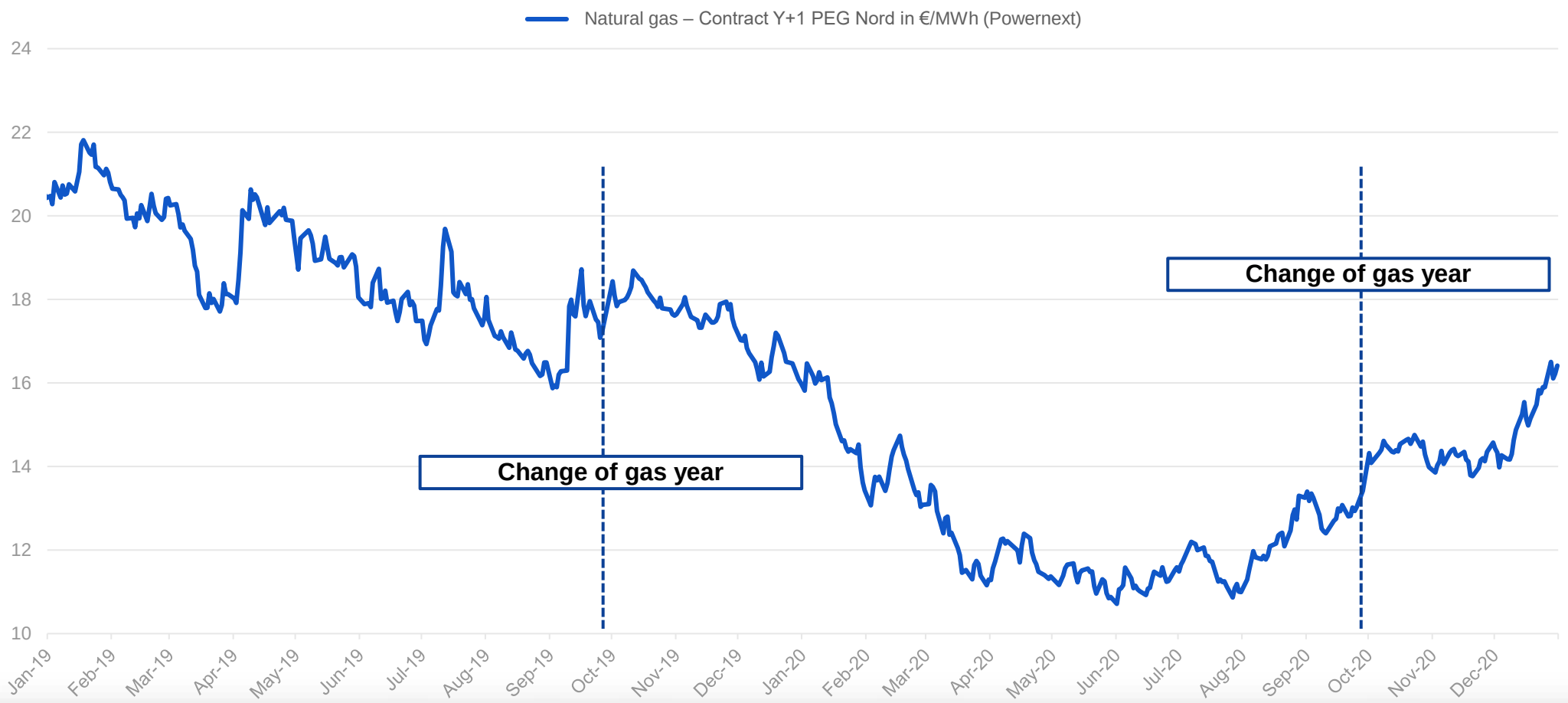
COAL PRICES (Y+1) FROM 01/01/2019 TO 31/12/2020

The Y+1 delivered price of coal price in Europe averaged $58.0/t in 2020 (-$11.6/t or -16.6% vs. 2019). In H1 2020, the price pursued the downward trend initiated in 2019 owing to gloomy forecasts on forward demand worldwide and extremely high inventories across Europe. Demand for coal, already undermined by competition from gas and the economic slowdown, bore the full brunt of lockdown measures and their impacts on growth. However, supply was also lower, the result of strikes or economic reasons, which kept prices at between $55/t and $60/t during the entire third quarter of 2020. In Q4, the emphatic recovery in Asian demand, and in particular Chinese imports from Russia and South Africa, generated a substantial price increase

BRENT PRICES (1) FROM 01/01/2019 TO 31/12/2020

The oil price came out at an average $43.2/bbl in 2020 (-$20.9/bbl or -32.6% vs. 2019). Oil demand was hit hard in the first quarter by COVID-19, which sent the Brent barrel price downwards throughout the year, owing both to the pandemic's direct impact on mobility (lockdowns, travel restrictions) and to its dramatic weight on the economy (demand for trade, industry). To support prices, OPEC+ endeavoured to reduce supply in line with the dip in demand, signing an agreement on 12 April on a reduction in production of up to 9.7 mb/d. The agreement, reached against a tense backdrop following a price war between Saudi Arabia and Russia, was pursued and renegotiated throughout the year in step with hopes for a recovery in demand and nuances in application by the various parties involved

GAS PRICES[(1)] (Y+1) FROM 01/01/2019 TO 31/12/2020



The gas price for Gas Year +1 delivery in the PEG region totalled €13.0/MWh on average in 2020 (-€5.4/MWh or -29.4% vs. 2019). In H1, the impact of COVID-19 on gas demand maintained the downwards price trend that began in 2019. The situation was compounded by mild temperatures, high inventory levels and support for non-conventional North American production. But the price dip slowed from June onwards following the cancellation of LNG deliveries from the USA and the closing of some non-conventional hydrocarbon production sites for economic reasons. The increase continued in H2, buoyed by scheduled and unscheduled production interruptions in Europe and, more fundamentally, by the recovery in Asian demand

CO_2 MARKET

The price of CO_2 allowances (EUA[(1)]) in the European Union Emissions Trading Scheme (EU ETS) rose sharply in 2018, from €7 to €25/tCO_2, in connection with the implementation of the Market Stability Reserve, which planned the gradual absorption of the market surplus

In 2019, the price of the CO_2 quota fluctuated between €18 and €30/t, following the plans to close German coal-fired power plants and on developments at Brexit, which could have relaxed or tightened the market's supply-demand balance, depending on its outcome

In 2020, the price of the quota has confirmed its volatility. It fell to €15/t in March when all markets fell, but went above €30/t several times during the year in response to positive ecological political signals. It ended the year on a strong increase, fueled in particular by the European Commission vote on a CO_2 emissions reduction target of 55% by 2030

The price of electricity – set at the level of the marginal cost of generation – is therefore sensitive to variations in the price of CO_2 that influence the cost of generating electricity from gas and coal

Sensitivity of the wholesale price of electricity in France to the price of CO_2, currently in the order of €0.50/MWh for €1/tonne of CO_2

CO_2 – for delivery in €/t in December of year N+1 (ICE)

The price of the emission certificate for delivery in December N+1 averaged €25.1/t in 2020 (-0.4% or -€0.1/t vs. 2019). This relative stability concealed extreme price volatility, generated by the impacts of the COVID crisis and negotiations on the EU's 2030 climate objectives, widely interpreted and monitored by speculators. As a result, the price plummeted in March, losing €8.4 in a single week as lockdown measures spread across Europe. Starting in April, the price reacted positively to announcements of government recovery plans and ecological policy signals, topping the €30/t mark twice, in June and September. At the end of the year, announcements on vaccines and the vote to increase the EU's 2030 emissions reduction targets continued to bolster the allowance price, which ended the year at €32.7/t

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FINANCIAL CALENDAR

6 May 2021	General Shareholder’s meeting
12 May 2021	Q1 2021 sales
29 July 2021	2021 half-year results

A TEAM DEDICATED TO ANALYSTS AND INVESTORS

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For more information, our team is available to you at this address: EDF-IRTeam@edf.fr

GLOSSARY (1/6)

- **IAEA:** International Atomic Energy Agency based in Vienna (Austria).
- **ANDRA:** National Agency for radioactive waste. In France, radioactive waste is managed by the National Agency for Radioactive Waste Management (ANDRA), a public industrial and commercial institution created under the French law of 30 December 1991
- **APE:** the French State Shareholding Agency is a national department controlled by the Minister of Economy and Finance. Its mission is to act as a shareholder for the French Government in order to develop its assets to maximise the value of its stakes
- **Architect-Assembler:** for EDF, the architect-assembler has control over the design and operation of its power plants; the organization of development projects; the schedule for completion and costs of construction; relations with the Nuclear Safety Authority; and the integration of feedback from operational experience. EDF's role as architect-assembler ensures control over its industrial policy with respect to the design, construction and operation of its fleet of power plants
- **ARENH:** Regulated Access to Historical Nuclear Energy
- **ASN (Autorité de Sûreté Nucléaire) :** the French Nuclear Safety Authority controls nuclear safety and radioprotection in France, on behalf of the French government, to protect workers, patients, the public and the environmental risks associated with the use of nuclear energy. It is notably in charge of the external control of nuclear facilities in France. The ASN is an independent administrative authority with a staff of more than 300. It is represented at the national level by the General Agency for Nuclear Safety and Radioprotection (or "DGSNR")
- **Cogeneration:** generation technique for combined electricity and heat generation. The advantage of cogeneration is the ability to capture the heat produced by the fuel, whereas in traditional electricity generation this heat is lost. This process also allows the same facility to meet the heating (hot water or steam) and electricity needs of both industrial and local authority customers. This system improves the energy efficiency of the generation process and reduces fuel use by an average of 20%
- **Combined-Cycle Gas Turbine (CCGT):** The most recent technology for generating electricity in a natural gas-fired plant. A combined cycle is made up of one or more combustion turbines and a steam turbine allowing for an improved yield. The syngas is routed to the combustion turbine, which generates electricity and very hot exhaust gases(effluents). The heat from the exhaust gases is recovered by a boiler, thus producing steam. Part of the steam is then recovered by the steam turbine to generate electricity

GLOSSARY (2/6)

- **CRE (*Commission de Régulation de l'Energie*):** French energy regulatory Commission. Set up on 30 March 2000, the CRE is an independent administrative authority responsible for contributing to the proper functioning of the electricity and natural gas markets in the interests of final consumers. In the respect, the CRE ensures, in particlar, that the conditions for access to electricity and natural gas transmission and distribution networks do not impede the development of competition. The CRE has significant powers: the power to make proposals, advisory powers and decision-making powers. In particular, the CRE proposes regulated tariffs for the sale of electricity. The CRE has decision-making power to set the Tariffs for Using the Public Transmission and Distribution Networks (TURPE). The CRE is also vested with very broad powers that enable it to investigate and obtain any information that it may deem useful for the fulfilment of its remit, as well as authority to settle disputes and to apply penalties.
- **Distribution networks:** downstream of the transmission network, medium- and low-tension distribution networks that serve end-users (individuals, Groups, SMEs, SMIs, etc.)
- **Electricity supply:** can be broken down into four types of consumption: "basic" (or "ribbon") supply of electricity generated and consumed throughout the year; "semi-basic" electricity supply, which is generated and consumed over the winter period; "peak" electricity supply, which corresponds to periods of the year when electricity generation or consumption is significant; and "lace" supply which is a complement to the "ribbon" supply
- **EPR (European Pressurized Reactor):** latest generation of reactors currently under construction (known as generation 3), it is the result of Franco-German cooperation, and offers advanced safety, environmental and technical performance
- **ETS :** Emission Trading System
- **Fuel cycle:** the nuclear fuel cycle encompasses all industrial operations in France and abroad which enable the supply of the fuel to generate energy in a reactor, then to unload and process it. The cycle can be broken down into three stages: 1) upstream: the processing of concentrates from uranium ore, the conversion, enrichment and production of fuel (which takes more than two years); 2) the core of the cycle corresponding to the use of fuel in the reactor: receipt, loading, operation and discharging (which takes three to five years); 3) downstream: pool storage, reprocessing of spent fuel in reactors of recoverable material, vitrification of highly radioactive waste, then temporary storage of the waste before storage

GLOSSARY (3/6)

- **Greenhouse gases:** Gas that retains a portion of the solar radiation in the atmosphere and for which an increase in emissions due to human activity (man-made emissions) causes an increase in the earth's average temperature and plays an important role in climate change. The Kyoto Protocol covers the seven following principal greenhouse gases: carbon dioxide (CO_2), methane (CH_4), nitrogen protoxide (N_2O), hydrofluorocarbons(HFC), perfluorated hydrocarbons (PFC), sulfurhexafluoride (SF_6) and, since 2013, nitrogen trifluoride (NF_3)
- **Hydropower generation:** maximum power energy that can be produced from hydraulic sources in normal conditions. However, generation from hydroelectric facilities does vary, sometimes markedly, from one year to the next depending on hydraulicity (rainfall and snowfall). In dry year, the generation index may vary by 20% or more from the standard level
- **Interconnection:** electricity transmission infrastructure that allows for exchanges of energy between different countries, by connecting the transmission network of one country to that of a neighboring country
- **LDC:** Local Distribution Companies that provide for distribution of gas and electricity to the end-customers on a delimited geographical area
- **LNG (Liquefied Natural Gas):** natural gas turned into liquid form by reducing its temperature to –162°C allowing for a reduction by 600 in its volume
- **MEDEF:** French companies association ("*Mouvement des entreprises de France*")
- **Metering:** A system allowing for the recording, at a given network connection point, of the volumes of electricity transmitted or distributed (power, frequency, active and reactive energy)
- **MW − MWh:** The megawatt-hour (MWh) is the energy unit generated by a facility and is equal to the facilities' power,expressed in megawatts (MW), multiplied by the duration of operations in hours.1MW = 1,000 kilowatts = 1 million watts1MWh = 1MW produced for 1 hour = 1 megawatt-hour1GW = 1,000MW = 1 billion watts1TW = 1,000GW

GLOSSARY (4/6)

- **Non-interconnected zones:** Zones in France which are not connected (by power lines) to metropolitan France (Corsica and overseasdepartments)
- **Nuclear safety:** nuclear safety includes all of the technical, organizational and human measures which are intended to prevent accident risks and to limit the effects of an accident, and which are taken at every stage of the life of a nuclear power plant (from design to operation and finally to decommissioning)
- **Nuclear tranche:** electrical generation unit consisting of a nuclear boiler and a turbo-alternator generator. A nuclear tranche essentially consists of its reactor type and the power of its turbo-alternator generator. EDF nuclear plants include two or four tranches, and occasionally six
- **Ofgem:** Ofgem is the Office of the Gas and Electricity Markets in the UK. Its main missions consist of protecting consumers, regulating gas and electricity monopoly companies, helping to secure Britain's energy supplies by promoting and regulating competitive gas and electricity markets. It also contributes to the drive to curb climate change and promote sustainable development
- **Plant availability:** fraction of power available, out of theoretical maximum energy, counting only technical non-availability. The availability coefficient (Kd) is defined as the ratio between annual actual generation capacity (or amount producible annually) and maximum theoretical generation capacity, where maximum theoretical generation capacity = installed capacity x 8,760h. The Kd, which includes only technical non-availability, i.e. scheduled shutdowns, unplanned outages and testing periods, characterizes a plant's industrial performance
- **PPA:** Price Purchase Agreement
- **PWR:** in a Pressurized Water Reactor, the primary coolant (water) is pumped under high pressure to the reactor core where it is heated by the energy generated by the fission of atoms. The heated water then flows to a steam generator where it transfers its thermal energy to a secondary system where steam is generated and flows to turbines which, in turn, spin an electric generator. In contrast to a boiling water reactor (BWR), pressure in the primary coolant loop prevents the water from boiling within the reactor

GLOSSARY (5/6)

- **Radioprotection:** At a power plant, ionising radiation sources are numerous: the fuel itself, equipment activated by neutron flux (particularly that which is close to the core, such as tanks or lids) and particles fromcorrosion of the primary circuit of reactors and carried by the primary fluid. The level of exposure of a person is quantified by the dose equivalent in Sieverts (Sv). The total dose equivalents, called “collectivedosimetry” and expressed in man-sieverts, is used as an indicator of dose received by all participatingpersons. The mobilisation of ground players has allowed a continuous improvement of performance on the protection of employees against the effects of ionising radiation.
- **Renewable energies:** energies for which generation does not require extinction of the initial resource. They largely derive from geothermal, water, air, fire and solar sources. They include hydro, wind, solar (the energy produced by marine waves and currents), geothermal (energy derived from the heat of the earth’s magma) energies, and bio-mass (energy derived from living matter, particularly wood and organic waste). They often include energy from the incineration of household or industrial waste
- **Reprocessing:** reactor burnt fuel reprocessing aimed at separating materials that can be recycled (uranium and plutonium) from final waste
- **RTE:** RTE is the operator of the French electricity transmission system. RTE, a public service company, operates, maintains and develops the high and very high voltage network
- **Series:** In the nuclear field, a series of plants means a set of nuclear plants with identical generation capacity.EDF’s PWR model is divided into three series of available electrical power: the 900-MW series (34 tranches of approximately 900MW each), the 1,300-MW series (20 tranches) and the 1,450-MW series (4 tranches)
- **STEP:** Pumped-storage hydropower plant. Power plant with two tanks, an upper and a lower one, connectedby pumps that allow the water to be pumped up once turbined and located in the lower tank, towardsthe upper tank.
- **Storage:** storage consists in placing packages of radioactive waste in a facility, ensuring their long-term management, i.e. under safe conditions allowing for long-term risks control

GLOSSARY (6/6)

- **Storage center:** low or medium-level short-life radioactive waste from nuclear plants, the Hague or CENTRACO facilities are sent to ANDRA's Soulaines storage center in the Aube region, which has been operational since 1992. This center has a capacity of 1,000,000cm, and an acceptance capacity of approximately 60 years. Very low-level short-life radioactive waste is sent to ANDRA's Morvilliers storage center (also in the Aube region). This center was commissioned in October 2003 and has an operating life of about 30 years
- **Transmission networks:** networks providing for the transmission of electrical power at high and very high voltages from the generating sites to the distribution networks or industrial sites directly connected to it; this includes the major interconnection transmission network (400,000 volts and 225,000 volts) and the regional distribution networks (225,000 volts, 150,000 volts, 90,000 volts and 63,000 volts)
- **Uranium:** In its natural state, uranium is a mix containing three main isotopes (elements whose atoms have the same number of electrons and protons, thus the same chemical properties, but a different number of neutrons): ■ uranium 238, 99.3% fertile ; ■ uranium 235, 0.7% fissile ; ■ uranium 234. ■ Uranium 235 is the only natural fissile isotope, a quality which justifies its use as an energy source.
- **Enriched uranium:** Uranium, whose isotope 235 content, the only fissile material, has been increased from its low naturallevel (0.7%) to approximately 4% for pressurised water reactor fuel.
- **Waste:** nowadays, the nuclear generation of 1MWh of electricity (equivalent to the monthly consumption of two households) produces around 11g of total waste across all categories. Short-life waste represents more than 90% of the total waste, but contains only 0.1% of the total radioactivity of those 11g