Le réseau
de transport
d'électricité

MANAGEMENT REPORT
CONSOLIDATED FINANCIAL STATEMENTS

2020

Message from the Chairman of the Executive Board

2020 was a year marked by the COVID-19 pandemic. The public health situation and the measures taken by the authorities had multiple impacts on the circumstances in which RTE performed its public service mission.

RTE ACTIVATED ITS BUSINESS CONTINUITY PLAN AND SET UP A PERMANENT COVID UNIT TO SUPPORT THE COMPANY'S TEAMS DURING THIS UNPRECEDENTED CRISIS. In this abnormal context, RTE as an organisation demonstrated its ability to maintain network operation activities at a normal level despite the sometimes substantial reorganisations that involved, and to keep up a practically normal level of investments.

RTE applied the French Government's instructions, and on-site operating protocols for the continuation or resumption of work were reinforced in liaison with trade and industry organisations (the French professional agency for risk prevention in building and civil engineering OPPBTP(1) and the French association of electrical engineering and HVAC companies SERCE(2)). RTE also supported its customers and suppliers by offering extended deadlines or accelerating payments, thus helping to support the national economy.

Thanks to dedication and solidarity from all members of the company, electricity transmission in France from point of generation to point of consumption continued unbroken 24 hours a day, 7 days a week.

The crisis context did not prevent RTE from meeting its major project deadlines in 2020:

- installation of the first "Équilibre" pylon, a technological and architectural innovation born of eight years of research and development;
- emergence of the Campus Transfo in Jonage. The site was completed in December, ready to receive its first trainees in January 2021;
- the start of operations by the new Grimaud electricity substation, the first metal-enclosed substation (*poste sous enveloppe métallique – PSEM*) to use the SF_6-free gas mix G^3: this disruptive, innovative technology marks the culmination of four years of technical development;
- completion of France's largest MESIL(3) undergrounding project in Montpellier, replacing 13 km of overhead lines with 12 km of underground links and freeing up land for the city's development projects.

(1) Organisme professionnel de prévention du bâtiment et des travaux publics.
(2) Syndicat des entreprises de génie électrique et climatique.
(3) *Mise En Souterrain d'Initiative Locale*, a negotiated procedure for burying installations at local instigation.

RTE occupies a central position in the energy transition, with three key roles to play:

- The role of pioneer and pathfinder, producing reports and analyses that clarify the technical and economic aspects of the options for the energy future. In 2020 RTE published a report entitled "The Transition to Low-Carbon Hydrogen in France", which extends the generation adequacy report and the analysis of electric mobility to inform the public debate on the rollout of low-carbon hydrogen. It also released a study conducted with the French environment and energy management agency ADEME(1), evaluating possible scenarios for carbon-free heating in the building sector by 2035.
- The role of operator, ensuring that the national electricity grid is well-prepared for the energy transition. RTE made an important contribution to stepping up development of offshore wind power in 2020. It started work on connection of the Fécamp wind farm off the coast of Normandy (a project and investment RTE has designed with a significant local focus for orders/purchases and employment opportunities), and continued connection work for the Saint-Nazaire and Saint-Brieuc wind farms. RTE is now a developer of maritime zones: the company is involved in eleven projects currently in the development or construction phase, and four public debates that are in progress or will be launched by mid-2021.

The transition to a carbon-free energy system must be integrated into a pan-European industrial strategy. The November 2020 edition of Europe's Ten-Year Network Development Plan (TYNDP), to which RTE made a substantial contribution, confirmed the need for significant development of European interconnections across all national borders by 2030 (+50 GW) and 2040 (+93 GW). This plan further underlines the relevance of the strategy set out by RTE in its own ten-year network development plan, the SDDR(2), in 2019. More broadly, in France and at European level, RTE defends the key role of transmission system operators and proactive European cooperation to put the ambitions of the Green Deal into practice as part of the new sustainable growth strategy.

- The role of optimiser, developing solutions that minimise the ecological and physical footprint of France's transmission network and the French electricity mix, but also of the economic footprint. At the end of 2020, the first energy trades were successfully undertaken on the TERRE (Trans-European Replacement Reserves Exchange) platform, a new market that enables transmission system operators to share available flexibility and support the supply-demand balance. This is a first step towards a European balancing market.

2020 was also a year of change for RTE as a new Executive Board took over, bringing in a team that combines renewal with continuity.

The new Board is driven by an ambition of reinventing the company's governance to enhance performance and effectiveness, while pursuing implementation of the Impetus & Vision corporate mission, remaining committed to the success of RTE's "strategic network plan" – its, which has now been validated by the French energy regulator CRE(2). To apply this far-reaching programme for industry and society, underpinned by the questions inherent to the national energy transition and diversification of the energy mix, RTE has been engaged in continuous, intense discussions with the regulator, to secure a TURPE 6 network access tariff that will enable the company to meet the challenges of its renewed public service mission while protecting its financial equilibrium.

XAVIER PIECHACZYK,
Chairman of the Executive Board

(1) Agence de l'Environnement et de la Maitrîe de l'énergie - Agence de la transition écologique.
(2) *Schéma décennal de développement du réseau.*
(3) Commission de régulation de l'énergie.

Presentation of RTE

RTE, Réseau de transport d'électricité ("RTE" in the rest of this document), is the company that manages France's electricity transmission network. RTE's essential missions are operating the public electricity transmission network and maintaining balance at all times in the electricity flows through the network.

2.1 BUSINESS MODEL

* FIGURES AT 31 DECEMBER 2020

NEW CHALLENGES

- **Stabilising demand for energy and development of new uses (self-consumption, storage, electric vehicles, etc.)**
- **Expansion of renewable energies**
- **New tariff framework (TURPE 6)**

OUR MISSION

PROVIDING
everyone, 24 hours a day, 7 days a week, 365 days a year, in France and in Europe, with access to an economical, safe, clean electricity supply

INFORMING
the options for our energy future

TRANSFORMING
our productive resources as an industrial operator, to serve the energy transition

OPTIMISING
the energy transition by proposing solutions to minimise the footprint of France's transmission network and its electricity mix

OUR RESOURCES

INFRASTRUCTURES

No. 1 TSO in Europe by network size and investment volume (€1.5 billion in 2020)

51 cross-border connections

106,047 km of overhead and underground links

2,800 RTE substations in operation

More than **22,750 km*** of fibre optics

CONSUMPTION

11,1 TWh* of electricity losses

Consumption of metals:

nearly **21 kt*** of aluminium

nearly **33 kt*** of iron

nearly **2 kt*** of copper

97.69% efficiency in infrastructures

(= 100% of injections carried – loss rate)

HUMAN RESOURCES

9,397* employees including **449*** on work-study contracts

RELATIONAL RESOURCES

More than **200** national partnerships, including 100 for R&D

300,000 data items processed per second

INTELLECTUAL RESOURCES

200 contributors to R&D activity

Close to **€35 million a year** spent on R&D

Decentralisation of generation

Digital transformation

COVID-19 pandemic: business continuity and support for the economic recovery

Responding to societal demands as infrastructures are upgraded

OUR EXPERTISE

Managing infrastructures

RTE constructs, operates and maintains the electricity transmission network, which is constantly evolving to increase line capacity, construct new cross-border links, connect renewable energies and reinforce the quality of supply.

Designing and implementing market mechanisms

RTE organises the electricity markets with mechanisms able to ensure the least costly available sources of power are used, all over Europe.

Monitoring the electricity system

RTE adjusts electricity output and consumption in real time, is in charge of security of supply and guarantees electricity solidarity between different areas of France and Europe.

Researching, innovating and coupling power with digital technologies

RTE integrates digital technologies to increase the network's flexibility.

VALUE CREATED

FOR RTE

€4,729 million* of sales

€1,915 million* of EBITDA

S&P rating: **A***

FOR THE ECONOMY

75,695 jobs supported(1)

€6.7 billion of GDP in France(1)

€2 billion of purchases

FOR OUR CUSTOMERS

99.9994%* continuity in the electricity supply

87%* customer satisfaction score

Producers: **424.8 TWh** of injections

Distributors: **19.1 TWh** of injections, **326.0 TWh** of withdrawals

Market actors: **34.6 TWh** of imports, **77.9 TWh** of exports

Industrial and railway customers: **19.1 TWh** of injections, **55.8 TWh** of withdrawals

Equivalent outage time: **3 min 04 s** (at 30.09.2020)

Certified load-shedding capacity, delivery year 2021: **2,279.5 MW**

FOR OUR EMPLOYEES

7th/500 in the Best Employer in France rankings (by *Capital* magazine)

1:15 ratio between the lowest and highest salary

FOR REGIONS AND LOCAL AREAS

50,517 MW (at 30.09.2020) of renewable energies connected to the high-voltage and very high-voltage networks in France

FOR THE ENVIRONMENT

85.1%* of waste recycled

1,161 ha* of land made biodiversity-friendly

(1) Source: survey of RTE's socio-economic footprint in France in 2016, conducted in March 2017.

RTE is a public service company, engaged in an optimisation process to serve its customers: industrial consumers, distribution network operators, energy producers and market actors. It defines four areas of customer services: connection and access to the network, metering and access to data, quality of electricity, and access to the markets. RTE's revenues consist largely of network access income, in application of the TURPE network access tariff.

2.2 HISTORY OF RTE

Historically, electricity transmission in France was carried out by Électricité de France (EDF), which had a monopoly on the generation, transmission, distribution, export and import of electricity by virtue of the law of 1946 on nationalisation of electricity and gas companies(1).

The law of 10 February 2000(2) transposing the European directive of 19 December 1996(3) laid down the principal rules for the internal energy market, which had recently been opened up to competition when the law was enacted. To avoid any risk of discrimination between different network users, the law provided for formation of a new network operator entity, independent of EDF, and in June 2000, an independent department named "Réseau de transport d'électricité" was set up at EDF, with separate management and accounts.

A further step was taken when a separate legal entity was established, in application of the law of 9 August 2004(4) transposing the European directive of 2003. RTE, a *société anonyme* (French-domiciled publicly-traded limited company) governed by an Executive Board and a Supervisory Board, was officially formed on 1 September 2005 by means of a partial business transfer from EDF, and became a wholly-owned subsidiary of EDF(5).

Since December 2016, the entire share capital of RTE has been held by Coentreprise de transport d'électricité (CTE), itself held by the following shareholders since 31 March 2017:

- **EDF** (50.1%);
- **Caisse des dépôts et consignations (CDC)**(29.9%);
- **CNP Assurances** (20%).

RTE has set up joint ventures with its foreign counterparts to construct interconnections with neighbouring countries:

- **Celtic Interconnector,** with the Irish transmission network operator EirGrid;
- **IFA2,** with the British transmission network operator National Grid;
- **INELFE** with the Spanish transmission network operator REE.

RTE also has five subsidiaries that operate outside its public service missions:

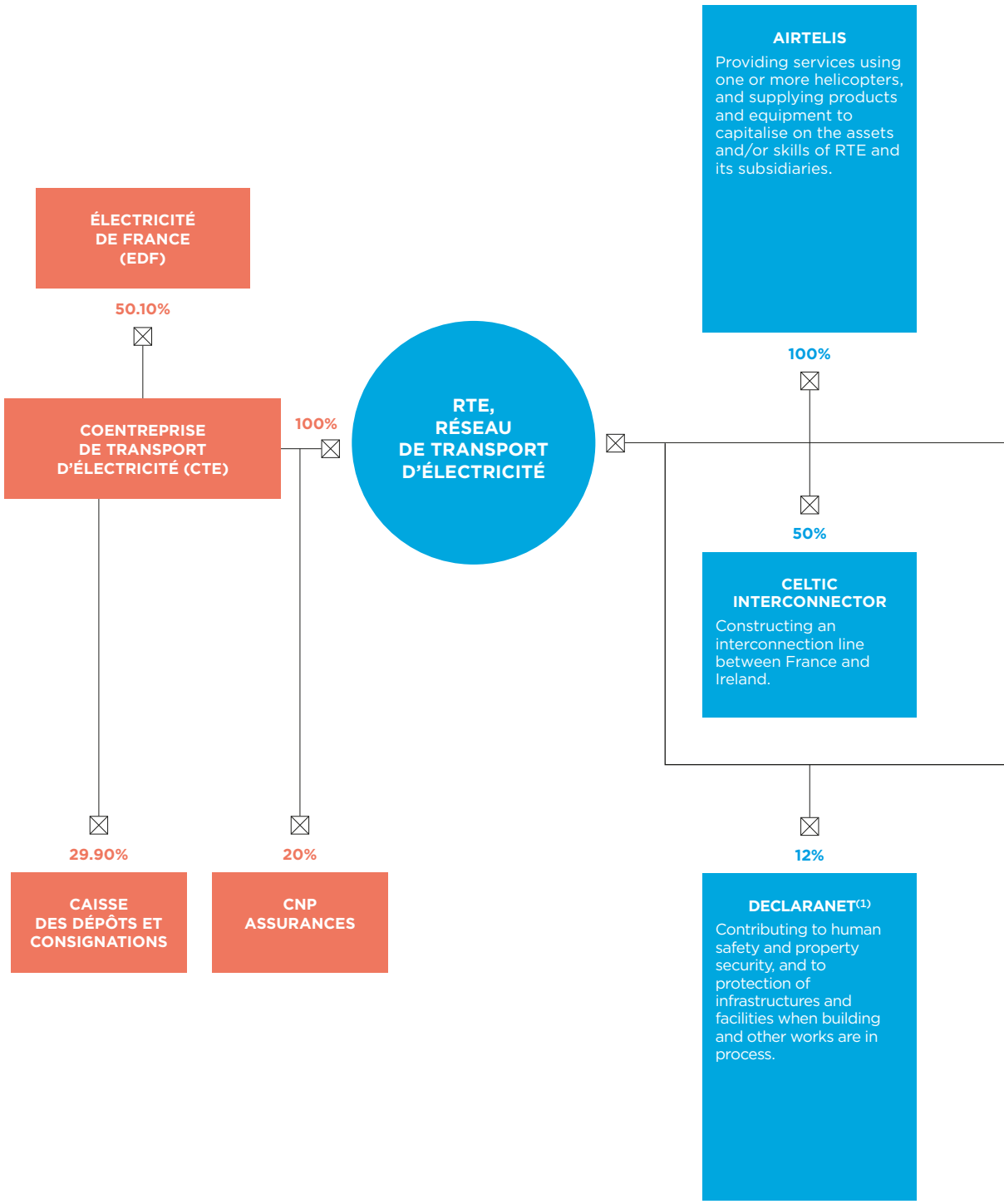
- **Airtelis,** which provides overhead work and related training, maintenance and consulting services;
- **Arteria,** a telecommunications company involved in local digital development that capitalises on high points on the electricity network;
- **Cirtéus,** which provides services, studies and advice in the competitive sector of the market for maintenance, operation and development of high-voltage and very high-voltage electricity installations in France;
- **RTE Immo,** which undertakes real estate operations, acquisitions, asset management, sales, execution of work and consulting services related to assets owned directly or by RTE(6);
- **RTE International,** which markets engineering and consulting services outside France, concerning all areas of an electricity transmission system operator's business.

(1) French law no. 46-628 of 8 April 1946 on nationalisation of electricity and gas.
(2) French law no. 2000-108 of 10 February 2000 on the modernisation and development of the public electricity service.
(3) Directive 96/92/EC of 19 December 1996 concerning common rules for the internal market in electricity.
(4) French law no. 2004-803 of 9 August 2004 on the public electricity and gas service and electricity and gas companies.
(5) RTE was named "RTE EDF Transport" until 2012.
(6) RTE Immo carried out no activities in 2020.

Framework agreements concerning the pricing methods for services sold by RTE to its subsidiaries are submitted to the regulator for approval.

Finally, RTE holds investments in companies that enable it to fulfil the missions assigned to it by the law:

- **Coreso,** which coordinates operation of the electricity networks covering France, the United Kingdom, Ireland, Germany, Portugal, Belgium, Spain and Italy;
- **Declaranet** (Protys), which contributes to human safety and property security, and to the protection of infrastructures and facilities when work is being done in the public domain, by facilitating declaration formalities for the companies doing the work;
- **HGRT,** a holding company for the European electricity market EPEX Spot, owned together with the EEX group;
- **JAO.EU,** which implements the cross-border capacity auctions for electricity trading in Europe.


ÉLECTRICITÉ DE FRANCE (EDF)
50.10%
COENTREPRISE DE TRANSPORT D'ÉLECTRICITÉ (CTE)
100%
RTE, RÉSEAU DE TRANSPORT D'ÉLECTRICITÉ
29.90%
CAISSE DES DÉPÔTS ET CONSIGNATIONS
20%
CNP ASSURANCES
AIRTELIS
Providing services using one or more helicopters, and supplying products and equipment to capitalise on the assets and/or skills of RTE and its subsidiaries.
100%
50%
CELTIC INTERCONNECTOR
Constructing an interconnection line between France and Ireland.
12%
DECLARANET(1)
Contributing to human safety and property security, and to protection of infrastructures and facilities when building and other works are in process.

ARTERIA
Making use of RTE's fibre optics network and the network infrastructures managed by RTE to host information and communications technology-related installations and/or contribute to development of such installations and their power supply.

CIRTÉUS
Providing services, studies and advice in the competitive sector of the market concerning maintenance, operation and development of high-voltage and very high-voltage electricity facilities.

RTE IMMO
Conducting real estate operations, acquisitions, asset management, sales, works and consulting services concerning real estate assets held directly or by RTE.

RTE INTERNATIONAL
Providing engineering and consulting services internationally, in all areas of an electricity transmission system operator's business.

100% 100% 100% 100%

50% 50% 34% 15.84%

IFA2
Constructing an electricity interconnection between France and England.

INELFE
Constructing an electricity interconnection between France and Spain.

HGRT
Handling subscription, purchase, sale, ownership and management of any shares or other marketable securities issued by Powernext and EPEX Spot.

CORESO
Coordinating operation of electricity networks in France, the UK, Germany, Portugal, Belgium, Spain, Italy and Ireland.
A Belgian company.

5%

JAO.EU(1)
Running cross-border capacity auctions for electricity exchanges in Europe (France, Benelux, Germany, Poland, Denmark, Norway, Austria, Czech Republic, Slovakia, Switzerland, Italy, Slovenia, Croatia, Hungary and Greece).

(1) Not included in the scope of consolidation.

2.3 GOVERNANCE OUTLINE

FULLY-INDEPENDENT CORPORATE GOVERNANCE

RTE is a *société anonyme,* a French-domiciled publicly-traded limited company, governed by an Executive Board and a Supervisory Board. It has certain specific features due to its status as operator of the French public electricity transmission network (transmission system operator – TSO). RTE's bylaws and governance methods safeguard its autonomy, independence of management and neutrality.

GOVERNANCE BODIES

SUPERVISORY BOARD

Role: the Supervisory Board examines and issues an opinion on matters relating to the company's major strategic, economic, financial and technological orientations, subject to the Executive Board's exclusive competence for decisions concerning network management and work necessary to implement the SDDR. It also monitors RTE's management by the Executive Board, in compliance with the provisions of the French Energy Code *(Code de l'énergie).*

Economic Supervision and Audit Committee

Role: in preparation for Supervisory Board meetings, this committee studies all financial aspects of the company, notably the budget and the economic and financial prospects, the annual financial statements and half-year results, the risk monitoring and management policy, particularly risk mapping, and the audit programme, audit outcomes, action plan follow-up and internal control.

Remuneration Committee

Role: issues an opinion on the setting of all kinds of remuneration that may be paid to key corporate officers for their duties.

After seeking the opinion of the French energy regulator CRE, the Supervisory Board appoints the members of the

EXECUTIVE BOARD

Role: the Executive Board has the broadest powers to act in the company's name in all circumstances, subject to the rights of the shareholders at a General Meeting and the Supervisory Board. It is the only body with competence to implement operations directly contributing to operation, maintenance and development of the public electricity transmission network within the scope of the missions assigned to the company.

EXECUTIVE COMMITTEE

Role: the Executive Committee examines all corporate matters that require oversight or a decision in the orientation, commitment, implementation and monitoring stages.

MEMBERS OF THE SUPERVISORY BOARD

The Supervisory Board consists of:
– six members representing the shareholder, CTE;
– two members representing the French State, appointed by virtue of articles 4 and 6 of ordinance no. 2014-948 of 20 August 2014 on governance and capital transactions by companies with public investment;
– four members representing employees.
Some Supervisory Board members must meet specific requirements, verified by the CRE prior to their appointment, to reinforce the network management's independence in relation to generation and supply entities(1).
The terms of office of the members of the Supervisory Board ended on 31 August 2020.

At RTE's General Shareholders' Meeting on 31 July 2020, eight Supervisory Board members were appointed for a five-year term beginning on 1 September 2020: the six members representing the shareholder CTE, and the two members representing the French State. The four Supervisory Board members representing employees were elected by RTE's employees on 2 July 2020, for a five-year term also beginning on 1 September 2020.
At its inaugural meeting on 1 September 2020, the new Supervisory Board appointed its Chair and Vice-Chair, the Chair and members of the Economic Supervision and Audit Committee, the Chair and members of the Remuneration Committee, and the Secretary of the Board.

(1) A list of all the roles and functions occupied by each Board member, regulated agreements and any capital increases is provided in the corporate governance report.

COMPLIANCE OFFICER

In accordance with European regulations and the French Energy Code, RTE has a designated compliance officer. Subject to competences attributed specifically to the CRE, the compliance officer is in charge of ensuring that RTE's practices comply with its obligations regarding independence of other companies included in the Vertically Integrated Enterprise. Olivier Herz has been RTE's compliance officer since 1 October 2016. He is entitled to attend General Shareholders' Meetings, Supervisory Board meetings, specialist committee meetings and all meetings relevant to his duties.
He has all powers to investigate documents on site for execution of his mission. Apart from the information he must report to the CRE, he has a professional duty of discretion regarding commercially-sensitive information collected in the course of his duties.

MEMBERS OF THE EXECUTIVE BOARD

Until 31 August 2020

– François Brottes, Chairman of the Executive Board
– Valérie Champagne, RTE's Deputy Managing Director in charge of Finance and Purchases
– Olivier Grabette, RTE's Deputy Managing Director in charge of Planning, Expertise and Solutions
– Clotilde Levillain, RTE's Deputy Managing Director in charge of Development and Engineering, Operation and Services
– Xavier Piechaczyk, RTE's Deputy Managing Director in charge of Networks, Customers and Regional Activities

Since 1 September 2020

The new Chairman of the Executive Board, **Xavier Piechaczyk,** was appointed by the Supervisory Board for a five-year term of office beginning on 1 September 2020. Following nominations by the Chairman, the other members of the Executive Board were appointed by the Supervisory Board with effect from 2 November 2020, for a term of office that will end at the same time as the Chairman's term, i.e. on 31 August 2025. These appointments heralded a new organisation of the areas placed under the responsibility of each member of the Executive Board.
The new Executive Board consists of:

3 2 1 5 4

1 **Xavier Piechaczyk,** Chairman of the Executive Board

2 **Clotilde Levillain,** Managing Director in charge of Customers and System Design & Operation

3 **Thérèse Boussard,** Managing Director in charge of Infrastructure Management

4 **Laurent Martel,** Managing Director in charge of Finance and Purchasing

5 **Sophie Moreau-Follenfant,** Managing Director in charge of Transformation and the Employee Environment

2.4 CORPORATE MISSION STATEMENT: IMPETUS & VISION

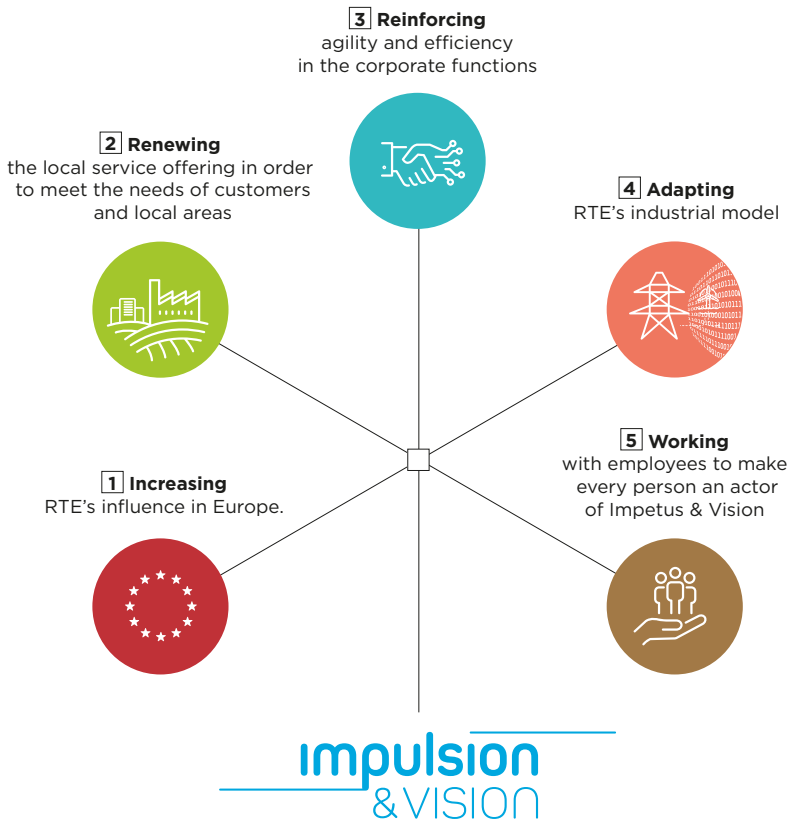
From the European Union to French regional and local authorities, the declared ambitions for the energy transition are extremely wide-ranging and are already entailing profound changes in the whole of the electricity sector: expansion of renewable energies, higher volumes of energy trade between European countries, new consumer behaviours, self-consumption, emergence of new uses, development of electricity storage, etc.
These changes are also taking place in a technological and digital revolution reflected in new forms of communication, dematerialisation, artificial intelligence, geolocation, etc.

In response to these transformations and new customer demands, RTE is adapting, making preparations and reinventing itself, to be a driving force in the forthcoming transitions.

The 2025 target of the Impetus & Vision corporate mission statement is founded on the following major principles:

- efficient, responsible performance for a modernised public service;
- bold action and innovation for a successful transformation of the industrial system;
- agility and receptiveness in order to support initiatives.

The corporate mission statement provides the stimulus for constructing RTE's future. It sets a common course that is meaningful for all employees, consisting of five strategic priorities:



The 2025 target of Impetus & Vision is a vector for the following ambitions:

- **improving** real-time monitoring of the electric and digital networks, by introducing 24-hour control rooms (operating 24 hours a day, 7 days a week and sharing the current dispatching rooms, see section 4.3.1);
- **rolling out** the industrial programme resulting from all dimensions of RTE's SDDR: replacement of infrastructures under a new technical/economic approach to management of the asset life cycle, adaptation and digitisation of the network for optimal system operation, and development and construction of interconnections and the undersea network necessary for the energy transition;
- **reasserting** the corporate functions' important position as partners of the other functions in corporate performance;
- **consolidating** RTE's central importance at European and local area level, by coordinating all actions in the European arena and offering services that meet the needs of customers and suppliers while also reinforcing the company's close links with local economic environments and actors.

The main achievements in 2020 relating to the corporate mission and its strategic priorities are described in chapter 4.

2.5 SIGNIFICANT EVENTS OF 2020

January 2020

Press conference on flexibility mechanisms

On Wednesday 22 January, RTE held a press conference on flexibility mechanisms(1).
France's electricity system is able to optimise operation of the infrastructures by absorbing the renewable energy expansion set out in the national multi-year energy plan (PPE), largely thanks to automata and increased network digitisation.
But beyond the horizon of the PPE (2028), the French grid will need more flexibility mechanisms: managed consumption, various forms of power storage (diffuse or large volume) and hydrogen, depending on the scenarios of change in the energy mix. At this press conference RTE presented a new study entitled "The Transition to Low-Carbon Hydrogen in France", which extends the generation adequacy report and the analysis of electric mobility and is designed to inform public debate on the rollout of low-carbon hydrogen (see section 4.3.3).

March 2020

Publication of network constraints for the Hauts-de-France region

On 24 March, in connection with implementation of the "S3REnR" regional renewable energy connection plans, RTE published the residual transmission network constraints remaining after network adaptation. This document provides a forward-looking view over a three-five year horizon, to enable potential network flexibility actors to identify any opportunities involving energy storage, load shedding where relevant, or residual generation curtailment.
This is the first publication of its kind and concerns the Hauts-de-France region of northern France, but the whole country will be covered gradually as the S3REnR plans are revised. RTE publishes the results of specific detailed studies, listing the facilities concerned by the constraints. The most effective levers for action and their key features (substations concerned, voltage to be limited, etc.) are published and can be consulted at:

https://www.contraintes-reseau-s3renr-rte.com/.

May 2020

Visit by Élisabeth Borne, French Minister for the Ecological and Inclusive Translation, to the Ampère Briche site at Saint-Denis

On 15 May, Élisabeth Borne visited the Ampère Briche site at Saint-Denis, just next to Paris, to thank energy sector employees and contractors for their hard work during the COVID-19 crisis, and to see for herself how site constraints and protective health measures can be reconciled.
The Ampère Briche project is relocating a 200 m section of two 63 kv underground links. This will enable French railway operator SNCF to redevelop the forecourt of Saint-Denis railway station, including installing disabled access.

The electricity supply for the 100,000 residents and health services that rely on the power lines concerned, principally the north of Saint Denis and the towns of Épinay-sur-Seine and Villetaneuse, was maintained while the work was ongoing.

(1) Flexibility mechanisms, sometimes referred to as smart grids, use connections between different objects in the electricity systems (generation or consumption sites, network infrastructures, storage, etc.) and an IT system to make real-time intervention in the system possible. They cover a varied number of solutions identified in the SDDR: limiting renewable energy output by automata (linked to captors such that network optimisation can be coupled with use of the flexibility mechanism in intermittent power generation), load-shedding, battery-based storage, etc.

June 2020

Start of work on connection of the Fécamp offshore wind farm

This connection is being built for Normandy's first offshore wind farm, which has a capacity of 497 MW (71 turbines). It extends 18 km out to sea and involves onshore work along the 50 km to the Sainneville-sur-Seine substation. During the first seven months, around 15 km of engineering work on underground links and the earth-levelling work for the new 3-hectare platform at the Sainneville-sur-Seine substation were completed, and almost all the offshore studies were conducted. Like the Saint-Nazaire and Saint-Brieuc offshore wind farms, the Fécamp project embodies RTE's leading role in the French Government's energy transition strategy, and is also an economic opportunity for the Seine-Maritime area. For the Fécamp wind farm, more than €25 million of orders have been placed with businesses located in the local region, Normandy, around 20 priority job seekers were hired to work on construction of the underground link, and substation work has been partly conducted by disabled workers, reflecting RTE's strong commitment to development of the economy and employment in local areas.

Axeleo Proptech 1 acceleration fund

RTE became an investor on behalf of the French State, alongside the Île-de-France region, the Banque des Territoires and the Caisse des Dépôts group, in Axeleo Capital's new investment fund Axeleo Proptech 1, which won the *Construire au futur*, *Habiter le futur* prize awarded by the *Territoires d'innovation* section of the *Programme d'investissements d'avenir* run by Allianz France, the VYV group, Vinci Énergies and blue chip family offices. The initial round raised €35 million and the fund is ultimately aiming for €50 million.

This commitment by RTE is intended to provide support for creative start-ups making innovative new technology-based products to meet the challenge of achieving more environmentally-friendly urban planning and urban living.
Supporting innovation that promotes housing with lower resource consumption and greater energy efficiency is a strong priority for RTE as an actor of the energy transition.

July 2020

Bond issue

On 8 July, RTE issued a new dual-tranche €1.25-billion bond. The first tranche (€500 million) has a term of 12 years and a coupon of 0.625%. The second tranche (€750 million) has a term of 20 years and a coupon of 1.125%. These are RTE's lowest-ever bond financing costs on both maturities. At 31 December 2020, the average maturity of RTE's long-term debt was thus 10.1 years for an average cost of 1.76% (compared to 10.2 years and 1.84% at 31 December 2019).

Approval of the SDDR by the CRE

After the French Government commended the new strategy set out in RTE's SDDR in November 2019, the CRE approved it and published its approval decision on 31 July 2020.
The SDDR provides an overview of future challenges for the public electricity transmission network and RTE's response strategies. The CRE gave this plan a favourable reception.
In particular, the CRE has underlined the relevance of the optimal design basis principle(1) to reduce investment requirements. The CRE also approved the management plans for assets at metal-enclosed substations (the PSEM plan) and for pylon corrosion (the Corrosion plan).
The strategies for interconnection development, network digitisation and renewable energy expansion planning were also favourably received by the CRE.

Installation of the first "Équilibre" pylon

As the Avelin-Gavrelle dual-circuit 400-kV electricity line between Lille and Arras, in the north of France often comes close to maximum transit capacity, RTE has decided to rebuild and reinforce it. This line helps to supply electricity to over 530 towns with more than 1.7 million inhabitants and 220,000 industrial and service sector jobs.
The "Équilibre" pylon design is a technological and architectural innovation, the outcome of a long development process that began in 2012. The first new-design pylon was installed on 8 July at Flers-en-Escrebieux.
This project is due to completed in November 2021.

(1) The optimal design principle described in the SDDR consists of accepting occasional curtailments of installed generation capacity, particularly for renewable energies in zones with substantial renewable energy output, to avoid building network infrastructures that would only be truly useful for a few hours a year.

September 2020

Incident at Éguzon

An incident at the Éguzon substation, in the Indre area of France, caused several power cuts on the 90-kV network, depriving 270,000 households of electricity in the *départements* of Haute-Vienne (163,000), Creuse (53,000), Indre (54,000) and Corrèze (2,400).
This incident occurred at a time when a modified generation plan was in force (notably causing lower nuclear plant availability) due to the impacts of the COVID-19 pandemic, and significant maintenance work was in process on the very high-voltage network.
Thanks to the rapid response by RTE's teams, in coordination with Enedis, power supply was restored to the homes affected in less than three hours.

Continuation of work on connection of the Saint-Brieuc and Saint-Nazaire offshore wind farms

Near Saint-Brieuc, preparatory work for RTE's future underground cables began on 8 September. This 16 km-long dual link will cross three towns: 5 km across Hénansal, the location of the connection substation, 7 km across Saint-Alban, and 4 km across Erquy. Offshore and onshore studies revealed the presence of metal masses on the beach and in the sea in the zone earmarked for the landfall construction. Further studies were conducted in mid-October to identify the nature of these objects, so that they could be eliminated if they were relics of the Second World War to ensure contractor safety during offshore work.

The Saint-Nazaire wind farm site was visited by France's Minister for the Sea Annick Girardin on 8 October. The 260 m-long landfall link conduits for its connection have been buried under the sand and in the seabed. Laying of the undersea cables was completed in November, and work on installation of the links is continuing both onshore and offshore.

As a developer of maritime zones, RTE is associated with 11 projects that are currently in the development or construction phase, 4 public debates that are in process or will begin by mid-2021, and more than €7 billion of investments under the SDDR, to connect 10 GW by 2035.

Water bomber helicopter mission for France's civil defence agency

For a contract awarded by France's civil defence agency Sécurité civile, RTE's subsidiary Airtelis provided its first ever firefighting service using its fleet of Super Puma helicopters. From 15 July to 15 September, the heliborne services department was active in Corsica, fighting fires alongside the local fire brigades.

October 2020

Storm Alex

In the night of 2 October, the area inland of Nice was lashed by Storm Alex, which left roads closed or unusable and communications down. Enedis and RTE mobilised their forces to restore the power supply to cut-off households as fast as possible.

Significant damage was caused by the storm, especially in the valleys of the Roya and Vésubie rivers, which burst their banks with extensive flooding. Hydropower facilities were particularly hard hit: at some plants, equipment was destroyed and plants will be unavailable for around a year.

Helicopters were used for the initial situation assessments, to transport machinery to the affected zone and to take generators to villages that found themselves with no electricity.

RTE aid for people in need in Lebanon

The head office of Électricité du Liban, the Lebanese national electricity production, transmission and distribution company, was seriously damaged by the Beirut explosion of 4 August, and so was a 225,000-V substation that supplies the city.

RTE has provided aid for Lebanon in coordination with EDF and Enedis, at the request of France's Ministy for the Ecological and Inclusive Transition. An inventory of RTE's stocks was drawn up in order to give Électricité du Liban a detailed list of available material resources that could be sent to Lebanon, subject to the approval of the regulator. On Tuesday 20 October, a ship left the Mediterranean port of Fos-sur-Mer, on the south coast of France, for Beirut, carrying emergency electric equipment donated by RTE.

Start of operations by the 225/63-kV Grimaud substation

The new Grimaud substation is a large-scale project in the Var area of the south of France and ensures a secure electricity supply for the Saint-Tropez bay area. The 63-kV substation is France's first PSEM to use the SF_6-free gas mix G^3: this is a disruptive new technology that marks the culmination of four years of technical development. G^3 gas is much less of a pollutant than SF_6: 1 kg of SF_6 is equivalent to 23,500 kg of CO_2, whereas 1 kg of G^3 is equivalent to 400 kg of CO_2 – 98% less than SF_6.

Completion of the undergrounding project at Montpellier

France's longest MESIL negotiated procedure for burying installations at local instigation was completed on 20 October in Montpellier. RTE had been working on this unusual project with the city of Montpellier since 2018. 13 km of overhead lines (four electricity lines) were replaced with 12 km of underground links, freeing up land for use. The last remaining pylon in the city centre was removed in late October. This large-scale project was a reaffirmation of RTE's commitment to serve local areas: by freeing land that can now be used for economic purposes, it is helping Montpellier to develop new districts.

November 2020

"The Greener Choice" open letter

RTE and six of its European counterparts – Elia, National Grid, REN, REE, Terna and TenneT – signed a joint open letter to suppliers entitled "The Greener Choice", to encourage responsible purchasing and reduce the environmental footprint. This shared engagement is the result of a strong initiative that began more than a year earlier at the instigation of RTE, which has long been committed to responsible purchasing. The letter sends a strong message to the industrial world: it aims to enrich the continuous dialogue between the purchasing division and suppliers, it encourages responsible purchasing, innovative good practices, and identification of actions with suppliers that can achieve concrete reductions in the carbon footprint of purchases, and opting for products and services that are more biodiversity-friendly and have a better social impact.

Press conference on plans for the winter

A press conference about the forthcoming winter was held on 19 November 2020. RTE's management discussed how COVID-19 had affected electricity supply in France for the winter of 2020-2021, and explained that particular vigilance would be exercised. Thanks to the active engagement of the electricity system actors since the start of the pandemic, France's electricity supply was in a better situation than expected in the spring of 2020, but there were still uncertainties concerning the months of January and February 2021, which were forecast to be particularly cold. Nevertheless, RTE had various levers in its network to reduce electricity consumption if generation levels turned out to be insufficient.
RTE also called on all French consumers to take energy-saving steps and reduce their consumption; in partnership with the ADEME, RTE's Ecowatt plan to control peak consumption was to be rolled out to the whole of mainland France.

December 2020

The first step towards a European balancing market

On 2 December 2020, RTE successfully conducted the first energy trades on the TERRE platform, a new market that enables European TSOs to share available flexibility and support the supply-demand balance. TERRE, is a major mechanism, set up at RTE's initiative, that echoes its corporate mission statement ambition to provide the impetus for a new dynamic in Europe.

2020 saw the emergence of the Campus Transfo

In 2016, RTE decided to move its training activities and the activities of the national network expertise centre and its IT and telecommunications division, previously located in Paris, to a single site in the Lyon area. The Campus Transfo was completed in December 2020 after two years of work. This was an exceptionally large-scale real estate project for RTE: 24,000 m^2 of extension to the existing training centre, 370 workstations, and €74 million of investment.

Throughout 2020 RTE worked to make sure the new campus could open in the best conditions and as soon as possible, by focusing on the practicalities of completing the project. RTE also safely moved a hundred employees and their families to the Lyon region. Finally, the teams made careful arrangements for the transfer of the technical expertise and teaching platforms to the campus, so that the impact on research and training activities was minimal.

The new training centre is unique in Europe, with examples of all the facilities found in the electricity transmission network: training lines and substations, and high- and low-voltage equipment. It will be possible to practice and experiment with, test and develop digital equipment that will be vital for electricity network management in the future: command and control, power electronics, telecommunications and information systems.

Decarbonising heating in the building sector: a report by RTE/ADEME

To inform the debate on appropriate regulation to reach carbon neutrality in the building sector, RTE and ADEME published a report in December 2020 following studies to assess the impacts of the SNBC[(1)] national low-carbon strategy scenario half-way through its carbon-neutrality trajectory (horizon of 2035). The studies concerned the impacts on CO_2 emissions, on the electricity system and security of supply, and on economic factors. The report also presents a set of

stress tests for the hypothetical situation where certain public policy targets are not met.

2.6 EFFECTS OF THE COVID-19 PANDEMIC

2.6.1 ORGANISATION OF THE COMPANY DURING THE CRISIS PERIOD

RTE has a **crisis management procedure** called **ORTEC(2)** to handle events that have, or could have, significant repercussions for operation of the electricity system and for its users. A key objective of the ORTEC procedure is rapid communication of information to RTE's management, the public authorities, and other industrial actors (energy producers, distributors and industrial customers).
Also, as an officially listed operator of vitally important infrastructures, RTE must be prepared for any situation in which a large number of its personnel are unavailable. Internal risk prevention at RTE mainly involves:

- assessment of risks that could affect employee health and safety;
- development of a business continuity plan;
- occupational health departments, which are in charge of risk prevention and support managers and employees.

RTE has a **business continuity plan for public health crises,** drawn up in 2015. This document sets out the principles for internal management of such crises (for instance a pandemic of flu, or an Ebola or H1N1-type virus) and the measures to be taken depending on the level of employee absenteeism.

— Management of the COVID-19 situation

RTE's management decided to take initial measures from 26 February 2020 to protect its employees and limit the spread of the virus in the company, mainly by adapting the business continuity plan to the specific features of the COVID-19 pandemic.

As the phases of the business continuity plan and the VigiCOVID plan(3) were activated, RTE set up a permanent COVID-19 unit to support the company's management and the operational teams.
This unit was constantly present and on call, and had the following missions:

- consolidating information on implementation of preventive measures, crisis management, detected cases of COVID-19 and related absences;
- ensuring coherent management of practical questions arising in real time about implementation of the required measures;
- making proposals to RTE's management for any necessary adjustments to the measures applied;
- handling internal and external communication;
- supporting implementation of the business continuity plan.

— Measures applied

RTE applied all the measures and instructions issued by the government and the OPPBTP, adjusting its systems and practices appropriately:

- social distancing was introduced;
- employees were provided with masks, and a stock of masks was kept and replenished;
- spaces and human movement in RTE's premises were adapted;
- a COVID manager was appointed by the Chairman.

2.6.2 CONSEQUENCES OF THE COVID-19 PANDEMIC FOR RTE

RTE's organisation demonstrated its ability to cope with crisis periods, successfully maintaining a practically normal level of activity. This was possible thanks to the dedication of all the company's employees, and its collective adaptability.

In this unusual context, new, temporary and specific methods were introduced to facilitate the first post-lockdown phase (July - December). The number of days "workable from home" was extended to three days a week with no formal agreement or commitment.

The company experienced an unprecedented rise in teleworking (around 60% of employees worked from home during the lockdown periods).

(1) *Stratégie nationale bas carbone.*
(2) Standing for *Organisation de RTE en cas de crise.*
(3) On 15 September RTE adopted a new operation method for the duration of the COVID-19 pandemic, instead of the Business Continuity Plan which is not suitable for crises extending over potentially long periods.

2.6.3 RTE, SUPPORTING THE NATIONAL ECONOMY DURING THE CRISIS

While continuing its operations, RTE took steps to help support the national economy, allowing flexible payment terms to customers and paying suppliers promptly.

For small- and medium-sized business (as defined by the national statistics office Insee) that are RTE customers, extension of payment deadlines for bills issued in April, May and June to the months of September to December 2020 was granted for entities that found themselves in economic difficulties and had applied for deferred payment of social and tax charges. For larger business customers, extensions were offered on a case-by-case business to companies that could prove they had applied for deferred payment of social and tax charges. At 31 December 2020, 18 customers had requested and benefited from extended payment times, concerning a total amount of €5.5 million.

RTE is also an important purchaser, and during the COVID-19 pandemic it strove to continue placing orders, and to speed up settlement of supplier invoices. From the outset RTE made the decision to settle all its supplier invoices from small- and medium-sized businesses from 16 March without applying the contractual payment times. This practice has been extended to 31 March 2021, resulting in accelerated settlement of 39,683 invoices totalling over €396 million.

Finally, since the beginning of the crisis RTE has been in regular dialogue with its contractors and their trade association SERCE to organise continuation or resumption of work. RTE is mindful of the surplus costs generated for businesses by the government health measures affecting site work.

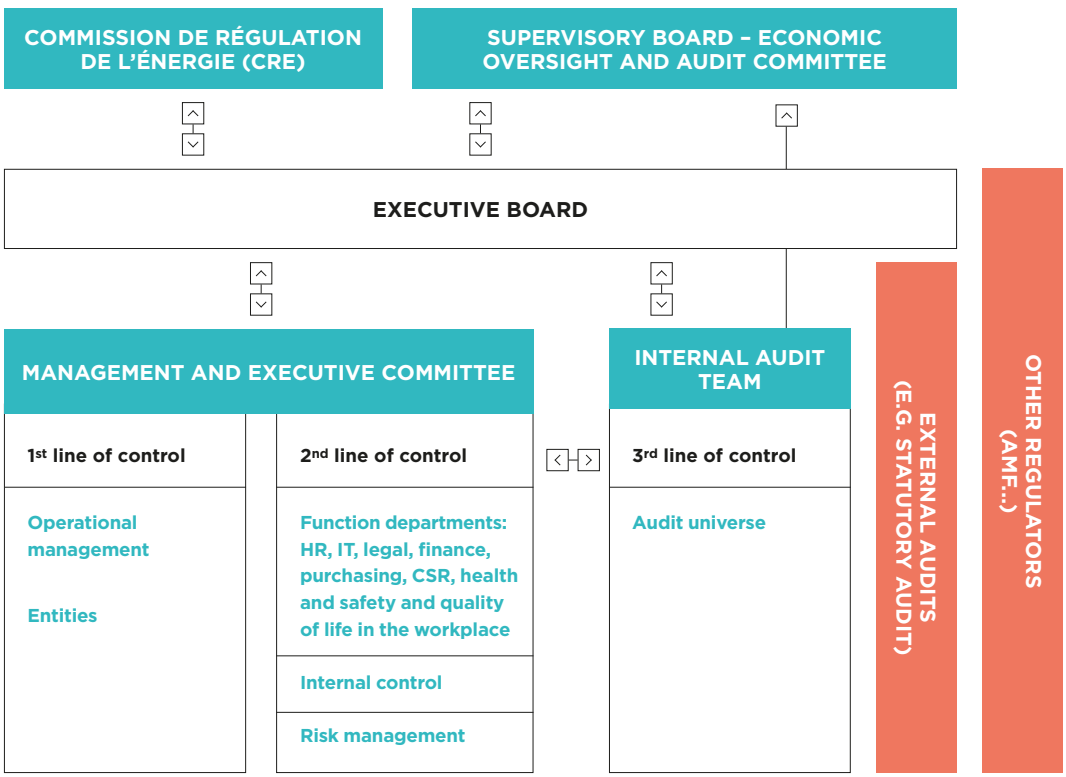
The cost for RTE of these mitigation actions and productivity losses caused by the COVID-19 pandemic amounted to around €40 million.

03

Risks and the control ramework

3.1 RTE'S GENERAL BUSINESS CONTROL

RTE has introduced procedures for control of its business activities which are integrated at all levels of the company. These procedures are designed to give management reasonable assurance regarding the execution of activities and implementation of decisions made in order to achieve the goals set. They contribute to efficiency in operations, with the aim of using resources effectively. They consist of three lines of control, for protection against risks that could compromise achievement of objectives, as shown in the diagram below:



The first line of control (operational controls: level 1) is performed by operational staff and their managers and concerns all actions by which the operational employees themselves make sure their task has been properly completed. Each entity manager has a set of internal control standards (RTE's internal control guide) to help with internal control work. This guide, prepared with input from the function managements, is regularly updated.

The second line of control (internal control and risk management: level 2) is performed by the function managements, with the aim of structuring and maintaining the business control procedures, principally by:

- **assisting** operational staff with identification and assessment of the main risks in their work;
- **proposing** policies and procedures for each function;
- **contributing** together with operational staff to designing the most relevant controls, particularly for the "function monitoring priorities", all grouped into a "monitoring and internal control plan";
- **observing and reporting** on the actual operation of processes in a specific function report.

Internal audit is the company's third line of control (level 3). An annual audit plan is proposed to the Executive Board, constructed under the "audit universe" methodology. All of RTE's activities are thus audited every three to five years, depending on assessment of the risks and challenges associated with each one.

3.2 RISK CONTROL

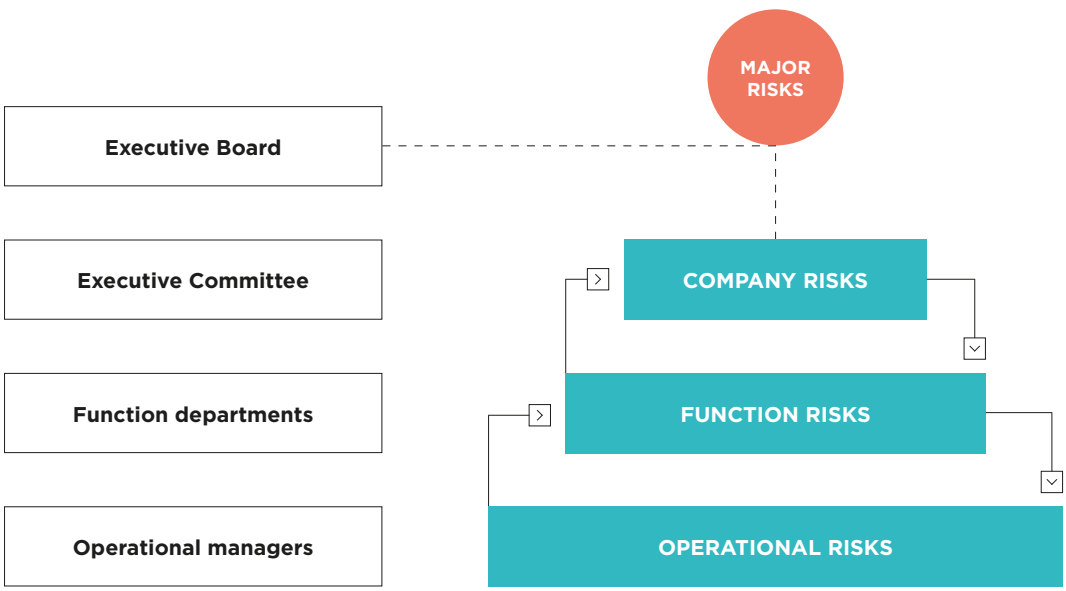
3.2.1 GENERAL RISK CONTROL PROCESS

3.2.1.1 Context

The risk control process is coherent with the company's mission and objectives. RTE applies the principles of the French financial market regulator AMF's[1] framework for French companies whose shares are admitted to trading on a regulated market. Risk control and internal control are instruments for action, control and surveillance; they concern every employee and involve each manager at all levels of the corporate hierarchy.

3.2.1.2 Roles and responsibilities

The risk control process is organised at several levels in the company (see figure below). The principal risks are identified and addressed at each level for optimum control.



— Company risks:

- RTE's Executive Committee examines and assesses the risks affecting RTE every half-year, and identifies the major risks among them.
- Major risks are risks that match criteria defined by the Executive Board: a risk is classified as major if the consequences of its occurrence could threaten the network's survival, RTE's missions, or human safety. The criteria and thresholds are reviewed annually by the Executive Board. Selection is currently based on five criteria of a strategic, financial, reputation, social and environmental nature.
- Each major risk is addressed under the supervision of a member of the Executive Board or Supervisory Board, and covered by a company action plan for control, which guarantees coherence between the corporate mission statement orientations and practical control steps.
- Strategic orientations, changes in the context, risk analyses by the functions, dashboard monitoring, consideration of audit observations and conclusions, internal control results, follow-ups of control action plans, events and weak signals and cross-comparisons with other companies lead to a fairly broad list of risks to be monitored and included on the register of risks validated by the Executive Committee.

— Function risks:

- The directors of the functions (operations, maintenance, development and engineering, purchasing, human resources, finance, customers, information and telecommunication system, etc.) are responsible for organising risk control for their own activities and making sure it is implemented and the procedures used are effective.

(1) *Autorité des marchés financiers*

- These analyses are informed by the internal control results and audit recommendations.
- Specific risks relating to corporate social responsibility (CSR) are also identified at the function level, then concatenated by the Environmental Consultation department (part of the Development and Engineering division) for the purposes of risk coverage associated with ISO 14001 certification.

— Entity risks:

- The operational entities' risks are identified on the basis of the function risks and a local analysis conducted in line with their objectives.
- Risk mapping for these entities is thus informed by the risks attached to the processes, projects and activities they manage, and also by cross-functional activities.
- Specific risk analyses are also conducted, for example in connection with projects or regulatory obligations.

Every year, the Supervisory Board's Economic Supervision and Audit Committee reviews the audit and internal control results, the follow-up of post-audit action plans, and changes made to RTE's major risk mapping and the associated projected audit schedule. The audit and risk division is in charge of design and application of the risk control process. This division contributes to its operational implementation by coordinating risk control and internal control officers located in each of the company's divisions and the regional entities, and promotes a culture of risk anticipation and control at RTE. It oversees application of the internal control and risk control methodology, structures its contributions, ensures timely production and supports the risk control and internal control officers in their action, defining expectations as regards best standards.

Finally, the audit and risk division regularly carries out external diagnoses of its activities with bodies that are members of the Institute of Internal Auditors (IIA), to keep in touch with best practices and define action for improvement. A roadmap for adjusting the risk control process to meet the latest recommendations (ISO 31000-2018) is currently being finalised and will be applied in 2021. The division's personnel are receiving training from the same bodies.

3.2.1.3 Methodology

— GENERAL METHODOLOGY

The methodological principles were clarified and enhanced in 2020 when French risk control standards were rewritten. The new version simplifies the roles and responsibilities, establishes a risk updating timetable compatible with the internal control procedures, and defines the risk structure.

Through these standards, every level of the company shares the same methodology for assessing (identification, analysis, evaluation) and managing risks, as well as monitoring and reviewing the internal control procedures.

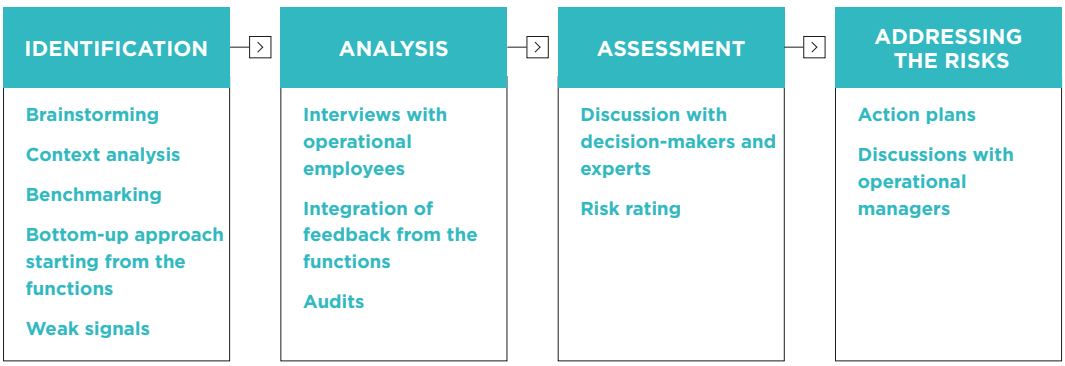
In this methodological framework, every risk is assessed on the basis of its impact, its likelihood of occurrence and its controllability by RTE, using a four-level scale and common criteria grids.

After analysis, the residual risk is evaluated and managed with appropriate control action. Risk control action typically aims to limit the risk (in terms of the consequences if it materialises), reduce the likelihood of occurrence, or protect the company against the risk through an insurance policy.

The diagram below illustrates the general risk control methodology.

— METHODOLOGY APPLIED TO COMPANY RISKS

Every year, the audit and risk division draws up a list of risks that could be added to the list of company risks. In this phase, new risks may result from bottom-up consolidation of function risks, subjects identified during benchmarking with other TSOs, or weak signals captured via the network of risk control officers. An annually updated context analysis and event monitoring also supply useful information for new inclusions in this list.



This list of new risks is presented to the Executive Board during a risk committee meeting, before validation of the risk mapping. At the committee meeting, Executive Board members select certain risks for further examination. The audit and risk division then interviews the company's decision-makers and experts to form an opinion. At the following risk committee meeting, the selected risks are discussed once more based on the information collected, and the Executive Board decides whether the risk should be included in the list of company risks, or whether more analysis is needed. The new risks are then assessed and addressed. These stages can be accelerated if the Executive Board considers a risk needs to be addressed faster.

— METHODOLOGY USED TO IDENTIFY NON-FINANCIAL RISKS

In 2015, RTE began work to assess social, societal and environmental issues of relevance to the company, through interviews with employees and external stakeholders.

In 2016, a meeting was held for internal actors (managers from the functions) and external actors (suppliers, customers, and NGOs), to better assess issues relating to CSR. The analysis confirmed the priorities and ambition of the corporate mission statement.

In 2017, a general performance workshop was held to identify financial and non-financial indicators based on major levers for value creation, in line with the corporate mission statement and the results of a materiality analysis. The results of this work were presented to the Executive Committee for the first time in January 2018, with a further presentation in October 2018 for validation of the key performance indicators and the business model.

In 2019, the analysis of major risks was revised to incorporate emerging CSR issues, particularly the risk related to climate change and environmental risks.

The major risks were also re-examined in view of the CSR challenges resulting from:

- stakeholder demands as identified in the materiality analysis;
- the United Nations' sustainable development goals (see below) in which RTE considers it has a role to play (sustainable development goals nos. 3, 4, 5, 7, 8, 9, 11, 12, 13, 14 and 15);
- and social, environmental and societal matters mentioned in the French decree on disclosure of non-financial information in the management report (decree no. 2017-1265, article 2).

— CONVERGENCE BETWEEN MAJOR RISKS AND NON-FINANCIAL RISKS

In the rest of this document, major risks with important social, environmental and societal impacts are classified as non-financial (NF) risks.
Societal and social risks are therefore included in the major risks of "Public opposition to transmission facilities", "Safety of employees, contractors and third parties" and "Inability to make the changes set out in the Impetus & Vision corporate mission statement by 2025".
Environmental aspects are included in major risks through the risks "Environmental damage: pollution, waste, biodiversity".
Risks relating to transparency, discrimination and human rights are included in the major risk named "Legal risk" and described in detail in chapter 3.7, "Vigilance plan", and through the financial risks.

— RISK TYPOLOGIES

RTE only examines the residual risks (after implementation of the existing risk control process), except in the case of corruption risk mapping (under the "Sapin 2" law).

Sections 3.2.2.2 and 3.2.2.4 describe each major risk and the principal resources for action. When the risk includes a non-financial dimension, the description emphasises the related policies and indicators (this constitutes RTE's Declaration of Non-Financial Performance – DNFP).

The table below indicates, for each risk, whether indicators exist, whether action plans have been prepared, and whether any specific organisation has been set up at RTE.

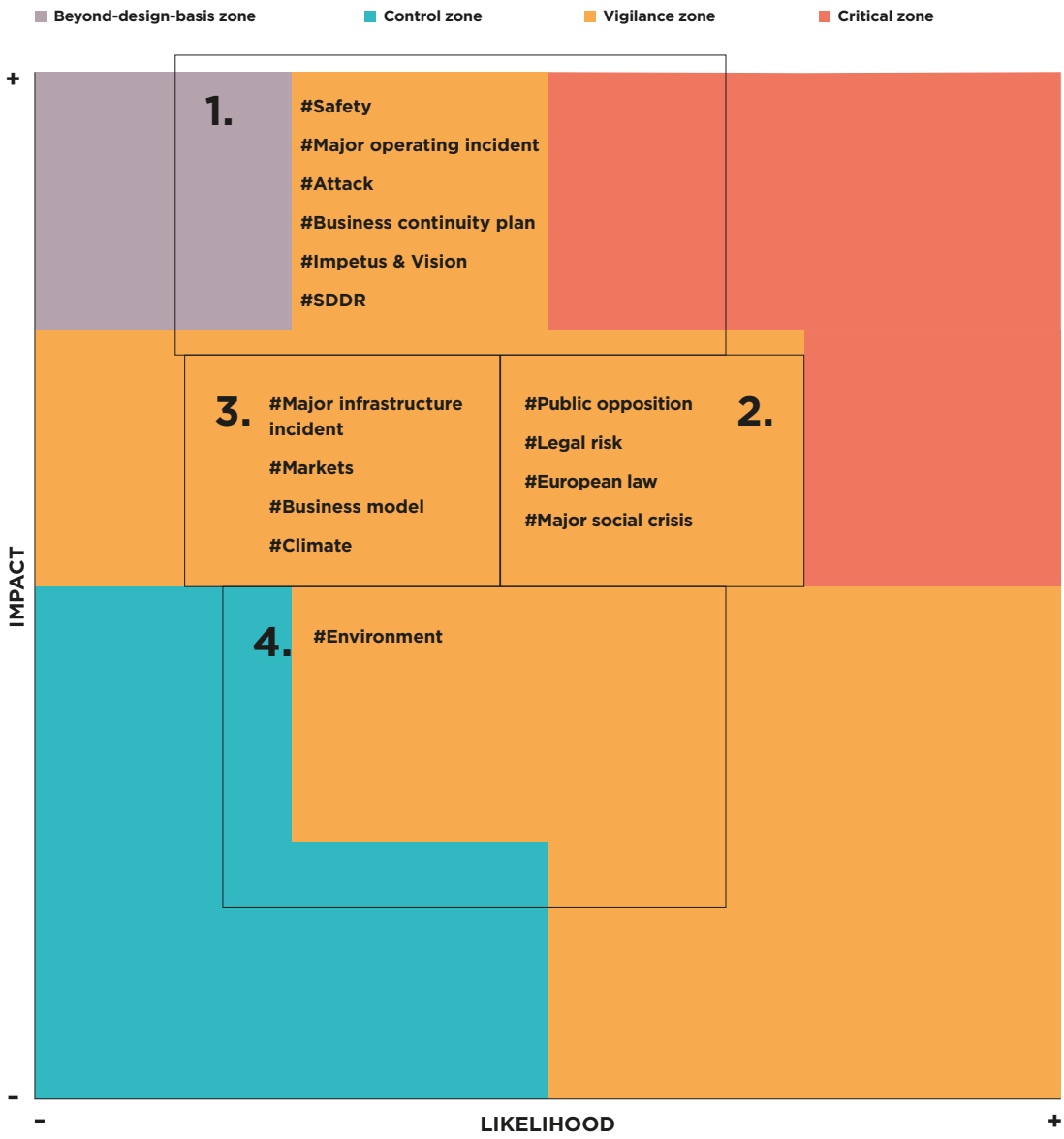
TYPE OF RISKS	INDICATORS	ACTION PLAN	SPECIFIC ORGANISATION
Generic risk mapping			
Major company risks	If non-financial	Always	Sometimes
Non-major company risks	No	Sometimes	No
Function risks	No	Sometimes	No
Entity risks	No	Sometimes	No
Specific risk mapping			
Duty of vigilance	No	Vigilance plan	Oversight committee
"Sapin 2" risks	In process	Yes	Anti-corruption mission

3.2.2 MAPPING OF RTE'S MAJOR RISKS

Risk mapping (impact/likelihood and criticality/level of control) provides a visual representation of risks and their positions in relation to each other. The mapping of major risks is updated half-yearly and validated by the Executive Board, in coordination with the corporate mission statement. Risk control is thus a continuous, constantly-evolving process.

3.2.2.1 Ranking of major risks

Major risks are ranked by priority from 1 to 4 according to their impact/likelihood, as illustrated in the simplified version of the impact/likelihood risk mapping below. Each major risk is identified by its short name (see the table in section 3.2.2.2).



The summary table in section 3.2.2.2 identifies the major risks and, where relevant, their non-financial consequence.

3.2.2.2 Summary of major risks

PRIORITY LEVEL	NAME OF RISK	DESCRIPTION OF THE RISK	NFR[1]	RELATED POLICIES	RELATED PERFORMANCE INDICATORS/ NEW INDICATOR (DEFINITIONS IN THE APPENDIX)
1	**#Safety** Safety of employees, contractors and third parties	Risks of accidents for RTE's employees or contractors in the course of their work	Yes	Policy for health, safety and quality of life at work	Accident frequency rate
1	**#Major operating incident** Incident affecting the electricity network that could cause a blackout	Serious operating incident that could result in power cuts for customers and potentially in partial or total collapse of the network	Yes	Operating and Development doctrines Market / Technical documentation regulations Electricity quality policy	Equivalent outage time Number of breaches of the large-scale incident threshold
1	**#Attacks** Large-scale conventional or cyber attacks on RTE's information systems or vital infrastructures	RTE may be exposed to deliberate malicious acts	Yes	Information system security policy	Percentage of employees trained in "cyber-awareness"
1	**#Business continuity plan** Break in continuity of critical activities	RTE's capacity to continue its critical activities in the event of severe disruptions, and to implement its business continuity plans	No	–	–
1	**#Impetus & Vision** Inability to make the changes set out in the Impetus & Vision corporate mission statement by 2025	RTE's ability to achieve, by 2025, the necessary changes to support the conversions required by the energy, technological and digital transition, and by new demands from customers and local areas	Yes	Impetus & Vision corporate mission statement Mobility and talent management policy Agreement on gender equality	Percentage of employees who benefited from a professional development measure
1	**#SDDR** Inability to implement the strategic orientations set out in the SDDR roadmap for 2021-2035	RTE's ability to implement the five industrial dimensions of the SDDR, which are key to a successful energy transition and achievement of the ambitious objectives defined in the PPE	Yes	Network development, upgrading and adaptation policies	Renewable energy power connected to the network
2	**#Public opposition** Public opposition to transmission facilities	Opposition from society could prevent or delay network development projects, weakening the power supply for certain areas or certain customers	Yes	Network development, upgrading and adaptation policies Environmental policy	Area of land made biodiversity-friendly Percentage of purchases from SMEs

PRIORITY LEVEL	NAME OF RISK	DESCRIPTION OF THE RISK	NFR[1]	RELATED POLICIES	RELATED PERFORMANCE INDICATORS/ NEW INDICATOR (DEFINITIONS IN THE APPENDIX)
2	**#Legal risk** Non-compliance with the law	Any failure to comply with laws and regulations exposes RTE to a significant risk, depending on the sanctions applicable	Yes	Environmental policy; ethics and GDPR	Recovery rate for hazardous waste tracking documents Percentage of sites subjected to an environmental regulation compliance assessment Percentage of employees trained in the "Sapin 2" and GDPR laws
2	**#European law** Changes in European laws with consequences for RTE's structure or missions	Changes in the legal framework could be a risk for RTE if they scaled down or limited its missions and therefore its efficiency	No	–	–
2	**#Major social crisis** Social crisis or lack of internal cohesion entailing significant media consequences	The external environment, which remains sensitive, and the internal changes currently in progress could lead to obstructions with an impact on RTE's organisation, finance or reputation	Yes	Agreement on social dialogue and employee representation	Employee pride score
3	**#Major infrastructure event** Beyond-design-basis event with a significant impact on the infrastructure	Accidents, fires or incidents leading to substantial material damage with high media coverage	Yes	RTE's crisis management procedure, ORTEC Business policy Electricity quality policy	Equivalent outage time Customer satisfaction score
3	**#Markets** Difficulties with design or implementation of market mechanisms	Difficulties with design or implementation of market mechanisms	No	–	–
3	**#Business model** Uncertainties over the structure and level of the TURPE 6 tariff	RTE must take care to maintain financial equilibrium and its ability to rise to the challenges of its public service mission	No	–	–
3	**#Climate** Ability to adapt the infrastructure, activities and organisation to the consequences of climate change	RTE is exposed to unpredictable weather events and will be affected by the accentuation of certain weather phenomena as a result of climate change	Yes	Stormproofing policy Resilience project	Equivalent outage time (including outages caused by weather events)

PRIORITY LEVEL	NAME OF RISK	DESCRIPTION OF THE RISK	NFR(1)	RELATED POLICIES	RELATED PERFORMANCE INDICATORS/ NEW INDICATOR (DEFINITIONS IN THE APPENDIX)
4	**#Environment** Environmental damage: pollution, waste, biodiversity	When an incident happens, the activity and employees of RTE, its customers and other third parties may be concerned by environmental emergencies	Yes	Environmental policy	Area of land made biodiversity-friendly Percentage of "zero-phyto" sites Volume of SF_6 leaks Volume of oil leaks Waste recycling rate CO_2 emissions from electricity losses and SF_6 discharge

(1) Non-financial risk.

3.2.2.3 Developments in major risks between 2019 and 2020

The list of major risks now comprises 15 risks.
Two major risks were added to the list in 2019 after CSR criteria were included in the selection process for major risks, bringing out risks related to climate change and the environment.

In 2020, two major risks were extended in scope:

- the risk of being uncompetitive on connections and network development has been modified to include all five industrial dimensions of the SDDR, which are all interlinked: renewing the network and adapting it to the new energy mix, connection of renewable marine energies, digitisation and interconnections. Success on all five industrial dimensions is the foundation of RTE's strategy, and is necessary for achieving the energy transition objectives set out in the PPE;
- the risk of a mismatch between skills and jobs identified in the corporate mission statement has been extended to cover all dimensions of Impetus & Vision, with the aim of supporting the changes brought about by the energy, technological and digital transition, and new demands from customers and local areas.

Finally, a new major risk relating to implementation of market mechanisms has been identified, as the pace of change in market rules accelerates due to European regulations and the demands of market actors.

The audit and risk division also carried out an evaluation of the COVID-19 pandemic's impacts on each major risk. The results did not affect assessment of these risks.

3.2.2.4 Non-financial dimensions of major risks, principal control resources, and results on key indicators

RTE's panel of risks covers a large number of social, societal and environmental aspects. The following table presents the principal non-financial impacts identified for each one.

In general, any power cuts on the high-voltage and very high-voltage electricity network could affect a large area, for example a large conglomeration or a county, with repercussions for the local area, customers and economy, as well as potential social and environmental impacts.

RTE is also preparing for the future. To rise to the challenge of the energy and ecological transition, network connection, upgrading and development projects must be successfully completed. This means the environment must be taken into consideration in RTE's activities and in the SDDR. Many local consultation procedures will also be necessary, involving intense dialogue with other parties. Faster connection of renewable energies will speed up the energy transition towards a lower-consumption, carbon-free society.

RTE's financial and non-financial performance is directly bound up with the infrastructure's resilience in the face of unpredictable weather events. The aim of control action in preparation for climate change is to strengthen resilience in both the network and the company, in order to limit the social, societal and environmental consequences of incidents that may affect the network. Action against climate change and to reduce emissions is included in the associated risks.

FINANCIAL DIMENSIONS OF MAJOR RISKS, PRINCIPAL CONTROL MEASURES AND RESULTS ON KEY INDICATORS

NAME OF RISK	NON-FINANCIAL DIMENSION	PRINCIPAL CONTROL MEASURES
#Safety Safety of employees, contractors and third parties	RTE is strongly mobilised to limit the risks of accidents for its own employees, its contractors' employees, and the people living near its facilities.	• Division in charge of health, safety and quality of life at work • Policy for health, safety and quality of life at work and the safety management system based on the MASE(1) principles • RTE's Safety Impetus programme and its 11 priority projects concerning safety, from real-time design (the rules that save lives, safety leadership, safety skills, safety in design, safety in scheduling, contractor safety, implementation in compliance of the decree of 1992, low-voltage outages, thorough preparation of work, making use of weak signals) • Safety reporting and information procedures (the RTE-Prévention information system) • Technical safety guide for operational employees, with an associated information system
#Major operating incident Incident affecting the electricity network that could cause a blackout	Many technical aspects contribute to network safety (maximum line intensity, short-circuit power, frequency management, loss of synchronism, etc.). Due to the protective and defensive measures taken by RTE, the number of major events remains small and their impact limited. However, customers may still experience local power cuts that can disturb the economic development of businesses. At some high-risk sites, a power cut could have potentially serious consequences for the environment (ICPE(2) sites, classified for environmental protection purposes, and "Seveso" sites) or for human safety (e.g. hospitals).	• Operating and development doctrines • Network defence, protection and restoration plan • Safety report and associated action plans for improvement • Implementation of the action for improvement decided after feedback on safety events • Policies for electricity quality and maximum current-carrying capacity • Continuous improvement of RTE's crisis management procedure ORTEC, regular crisis exercises • European network codes
#Business continuity plan Break in continuity of critical activities	Not applicable	• Organised procedure between the functions, led by the information and telecommunications systems division and operations division • Regular examination of critical activities • Keeping facilities in good operating order, adapting and improving business continuity plans and business resumption plans for critical activities • Adjustment of the general "health crisis" business continuity plan into a COVID-19 plan • Regular testing

(1) *Manuel d'amélioration sécurité des entreprises, a guide to promote health and safety in the workplace.*
(2) *Installation classée par la protection de l'environnement.*

INDICATORS	2019	2020	TARGET	COMMENTS
Accident frequency rate	9.33	6.99	3.50	As a result of lockdowns and working from home, the cumulative total number of work-related accidents concerning RTE employees decreased in 2020. However, the accident frequency rate in the periods when normal work resumed, even progressively, was close to the annual rate for 2019. The situation was better for contractors, who recorded the lowest number of accidents entailing sick leave in four years.
Equivalent outage time	6'6"	3'12"	Not available	The equivalent outage time totalled 3 minutes and 12 seconds in 2020, or 3 minutes and 7 seconds excluding unusual events. This corresponds to 2,321 MWh of undistributed energy, or 2,234 MWh excluding unusual events.
Number of breaches of the large-scale incident threshold	3	1	0 situation for which RTE is responsible 2 situations for which external parties are responsible	There is a clear downward trend in major incident situations, from 7 in 2018 to 3 in 2019 and 1 in 2020.
Not applicable	–	–	–	–

NAME OF RISK	NON-FINANCIAL DIMENSION	PRINCIPAL CONTROL MEASURES
#Attacks Large-scale conventional or cyberattacks on RTE's information system or vital infrastructures	The social, societal and environmental consequences of the risk of attack are identical to those of the risk of power cuts described above: economic, social and environmental consequences at the industrial sites concerned. Making all employees aware of site and information system security is one way to reduce these risks, and thus limit their impact.	• Division in charge of the safety and security of physical assets • Responding to the requirements of the French law on the national military budget, and following the recommendations of the ANSSI(1) (French national authority for information systems security) through a partnership agreement • Safety and security policy for physical assets • Technical policies intended to maintain and develop secure access procedures for sensitive premises and facilities, and to protect physical assets • Screening via background checks for RTE employees and contractors who work in sensitive premises and facilities • Division in charge of information systems and telecommunications • Information system security policy • Strengthening the first line of defence (employee training and awareness-raising, inspections, tests) • Gradual establishment of a 24-hour, 7/7 control room for information systems and cybersecurity, to be complete in 2022
#Impetus & Vision Inability to make the changes set out in the Impetus & Vision corporate mission statement by 2025	Control of this risk aims to guarantee the employability of RTE's personnel and give the company a diversity of profiles as its functions undergo significant change. The social impact of this risk is substantial, as it concerns the preservation and development of all employees' skills.	• Impetus & Vision corporate mission statement • Project management that coordinates all initiatives in a defined comitology process and regularly reports progress to the Executive Committee • Definition in 2020 of the target for industrial activity by the horizon of 2025 and the appropriate skill requirements, to provide clarity for employees, prepare career paths, and study the company's resilience in all its dimensions (regarding the health crisis, major operating incidents, business continuity, etc.) • Significant use of experimentation phases and collaborative work to fine-tune the target and elicit employee commitment • Start of work on the prerequisites for change, using precise reverse scheduling: new industrial facilities, training in the jobs of the future, real estate projects, measures to support mobility, working time arrangements in the future organisations • Setting up a pioneering team for the information system and cybersecurity control room two years before its opening date, to test the new processes progressively and plan the workload ramp-up

(1) Agence nationale de la sécurité des systèmes d'information.

INDICATORS	2019	2020	TARGET	COMMENTS
Percentage of employees trained in "cyber-awareness"	Not available	41%	80%	–
Percentage of employees who benefited from a professional development measure	89.7%	89%	Not available	–
Percentage of women on management committees	26%	23%	25%	–

NAME OF RISK	NON-FINANCIAL DIMENSION	PRINCIPAL CONTROL MEASURES
#SDDR Inability to implement the strategic orientations set out in the SDDR roadmap for 2021-2035	To rise to the challenge of the energy and ecological transition, RTE must succeed in its five industrial dimensions: network connection, upgrading, development and digitisation projects must be successfully completed, and interconnections must be reinforced. The SDDR cannot be applied to the detriment of the environment, and many local consultation procedures will be required. RTE's non-financial performance is linked to its capacity to meet the large number of societal and environmental demands. Faster connection of renewable energies will speed up the energy transition towards a lower-consumption, carbon-free society.	• Validation by the CRE of practically the whole SDDR, with minor reservations. In response a "flexibility mechanism" roadmap has been proposed to the CRE • Mobilisation of all components of the company, through operational and strategic management that will be reinforced to implement the SDDR • Launch of a Performance project in the development and engineering division • Securing a sufficient TURPE network access tariff for successful execution of this large-scale industrial programme
#Public opposition Public opposition to transmission facilities	RTE develops and maintains its network infrastructure throughout France, over time periods spanning several decades. Consulting stakeholders makes it possible to take account of their expressed needs, minimises the risk of delay in administrative procedures, and preserves the economic balance of a project without harming the environment. The quality of dialogue with stakeholders is crucial for acceptance of the network extensions that will be necessary to connect new generation sites (particularly for renewable energies) or for the economic development of new consumers. In both cases, RTE's activities have a major societal, social and environmental impact. Such projects often have accompanying support measures to reinforce their acceptability at local level.	• Concerted action with stakeholders in projects: impact studies, project support plans, making more local purchases, landscaping and biodiversity-friendly development, etc. • Limiting impacts and monitoring environmental commitments • Professional development for the communication and engagement teams • Partnerships on sea-related matters and a specific roadmap for maritime projects • Policy for MESIL local-initiative undergrounding projects • Introduction of three addition service lines for local decision-makers and areas • Transparency on the subject of electromagnetic fields

INDICATORS	2019	2020	TARGET	COMMENTS
Renewable energy power connected to the network	48,663 MW	50,292.3 MW (at 30 November)	–	The renewable energy power connected to the HTA and HTB high-voltage networks continued to rise, increasing by 2.7% from 2019 to 50,292.3 MW at 30 November 2020; this increase mainly concerns wind power (in the HTA and HTB networks) and solar power (essentially in the HTA network).
Area of land made biodiversity-friendly	1,161 ha; 8 sites including 6 with the Jardin de Noe label	1,235 ha	+250 ha	Contracting and development with managers and owners of the land concerned was slowed down by the COVID-19 pandemic.
Percentage of purchases from SMEs	21%	20%	23% (2021) 25% (2025)	"RTE's purchases contribute to local economic development, and purchases from SMEs are a strong priority for RTE's purchasing division. In 2020, direct purchases by RTE from small and medium-sized suppliers amounted to €333 million, or approximately 20% of the company's total purchases. RTE aims to increase this share to 25% by 2025". The 2020 result is practically stable compared to 2019, demonstrating RTE's continued commitment despite the complicating factor of the COVID-19 pandemic.

NAME OF RISK	NON-FINANCIAL DIMENSION	PRINCIPAL CONTROL MEASURES
#Legal risk Non-compliance with the law	Some regulatory requirements, particularly concerning respect of the environment (Environmental Code), anti-fraud and anti-corruption (the "Sapin 2" law), and protection of private data (the GDPR regulation) contribute to RTE's non-financial performance. Failure to comply with these requirements could have major social and societal consequences. Respect of human rights is also one of the issues covered by RTE both in its internal practices and in relations with customers and suppliers (the vigilance plan).	• Division in charge of legal affairs • Monitoring laws and regulations concerning statutory obligations applicable to all companies of RTE's size, and more specific obligations (e.g. under the Energy Code) • Procedures are currently being reinforced to meet recent obligations, particularly concerning anti-fraud and corruption, the duty of vigilance, and management of personal data (France's "Sapin 2" law and duty of vigilance law, the GDPR regulation). • Annual publication of the code of conduct report
#Major infrastructure event Beyond-design-basis event with a significant impact on the infrastructure	Many technical aspects contribute to network safety (maximum line intensity, short-circuit power, frequency management, loss of synchronism, etc.). Due to the protective and defensive measures taken by RTE, the number of major events remains small and their impact limited. However, customers may still experience local power cuts that can disturb the economic development of businesses. At some high-risk sites, a power cut could have potentially serious consequences for the environment (this concerns ICPE sites, classified for environmental protection purposes, and "Seveso" sites) or for human safety (e.g. hospitals).	• Continuous improvement of the RTE crisis management procedure ORTEC, regular crisis exercises • Implementation of the action for improvement decided after feedback on infrastructure events • Feedback on gales, heatwaves and floods currently indicates network resilience in line with the rules underlying its structure and design basis • Stormproofing policy • Identified risks associated with an ageing network, and preventive action policies included in the SDDR: replacement of instrument transformers, the metal-enclosed substation plan, the line pylon corrosion plan, the management plan for vegetation around power lines, the conductor plan, the transformer bushing plan, handling obsolescence in command and control equipment, etc.

INDICATORS	2019	2020	TARGET	COMMENTS
• Recovery rate for hazardous waste tracking documents	96%	96.7%	100%	The indicator is higher than in 2019 and previous years. The change to a new waste monitoring system at RTE, ADEN, encouraged users to send out the necessary reminder and collect the final hazardous waste tracking documents. The dry-run audits and themed support services from RTE's teams are getting results in the long term. The calculation method will be changed in 2021: this indicator will be calculated from 5 years of data instead of 1.5 years as currently.
• Percentage of sites subjected to an environmental regulation compliance assessment	1,115 (80%)	99.9%	20% five-year cycle	The 99.9% score is satisfactory in view of the COVID-19 pandemic and the specific circumstances this year. It indicates that regulatory control of sites was maintained at a good level.
• Percentage of employees trained in the "Sapin 2" and GDPR laws (new)	Not available Not available	Sapin 55% GDPR 38%	Not available Not available	
• Equivalent outage time excluding unusual events	3'25"	3'04"	≤ 2'48" (TURPE 6)	Excluding unusual events (fires in the Martigues zone in August), the equivalent outage time in 2020 is comparable to the average for the past ten years. It is noteworthy that the large number of storms in early 2020 had relatively limited consequences.
• Customer satisfaction	87%	87%	Not available	

NAME OF RISK	NON-FINANCIAL DIMENSION	PRINCIPAL CONTROL MEASURES
#European law Changes in European laws with consequences for RTE's structure or missions	Not available	• Division in charge of European affairs • Dedicated organisation as part of an Europe and internal coordination project, essentially for adaptation of the clean energy package • Positioning RTE as a source of ideas and innovation, to avoid uncontrolled change in European laws that would affect the network's performance, and potentially its safety • Continuous relations, particularly at RTE's Brussels office, with European institutions, electricity market actors and stakeholders • Staged rollout of the fourth "Clean energy for all Europeans" package while continuing to apply the "network codes" from the third package: forthcoming establishment of regional coordination centres, new market rules (minimum threshold of 70% for cross-border capacities offered to the market, sharing redispatching costs, etc.) • An "all-round" model of network management, which makes RTE an exception among European TSOs: this model has many advantages because it fosters synergies between the different business functions involved in electricity transmission, and also because it performs its mission along the whole of the value chain
#Markets Difficulties with design or implementation of market mechanisms	RTE has a reputation for quality in its economic studies, and for impartiality in organisation of the market. Any difficulties or proven inefficiency in the market mechanisms set up by RTE could affect trust in the company and involve a significant image risk for RTE.	• Electricity system economy division, in charge of designing market mechanisms and preparing them for operation • Roadmap for the capacity mechanism following feedback collected in 2020 from electricity market actors and stakeholders (concerning efficiency, internal and external operating problems, etc.) • Simplification and improvement of the reserve contract and adopting harmonised wording in contracts (interruptible load contracts, demand response tender, reserves) • Review of the supply-demand balance roadmap with clarification of priorities (e.g. real-time control of information systems and the back-office system, frequency action plan) • Introduction of a new organisation for cross-functional management of the supply-demand balance, providing an overview of changes by process, with input from operational employees over the whole life-cycle of projects, the goal being to verify RTE's response capacity

INDICATORS	2019	2020	TARGET	COMMENTS
Not available	–	–	–	–
Not available	–	–	–	–

NAME OF RISK	NON-FINANCIAL DIMENSION	PRINCIPAL CONTROL MEASURES
#Business model Uncertainties over the structure and level of the TURPE 6 tariff	Not applicable	• Continuous discussions with the regulator on the desired guiding principles for the TURPE tariff and its structure • Detailed documentation of the funding requirements to be covered by the tariff • Explaining the investment and maintenance needs for the electricity transmission network for the next fifteen years, through the SDDR published in 2019
#Climate Ability to adapt the infrastructure, activities and organisation to the consequences of climate change	RTE's financial and non-financial performance is directly related to the infrastructure's resilience against unpredictable weather events (essentially heatwaves and floods). It is more necessary than ever to strengthen this resilience in order to limit the social, societal and environmental consequences of incidents that may affect the network.	• Launch of the Resilience and climate change project: finalisation of preliminary studies • A study of scenarios and the required data is in progress (horizon: 2050), and partners are being sought. A roadmap for floods and heatwaves will be defined based on the initial results • Technical benchmarking of the other 15 TSOs • Study of the effects on work buildings and organisation • Stormproofing policy • SDDR

INDICATORS	2019	2020	TARGET	COMMENTS
Not available	–	–	–	–
Equivalent outage time (including outages caused by weather events)	3'14" (53%)	32" (16%)	Not available	This indicator is significantly lower than in 2019 (3 min 14 s) and 2018 (52 s) due to better network resilience against weather events in 2020. In 2019, RTE's network was affected by particularly serious episodes of sticky snow.

NAME OF RISK	NON-FINANCIAL DIMENSION	PRINCIPAL CONTROL MEASURES
#Environment Environmental damage: pollution, waste, biodiversity	By nature, this risk encompasses a direct environmental risk, and control of that risk contributes to RTE's non-financial performance.	• Division in charge of CSR and the environmental consultation department in the development and engineering division • Environmental policy and environmental management system based on ISO 14001 • Improvement plans resulting from follow-up and renewal audits for ISO 14001 certification • Technical environmental policies (management of oil leaks from underground links, management of greenhouse gas (GHG) links (SF_6), management of equipment containing PCBs (polychlorobiphenyls), management of vegetation in and around substations, "zero-phyto" approach) • Other measures to reduce RTE's ecological footprint (ecodesign and biomimicry, energy efficiency in buildings, lower energy consumption in employees' movements)

INDICATORS	2019	2020	TARGET	COMMENTS
Area of land made biodiver-sity-friendly	1,161 ha; 8 sites including 6 with the Jardin de Noé label	1,235 ha	Not available	Progress was comparatively limited in 2020, as very little conversion work could be done for the following reasons: • the COVID-19 pandemic: choices had to be made and certain operations scheduled for this year were deferred • the seasonal nature of vegetation work before the switch to the "zero-phyto" approach: scheduling was particularly complex this year due to the national lockdown in spring; • the absence of budget validation by the regulator for implementation of the "zero-phyto" approach at sites not governed by regulations (a position is expected in the TURPE 6 tariff decision). The decrease since 2019 is explained by an exceptionally high discharge, estimated at 640 kg, compared to 200 kg in 2019.
Percentage of "zero-phyto" sites	100% of new substations, 18% of existing substations	100% of new substations, 20% of existing substations	100% 20% of new substations	
Volume of SF_6 leaks	4.9 t	5.1 t	4.5 t (2021) (< 4 t in 2024)	• SF_6 discharge has been in continual decline in recent years (apart from exceptional discharges), as a result of the action taken under the anti-air pollution (discharge reduction) policy and its implementation by the functions.
Volume of oil leaks (new)	19.39 m^3	46.76 m^3	Not available	2020 was marked by: • a higher volume of oil leaks into the environment from equipment in the "Substations" category due to a large number of accidental events (fire or spills) at power transformers, on top of problems with instrument transformers in very hot periods; one principal event accounted for 86% of leaks in the "Transformers and substations" category; • a higher number of leaks from underground links (doubled the 2019 result), although the total volume of oil leaked into the environment by this type of equipment was lower.
CO_2 emissions from electricity losses and SF_6 discharge	734 kt	703 kt	Not available	• CO_2 emissions: the distribution of flows through the network (especially due to international transits) resulted in a higher rate of electricity losses from the network. However, the electricity emission factor (average mix excluding network losses) decreased slightly between 2019 and 2020, from 0.0553 to 0.0545 kg/CO_2-eq/kWh reflecting the lower-carbon mix; this is positive for reducing the carbon footprint of electricity losses.
Waste recycling rate	85%	90.4%	> 75%	RTE's high waste recycling rate in 2020 results from use of a typology of sites with high recycling potential. For example, earth-levelling work at the Sainneville substation (for the Fécamp connection project) accounted for 25% of RTE's total waste volume, and 100% of the earth removed was reused.

3.3 INTERNAL CONTROL

Internal control of finance and purchasing activities, which is a component of the internal control procedures, draws directly on a dedicated unit (the "risk control" unit) in the finance and purchasing division.

In early 2020, the audit and risk division met with all RTE's function managers, to remind them of the link between risk control and internal control, and the importance of having targeted function-specific controls for the most critical risks in each function. The percentage of controls relating to major risks and function risks has increased. In 2020, all prime function monitoring is now linked to risk analysis and advanced prioritisation: 78% concerns a risk in a priority or close monitoring zone, compared to 51% in 2019 and 35% in 2018.

Other important developments in 2020 were the revision of RTE's internal control policy, which was signed by the Chairman of the Executive Board, and the introduction of a new training in Committee of Sponsoring Organizations of the Treadway Commission standards for internal control officers and function managers.

In accordance with the AMF's recommendation, RTE assesses its internal control procedures every year in an annual report written for the Executive Committee, and presented to the Economic Supervision and Audit Committee. This document reports on operation of the internal control procedures, presents areas for improvement for the following year, and sheds light on how the principal activities are controlled.

3.4 INTERNAL AUDIT

As the third line of control, the internal audit team is in charge of periodical controls in order to verify that the risk control, internal control and operational business control are working correctly.

The internal audit's methodological approach is based on the International Professional Practices Framework. The objectives and methods were confirmed by the Chairman of the Executive Board through signature of an updated Audit Charter in 2019.

The results of internal audits assess risk controls, effectiveness of control resources, and the audited activity's capacity to meet its objectives. The principal audit conclusions are presented to the Executive Board, which validates recommendations for improvement before they are implemented.

Recommendations are implemented through action plans by the divisions concerned. The internal audit team monitors the application of these action plans, to ensure that the risk control process is duly improved.

The Chairman of the Executive Board fixes an annual programme of audits coherent with the company's major risks and sends it to the Economic Supervision and Audit Committee. The audit and risk division is in charge of executing this programme.

3.5 FINANCIAL RISKS

3.5.1 CONTROL OF FINANCIAL RISKS

Operations on the financial markets expose RTE to a range of risks:

- interest rate risk: the risk associated with future changes in interest rates for the holder of a fixed-rate or floating-rate receivable or debt;
- liquidity risk: the risk that the funds necessary to honour commitments will not be available;
- counterparty risk: the risk for a third party that his counterparty will be unable to honour some or all of its debt or contract at the agreed time.

The general cash management policy is covered by an annual framework that lists the authorised financial instruments and sets out the rules and constraints that must be respected. This framework is defined by the company managers in charge of the finance division. It includes a list of authorised counterparties, with assigned commitment limits by amount and type of financial instrument. The general cash management policy takes account of developments on the financial markets, and has had to adapt to an environment of low and even negative interest rates.

— Interest rate risk

RTE is exposed to an interest rate risk on its financial indebtedness. The company's sensitivity to changes in rates, assessed on the basis of probable scenarios, is as follows:

- sensitivity of financial expenses: a change in interest rates has little effect on the financial expenses on long-term debt (with residual maturity over one year) since 96% of the long-term gross debt bears interest at fixed rates at 31 December 2020;
- sensitivity of financial indebtedness: a 1% change in interest rates would cause an opposite change of 10.5% or approximately €1,378 million in the discounted (marked-to-market) value of debt at 31 December 2020.

Average maturity for the Group's debt at 31 December 2020 was 10.1 years and the average interest rate was 1.76%.

On 20 May 2020, the rating agency Standard & Poor's confirmed RTE's long-term rating of A, with a stable outlook.

— Liquidity risk

Low market liquidity can affect RTE's access to financing sources and thus make the cost of resources excessive.

RTE seeks to control this risk through a policy of diversifying its financing sources, by keeping up constant participation in the financial markets and seeking to preserve or improve its image and credit rating on the capital markets. RTE makes every effort to optimise the timing of its operations.

To address liquidity risks, RTE manages a short-term securities portfolio mainly comprising negotiable debt instruments for which a liquid market exists, which are rapidly realisable to meet liquidity needs. RTE also holds shares in monetary investment funds.

At 31 December 2020, the liquidities available in the very short term from RTE's syndicated credit line amounted to €1.5 billion. This €1.5-billion syndicated credit line was agreed in June 2016 for a five-year period, with two possible one-year extensions. The first extension option was exercised in June 2017. The second was exercised in June 2018, deferring the maturity of this credit line to June 2023.

RTE also has a Negotiable European Commercial Paper programme for a maximum €1.5 billion, which it can use to meet its own liquidity needs. At 31 December 2020, the Negotiable European Commercial Paper issued amounted to €400 million.

During the second quarter of 2020 RTE revised the AMF-approved documentation for its Euro Medium Term Note (EMTN) Programme. The ceiling for this EMTN programme is €10 billion.

At 31 December 2020, neither RTE nor any of its subsidiaries was in default on any borrowing.

— Counterparty risk

Counterparty risk is defined as the total loss that RTE would sustain on its business and market transactions if a counterparty defaulted and failed to perform its contractual obligations. The main potential counterparty risks for RTE concern cash and cash equivalents, trade receivables, supplier payables, negotiable debt instruments, short-term investments and derivative financial instruments. The cash and financing operation risk is approached through rules laid down in the annual framework, with the following main principles:

- financial transactions can only be undertaken with authorised counterparties for which quantified limits have been set;
- only agency-rated counterparties are authorised, and they must have a minimum BBB rating with at least a stable outlook;
- a limit has been set for the portion of total investments undertaken with counterparties rated BBB+ and BBB;
- sectorial diversification is required for cash investments: cash investments in any given sector (apart from the banking sector) must not exceed 30% of all short-term investments.

In 2020, RTE continued the counterparty risk management measures introduced in previous years, namely:

- oversight of the short-term investment policy to ensure it follows the cash cycle as closely as possible: this limits the level of such investments and thus the associated counterparty risk;
- a search for better-quality counterparties, to strengthen the average rating of the securities portfolio.

The department in charge of cash and financing has a financial risk control section that regularly oversees all the risks inherent to financial activities. It also verifies that RTE complies with the rules and constraints defined in the framework, through daily reporting of the principal risk indicators to the firm's managers in charge of the finance division.

If a risk limit is exceeded, an alert procedure is set in motion, involving notification of the company managers in charge of the finance division, reporting of how the situation was handled, and, where relevant, proposal of corrective action.

In 2020, the financial risk control committee examined the following themes:

- changes in counterparty risk, principally in the cash management and accounts receivable/payable activities, and the effectiveness of the control action applied;
- the financial consequences for RTE of any special conditions granted to certain counterparties (payment extensions for some categories of customer, accelerated settlement of invoices issued by SMEs and ETIs, etc.) in view of the slowdown in business caused by the COVID-19 pandemic;
- dispute situations between RTE and certain counterparties which may give rise to recognition of provisions;
- matters related to assessment of the integrity of RTE's current or potential contractual counterparties, and, more broadly, the improvement and rollout of

the anti-corruption compliance programme, following application of article 17 of France's "Sapin 2" law.

3.5.2 ACTION AGAINST TAX AVOIDANCE

Article L. 225-102-1 of the French Commercial Code requires companies to report on their situation regarding prevention of tax avoidance.

Tax avoidance consists of deliberately transferring financial flows that could be taxable in the company's principal country of location to another state with more attractive tax legislation.

The team in charge of tax matters at the RTE Group makes sure that no such tax avoidance practices exist at RTE by checking all financial flows. This is facilitated by the fact that the tax team is part of the accounting department.

All taxes are paid on French national territory, and there are no financial flows in any subsidiary located in a country with favourable tax laws that could be interpreted as a source of tax avoidance.

Similarly, all financial investments (investment funds) are made by financial establishments located in France.

3.5.3 PREPARATION AND PROCESSING OF FINANCIAL AND ACCOUNTING INFORMATION

3.5.3.1 Organisation and role of the finance division

The finance division contributes to control of RTE's activities, notably through the following missions:

Performance oversight and budget reporting

- Oversight of the budget process and cycles (budget, three annual budget updates, and the medium-term plan).
- Summarising the budget process and the associated choices.
- Contributing to performance oversight, by monitoring budget resources per entity.
- Contributing to application of the budget through general performance reviews in the divisions.
- Ensuring key financial balances, notably in tariff discussions with the regulator.

The budget, the budget updates and the medium-term plan are examined by the Economic Supervision and Audit Committee, and by the Supervisory Board.

Accounting and tax

- Producing the individual financial statements of RTE and certain subsidiaries, and the Group's consolidated financial statements, in compliance with the standards applicable.
- Meeting tax obligations (declarations, monitoring and settling the taxes payable by RTE).
- Providing advice to all RTE entities and subsidiaries on accounting and tax matters.
- Documenting the accounting and tax doctrine and standards, and maintaining the associated databases.
- Taking preventive action against fraud across its scope of responsibility.

Finance and cash

- Financing RTE's operations.
- Determining RTE's financing requirements.
- Managing cash investments.
- Compensating for the company's electricity losses.

Insurance and risk control

- Implementing an insurance programme to protect the company's assets.
- Contributing to the second line of control of the company's activities through implementation of the internal control procedures and management of financial and accounting risks.

3.5.3.2 Preparation and control of accounting information

Organisation of accounting information preparation

RTE's accounting and tax department is in charge of establishing RTE's individual financial statements, the financial statements of certain subsidiaries, and the Group's consolidated financial statements.

The individual financial statements are prepared by teams corresponding to each major area of the accounting cycle (fixed assets, purchases, sales, taxes, etc.). This organisation makes it possible to manage competences efficiently and thus ensure reliability in accounting and tax data.

The closing of the financial statements is managed by a general team which is in charge of RTE's general accounting.

For certain RTE subsidiaries, the financial statements are established by the team in charge of the relevant entities' transactional accounting.

The consolidated financial statements are established using data recorded by the general and subsidiaries team.

RTE's individual financial statements and the Group's consolidated financial statements are approved each year by the Executive Board.

They are examined every half-year by the Economic Supervision and Audit Committee, and by the Supervisory Board.

Control of accounting information

The Head of accounting is responsible for proper operation of internal procedures which ensure reliability in the Group's accounting and tax data. He/She reports to the Deputy Managing Director in charge of finance.

A tax and accounting internal control team (part of the accounting department) oversees the entire system of tax and accounting controls in the operational processes and the accounting processes for preparation of the financial statements.

Through the tax and accounting internal control, the accounting and tax department contributes to improving the quality and reliability of accounting information in liaison with RTE's various functions.

Tax and accounting internal control is part of RTE's internal control procedures described above in section 3.4 "Internal audit".

The accounting and tax department conducts "soft closing" procedures to facilitate the audits of the financial statements at 30 June and 31 December. These procedures are part of the annual audit process applied by RTE's statutory auditors.

3.5.3.3 Control of financial information

For RTE's internal control policy, each entity in the finance division prepares an internal control supervision plan relating to its risk analysis process. The risk control unit verifies the adequacy of the systems in place.

For example, a control system is used to make sure that no user has authorisations that are incompatible with proper segregation of duties; data analysis tools are used for certain business processes (mainly tax, payroll, expense reports and purchases) to identify any potential anomalies and correct them where relevant.

Analyses are also conducted at least annually with the divisions to identify and address the causes of any variances between real and forecast figures for major income and expense items, in order to have constant confirmation of the reliability of financial budget estimates.

Counterparty risk control is presented above in the section entitled "Control of financial risks".

3.6 INSURANCE

RTE covers the financial consequences of the risk of accidental damage to or by property or people by adequate insurance programmes that are managed by the insurance unit, which is part of the finance division. The insurance is subscribed through the intermediary of consultant brokers, and provided by insurers that are rated at least equivalent to RTE's financial rating, and present the best guarantees of expertise in the risks insured.

Once the risks potentially to be insured have been identified and quantified, RTE's brokers assist the company to determine contractual indemnification limits that are used to prepare a design basis for insurance cover, depending on the maximum possible claims identified.

The insurance policies subscribed cover the following risks:

- damage to property (industrial and office buildings);
- transport;
- general civil liability;
- civil liability for environmental damage;
- liability of key executives and management;
- aeronautical civil liability;
- damage to certain aircraft (the Airtelis fleet and drones);
- individual accidents and repatriation assistance for personnel on business assignments outside France.

These policies also cover the risks of RTE's subsidiaries.

In 2020, RTE rolled out a fire risk prevention plan for electricity substations and buildings, and is continuing to develop prevention and protection measures.
This prevention and protection policy is being implemented for industrial sites in order to reduce the scale and frequency of risks of accidental fires or explosions in critical industrial installations.

Insurance of major projects

Dedicated insurance programmes are generally used for major infrastructure projects, particularly connections for offshore wind farms and network interconnections. These programmes are intended to finance repairs in the event of significant damage to facilities under construction, and also to cover the financial consequences of any civil liability claims against RTE and its contractors, notably compensation to third parties arising from execution of such projects.

RTE prioritises insurance solutions to which it subscribes on its own behalf and on behalf of all participants in the project. RTE limits the number of insurance policies for a given project, in order to reduce risks at the interfaces and the number of insurers involved. However, an interconnection project consisting of several construction lots (for instance for the converter stations, engineering work and undersea cables) can still be covered from start to finish by a single insurance programme, independently of the individual construction contracts making up the project.

For most major projects, the typical insurance cover subscribed directly by RTE concerns comprehensive insurance for sites (including assembly, testing and transport); civil liability insurance for the project manager and the site; and civil liability insurance relating to environmental risks and damage to biodiversity.

Some types of insurance cover considered vital for proper execution of a project, such as Protection & Indemnity marine liability insurance, cannot be subscribed by RTE. If necessary, such insurance is taken out by the party able to do so, and RTE verifies that the insurance is in place before doing any work on the project.

3.7 DUTY OF VIGILANCE

RTE's vigilance plan is drawn up in compliance with article L. 225-102-4 of the French Commercial Code, which derives from law no. 2017-399 of 27 March 2017 on the duty of vigilance by parent companies and outsourcing firms.

It is developed and overseen by a steering committee consisting of representatives of the divisions concerned at RTE (legal division, human resources division, purchasing division, CSR division, audit and risk division).

The plan includes reasonable vigilance measures intended to identify risks of, and prevent, serious breaches of human rights and fundamental freedoms, or damage to the health and safety of individuals or to the environment resulting from RTE's activities, or from the activities of contractors or suppliers with which RTE has an established business relationship.

A specific analysis, updated annually, was conducted to identify and assess risks of harm to human rights, the environment, and health and safety across the consolidated scope of RTE and its suppliers. The risks are rated 1 to 4 on three parameters measuring their likelihood of occurrence, the scale of the consequences (impact) if they do occur, and the degree to which they are controllable by RTE. This leads to the following risk hierarchy:

1° Safety of employees (human factor) and suppliers;
2° Environment and climate.

3.7.1 VIGILANCE MEASURES FOR RTE'S ACTIVITIES

The vigilance measures applied by RTE in respect of its employees are described in RTE's declaration of non-financial performance, in section 3.2.2.2 on employee safety, the environment and the climate.

Key performance indicators are used to assess the effectiveness of these measures, on at least an annual basis.

3.7.2 VIGILANCE MEASURES FOR SUPPLIERS' ACTIVITIES

The vigilance measures applied by RTE in respect of suppliers are among the commitments made by the company in 2016 in its responsible purchasing charter. This charter reflects RTE's ambition to pursue and reinforce the integration of social, environmental and economic issues into its activities and its interactions with suppliers, for enhanced performance. These values were reaffirmed in January 2019 when RTE obtained the "Responsible Supplier Relations and Purchasing" label, which is given by the French authorities to distinguish companies whose practices have demonstrated long-term, well-balanced relations with their suppliers.

In 2020, purchases by RTE excluding subsidiaries (not including system services and purchases of electricity to cover network losses) reached €1,738 million and concerned around 8,600 suppliers.

3.7.2.1 Risk mapping in the purchasing function

The purchasing function's risk analysis is updated annually. It identifies function-specific risks concerning suppliers, and includes an appendix dedicated to the three risk areas identified in the French law on the duty of vigilance: health and safety, environment, human rights and fundamental freedoms. This analysis shows that some of the most pressing risks relate to safety, particularly the electricity risk. In the environmental domain, the most sensitive risks concern adverse effects on biodiversity, control of pollution, waste processing, and exhaustion of resources. Particular vigilance is exercised to detect any risk of supplier behaviour that does not respect human rights and fundamental freedoms.

3.7.2.2 Risk mitigation action in 2020, indicators and results

2020 was struck by a major public health crisis, and RTE introduced a number of actions in favour of its suppliers, to support them financially and mitigate the risks, particularly health risks.

HEALTH AND SAFETY

TYPE OF RISK	RISK MITIGATION ACTION	INDICATORS	RESULTS IN 2020 (AT 31 OCTOBER)
Health and safety risk	During the COVID-19 pandemic, action was taken to mitigate the health risk, particularly by providing personal protective equipment suppliers' employees and subcontractors	Amount of RTE's contribution to this risk mitigation action and productivity losses caused by the situation ("COVID costs")	Nearly €40 million
Health and safety risk	Introduction of a pass for access to RTE's installations (the High-Voltage Pass), compulsory for all suppliers working on engineering division sites. This pass is issued after in-person training concerning specific site risks, validated by successful completion of a questionnaire	Number of High-Voltage Passes issued by RTE since the Pass was first introduced in 2017	A total of 10,510 High-Voltage Passes issued (2,435 in 2020)
Health and safety risk	Continuation of RTE's Safety Impetus programme with suppliers: ➜ spreading the new policy for health and safety and quality of life in the workplace, and the "rules that save lives"; ➜ holding safety-themed meetings between RTE's management and its principal suppliers	Annual number of safety-themed meetings with suppliers, involving RTE management and the principal suppliers	21 safety meetings held (particularly about COVID-19)
Health and safety risk	On-site supplier audits to verify compliance with contractual commitments, particularly concerning safety	Annual number of audits performed and safety deficiencies observed	• 36 audits performed • 61 safety deficiencies observed (including 15 points of non-compliance)
Health and safety risk	➜ Contracts are awarded on a best-bid basis, referring to selected safety criteria weighted according to the key features of the contract	Annual percentage of RTE contracts awarded on a best-bid basis by reference to safety criteria	42%
	➜ Reinforced control of best-bid contractual commitments made by the winners of RTE contracts	Implementation of the control actions decided in 2020	End of 2020

ETHICS, HUMAN RIGHTS AND FUNDAMENTAL FREEDOMS

TYPE OF RISK	RISK MITIGATION ACTION	INDICATORS	RESULTS IN 2020 (AT 31 OCTOBER)
Ethical risk	Application of a system to assess suppliers' ethical situation (with regard to France's "Sapin 2" law)	Number of "Sapin 2" / ethical assessments conducted	Since the system was introduced in mid-2019, 223 assessments have been conducted (17 in 2019 and 206 in 2020)
		Number of risk situations identified during these assessments	8 risk situations were identified and addressed in 2020

ENVIRONEMENT

TYPE OF RISK	RISK MITIGATION ACTION	INDICATORS	RESULTS IN 2020 (AT 31 OCTOBER)
Environmental	Development by suppliers of eco-sites for projects with priority environmental content, to improve management and recycling of waste	Number of eco-sites	13 eco-sites in 2020
Environmental	Sharing a biodiversity ambition: in addition to the strictly business relationship with suppliers, RTE considers it should lead its suppliers in a shared vision of the challenges relating to biodiversity and the resources that should be activated to protect it (this action is also part of the stated aims of the Act4nature France initiative).	Commitment made by RTE through the Act4nature(1) initiative.	On 10.07.2020
		The principal contractors received an invitation from the Chairman of RTE's Executive Board to follow this ambition	On 17.11.2020
Environmental	Estimating electricity losses and GHG when making purchases of equipment that produce GHG (transformers)	Annual percentage of transformer contracts that included these criteria	100% of transformer supply contracts (in 2020, notice of the 2020-2023 framework contract for earthing transformers)
Environmental	On-site supplier audits to verify compliance with contractual commitments, particularly on environmental matters	Annual number of audits performed and a typology of deficiencies observed (environmental matters, etc.)	• 36 audits performed, including 1 audit of waste management contractors • 20 deficiencies noted on environmental matters (including 1 point of non-compliance)
Environmental	➜ Contracts are awarded on a best-bid basis, referring to selected environmental criteria weighted according to the key features of the contract	Annual percentage of RTE contracts awarded on a best-bid basis by reference to environmental criteria	45%
	➜ Reinforced control of best-bid contractual commitments made by the winners of RTE contracts	Implementation of the control actions decided in 2020	End of 2020

(1) http://www.act4nature.com/who-are-we/.

3.7.2.3 Supplier evaluation

Suppliers are evaluated after completion of every order on the following four criteria: quality/timing, safety, environment, and innovation. This evaluation is complemented by RTE's regular supplier audits. The results of the evaluation, which are shared with the supplier at least annually, form a basis for requesting corrective action and collecting feedback that is taken into consideration when selecting suppliers for future contracts.

3.7.2.4 RTE's whistleblowing and alert procedure

The whistleblowing platform[1] was set up by an external contractor and has been operational since January 2019. It is accessible to all the company's employees, and third parties.

The whistleblowing procedure meets the requirements of decree no. 2017-564 of 19 April 2017 concerning procedures for reporting concerns in public-sector or private entities and government administrations.

This procedure was drawn up in conjunction with the union organisations. It aims to prevent not only corruption and influence-peddling, but also crimes and other violations of the law. RTE places particular emphasis on prevention of harassment (moral harassment, sexual harassment or sexist behaviour) and discrimination, which are the subjects of two specific articles in the company's internal regulations.

This platform complements the system for reporting psychosocial risks specific to RTE, which consists of a human network of identified local officers, set up as a preventive measure. As French law requires employers to take the necessary measures to ensure safety and protection for employees' physical and mental health (article L. 4121-1 of the Employment Code), RTE takes a multidisciplinary approach to providing support for the employee(s) concerned, involving management, liaison officers for quality of life in the workplace, occupational health teams, members of the health and safety committee, employee representatives, and even specialist firms, depending on the situation. The dialogue established leads to a diagnosis and prompt proposals of effective solutions: adjustments of work organisation, prioritisation in the business activity, support from HR, reminders of standards of behaviour in the company, counselling, etc.

3.8 ANTI-CORRUPTION COMPLIANCE

Law no. 2016-1691 of 9 December 2016 (the "Sapin 2" law) on transparency, anti-corruption and modernisation of economic life requires certain companies to set up "measures designed to prevent and detect corruption or influence-peddling in or outside France". RTE falls within the scope of this law due to its size and annual sales, and is thus under an obligation to have an anti-corruption plan containing eight points for compliance.

To comply with the eight requirements set out in article 17 of the "Sapin 2" law, RTE began to construct an anti-corruption compliance plan[2] in early 2017. This plan comprises:

- an anticorruption code of conduct and a procedure for collecting reports of incidents, all incorporated into RTE's internal regulations;
- risk mapping for corruption and influence-peddling, which identifies, assesses and ranks the risks of exposure to such behaviours;
- evaluation of third parties' integrity;
- accounting control procedures;
- an online "Sapin 2 anti-corruption" training course, and face-to-face training on preventing corruption at RTE;
- a disciplinary procedure;
- an internal control and assessment system for the measures implemented, to ensure efficient rollout of the anti-corruption compliance plan.

The risk of corruption is regularly monitored by the company's governance bodies.

In addition to the significant measures taken by RTE to comply with article 17 of the "Sapin 2" law, RTE is careful to ensure that its anti-corruption compliance plan takes account of the recommendations issued by the French anti-corruption agency, and follows the guidelines emerging from the Sanctions Commission doctrine so that it is founded on the appropriate instruments and best practices.

The company therefore began to consolidate and reinforce its anti-corruption compliance plan in late 2019, at the instigation of its Executive Board. This involved the following steps:

(1) https://www.rte-france.com/rte-en-bref/nos-engagements/entreprise-responsable-et-devoir-de-vigilance.
(2) https://www.rte-france.com/rte-en-bref/nos-engagements/le-programme-anticorruption-de-rte.

— CONSOLIDATION OF THE ORGANISATION AND RESOURCES

- establishment of an anti-corruption compliance unit to oversee the anti-corruption compliance plan under the responsibility of the head of legal affairs. As this subject concerns all functions, the unit consists of the Head of anti-corruption compliance and the Head of risk control in the finance and purchasing division;
- creation of a network of anti-corruption compliance officers, to facilitate rollout of the anti-corruption compliance plan. These officers act as the anti-corruption compliance unit's interface with the function and regional managements, and the subsidiaries. They help to improve the plan's relevance and efficiency, and provide feedback from their first-hand experience, as well as promoting the compliance culture in RTE;
- designation of a "Sapin 2 officer" to collect reports of any corruption on the dedicated platform, and respond appropriately.

— ADOPTION OF AN IMPROVEMENT DRIVE

The priority actions taken during 2020 included:

- promotion of ethical behaviour in performance of RTE's business and relations with third parties.

RTE's Executive Board has reasserted its commitment to fighting corruption several times:

- through internal communication campaigns targeting all RTE employees;
- in a letter bearing the signature of the Chair of the Executive Board, sent in October 2020 to RTE's suppliers, setting out the ethical values RTE considers important and asking that particular vigilance be exercised when making gifts and invitations;
- revision of the risk mapping for corruption and influence peddling, which was identified as a priority.

The risk mapping for corruption and influence peddling was revised in 2020 using a methodology based on the recommendations of the French anti-corruption agency.

Once finalised, the revised risk mapping for RTE and its subsidiaries will enable the company to efficiently continue consolidation and updating of the other measures introduced by RTE, as defined in the action plan for 2021.

Our commitments to meet the major challenges of a fast-changing energy world

RTE is fully aware of the historic nature of the changes currently taking place in the French and European energy landscape, and this awareness is duly integrated into its industrial model.

RTE is committed to meeting the major challenges of today's fast-changing energy world. It undertakes to grasp the new developments needed and to plan ahead for future developments in the network by regularly-published energy sector analyses and close attention to changes at European level. RTE will adapt its industrial system to these further transformations in its SDDR, and will continue to set up new projects such as market mechanisms. Finally, the ongoing changes will continue with initiatives for the environment, to advance action against climate change, and protect biodiversity and natural resources.

4.1 PRESERVING RTE'S INFLUENCE AS A CENTRAL ACTOR AT EUROPEAN LEVEL

4.1.1 REINFORCING COOPERATION AT EUROPEAN LEVEL

— DESCRIPTION OF THE CHALLENGE

The electricity transmission network in Europe is managed by 43 TSOs in 36 countries. France is an important electricity hub in the centre of Europe: 50 of the 423 European interconnections cross its borders.

Regulation of the energy sector is now largely European. Eight network codes(1) have been adopted in the last ten years, and are currently being implemented. The Clean Energy for all Europeans package of legislation was formally adopted in 2019. It reinforces European energy transition goals for 2030, completes governance of the Energy Union and adapts certain common rules for the internal electricity market.

The European Green Deal, which is a European Commission plan that constitutes a kind of "climate law", is stepping up the pace of change in the European electricity and energy system with the objective of achieving carbon neutrality. This Deal is complemented by the recently-negotiated increase in the intermediate 2030 target for CO_2 emission reductions, raising it to a 55% reduction based on 1990 emission levels. There are also the European strategy for marine energy, the EU strategy on energy system integration, the proposed revision of the TEN-E(2) infrastructures regulation, and the new European industrial strategy. The EU is keen to provide a stronger impetus by accelerating the "green recovery" and strategic European autonomy in key sectors.

In March 2020, after the European Commission's announcement that the Green Deal took precedence over all European policies and in view of its multidimensional nature, RTE's management defined a corporate position with three aspects:

- confirming the strategic role of electricity networks for a successful energy transition and overcoming new points of vulnerability;
- repositioning RTE in a "greener", more complex and more open pan-European ecosystem, while seeking out appropriate new channels for influence;
- contributing to a new European industrial strategy for robust electricity networks able to support the energy transition in Europe and beyond.

In this context, RTE defends the key role of TSOs for a successful transition to a carbon-free energy system, and is clear about the challenges facing them during the highly sensitive transition phase. Their action needs to be part of a Europe-wide industrial strategy with support from European and national decision-makers if it is to achieve continuous adaptation of network infrastructures and guarantee safe, efficient operation of the electricity system.

In view of these challenges, RTE has to work alongside the European institutions on a daily basis, and closer cooperation will be required between TSOs, through ENTSO-E(3) but also through coordination between regions or with each neighbouring country.

— RTE'S ACTIONS AND COMMITMENTS

RTE's key role in regulatory harmonisation and European cooperation was illustrated by a certain number of events in 2020.

(1) Prescriptive European technical rules for operation of the European electricity system as regards connection, network operation, market functioning and management of interconnections.
(2) Trans-European Energy Network regulation.
(3) European Network of Transmission System Operators for Electricity.

Contributing to regulatory harmonisation and European coordination

2020 was a year of intense activity for deployment of the Clean Energy for all Europeans package of legislation:

- preparations were made for the establishment of regional coordination centres, due to start in 2021;
- working with the French energy regulator CRE when necessary, RTE contributed to the new European methodologies for operation of the electricity system and markets (sharing the costs of cross-border redispatching, setting a minimal threshold of 70% for cross-border capacities offered to the market, secure supply criteria, etc.).

Meanwhile, application of the network codes resulting from the third Clean Energy Package continued. For example, the TERRE European balancing platform for trading reserves that can be activated in 30 minutes began operations in 2020, and so did regional coordination systems for analysis of the electricity system's short-term adequacy, and coordinated outage planning coordination on the very high voltage networks.

A joint initiative to reduce GHG emissions was also taken in December 2020 with seven other European TSOs(1): these TSOs will issue a common position by mid-2021 on how to cut GHG emissions further, in the interests of European society. The efforts will focus on the operators' carbon footprint, and on system emissions, which are much higher, and involve electrification and incorporation of renewable sources of electricity. On 16 December 2020 RTE set up a dedicated industrial European affairs unit to support and participate in the industrial strategy developed in response to the Green Deal and recovery plans.

The specific Brexit-related context was also notable in 2020: the tense negotiations between the EU and the UK created uncertainty around the rules applicable from 1 January 2021 for energy exchanges between the UK and the EU, and optimum use of cross-channel interconnections. RTE worked with its British counterparts throughout the year to make sure standby rules and procedures were in place so that power exchanges could continue after the signature of the trade agreement.

Continuous presence at the European institutions

Despite social distancing rules, RTE strove to maintain a continuous presence at the European institutions, either directly or via ENTSO-E.

In 2019, Hervé Laffaye, one of RTE's Deputy Managing Directors, was elected President of ENTSO-E for a two-year term. An RTE representative was also re-elected as head of ENTSO-E's system development committee. In 2020, the head of RTE's representative office in Brussels was appointed vice-president of ENTSO-E's Policy & Communication Group.

The group of TSO that signed a joint declaration in 2019 concerning the missions and challenges facing TSOs intensified their discussions in 2020, as they monitored the consequences of the COVID-19 pandemic for electricity system management and continuity of electricity supply, which is an essential resource for local communities, while taking care to protect employees' health. They issued a joint statement summarising the work done by the TSOs during the crisis, and expressing the hope that the post-crisis economic recovery would be more respectful of the environment and the climate.

As well as the close relations between RTE's representative office in Brussels and European institutions, RTE is actively involved in a number of European professional forums and associations. It is a member of the European Parliament's European Energy Forum, the Renewable Grid Initiative (RGI), the European Association for Storage of Energy (EASE) and the Roundtable for Europe's Energy Future, and is a partner of IFRI(2) (the French international relations institute) and Friends of Europe.

A cross-functional Europe and internal coordination project was set up at RTE in 2019, with the particular goal of overseeing RTE's adaptation of the Clean Energy Package measures, in association with the relevant functions of RTE and stakeholders (the CRE and the appropriate ministries). Following the ACER's(3) increasing involvement in debates and proposed laws, the TSOs filed an appeal before the European Court of Justice against ACER decisions on proposed European balancing platforms. Formation of the European distribution system operators' association EU-DSO will be a significant step in cooperation between energy distributors and

(1) Amprion (Germany), APG (Austria), Elia Group (Belgium and Germany), Red Eléctrica (Spain), RTE (France), Swissgrid (Switzerland), TenneT (Netherlands and Germany) and Terna (Italy).
(2) Institut français des relations internationales.
(3) Agency for the Cooperation of Energy Regulators.

the TSOs belonging to ENTSO-E (the European Commission has programmed the development of new network codes for cybersecurity and demand flexibility, to be prepared jointly by ENTSO-E and EU-DSO, for 2021).

The new sustainable growth strategy set out in the European Green Deal will give rise to a battery of 50 initiatives in 2020 and 2021, legislative and otherwise (strategies and action plans). During the first half of 2020, the European Commission held a large number of public consultations relating to the Green Deal. Whenever a policy initiative affected the TSOs' mission, RTE responded either directly, or via ENTSO-E or a professional association (e.g. UFE[1], The relevant initiatives concern: smart integration of electricity by sector, the European strategy to promote marine energy, targets for reducing the carbon footprint, preparations for revision of the TEN-E regulation and the F-Gas[2] directive, and strategic independence of the major electricity networks in preparation for a new European industrial strategy.

4.1.2 INCREASING EUROPEAN INTERCONNECTIONS

— DESCRIPTION OF THE CHALLENGE

Developing electricity interconnections is one of the pillars of European Union energy policy. Cross-border interconnections underpin the single electricity market and have facilitated a gradual shift from a national to a European approach to generation fleet operation. Taking advantage of energy complementarities between countries, interconnections make an essential contribution to the incorporation of renewable energies, and are a key component of the energy transition. This European priority is reflected in the target set for each Member State: raising its level of interconnection to 10% by 2020 and 15% by 2030.

The key aim of RTE's SDDR is doubling France's interconnection capacity in fifteen years, from around 15 GW currently to around 30 GW by 2035. This ambitious target is coherent with European Union and French policy priorities and is combined with the European TYNDP developed by ENTSO-E. To achieve it, interconnections will have to be developed across all of France's borders. Fifteen projects have been identified to develop or reinforce interconnections, and are at varying stages of maturity. Any decision to invest in a new interconnection remains conditional on a socio-economic cost-benefit analysis showing that the project would be profitable for the European community.

At national level in France, the energy roadmap also includes a substantial rise in interconnections. This is reflected in the reinforcement projects on all borders set out in the country's PPE. The 2019 generation adequacy report[4] showed that an increase in the network capacity is essential for a good technical and economic balance in the electricity mix as envisaged in the PPE, with nuclear and renewables accounting for 95% of electricity.

At European level, a key event of 2020 was the publication in November of the 2020 European TYNDP. This strategic document confirms the need for significant development of European interconnections across all borders by 2030 (+50 GW) and 2040 (+93 GW). It confirms the relevance of the strategy developed in 2019 in RTE's own SDDR.

— RTE'S ACTIONS AND COMMITMENTS

Several European interconnection projects led by RTE saw significant developments during 2020.

Work on the IFA2 project, the new interconnector between France and the UK, was completed in 2020, and tests were launched ahead of the start of commercial operations. Before the tests, finishing work was done on the underground and undersea sections of the link to ensure durability and protection. Meanwhile, the final work on the converter stations and installation of the electrics and electronics was completed, prior to tests on the machinery and then on the interconnector as a whole. Technical delays caused deferral of the commissioning date to early 2021.

(1) Union française de l'électricité.
(2) Regulation (EU) No 517/2014 of the European Parliament and of the Council of 16 April 2014 on fluorinated GHG.
(3) The 2019 generation adequacy report updates the diagnosis of changes in the supply-demand balance over a five-year horizon, drawing on the latest information and decisions concerning changes in consumption and the generation fleet.

For the Savoy-Piedmont project connecting France and Italy via the Fréjus tunnel, work on the high-voltage link (civil engineering, cables, finishing) was successfully completed on the French side in 2020. Meanwhile, construction work for the converter station near Chambéry was also finalised (civil engineering and installation of the power electronics). Verification and acceptance testing of the low-voltage command/protection facilities will continue during the first quarter of 2021. On the Italian side, work is in the final phase (laying and connecting cables). Repairs to the low-voltage Italian cables and fibre optic and finishing work should continue through the winter of 2020-2021.

Several other projects are currently under consideration, particularly the following undersea interconnection projects:

- For the Bay of Biscay project to construct a new electricity interconnector between France and Spain under the Atlantic, after the major technical problems encountered in 2019 RTE and REE decided in early 2020 to adopt a land detour around the Capbreton submarine canyon. Following delays caused by the COVID-19 pandemic, a new phase of technical studies and public consultation was organised in the second half of 2020. This resulted in a preferred alternative route (the lowest-impact route zone) which is to be submitted to the competent body for approval in the first half of 2021. In parallel, in November RTE and REE launched a consultation with selected suppliers regarding the cables for this project.
- Several steps forward were taken in 2020 on the Celtic Interconnector project with EirGrid to create a 575-km electricity interconnection between Brittany in north-west France and Cork in south-west Ireland, despite the problems caused by the COVID-19 pandemic, which prevented the teams from meeting up. The tenders for purchases of the cables and converter stations were issued in October 2020 with the aim of signing the contracts in autumn 2022. Meanwhile, detailed studies and preparation of the applications for official authorisations continued: they were filed with the French authorities in late November 2020.

4.1.3 ROLLING OUT MARKET MECHANISMS

— DESCRIPTION OF THE CHALLENGE

For its operation, the electricity system requires physical infrastructures (high-voltage lines, substations, interconnections with neighbouring countries, etc.) and market mechanisms that are "coupled" at European level.

Electricity networks cannot function alone: all the electricity system actors must be coordinated to ensure a real-time balance between supply and demand in the network while guaranteeing safety in its operation. This is achieved through organisation of the electricity market. In France that mission is assigned to RTE, which must make sure that all the actors (energy producers, consumers, traders, etc.) can use the electricity market for electricity purchases/sales or interconnection capacity purchases in order to trade electricity with foreign countries, as close to real time as possible.

To address all the demands of the electricity system, elicit the necessary investments by its actors and anticipate all hazards that can affect production and consumption, RTE is introducing mechanisms that relate to different time horizons, from capacity reservations for periods that may be several years ahead, or real-time activation.

These national and European market mechanisms contribute to the economic optimisation of electricity supply by sending out the right economic signals to encourage investment in generation or demand-response action. Similarly, with its cross-border infrastructures and implementation of supranational mechanisms for fair, efficient allocation of interconnection capacities, RTE is contributing to the economy and the overall safety of interconnected European networks.

All these mechanisms are evolving to support the energy transition and promote integration of new forms of flexibility (renewable energies, batteries, etc.).

RTE operates under fast-evolving laws and regulations, both national and European. The primary objective is still to build a single market with European network(1) and guidelines which form a body of regulations common to all network operators, laying down the principles of electricity system management and international interconnections.

(1) There are eight network codes and guidelines. They form a body of rules for connection, network operation and market operation that apply to all network operators in the EU. This regulatory architecture defines the technical and operational requirements implemented directly at national level or adapted through application methodologies developed in conjunction with European TSOs. The Capacity Allocation and Congestion Management guideline and the Electricity Balancing Guideline directly concern market mechanisms, and are two of the most important network codes, driving significant changes in electricity system management at European level.

— RTE'S ACTIONS AND COMMITMENTS

In 2020 RTE continued to cooperate at European level with all stakeholders concerned by the application of network codes and the Clean Energy Package.

To take the integration of European markets further, in December 2020 RTE connected to the TERRE platform, the first European balancing platform that enables multilateral energy exchanges between European countries in close to real time. This platform is reserved for TSOs, which can intervene to correct any imbalance between supply and demand. European research is continuing on the other two proposed balancing platforms (PICASSO(1) and MARI(2)), which are expected to open in 2022 and 2024, handling transactions even closer to real time.

RTE continued its work on the contractualisation of capacity reserves, so that some can be acquired for shorter time horizons (from annual to daily) to partly cover its requirements. Since 1 July 2020, 100% of RTE's primary reserve requirements have been covered by a daily cross-border tender. In 2021, 100% of the secondary reserve and one third of the tertiary reserve will be covered by a daily tender.

Also, like most European countries, France has introduced a capacity mechanism designed to meet the secure power supply criterion defined by the public authorities.

In 2020, in compliance with the regulations, RTE completed the financial settlement process for this mechanism's first year of delivery, for a full cycle of three years. In parallel, to meet the actors' demand, RTE launched a feedback process with them, collecting views on the operation of the mechanism since it began. This enables the company to identify and initiate improvement and streamlining action to adjust the capacity mechanism in the short and medium term.

Finally, RTE runs an annual tender procedure for the French Government to encourage load shedding in order to meet the national energy policy targets. In 2020, against the backdrop of the COVID-19 pandemic, the Ministry for the Ecological Transition announced special measures to reinforce security of supply for the winter of 2020-2021. These measures were developed in conjunction with, and implemented by, RTE. They have practically doubled the capacities defined for 2021 (1,366 MW) and ensured an additional load-shedding capacity of 370 MW for the early part of the winter 2020-2021.

4.2 INTEGRATING THE LATEST TECHNOLOGICAL TRENDS TO ENABLE INNOVATIVE SOLUTIONS

4.2.1 FACILITATING THE EXPANSION OF RENEWABLE ENERGIES AND CHANGES IN THE ENERGY MIX

— DESCRIPTION OF THE CHALLENGE

Renewable energies, which apart from hydropower are relative newcomers to French electricity generation, have seen notable expansion in recent years. As of 1 November 2020, 17.3 GW of wind turbines and 10 GW of solar panels were installed on French territory, together covering 11.7% of average French power consumption (compared to 10% the previous year).

France is currently engaged in an energy transition that needs faster development of renewable energies. The final version of France's PPE published in April 2020 validated the concentration on accelerating growth in the share of renewable energies by 2030-2035.

As the network manager and guarantor of balance in the electricity system, RTE must prepare and apply a network transformation programme for the short and medium term, to facilitate integration of the future electricity mix. This will also help to keep the networks off the energy transition's critical path. This point is covered further in section 4.3.1.

But as well as adapting the network infrastructure, RTE and its fellow TSOs are now working on changes to the operation of the new system, focusing on two different horizons:

I. Preparing for system operation in 2030-2035. This horizon is central to RTE's industrial plan, although the fundamentals of the electricity system operation will not be called into question by that time. The main challenges lie in changing the organisations and industrial implementation of technologies that are currently in development (see details of the corporate mission statement and the introduction of the new 24-hour control centres).
II. Forward planning for changes in a European electric system set to be carbon-neutral by 2050, with operation mainly based on power electronics.

(1) Platform for the International Coordination of the Automatic frequency restoration process and Stable System Operation (activation in less than 300 seconds)
(2) Manually Activated Reserves Initiative (activation in less than 15 min)

— RTE'S ACTIONS AND COMMITMENTS

The innovations made by RTE are designed to bring in optimised, more flexible modes of operation, notably founded on digital solutions (automata, captors, etc.) and reinforced telecommunications systems (see section 4.2.2).

In parallel, RTE is continuing to explore possible adjustments to the electricity system and therefore the network after 2035, making projections assuming an even larger proportion of renewable energies in 2050 (producing a long-term generation adequacy report, and a study in partnership with the International Energy Agency - IEA).

4.2.2 NEW DIGITAL OPPORTUNITIES

— DESCRIPTION OF THE CHALLENGE

Wind and photovoltaic power generation have a very low impact on global warming, but their output is characterised by high variability and low predictability. Greater reliance on this type of energy increases uncertainty and shortens the decision times for real-time management of the electricity system as regards both the supply-demand balance and managing power flows through the network. Digital technologies are put to use to compensate for these disadvantages and construct responses to the challenge of incorporating several dozen GW of wind and photovoltaic power. Digital technologies should optimise operation of existing infrastructures and their maintenance in future years.

— RTE'S ACTIONS AND COMMITMENTS

RTE is rolling out the very latest digital technologies at national level, at local level in zones where the network is constrained, and in every substation in the network.

In France, RTE has been renewing and modernising the information system used to run the electricity system since early 2017. The supervisory control and data acquisition (SCADA) system used for real-time electricity system oversight from national and regional dispatching rooms is being revised prior to industrial rollout in 2021. The current system is more than 20 years old, with a low capacity for change to take account of the new European codes on network balance.

The modernisation work has the following objectives and challenges:

- Capacity for change: having an infrastructure able to respond to new European requirements, for example concerning the format of the data shared (which must be compatible with the ENTSO-E standard) or the introduction of economic precedence for secondary frequency control.
- Single base/harmonisation: the future SCADA system will have a single database: this will make it possible to have a harmonised data configuration and avoid differing configurations in cross-border zones.
- Adaptability: taking advantage of the opportunities associated with a standard modern-design product, offering high adaptability for a constantly-changing environment.
- Security: the electricity network control system must be protected against cyberattacks. The architecture of the future SCADA system has been developed in partnership with the IT and telecommunications division's security team and France's national authority for information systems security ANSSI to make sure access and the data are secure. This security is achieved by a compartmentalisation into different security zones according to sensitivity, to reach a level of security in line with ANSSI recommendations and the provisions of the military programme law.
- Open data: facilitating options for data exchange with the rest of the industrial and office information system, to maximise use of internal data.

At the level of a single electricity zone, which can cover dozens of lines and substations, RTE's teams developed and tested the first "adaptive zone automaton" in 2019. This is a software that resolves transit constraints by adapting the network topology and generation output in the zone. This demonstrator was enriched in 2020 by adding dynamic line rating: this is a management principle which, by referring to real-time measures of temperature, gradient, vibrations, and other factors, optimises use of facilities as close to maximum capacity as possible.

Finally, at local level, RTE has been installing digital command and control technologies in its electricity substations since 2006. R#SPACE, the next digital command and control technology for substations, is currently in the design phase. The principal contracts with the industrial entities that will make the first R#SPACE substations were signed in 2020, and the technology will be rolled out from 2023. The new system will facilitate large-scale incorporation of renewable energies, bringing adaptability and

openness to advanced automation functions. It therefore paves the way for closer monitoring that will facilitate maintenance and improve management of network assets. The basic principle is interoperability between components supplied by different manufacturers for the same substation (under international standard IEC 61850), and more extensive computerisation of command and control.

RTE also engages with stakeholders in their use and interpretation of data, and is stepping up support in this respect. RTE provides clarifications and promotes the benefits of data service offerings, from open data to value-added services such as Éco2Mix or trend analyses such as reports on the electricity system, which are levers of economic performance for local authorities.

RTE has already experimented with and integrated artificial intelligence (AI)-based operation solutions in dispatching rooms and data science studies, but the time has now come for a more explicit "augmented" intelligence strategy to meet the company's new challenges and make fullest use of mature technological opportunities. With this aim, RTE launched the ORIGAMI project for network development studies, in the form of an innovation partnership. This project will enable the company to assess the contributions of different forms of AI (semantic analysis, natural language, deep learning), and will improve the very complex process of hypothesis construction concerning electricity generation and consumption for long-term studies.

4.3 MAINTAINING AND ADAPTING THE NETWORK FOR THE ELECTRICITY LANDSCAPE OF THE FUTURE

4.3.1 ADAPTING THE INDUSTRIAL MODEL

— DESCRIPTION OF THE CHALLENGE

As the sector adapts to meet the challenges of the energy transition, in-depth changes will be made to the electricity network, and to operating and maintenance methods for the electricity system. RTE's business activities are already evolving as a result, and this involves major industrial challenges.

In the next few years, integration of renewable energies and the rising need for equipment upgrades due to the advancing age of the network mean that more flexible, optimised modes of operation must be found, notably involving digital solutions (automata, captors, etc.) and reinforced telecommunications systems. In parallel, connection of offshore wind farms and development of interconnections (particularly undersea links with Spain, the United Kingdom and Ireland) are large-scale industrial projects with specific constraints.

The main lines of the SDDR published in September 2019 were validated by the CRE in its decision 2020-200 of 23 July 2020. The plan uses the trajectories traced by prospective studies such as the generation adequacy report.

RTE must now apply the principles of its SDDR through an efficient, comprehensive industrial strategy, develop the new generation of "S3REnR" regional renewable energy connection plans, and programme the incorporation of the next new offshore wind farms, in execution of the DSF(1) coastal planning strategies.

The SDDR sets out a proposal for changes to the transmission network in the next fifteen years in order to achieve the public objectives, highlighting the challenges, the margins for manoeuvre and the need for coherence. This raises significant industrial challenges on the five aspects of RTE's SDDR:

I. renewal of the existing network: priority to "everyday networks";
II. adaptations: structural changes to the network once renewable energies reach 50 GW;
III. the basic digital framework: some devices need reinforcing to maintain security and efficiency in the electricity network;
IV. interconnections: a sequenced scheduled to double France's energy exchange capacity in fifteen years;
V. the offshore network: new infrastructures will be developed for effective evacuation of the renewable electricity generated offshore.

RTE's industrial strategy as expressed in the SDDR is founded on the principles of long-term planning to reduce costs, standardisation of equipment, sharing infrastructures (for example, for connection of wind farms) and employing digital technologies to further optimise the use of existing lines, reduce the need for network adaptations, and intelligently replace the oldest infrastructures.

(1) *Documents stratégiques de façade.*

In addition to its importance for achieving the energy policy targets laid down in the PPE, the SDDRn is an industrial programming instrument in its own right, mobilising RTE as the network operator and a broad industrial fabric of suppliers and contractors.

— RTE'S ACTIONS AND COMMITMENTS

RTE must now apply the SDDR industrially and operationally with managed and monitored trajectories, while adapting the network oversight and operation methods. Making the transition from a discourse to a concrete industrial policy is central to RTE's commitment.

Adapting the network to the new deal for the next fifteen years

Turning the SDDR into an operational work programme poses particularly significant challenges regarding coordination. From adapting the design basis methods for the network to conducting targeted studies, to managing cross-functional projects, to external communication, and even to participating in regulatory consultations, the necessary current and future actions involve a large number of entities at RTE.

To guarantee successful implementation of the industrial network transformation plans, particularly the network renewal and adaptation projects (PSEM, anti-corrosion, zero-phyto, automata), a specific mode of management for major change programmes will be needed.

Adapting network monitoring and operation in the 24-hour control centres

By 2026, RTE will operate its network and infrastructures differently. It will have nine 24-hour control centres operating round the clock 7 days a week, controlling and monitoring the networks and overseeing real-time exchanges of information about the operation and maintenance of electricity and digital networks.

The goals of this change are to put RTE's industrial facilities, and its capacity for operation and oversight, in a position to respond proactively to new challenges arising from the electricity and digital networks, and to the needs of customers and local areas; and to consolidate RTE's overall performance.

In this new configuration:

- the electricity system will be operated in real-time from three 24-hour control centres located in Saint-Denis, Marseille and Nantes, replacing the current eight dispatching centres. This concentration will enable RTE to reduce the growing complexity of electricity system management;
- equipment will be monitored from five 24-hour control centres located in Lille, Lyon, Nancy, Nantes and Toulouse. These five centres will complement control room groupings, such that all electric equipment in the transmission network can be monitored round the clock. This increases RTE's capacity to solve technical problems, anticipate problems thanks to closer surveillance, and contribute to better management of network assets by taking the opportunities offered by the new digital technologies;
- the IS-telecoms and cybersecurity systems will be monitored from a 24-hour control centre in Saint-Quentin-en-Yvelines. By re-insourcing certain activities, this centre will improve RTE's ability to detect and repair telecom incidents, deal with information system incidents in real time, and fight cyberattacks.

Coordinated, 24-hour operation of these three types of control centre will also enable the company to cope with more complex incidents more efficiently, and respond more rapidly, than is currently the case. More in-depth, real-time analyses of dysfunctions or incidents will be possible day and night, to determine the causes and propose optimal solutions. 24-hour monitoring of the telecoms and IS infrastructures will also make it possible to foresee and prevent disturbances that could affect control centre operations.

In 2020 the first steps in this change were made. A pioneering IS-telecoms team was set up at the Saint-Quentin-en-Yvelines site in September 2020, to make preparations for the new IS control centre and begin to take over the initial IS-telecoms monitoring activities. This control centre will begin 24-hour operation in autumn 2021. Studies concerning the real estate adaptations needed at the site have also begun, with a view to starting work in 2021.

Work on the 24-hour control centres project will continue in 2021 and 2022, to establish a detailed organisation for each control centre, professionalisation training and a consolidated overview of forward workforce planning. The nine centres will be set up between 2021 and 2025-2026.

4.3.2 SUPPORTING RESEARCH AND DEVELOPMENT, INNOVATION AND EXPERIMENTATION

— DESCRIPTION OF THE CHALLENGE

The energy transition is bringing deep-seated change to the electricity landscape, and will entail a new real-time mode of network operation. Renewable energies, connected by power electronics and distributed across the whole of the country, should contribute to the resilience of the system through response modes that differ from traditional generation sources. It is now up to R&D to devise and validate appropriate systems for this new context, for timely integration as the European energy mix evolves. A well-controlled schedule is also key, as timing can affect the equipment's constructive capacities: the contractual demands on future generation and consumption facilities need to be specified as early as possible if they are to perform as required.

RTE must also continue to adapt and optimise the use of its own infrastructures. While this naturally involves reference to cost and technical performance criteria, it will also have to gradually add criteria relating to life-cycle analysis of facilities and their environmental impact. The R&D teams are working both on the technical aspects of these new flexibility mechanisms(1), and on changes in their optimisation; this will be a key axis of the CAP R&D roadmap for the next decade.

For nearly ten years, the participative innovation approach used at RTE has aimed to engage and acculturate employees in order to collect and analyse good ideas, and turn some of them into structured projects. Useful levers of action to develop technological, methodological and social innovations are to be consolidated once they have proved their worth, and new ones created to test other modes of leadership.

— RTE'S ACTIONS AND COMMITMENTS

Through the European research project OSMOSE, RTE is quantifying the flexibility required in the electricity system of the future which will incorporate more renewable energies, and validating the most suitable technical options to meet these needs, with storage batteries as the likely vector.

OSMOSE, headed by RTE, is a four-year (2018-2022) project involving a consortium of 33 partners (European TSOs, electricity producers, equipment manufacturers, IT companies, and consulting firms). Its objectives are to anticipate flexibility requirements as renewable energies are incorporated, to make recommendations about the distribution between technological levers and new market mechanisms, and thus to achieve a transition at the lowest cost while maintaining the same quality of electricity supply.

As well as bringing new equipment into the network, R&D is using AI and other approaches to enhance the decision-making softwares used in network operation, asset management and infrastructure adjustment. These pieces of software, which are being rolled out in the operational units in successive blocks, will enable the company to better incorporate consideration of the hazards, scenarios and trajectories that may affect decisions in the near or distant future.

Training relating to internal innovation methodologies continues to attract a large number of employees, which is a positive sign for the future vivacity of creativity processes and places.

4.3.3 INFORMING PUBLIC DECISIONS

— DESCRIPTION OF THE CHALLENGE

The missions assigned to the company by the government give RTE strong institutional legitimacy to inform political decisions for the energy transition in the medium and long term.

The energy transition objectives carry significant ambitions: achieving carbon neutrality, reducing energy consumption, diversifying the French electricity mix, etc. They will bring about unprecedented change in the electricity system on a scale not seen since execution of the French nuclear electricity programme, and affect all its components.

Among the levers identified to conduct this transition, France's national low-carbon strategy projects a substantial electrification of the energy system by 2050 (between 600 and 650 TWh of electricity consumption). But the policy does not address several underlying hypotheses about how this can be achieved. In particular, the low-carbon strategy does not describe how an electricity system of such scale will operate without relying on the existing nuclear power plant fleet. Depending on whether the "new nuclear" avenue is considered open or closed, the conclusions could be very different.

(1) In the optimal development principle, having flexibility mechanisms makes it possible to smooth flows and thus limit infrastructure requirements. This then requires an ability to manage these flexibility mechanisms closely.

Nonetheless, these prospective studies act as an essential inductor for RTE's industrial strategy, since the forthcoming changes determine the future network requirements, the system operation methods to be adopted, and the necessary adjustments to the electricity market mechanisms.

— RTE'S ACTIONS AND COMMITMENTS

In 2020 RTE enriched and continued its programme of prospective studies to inform the public authorities and debates with stakeholders about changes in the electricity mix in the medium and long term.

The SDDR published in 2019 has now been validated by the CRE, the Minister for the Ecological and Inclusive Transition, and the Environmental Authority, and defines prospects for network infrastructure change in line with the PPE. Some information concerning the needs for network change was transposed into the final PPE.

Meanwhile, RTE carried out more analyses on the integration of new electricity uses:

- after the 2019 report on electric mobility, RTE published a report on low-carbon hydrogen in January 2020. This work is part of France's Hydrogen Plan launched in 2018 by the Minister for the Ecological and Inclusive Transition. The hydrogen report, which analyses the economic, technical and environmental questions posed by increasing hydrogen's contribution to the electricity system, is consistent with France's ambitions as explained in its recent hydrogen strategy (the "France Relance 2020" recovery plan);
- in late 2020 RTE published a study conducted in partnership with the French agency for the environment and energy control, ADEME, examining the impact of energy efficiency policies on the building industry (insulation, renovation, standards for new buildings) and development of new electric heating solutions. This study is the final component of the "trilogy of uses" programme.

RTE is now making projections over the European carbon-neutrality horizon to prepare the ground for the energy system of tomorrow. It develops and studies scenarios to inform the government's decisions for the French energy policy.

Two important exercises were started in 2020:

- preparation of the long-term generation adequacy report, in which RTE presents and analyses various scenarios for attaining carbon neutrality in 2050;
- at the request of the Minister for the Ecological and Inclusive Transition, a study in partnership with the IEA of the technical feasibility conditions of the scenarios assuming high penetration by renewable energies.

These studies are essential, and certain decisions must be taken now, given the long-time constants on energy infrastructures. Work on these long-term scenarios will be published during 2021 (in early 2021 for the RTE-IEA report and around mid-2021 for the long-term generation adequacy report).

These prospective analyses are conducted through extensive cooperative work with all stakeholders, characterised by organisation of a large number of working parties (with a high participation rate). In each case the work leads to a report outlining the methodology and assumptions under consideration by RTE. These documents are available from RTE's customer consultation website(1).

4.4 FIGHTING CLIMATE CHANGE, PROTECTING BIODIVERSITY AND RESOURCES

4.4.1 ACTION AGAINST CLIMATE CHANGE

— DESCRIPTION OF THE CHALLENGE

Fighting climate change and adjusting to its effects are a priority for public and private actors on a worldwide scale. The Paris agreement has set ambitious objectives to manage the ecological transition required to achieve carbon neutrality by 2050. In France these objectives are expressed in the national low-carbon strategy.

Through the action it is taking to adapt the power transmission network and ensure more efficient flow management, RTE is positioning itself to enable France to meet the targets set in the PPE, which aims to halve national emissions from electricity production by 2035, to around 10 million tonnes of CO_2 equivalent.

As network operator, RTE is also taking steps to intensify this effort by improving its own industrial footprint.

(1) www.concerte.fr.

— RTE'S ACTIONS AND COMMITMENTS

RTE continued its efforts in 2020 to mitigate the impact of its emissions and adapt the company's activities to climate change.

4.4.1.1 Reducing greenhouse gas emissions (GHG)

RTE's total GHG emissions in 2018 amounted to 1,069,000 tonnes of CO_2 equivalent (scopes 1, 2 and 3). The main types of emissions were electricity losses from the network (572,000 tonnes of CO_2 equivalent or 53.5% of RTE's total GHG emissions), emissions from industrial and office buildings (201,000 tonnes of CO_2 equivalent or 18.8% of the total), and SF_6 discharge (138,000 tonnes of CO_2 equivalent or 12.9% of the total).

In 2020, the GHG indicator, which represents the total electricity losses and SF_6 discharge expressed in tonnes of CO_2 equivalent, was 703,000 tonnes of CO_2, compared to 710,000 tonnes of CO_2 in 2018 and 734,000 tonnes of CO_2 in 2019.

Due to changes in the electricity generation fleet and electrification of certain uses that are highly dependent on fossil fuels, the electricity transmission network and subtransmission networks need to evolve.

RTE makes investments every year to adapt its infrastructures to the energy transition, and has thus contributed to lowering emissions by the electricity system.

In 2020 RTE launched the "low-carbon trajectories" project which aims to set a target reduction for RTE's own emissions in the medium term. RTE also wants to estimate its contribution to carbon neutrality beyond the scope of its own emissions, through integration of lower-carbon generation facilities and electrification of uses.

4.4.1.1.1 Energy efficiency action plans for electricity losses

Some of the electricity carried by the transmission network is lost between the production site and the place of consumption due to the "Joule" effect which converts some of the electricity transiting through a conductor (overhead cable, underground link) into heat. In 2020 these losses totalled 10,700 GWh, or 2.31% of total injections (from production sites and imports).

The GHG impact of these electricity losses results from the generation of extra electricity to compensate. The emissions related to these losses are calculated as the product of two factors: the quantity of losses, and the emissions associated with production of 1 kWh of electricity in France (the emission factor used in the ADEME's *base carbone* database).

In 2020, electricity losses from the network thus led to emissions of 583,000 tonnes of CO_2 equivalent.

The factors influencing the scale of electricity losses (consumption level and location, generation plans, international transit, etc.), are beyond RTE's control, and as a result RTE has no levers to influence the rate of losses from the transmission network. Nevertheless, RTE always seeks to contain the quantities of electricity losses, for both economic and environmental reasons: they account for over 95% of RTE's energy bills and 54% of its GHG emissions. Adjustment of operating plans to reduce losses is a point of constant attention by RTE's operators, and their actions reduce the annual volume of losses by around 1.5%.

The target set by the CRE for electricity losses is 2.1% or less for each year until 2021. In 2020, electricity flows were also affected by the COVID-19 pandemic. The downturn in consumption was accompanied by a downturn in generation at nuclear sites, and an increase in imports from Spain. Short-distance flows were thus replaced by long-distance flows, and this had the effect of increasing the rate of electricity losses across the transmission network.

Since 1 October 2018, RTE has included an internal CO_2 price to calculate electricity losses and redispatching costs in its network development decisions. RTE thus values CO_2 emissions by the electricity system at €57 per tonne of CO_2 equivalent in 2020, and €100 per tonne of CO_2 equivalent in 2030. This trajectory reflects ambitious CO_2 reduction scenarios at national and European level, favouring the network adaptation and renewal strategies that make the most effective contribution to cutting emissions.

4.4.1.1.2 Actions for energy efficiency in substations by IoT consumption measurements

Consumption by ancillary units of substations is estimated to account for 3% of RTE's total electricity losses. To control these losses, RTE has introduced a plan for remote measurement of energy consumption by the ancillary units at substations that are new or being rebuilt/extended. The data are collected remotely by RTE via IoT(1) communications. The

(1) Internet of Things

Pivoz-Cordier 400 kV substation was the first site to be equipped.

4.4.1.1.3 Energy efficiency in buildings

Following the publication of the office eco-efficiency decree resulting from France's ELAN law, RTE began an action plan in the Nancy and Nantes regions, and at its head office in La Défense. Feedback collected in early 2021 will be used for the action plans for the other regions (Lille, Lyon, Marseille, Paris, Toulouse).

An ecodesign guide, including required energy performance levels for new or renovated buildings, has been written and will be distributed from 2021.

When its data storage bays were replaced, RTE reduced electricity consumption by its data centres by 8%.

4.4.1.1.4 SF_6 action plan

The principal types of direct emissions by RTE relate to leaks of SF_6, a powerful GHG with a global warming potential that is 23,500 times stronger than CO_2. This synthetic gas is used in the electricity industry as an insulator, especially for PSEM which can now be very compact, and overhead circuit-breakers. SF_6 discharge may be caused by accidental leaks from facilities, the age of facilities, maintenance operations or dismantling of equipment at the end of its life.

RTE has applied a proactive policy to cut SF_6 leaks since 2004, and this policy will soon be amplified in view of the growing environmental issues. RTE's objective is to bring annual emissions below four tonnes by 2025 and maintain that level in the long term. With the plan for PSEM described in the SDDR, RTE is focusing on a comprehensive programme to improve environmental performance by its facilities. The basic programme concerns replacement of PSEM, conversion to indoor substations, development of solutions to facilitate certain maintenance operations, and finally reinforced maintenance operations for all facilities (faster plugging by reducing the time between detection and treatment of any leak, targeted upgrading). The cost of the plan is estimated at a total €630 million over the horizon covered by the SDDR (2020-2035), plus €40 million for the anti-air pollution policy.

In 2020, SF_6 emissions totalled 5.09 tonnes, or 119,615 tonnes of CO_2 equivalent. 2020 saw the opening of RTE's first 63 kV PSEM to be insulated with an alternative gas (the Grimaud substation, insulted with G^3), and SF_6 discharge by these substations was controlled. Regarding circuit-breakers, the initial feedback on the four SF_6-free circuit-breakers installed a decade ago in RTE's network for a R&D project has paved the way for pre-industrial installation of around 50 such circuit-breakers in the next few years. RTE's objective is to support development of these new technologies with a view to equipping all its installed facilities (circuit-breakers account for around one tonne of SF_6 discharge each year).

RTE constantly measures and locates its reserves of SF_6 and tracks the volumes installed in all facilities containing SF_6 and the related flows (e.g. gas purchases, gas inflow into the equipment, discharges and emissions, monitoring of regeneration and destruction processes). The total installed mass in facilities containing SF_6 was 568 tonnes in 2020, which was a year when RTE reinforced its commitments to reduce installation of SF_6-insulated substations to the absolute minimum. The new modular indoor substations are now available in 63 kV, through a framework contract. Benchmarking is currently in progress for the forthcoming new technologies for PSEM. Finally, the engineering teams work to optimise the available space/advanced technology balance on a case-by-case basis, to help reduce the installed mass of SF_6 in RTE's facilities.

The European Commission announced that the F-Gas regulation would be revised by the fourth quarter of 2021 to continue reducing SF_6 emissions. The Commission has ordered a study to assess the availability of alternatives to SF_6 for medium- and high-voltage electricity equipment, and in 2020 it launched two public consultations about the roadmap and the content of the revision. RTE has contributed to this via the GIMELEC in France, and ENTSO-E at European level, notably giving its view of the date when alternatives to using SF_6 will be available, for each voltage level.

4.4.1.1.5 Low-carbon employee mobility

In 2011, well before the enactment of France's energy transition law for green growth in 2018, RTE launched a mobility plan to help its employees to travel "better and less", whether for business travel or daily commuting. The aim of the plan is to reduce environmental impacts (travel is the sixth-largest source of RTE's GHG emissions, accounting for 2% of emissions).

The company is continuing this engaged action:

- it has introduced a sustainable mobility grant, which replaces the kilometre-based indemnity for cycling. Through this new annual grant RTE covers some or all of the travel costs incurred by employees, for a broader range of transport modes: cycling (by electric or regular bikes), car sharing, and public passenger transport;

- to encourage safe cycling, the cyclists receiving the sustainable mobility grant must now sign "RTE's Cyclist Safety Charter", in which they promise to use a well-equipped bicycle and to wear the safety equipment recommended by RTE. Each signatory of this charter has been issued with a safe cycling kit containing a cycling helmet, a high-visibility jacket and a pair of gloves;
- RTE has had a teleworking agreement since 2012 and 20% of its employees were working from home one or two days a week at the start of 2020. Thanks to this experience, the switch to teleworking for all possible functions during the two national lockdowns was very smooth.

4.4.1.1.6 Raising employee awareness

In 2020 RTE designed an e-learning course on the topic of climate change, to build employee awareness of climate change issues and the importance of their own individual actions. This course will be rolled out to the whole company in early 2021.

4.4.1.1.7 Commitment through the Alumni for the Planet initiative

RTE supports Alumni for the Planet, an initiative launched on 12 November 2020 by representatives of French higher education, and the worlds of business and science. This initiative aims to create and develop a network of graduates of a variety of business/engineering schools and universities who all share the same commitment to action in favour of the climate and the environment.

4.4.1.2 Adapting to climate change

Weather events are likely to become more and more serious, with consequences for the electricity supply-demand balance (affecting the level and zones of consumption, with generation facilities impacted by wind, heat and rainfall conditions), the infrastructure and the network. These impacts are expected to become more significant as global warming advances.

Since RTE invests in installations intended in some cases last for decades, it is crucial to identify any weaknesses in the infrastructure, links and substations, particularly sensitivity to temperature and flooding. RTE thus decided to launch a Resilience project to identify and assess these weaknesses, based on 2050 climate scenarios developed with France's national weather office Météo France from assumptions established by the Intergovernmental Panel on Climate Change.

The work done in 2020 defined the calculation methods for certain pilot facilities, with the goal of generalising these calculations to the entire infrastructure from 2021.

To cope with heatwaves, a new "hot weather plan" was introduced in the summer of 2020 to improve management of the risks for sensitive equipment in the electricity substations and overhead lines. 1,300 facilities have been classified as sensitive to hot weather in France: when the air temperature exceeds 35 °C, transit through these overhead lines must be limited. The goal is to maintain regulation safety distances from the environment, in order to ensure safety for people and property, while keeping the consequences for customers and worksites to the minimum. At the height of the summer heatwave on 8 August 2020, transit capacities were reduced for 1,012 lines, with only limited consequences for the power supply to customers.

4.4.2 PRESERVING RESOURCES (CIRCULAR ECONOMY) AND BIODIVERSITY

— DESCRIPTION OF THE CHALLENGE

Preserving resources and protecting biodiversity are natural concerns for a major infrastructure operator.

RTE is taking a proactive approach to reducing its environmental impacts and preventing pollution from its activities, by introducing new methods and building on training and awareness-raising provided for every employee.

— RTE'S ACTIONS AND COMMITMENTS

Environmental action at RTE follows a general environmental policy defining its ambitions, and an environmental management system involving a programme for action at national and regional level called the "Environmental management programme".

RTE has held ISO 14001 certification for all of its activities since 2004 and has an audit performed annually by an AFAQ(1)-accredited organisation. The most recent renewal audit by AFNOR(2) Certification in 2019 concluded that there were no points of non-compliance. RTE's certification was confirmed in the follow-up audit of 2020, in recognition of RTE's continuous improvement policy for environmental action.

(1) Association française pour l'assurance de la qualité.
(2) Association française de normalisation.

Given the scale of environmental challenges, RTE has been taking steps since 2017 to incorporate **ecodesign** into its environmental management system, so that environmental factors are paid more attention right from the design stage of its projects, policies and purchases under a full life-cycle approach. The chief aims of this approach are to reduce GHG emissions, increase the surfaces protected and developed to promote biodiversity, and cut the tonnage of materials extracted.

This approach applies to all the company's activities: physical network development, internal policies and recommendations, prospective studies, and purchases. Network actors will be able to add an environmental criterion to the existing technical and economic decision-making criteria.

After experiments conducted in 2018 and 2019, RTE finalised instruments in 2020 that are useful for all its functions. The following practical developments were achieved:

- raising awareness of life-cycle impacts in the energy transition: assessment of raw material consumption under the SDDR, and preparation for estimating the footprint of the energy scenarios in the generation adequacy report by the horizon of 2050;
- continuation of the national biodiversity strategy begun in 2012, using life-cycle analyses for offshore substations and overhead and underground lines, to inform future design choices;
- encouraging suppliers to adopt the same approach, via RTE's framework contracts, requiring applications for environmental assessments, and a "best-bid" selection criteria based on life-cycle analyses.

Plant and animal life and the landscape

After joining the inter-business Act4nature initiative in 2018, RTE signed up to the "Business for Biodiversity Act4nature France" commitments in December 2019 with an **action plan for the 2020-2024 period**. This action plan was also filed with the Act4nature International alliance. RTE thus clearly displays its commitments in relation to nine areas: vegetation management beneath power lines, reducing the use of chemical weedkillers, protecting birdlife, promoting urban biodiversity, identifying impacts of the company's activity on biodiversity, stakeholder relations, employee training, developing indicators, and supplier relations.

— Protecting birdlife and installing power line markers

RTE installs devices to limit the impact of its facilities on birds. The company's bird protection policy concerns development, engineering and maintenance worksites and funds the installation of markers and other devices such as spikes, anemometers, nesting platforms and artificial nests, auditory bird scarers, and decoy birds of prey on overhead power lines, to reduce the risks of collision and electrocution. RTE has set itself targets in this policy for eliminating the most sensitive points in terms of bird collision risks.

Line markers are visual devices installed on conductors and earth wires to make them more visible, and therefore limit the risks of collision for birds. So far, about half of the total 728 sensitive points have been equipped, and around 2,400 km of overhead lines carried markers to protect birds by the end of 2020. RTE currently spends an average €500,000 every year putting markers on its existing lines, in addition to equipping newly-created facilities. Around 13,000 further devices are also installed on pylons to limit the risk of bird electrocutions and any resulting short circuits.

Finally, RTE is a member of France's national birdlife committee (CNA)[1] which involves associations, Enedis and the Ministry for the Environment. The CNA is a forum for dialogue to prioritise actions to protect birdlife around power lines. The CNA is active across France, sometimes through regional committees.

Interactions between birds and RTE's activities is also the subject of research and prospective action. RTE is engaged in an operation concerning wild ospreys, and has conducted camera-based studies of the way birds behave around electricity lines.

Developing biodiversity below the lines

20% of the land underneath RTE's power lines is in natural zones, essentially forests and marshland; 70% is in agricultural areas, and 10% in urban areas. In the linear forest clearings, RTE principally manages vegetation by an industrial practice of rotary mulching, but this method does not always take account of natural species' biological cycles.

Two RTE policies are making the land below the lines more biodiversity-friendly. Under the biodiversity policy, the company is introducing biodiversity-friendly land management in partnership with natural space managers and biodiversity actors. By the end of 2020, a total 1,235 hectares of land had been made biodiversity-friendly. Under the vegetation policy, a

(1) Comité national avifaune.

selective cutting method is applied, in partnership with hunting federations.
Following the Europe-wide LIFE Elia-RTE project undertaken with its Belgian counterpart, RTE decided to conduct a pilot project to prepare the design basis for industrial rollout of alternative vegetation management.

The BELIVE project, whose name stands for Biodiversité sous les LIgnes par la Valorisation des Emprises (Biodiversity below the lines by enhancement of the occupied areas), incorporates the principles developed in the LIFE project to place electricity lines in "green corridors". The objectives are to improve integration of facilities into the surrounding countryside, encourage biodiversity and good relations with third parties, and reduce maintenance costs while preserving electricity network safety.
BELIVE is an operational R&D project being undertaken in the Ardennes regional park in north-east France, and areas in the west and south-east of France. Landscaping will be applied to 200 hectares of land selected on the basis of economic, societal, environmental, legal, and technical criteria, to help RTE determine the extent of the human and financial resources needed to apply this action at national level. In each area concerned, RTE sets up measures to maintain low vegetation under the power lines, in contact with local actors.
To follow on from this project RTE intends to introduce a new alternative vegetation management policy in 2021 that will position the company as a committed actor of the energy and ecological transition, and enable it to develop virtuous, industrially and economically sustainable vegetation management methods in anticipation of possible future restrictions on rotary mulching.
The sites where RTE actions have already put alternative management into use have demonstrated the technical feasibility of using this type of vegetation management, and its benefits for the environment and the company.

— Establishing and promoting urban biodiversity

RTE reaffirmed its commitment to promoting biodiversity by renewing its partnership with the nature protection association Noé for the 2019-2021 period. RTE is thus supporting development at office sites of green spaces that are managed under biodiversity-friendly and wildlife-friendly principles.

RTE continued in 2020 to raise awareness in its employees who are in charge of this management approach, notably through appropriate maintenance recommendations. To promote social integration, RTE has signed maintenance contracts for these green spaces with organisations that work to integrate people with disabilities into the labour market (ESATs[1]).

The target of completing work on 15 sites was achieved by the end of 2020, and work continues on other sites for 2021.

Knowledge and protection of the marine environment

RTE is the entity in charge of connecting France's offshore wind farms, and several undersea electricity interconnectors. Starting with the Dunkirk wind farm project, the connection facilities under RTE's responsibility include the offshore substation. To complete these projects while protecting the environment at every stage of the offshore facilities' life-cycle, RTE is working with partners in the marine world to develop relevant knowledge. It implements the avoid-mitigate-offset-monitor (ERC-S[2]) principle and supports relevant skill development for this type of work.

— Identification and anticipation of the impacts and potential benefits of RTE's activities for marine biodiversity

RTE is conducting several research and development projects with various scientific partners, to study and control the potential ecosystem impacts of underwater electricity cables. These projects are ongoing and pursue three principal aims:

- Studying the potential effects of installation and operation of undersea electricity cables:
  - The OASICE project studies how construction and operation of new undersea electricity cables affects the marine environment, using scallops as bio-indicators. A large amount of data was collected in 2019 and 2020 during the installation of the IFA2 undersea interconnector, and are now being analysed.
  - The SPECIES project, coordinated by France Énergies Marines, France's national institute for research on renewable marine energies for the energy transition, studies how undersea electricity cables laid on or buried in the seabed affect the benthos (the community of organisms that live on the seabed), looking particularly at the reef and reserve effect, and the effect of electromagnetic fields. Initial results published in 2020 show that the behaviour of young European lobsters is not affected by the magnetic field emitted by undersea cables.

(1) *Établissement et services d'aide pour le travail.*
(2) Éviter, réduire, compenser – suivre.

- Characterising the dynamics of the environments where offshore floating and fixed-foundation wind farms and their connection to the network will be located:
  - Three projects in partnership with France Énergies Marines aim to better characterise marine ecosystems and their dynamics in relation to the social sphere (the APPEAL project), the physical environment (the DUNES project), and infrastructure supports during the open water colonisation phase (the ABIOP+ project). These projects are developing understanding of the initial state of the environment and the species dynamics, and the information is used to model future developments according to environmental modifications. A PhD on the eco-systemic approach to the impact of floating wind farms, undertaken as part of the APPEAL project, was completed in late 2020.
  - The ECOSYSM-EOF project, launched in 2019, is studying a range of high-frequency observation instruments that are necessary for acquisition and documentation of knowledge about the current state and changes in marine ecosystems around the floating wind farms in the Gulf of Lion (in the Mediterranean). These technical instruments will subsequently be used to study the potential effects of operating these infrastructures.

- Exploring innovative solutions:
  - The BIOMIM – *Lignes de vie marine* (marine lifelines) project concerns bio-inspired solutions for offshore wind farm connection. The objective is to combine a solution inspired by nature with a marine infrastructure that is conducive to regeneration of ecosystems.
  - RTE wants to develop more than just the electric dimension of its platforms: it is keen to make them an instrument for co-uses, putting the information and innovation they produce to use for local areas and users of the sea.

- RTE is also a participant in two general projects:
  - The "cumulative effects" scientific interest grouping, which studies the eastern English Channel under a regional approach, to understand the cumulative effects of maritime activities (extraction of marine aggregates, renewable marine energies, immersion of sediment, fishing).
  - The COME3T national network of experts, formed to provide expert knowledge, analyses and recommendations on environmental and socioeconomic issues relating to renewable marine energies.

— Applying the (ERC-S) principle to protect the marine environment

As a responsible company with a public service mission, RTE develops its projects in accordance with the ERC-S principle. The main actions implemented include the following:

- In 2019, RTE and IFREMER updated a summary of knowledge about the impacts of undersea electricity cables during the construction/installation and operation phases. No significant potential impact has been detected, and the knowledge collected indicates that these cables' ecological effects relate to environmental issues typically inherent to any artificial structure installed in the seabed (modification of the natural substratum), and to more unusual questions concerning electromagnetic fields and cable warming. In 2020, RTE engaged consultants CREOCEAN to consolidate knowledge of the impacts of offshore substations.
- RTE is building on the ERC-Smeasures stipulated in the connection and interconnection permits already granted, complemented by experience gained from implementing the environmental commitments made for offshore work.
- RTE is adapting its systems for application of the ERC-S principle to the specificities of the undersea world, by updating the requirements for waste processing and handling offshore environmental emergencies. In 2020, RTE worked with the French Government's energy and climate department to establish specifications for a report on the current state of the environment; this is a key stage in the environmental assessments of future offshore wind farm projects.

Raw materials, the circular economy and waste management

— Increased traceability in raw material consumption

As well as restraining energy consumption, RTE aims to control and reduce its consumption of all kinds of resources. To achieve this, the company is improving the traceability and measurement of its consumption of raw materials, particularly:

- Consumption of metals:

Since 2017, RTE has worked to improve quantification of the principal metals found in the current electricity network (steel, aluminium, copper and zinc) and expected consumption of those metals, in order to manage its assets and contribute to preservation of resources. Studies conducted until 2020 determined that the RTE network contains 25 million tonnes of concrete, 3 million tonnes of steel, 96 thousand tonnes of copper, and 66 thousand tonnes of zinc. Additional studies have been launched to relate these

quantities to the challenges (and solutions) of criticality management and performance improvement in a circular economy. For greater control over the traceability of materials, an experimental Raw Materials Pass accreditation system has been tested on a few contracts, to collect information from upstream value chains about the geographical origin, recyclability, types and volumes of raw materials used, and secondary materials content in the materials concerned. This initiative is in line with a general trend observed at European TSOs.
Work to construct a prospective view of raw material consumption has now been incorporated into the environmental analysis section of the generation adequacy report for 2050: analysis of the report's various scenarios will include materials consumption results alongside standard life-cycle analysis indicators.

- IT, telecommunications, and paper consumption:

RTE takes steps to promote more sustainable use of digital equipment, including purchasing ecodesigned hardware, extending the operating life of equipment, sharing resources, dematerialisation, virtualisation, and reconditioning of unused equipment.
RTE also raises employees' awareness of environmentally-friendly practices that can reduce use of consumables, notably via the company's profit share agreement (which includes an indicator concerning the volume of printing), and challenges to reduce e-mails. RTE is encouraging use of virtuous consumables such as recycled paper, which has become the norm at the head office.
For software, RTE promotes open-source development, with code reuse and application of software ecodesign rules. Good information system planning is also a factor of optimisation, because it avoids duplication of functions in different applications.

— Circular economy and waste management

In the spirit of the law of 10 February 2020 on action against waste and the circular economy, RTE is broadening application of circular economy principles in its activities. In 2020:

- RTE renewed its monitoring and management system for waste produced at its own premises and on its worksites by contractors. The new system will be able to incorporate expected future developments, including the French Government's "Trackdéchets" system to trace dangerous waste;
- a contract for electronic and computerised command and control equipment was set up to build up repair stocks: this reduces production of waste and makes it possible to repair prior-generation systems rather than entirely replacing the equipment.

When waste is produced, RTE encourages recycling as far as possible and subsequent reuse by any method, including for producing energy. When new facilities or buildings are under construction, RTE develops eco-sites, which achieve higher recycling rates.

Most of RTE's waste (nearly 85% in 2019) is inert waste such as excavated earth. In 2020 close to 90% of this waste was recycled, most of it being sent to fill cavities at quarries.
To make the circular economy a key concern for everyone at RTE, the waste recycling rate has been one of the criteria included in the company's profit share process since 2018.
The overall recycling rate for RTE's own waste in 2020 was 90.4%.

Anti-pollution action

RTE takes a proactive approach to reducing its environmental impacts and preventing pollution caused by its activities. This strategy includes preventive action such as employee training or and installation and upgrading of containment systems beneath high-risk facilities, and curative action such as provision of anti-pollution resources and procedures for intervention in the event of an environmental emergency.

— Action against water and ground pollution by oil

RTE operates facilities that contain oil (power transformers, ancillary service transformers, underground oil-filled links, etc.). As these facilities are leakproof, they pose no risk for the environment in normal circumstances, but they can be a source of damage to soil and water if an accidental oil spill happens. RTE is thus ready to intervene and prevent any risk of pollution if such an incident arises. Dedicated processes exist to identify facilities at risk, so as to improve control of accidental pollution, and the employees concerned are trained to handle such incidents.

In 2020 there were two significant developments:

- the volume of oil leaked into the environment from the "Substations" category increased, due to a large number of accidental events (fire or spillage) at power transformers, in addition to problems with instrument transformers in very hot periods. One

principal event accounts for 86% of the leaks[1] attributable to the "Transformers and substations" category;

- the number of leaks from underground links doubled compared to 2019, although the total volume of oil discharged into the environment by these facilities decreased.

These developments show the importance of monitoring and compliance programmes for containment systems in high-voltage equipment, replacement of instrument transformers, and monitoring and replacement programmes for underground oil-filled links with a high risk of leaks.

ACCIDENTAL OIL LEAKS	2017	2018	2019	2020
Unrecovered oil – underground links (m³)	19.56	1.36	4.85	2.36
Unrecovered oil – transformers and substations (m³)	5.09	5.84	14.49	44.40
Recovery rate (%)	57.33	84.64	89.30	54.17

— Action against water and ground pollution by PCBs

Some of RTE's facilities may contain polychlorobiphenyls (PCBs). To honour its commitment to eliminate or decontaminate all its PCB-polluted equipment by 31 December 2025, RTE has a specific plan that was approved by a ministerial decision of April 2014, and amended in 2019.

At 31 December 2020, RTE's specific plan is 91% complete (147 of 162 facilities have been treated), and the amendment to the plan is 87% complete (33 of 38 facilities treated).

Execution of this plan is progressing in line with the forecast schedule, although two operations under the amendment were deferred to 2021 as a result of the COVID-19 pandemic. This deferral will not affect achievement of the objective of treating all RTE equipment containing PCBs by the target date of 2025.

— The "zero-phyto" objective

The phytosanitary products RTE uses at its substations are essentially weedkillers with active ingredients that destroy vegetation. RTE made commitments under the 2010 Ecophyto plan to monitor and analyse the use of such products, and reports annual figures in order to confirm that the weeding work done complies with regulations.

To reduce its environmental impact, RTE has experimented with differentiated management of green spaces and alternative weeding practices. The results of those experiments provided a basis for a strategy, drawn up in 2018, to end the use of phytosanitary products at all its substations.

Consequently, since 2018 all RTE's office sites have been maintained without weedkillers, and since 2019 all new substations in development include features to make them compatible with "zero-phyto" maintenance.

In 2020, five of the seven regional substation maintenance contracts were renewed on a basis that includes obligations to use alternative weeding methods at sites of less than 5,000m².

Procurement notices have been issued for contracts for research and work on "zero-phyto" adaptations with a view to converting existing sites, and project teams have been designated to roll out the "zero-phyto" strategy.

Currently, RTE maintains 2,300 hectares in its electricity substations, including 1,400 hectares where phytosanitary products are used, which will be progressively converted. The conversion rate of sites to the "zero-phyto" policy was 20% at the end of 2020. The employees working at electricity sites that already follow this approach stress the benefits in terms of quality of life at work.

Professional development for all employees

As environmental campaigns require commitment from its employees, RTE offers professional development action and materials in the form of methodological guides, awareness-raising, special campaigns and training.

(1) The real recovery rate for this event will be known in February 2021 after the remote tank has been emptied.

RTE's environmental professionalisation group maintains and develops skills in this field by offering specific training appropriate to the company's environmental issues: understanding the impacts, waste management, third-party safety and biodiversity. This group makes sure that the technical training available in every business function incorporates these aspects. It monitors all the company's environment-specific training and prepares new courses if necessary. In 2020, an e-learning course was produced to promote ecodesign practices.

RTE also develops training courses dedicated to the marine environment, in partnership with external professionals and associations. A course on coastal biodiversity is offered, run in conjunction with the Armorique national park.

RTE made a commitment under the "Business for Biodiversity – Act4nature" initiative to double the number of employees who received elementary training in biodiversity by 2022, and to increase employee participation in operations to raise awareness of biodiversity issues.

Between 5 and 11 October, RTE participated in the 10th Fête de la nature, an annual celebration of nature. Around 40 events were held on the theme of "Sowing the seeds", attended by nearly 800 people (members of the public, school groups and employees).

Face-to-face training decreased in 2020 as a result of the COVID-19 pandemic, but many employees followed (shorter) distance training courses, particularly online training about transporting dangerous materials.

ENVIRONMENTAL TRAINING	2017	2018	2019	2020
Number of hours of environmental training (excluding substation maintenance training)	7,722	8,997	7,758	5,777
Number of employees trained (excluding substation maintenance training)	533	600	588	1,284

4.5 SUPPORTING CUSTOMERS AND LOCAL AREAS

4.5.1 NEW USES OF ELECTRICITY

— DESCRIPTION OF THE CHALLENGE

Uses of electricity are evolving fast, as reflected in the rise of collective and individual electric mobility, smart buildings, the digital industry, power storage and charging management for electric appliances. RTE is significantly involved in these fields, so it can plan ahead for changes and take steps to incorporate them into the electricity system. Three major areas are concerned: electric mobility, the emergence of datacentres, and hydrogen.

— RTE'S ACTIONS AND COMMITMENTS

RTE is engaged alongside the actors of mobility and new electricity uses to study the new needs of businesses and individuals and adapt the electricity network accordingly.

In 2017 RTE joined AVERE-FRANCE(1), an association for development of electric mobility, for a collective analysis of the issues raised by the arrival of 15 million electric vehicles in the electricity system in the next fifteen years.

The results, published in May 2019, are informing public debate about the interactions between France's energy and mobility roadmaps. The analysis was established in conjunction with all actors in the sector and assesses electric mobility behaviours, its contribution to the energy mix, and the economic and ecological impact. This project has strengthened the links between RTE and actors in the world of mobility (automakers, start-ups supplying solutions for management of battery charging). It also opened up a space for discussion of the basic assumptions that shape the expanding use of electric vehicles.

(1) Association nationale pour le développement de la mobilité électrique.

The main results show that:
- the electricity system will be able to absorb growth in electric vehicle use provided that charging is well managed, for example by locating vehicle charging points near plants producing intermittent renewable energies;
- an increase in electric vehicles will bring major ecological and economic benefits, whatever the underlying assumptions;
- electric mobility is a flexibility factor for management of the electricity network.

Supporting datacentre installation

The growing number of datacentres is an important development for RTE. This business sector needs a high-quality electricity supply and has much to gain from developing in a French national electricity system that is already largely carbon-free. New datacentres are being set up at quite a pace, particularly in the Paris region and around Marseille, and RTE is taking particular care to plan ahead to support the arrival of prospective new users, especially hyperscale datacentres. These are a new form of datacentre that generally need a very powerful electricity supply above 50 kV, entailing direct connection to the high-voltage electricity network.

Against this background, RTE is continuing its partnership with the professional association France Datacenter, to understand and adapt to new customers' needs. This translates in practice into frequent presentations by RTE at regional conferences, and the development of tailored support measures for customers.

Hydrogen, an energy that serves network flexibility and economic development

Over the last few years, hydrogen has carved itself a place in the French energy landscape, as a vector for the energy transition. Production of hydrogen by electrolysis, i.e. turning electricity into gas, is 93% carbon-free and, by RTE's estimations, can achieve an annual 6 million tonne reduction in CO_2 emissions in France by 2035.
To meet the governmental ambitions for hydrogen deployment published in 2018 and reinforced in 2020, RTE has drawn up a report entitled "The transition to low-carbon hydrogen in France" to analyse and identify the value of the services electrolysers can provide to the power system.

In the medium term, low-carbon hydrogen offers a way to reduce emissions by the industrial sector, by replacing the current fossil fuel-based hydrogen, as provided for by law and set out in the PPE. It also creates opportunities to reduce emissions by the transport sector (heavy transport, as a substitute for petroleum fuels) and gas networks. In the long term, developing the production and storage of low-carbon hydrogen can provide the electricity system with an additional flexibility solution, and that is a particularly attractive benefit in scenarios assuming a high share of renewable energies.
In all cases, the first step is to significantly increase the volumes of low-carbon hydrogen production in France over the next ten years.
This development will be largely based on electricity, via the electrolysis of water. Large- scale development of electrolysis will be based on the growth in production of carbon-free electricity planned under the PPE Plan, and will result in additional electricity consumption. Its consequences, and the opportunities it offers, will depend on how electrolysers are operated. The technical conditions, emission reduction performance, cost of processing and economic balance depend largely on the same factor.
RTE is a partner in the Jupiter 1000 demonstrator project at the Grand port maritime de Marseille site, at Fos-sur-Mer on the Mediterranean coast. Installation is being conducted by a consortium headed by GRTgaz, and the aim of the project is to test the injection of hydrogen produced with electrolysis and synthetic methane into the gas transmission network.

RTE is also linked to several regional industrial projects:
- the Hygreen Provence project, in the south-east of France, led by the Durance-Luberon-Verdon urban area, to couple photovoltaic generation and hydrogen production and storage;
- the Zero Emission Valley project, in the Auvergne-Rhône-Alpes region, which aims to develop a regional hub for carbon-free hydrogen fuelled mobility, deploying 1,000 vehicles and 20 charging stations by 2023;
- the H2V59 project, managed by a company called H2V, which involves creating a hydrogen production plant at a site that belongs to port management entity Grand port maritime de Dunkerque.

4.5.2 GREATER SENSITIVITY TO THE QUALITY OF ELECTRICITY

— DESCRIPTION OF THE CHALLENGE

France's public electricity transmission network was originally built in the second half of the 20th century under the national policy to equip the whole country. It serves the entire interconnected area of mainland France today, but now needs adapt to modern lifestyles, for example through reinforcements to cope with peri-urbanisation or transferring equipment underground in areas where land is in short supply, while also beginning a crucial phase of upgrading for the oldest parts of the network. Ensuring a secure power supply is a key issue for development of the economy, and particularly important for attracting businesses in which electricity quality is vital (e.g. datacentres).

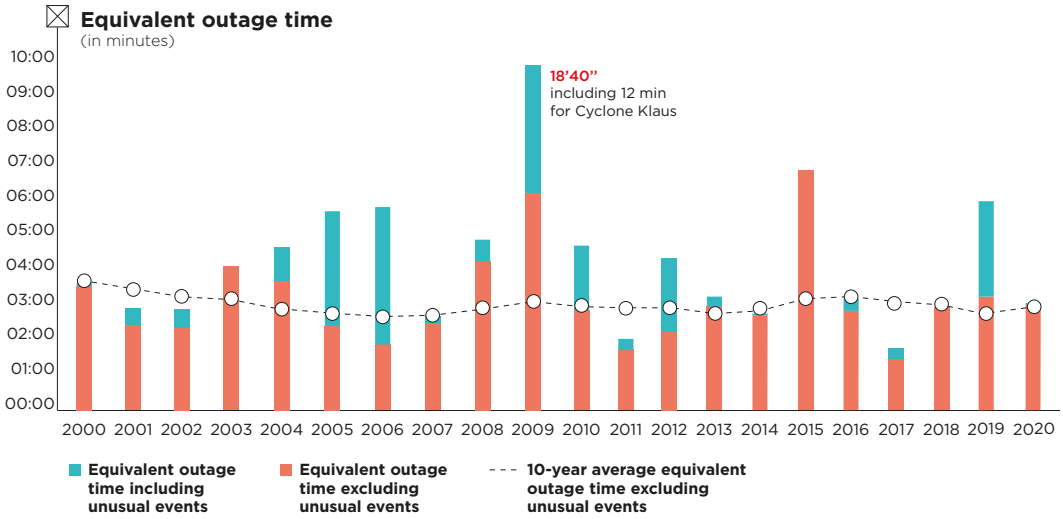
Furthermore, society is becoming increasingly sensitive to power cuts. Any break in power supply is considered very costly for the community, due to the resulting disruption of industrial and professional work, disturbance to transport services, etc.

— RTE'S ACTIONS AND COMMITMENTS

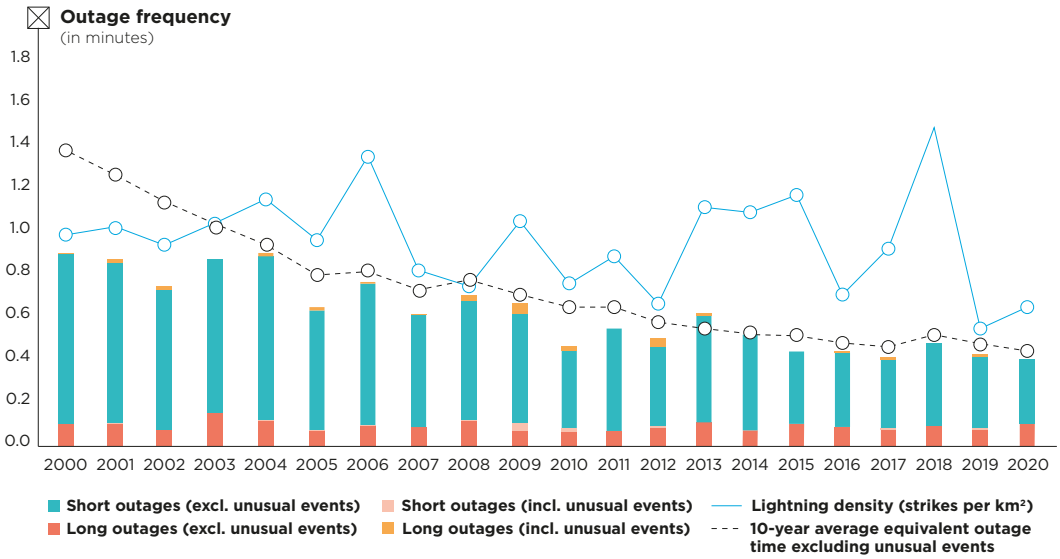
RTE is taking action to address this issue, with three-year commitments concerning the quality of electricity for customers in the consumers category.

RTE uses several indicators to monitor and report on its performance:

- Equivalent outage time is an index reflecting the scale of power cuts, calculated as the ratio of undistributed energy to the average power distributed during a year. In 2020, the equivalent outage time totalled 3 minutes 12 seconds, or 3 minutes and 4 seconds excluding unusual events. This corresponds to 2,287 MWh of undistributed energy, or 2,201 MWh excluding unusual events. Excluding unusual events (fires in the Martigues area in August), the equivalent outage time for 2020 was consistent with the average for the ten previous years. The large number of storms in the early part of the year had relatively limited consequences.



- Outage frequency is the average number of unplanned power cuts per site during the year. It is broken down into long-outage frequency and short-outage frequency. The outage frequency for 2020 was the best ever achieved by RTE: 0.35, or 0.34 excluding unusual events (73% were short outages[1]).



- RTE has made a commitment to keep outages below a limit set by reference to the history of each site. Although the thresholds have gradually risen, the results remain good: at 31 December 2020, these limits were 92% respected for distributors and 93% for industrial customers. RTE has also made a commitment to consumers to keep the total duration of outages below a certain limit for each three-year period. At 31 December 2020, these limits were 97% respected for industrial customers.

RTE is also committed to minimising the disturbance caused to customers by scheduled work that is essential to keep facilities in good operating order. Work on the network is always scheduled in liaison with each customer, so that any constraints and opportunities relating to its specific needs can be properly addressed.

For industrial consumption sites, the commitment of no more than three days of pre-scheduled unavailability in three years for each connection was respected in 73% of cases at 31 December 2020. When RTE was obliged to exceed this threshold due to more complex work, this was done with the customer's consent, generally during a break in their activity or when an alternative power supply was available, such that the customer's business was unaffected and surplus costs were prevented.

At the vast majority of production sites, outages are sufficiently long for network maintenance operations to be completed without affecting output. For other sites where this is not possible (e.g. renewable energy plants), scheduled interruptions are subject to a commitment that they will not exceed five days in three years.

For distributors, the schedule is coordinated between network operators such that work can be done without interrupting the electricity supply to end customers. To simplify and streamline execution, scheduling is now shared with Enedis via a common information system that was rolled out in early 2020.

4.5.3 STRONGER REGIONAL AND LOCAL AMBITIONS

— DESCRIPTION OF THE CHALLENGE

Economic development and planning is changing in France, with local authorities having greater competence in matters relating to the energy transition. To support and facilitate these changes, RTE, as guarantor of a secure power supply and inter-regional electricity solidarity, is adapting and taking action to use its expertise for the benefit of local authorities. With the ambition of being a partner in their performance, RTE has set itself the goal of structuring a set of services to support economic appeal and employment, the energy and

(1) Power cuts lasting less than three minutes.

inclusive transition, the ecological transition and quality of life.

— RTE'S ACTIONS AND COMMITMENTS

RTE has made local contacts and services a key theme of its corporate mission statement.

In 2019, RTE ran a satisfaction survey for a range of local actors (local authorities, economic development agencies, chambers of commerce and industry – CCIs, town planning agencies, chambers of agriculture, etc.), to have a better understanding of their needs. More than 10,000 actors were contacted, and nearly 800 replied in detail. RTE is a very well-known name to the actors surveyed: almost all of them (94%) had already heard of the company, and 74% said they were satisfied with their relations with RTE.
The results of this survey provided a better picture of local needs, so that RTE can support regions and local areas with practical commitments that are appropriate to their characteristics, issues and dynamics These commitments are organised into four major themes.

Laying the groundwork for economic appeal and employment opportunities

With its nationwide network, RTE guarantees provision of the same services in all areas, whatever their demographic or industrial situation. RTE operates one of the most effective transmission networks in Europe in terms of electricity supply quality. With its extensive infrastructure and regional establishments, RTE is committed to contributing to local economic development and building local appeal.
RTE is excellently-placed to facilitate growth for existing businesses and encourage new industrial establishments or relocations.
RTE offers a set of services constructed around dialogue and collaboration with economic actors both national (the French Government's department for Businesses, the business support agency Business France, the Federation of economic development agencies, the industrial employers' association France Industrie, etc.) and regional (local authorities, economic development agencies, CCIs, competitivity hubs, etc.) to plan ahead for the development and arrival of new industries with optimum timing, for a favourable cost and a supply quality appropriate to requirements.

Leading the energy transition to fight climate change

Local actors are fully engaged in developing polices and actions to fight global warming and support the energy transition.
RTE supports them by producing, analysing, and providing a broad range of data that can help them achieve a long-term supply-demand balance for electricity, a safe electricity system, and interzone solidarity for electricity.

Protecting biodiversity and resources for the ecological, inclusive transition in local areas (see section 4.4.2)

With 15,000 km of power lines in environmentally protected zones, preserving and enhancing biodiversity are key commitments of RTE, and contribute to the objectives and policies introduced by local authorities. The open spaces beneath RTE facilities that are far from human activity provide refuges for plant and animal life. RTE works with the actors and local authorities concerned to adopt innovative organisations and management methods that make its infrastructures spaces for biodiversity.

Enhancing local quality of life

Health, education, employment, agreeable surroundings, social cohesion and good town planning are factors that add to local quality of life.
Since the perception of the landscape influences this quality of life, RTE is committed to good landscaping. The company works together with local authorities, local residents and the academic world to integrate its infrastructures harmoniously into their environment.

RTE's purchases, a contributor to local development

RTE's purchases also contribute to local economic development. In 2020, the amount of RTE's direct purchases from SME was €330 million or around 20% of the company's total purchases. RTE aims to reach a proportion of 25% by 2025. Approximately 90% of RTE's purchases are from suppliers located in France.

RTE has several levers for encouraging employment in local areas:
- tenders are structured in a way that facilitates participation by local SMEs. For example, purchases of substation landscaping work under the "zero-phyto" policy (€50 million notified in 2020 in the North and Île-de-France – Normandy regions) are tendered in batches such that regional SMEs are able to bid for a contract;

- contracts are awarded on a best-bid and full life-cycle cost basis, taking into account the cost of transport, travel and, in some cases, the carbon impact, in order to encourage bids from local suppliers;
- Meetings between the groups that hold national contracts and local SMEs are regularly organised, in the form of regional forums or "business days", with the support of local CCIs. For example, in 2020 RTE took part in a forum for major entities that work with contractors and suppliers in the Occitanie region, and business days relating to construction of the Fécamp offshore wind farm and its connection.

As an active member since 2013 of the association Pacte PME, that promotes trade with small and medium-sized enterprises, RTE applies the good practices recommended by the association, and continues regular publication of "calls for skills" on the Pacte PME site, to which SMEs respond.

As well as a focus on SMEs, RTE fosters employment in local areas by incentivising suppliers to hire unemployed people, through social clauses included in its tender consultations and contracts. These clauses led to 59,000 hours of work in 2020 for people who had lost touch with the job market. Certain projects made a particularly noticeable contribution to these results: for example, the reconstruction of a 400-kV overhead power line between Lille and Arras, in the north of France (the Avelin-Gavrelle project), and the building of RTE's new training campus in Lyon.

Through its disability agreement, and with the support of the GESAT network, a national association of ESAT and EA entities that aim to promote employment of the disabled, RTE is continuing to increase its purchases from the protected and sheltered sectors, which totalled €2.3 million in 2020. The most recent renewal of the reprographics contract for the Lille site, awarded to a disability-friendly company, is one example of this policy.

4.5.4 SUPPORTING AND FACILITATING CUSTOMER CHANGE

— DESCRIPTION OF THE CHALLENGE

There are many challenges relating to customers:

- maintaining RTE's customer satisfaction at the top end of the benchmark range for industrial service companies;
- reinventing and improving services to RTE customers (including the digital transformation);
- building stronger economic roots in local areas for future customers and employment catchment zones;
- maintaining high-quality customer relations on a daily basis, and quality contract writing, invoicing, energy measuring and metering, data validation, oversight of financial settlements relating to market mechanisms, and debt recovery.

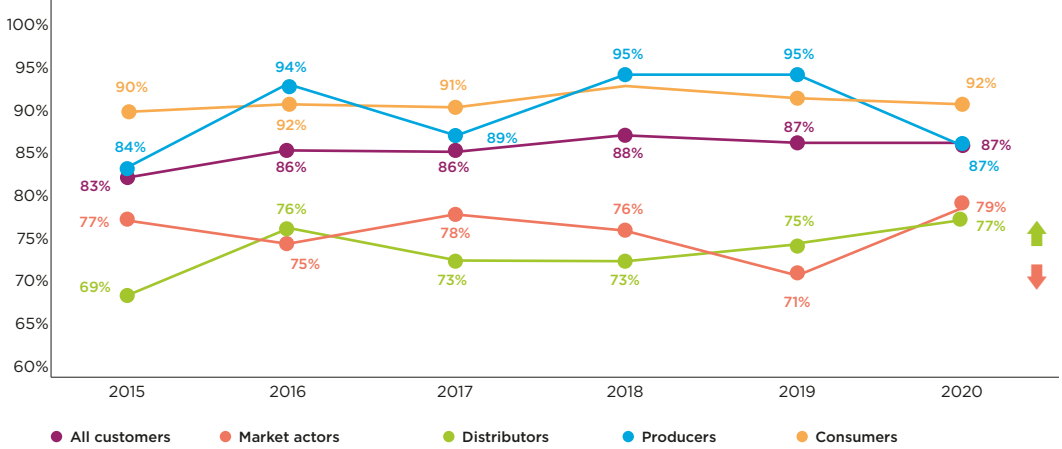
— RTE'S ACTIONS AND COMMITMENTS

RTE's sales division is simultaneously committed to giving full satisfaction and support to today's customers, and winning the customers of the future.

Improving quality of service at RTE

The customer satisfaction survey conducted by the sales division in 2020 measures the satisfaction of all RTE's customers, be they industrial customers, producers, distributors or market actors. They were asked to rate a broad range of questions covering all their interactions with the company on a scale of 0 to 10 (a rating of 7 or above is considered to indicate a satisfied customer).
The overall customer satisfaction score in 2020 remained stable at 87.

Customer satisfaction score between 2015 and 2020



Customers principally want more transparency (in the event of network incidents affecting their electricity supply, or concerning network connections, particularly in the case of distributors), more coordination for work scheduling, and a simplification of market rules.

Every dissatisfied customer is contacted by the sales teams. The results of these contacts are analysed by product line (connection, electricity quality, metering, access to markets, etc.) or by customer segment (industrial customers, producers, distributors, market actors). They are then used for action plans drawn up jointly with the functions concerned, and validated by the customers and services committee.

RTE customer services

Making things easy for new customers (e.g. renewable energy producers, electricity storage operators, data centres) is also a priority at RTE.

2021 will see the introduction of the new TURPE 6 network access tariff in August. The sales division, which handles invoicing for all customers, will ensure the new tariff is applied immediately and faultlessly when it takes effect. Meanwhile the sales departments will assist customers by providing all the necessary explanations to help them optimise their invoices and revise their contracts if necessary.

On the market mechanism side of RTE's business, the emphasis will be on continuing to educate actors to give them a clear understanding of the many market mechanisms set up by RTE, ongoing operation of existing mechanisms (particularly the capacity mechanism), and incorporation of new systems (long-term tenders for the capacity mechanism, daily tenders for the rapid/additional capacity reserve, demand response tenders for suppliers, the TERRE European platform, etc.).

The sales teams are also available to assist industrial customers in the economic crisis triggered by the COVID-19 pandemic.

Facilitating change for customers

Meanwhile, RTE is continuing its digital transformation (dematerialisation of contracts, data access authorisations, etc.) and the rollout of access to data. The company is also preparing to introduce a new cross-function customer relation management system in the next few years.

4.6 LOOKING AFTER EMPLOYEES AND REWARDING TALENTS

Key figures for RTE employees:

CONTRACT TYPE	OPERATIONAL STAFF	SUPERVISORY AND TECHNICAL STAFF	EXECUTIVES	TOTAL
Permanent contracts (IEG and non-IEG status)	392	3 ,712	4,780	8,884
Temporary fixed-term contracts	180	302	31	513
– work-study contracts	173	276	0	449
– other	7	26	31	64
Total workforce	**572**	**4,014**	**4,811**	**9,397**

CONTRACT TYPE	UNDER 25	25-34	35-44	45-54	55-59	60 AND OVER	TOTAL
Permanent contracts (IEG and non-IEG status)	300	2,469	2,375	2,340	1,120	280	8,884
% permanent contracts	3.4%	27.8%	26.7%	26.3%	12.6%	3.2%	100%
Temporary fixed-term contracts	406	95	12	-	-	-	513
% temporary fixed-term contracts	79.1%	18.5%	2.3%	0.0%	0.0%	0.0%	100%
– work-study contracts	372	71	6	-	-	-	449
– other	34	24	6	-	-	-	64
Total workforce	**706**	**2,564**	**2,387**	**2,340**	**1,120**	**280**	**9,397**
Percentage of workforce	**7.5%**	**27.3%**	**25.4%**	**24.9%**	**11.9%**	**3.0%**	**100%**

4.6.1 CONTINUOUS ENHANCEMENT OF SAFETY AND QUALITY OF LIFE AT WORK

— DESCRIPTION OF THE CHALLENGE

Health and safety and workplace life quality took on a whole new meaning in 2020 under the pressure of the COVID-19 pandemic. The challenge facing RTE's employees and managers was to protect employees' and contractors' health and maintain a high level of safety in the performance of vital and essential operational activities, while also preserving team cohesion during lockdown periods.

— RTE'S ACTIONS AND COMMITMENTS

The main lines of the "Safer, healthier, happier" prevention policy were adjusted to focus on leadership and organisation of preventive measures, health protection and support for contractors. The safety management programme developed at the start of the year 2020 was adapted.

The ambition of eradicating serious and fatal accidents was reaffirmed, and action was directed in priority to control of major risks (electric shocks and falls from height).

Regarding general health, the occupational health department adjusted its operating methods to cope with the pandemic situation, providing advice and backup to management, and support and counselling for employees.

To enhance quality of life in the workplace, preventive actions against psychosocial risks and all forms of violence at work were redirected towards support for managers and employees facing risks relating to isolation and overwork while working from home, and risks of tension and psychological decompensation during lockdown phases.

Continuous improvement of safety through well-structured organisation and a network of trained leaders

The safety management system introduced in 2020 provides teams for construction, oversight and coordination of safety improvement measures, in coherence with the company's organisation. The company's safety committee, presided by a member of the Executive Committee, defined RTE's 2020 safety management programme and is in charge of leading it and measuring its effectiveness.
The management system described, then approved by the Chairman of the Executive Board provided the basis for RTE's adherence to the MASE system in October 2020.

To make sure safety issues are given due consideration at work, training for 1,000 "safety leaders" began in 2020, using e-learning and online classes run in conjunction with the french institute for an industrial safety culture(1). This training develops leadership in actors who have a significant influence on safety due to their function. It initially concerns line managers and project managers, and will be extended to foremen in a later phase. With the same aim of supporting management's on-site action, a new mobile app, Dialog, has been introduced to facilitate observation and use of weak signals that often precede accidents and dangerous work situations.

A system of fair rewards, developed with the functions and validated by the Executive Committee in September 2020, underpins employee commitment to safety. This system has 7 principles for promoting proactive safety practices and behaviours. It is being blank tested until 2021 and supports application of RTE's "rules that save lives": 11 rules that set "red lines" that must not be crossed, forming a standard for professional practices derived from analysis of serious and fatal accidents that occurred in the last ten years. The reward system also covers good management practices to apply when the rules are broken, or when mistakes are made. In 2020, the main action to raise employee awareness concentrated on the mechanisms behind mistakes and the way our brains function. More than 6,000 employees followed an e-learning course on this topic (named "CERVER").

Contractors' commitment to safety

As its contractors' safety performance is included in RTE's objectives, the maintenance, development and engineering division, and the real estate and logistics division decided to amplify safety-related support and incentives for their principal contractors.

A joint commitment charter is proposed to current and potential contractors. It contains a commitment to apply RTE's "rules that save lives", to maintain or earn certification by an accredited body, and to participate in sharing analyses of accidents and dangerous situations, and the lessons to be learned from them.

The criteria set out in this charter are included in the supplier selection process, and the existing supplier assessment procedures were activated on all components in 2020. Status downgrades were applied to several suppliers as a result of observed safety failings. Dynamic contract share allocation based on safety observations played its role thoroughly.

Work on priority sites and activities carried on during the COVID-19 pandemic, with support from RTE's teams in liaison with the contractors' COVID-19 officers. Specific guides were drawn up and shared, to limit the risks of contamination and reduce co-work phases.

Sharing knowledge and good practices continued throughout 2020 via the network of preventive health

(1) Institut pour une culture de sécurité industrielle.

officers at RTE and contractors. A particular aim was to update the operational safety rules that are common to all contractors, and to establish a user guide for cutting equipment. The requirement to hold a High-Voltage Pass certifying contractors' knowledge of the risks and remedial measures was extended to painting contractors working on overhead lines. 12,000 High-Voltage Passes have now been issued.

Motivated, active occupational health teams

The health teams at RTE were very active during the COVID-19 crisis, providing all employees with information sheets describing the individual and collective precautions to be taken, and issuing updates as the pandemic situation and government measures evolved. The advice and protective resources available from the occupational health department to cope with psychosocial risks and problems relating to the experience of lockdowns and working from home were set out in additional information sheets. A counselling service was also set up during France's two national lockdowns.

RTE's occupational health department also prepared a voluntary flu vaccination programme for employees, in line with the strategy recommended by the authorities. The practicalities (dates, places, procedures, etc.) were defined at the level of each regional medical service and complied with national government decisions.

Initiatives were taken during the week-long "*Parcours du cœur*" event to raise awareness of heart health and help employees protect themselves against cardiovascular risk factors, held on 12-18 October 2020 in association with the French cardiology federation. Two conferences were held, in Lyon and at the head office in Paris.

Renewed accreditation for the occupational health department

In October 2020 the Paris region's department for business, competition, consumption and employment[1] renewed the accreditation of RTE's occupational health department for a five-year period. This decision gives official recognition to the skills developed, investments made and work done with its health employees by RTE in recent years. The accreditation puts the department in a position to monitor its employees' health, for the benefit of the company and the individuals themselves, while helping to develop primary prevention measures for occupational health that are appropriate to the company's practical situations and challenges. The COVID-19 pandemic has confirmed the relevance of the "internal health service" model for a public service company that is an operator of vital importance to the country, performing a mission that is essential to keep the nation working.

Lower accident rates

Due to the lockdown and increased teleworking, the total number of accidents happening to RTE employees in the course of their work declined in 2020. However, the accident frequency rate during periods when work resumed, even gradually, was similar to 2019. Contractors reported a more favourable situation, with the lowest level of accidents entailing sick leave in four years; a particularly noteworthy result is that no accident entailing sick leave occurred at maintenance contractors. **The ambition of "zero fatal accidents" at RTE and its contractors was thus achieved in 2019 and 2020.** In 2020, cases of sudden illness at work (23) recorded as accidents entailing sick leave accounted for one third of such accidents, a proportion that has doubled in the last three years. Analysis of such cases did not identify a specific cause or population concerned (outside the maintenance division, sudden illness is the only cause of workplace accidents entailing sick leave in 2020).

Among the reported accidents involving RTE employees, five concerned electrocution risks, falls from height or carcinogenic/mutagenic/reprotoxic substances. There were four accidents in these categories involving contractors. Analysis of dangerous situations and near misses confirms the need to consolidate control of induction, electrical bonding in working areas, safe fixing and use of suspended access equipment. "Qualifying" training continued under the training plan, adjusted for the pandemic situation. In the 2021 training plan, the priority remains developing professionalism in controlling these risks.

(1) Direction régionale des entreprises, de la concurrence, de la consommation, du travail et de l'emploi.

	RTE			CONTRACTORS		
	2018	2019	2020	2018	2019	2020
Work-related accidents entailing sick leave	58	92	70	61	67	53
Work-related accidents not entailing sick leave	48	72	77	38	38	31
Total number of work-related accidents	106	164	147	99	105	84
Including:						
– cases of sudden illness at work followed by sick leave	10	28	23	2	3	6
– major risk accidents: falls from height	5	1	1	3	6	5
– major risk accidents: electrocution (high-voltage)	0	0	2	1	3	1
– major risk accidents: electrocution (low-voltage)	0	0	2	0	2	0
– major risk accidents: chemical substances	1	1	0	0	0	0

Summarising, accidents were down essentially because activity levels were down, due to the COVID-19 pandemic and measures taken to protect employees. The severity of accidents was stable if not lower. The risk of a sudden jump in the number of accidents when work resumed after lockdown was well controlled.
The proportion of sudden illness cases included in the declared accidents (33% in 2020) masks the progress made in controlling other risk factors.

4.6.2 ENCOURAGING SKILL DEVELOPMENT

— DESCRIPTION OF THE CHALLENGE

Skill transformation and development is becoming increasingly crucial in today's world due to the fast-changing electricity market, the need to support the energy transition, and significant evolutions in the company's functions and mission.

Many people spend their whole career with the company, and RTE must ensure that each employee possesses all the skills relevant for his/her work, and his/her employability in the company as a whole. This means staff recruitment must be treated as an opportunity to acquire skills the company lacks, encourage internal mobility and constantly adapt the professional development training offered to employees.

— RTE'S ACTIONS AND COMMITMENTS

In 2020, RTE redesigned and expanded all its HR processes to achieve the targets it has set itself.

Constructing a more efficient, more transparent HR division

The new organisation of the HR division introduced on 1 July 2020 has been designed for greater efficiency and clarity of action. Two new units were created for skills:

- the HR development department, consisting of all employees in charge of workforce management (jobs and skills), and all employees in charge of recruitment, career path support and talent detection and support, whether based at the head office in La Défense or in the regional teams;
- the Academy, consisting of all members of the HR division who work on professional development: about 80 trainers, and all other actors in charge of training design and oversight.

A new professional dynamic

A new "professional dynamic" policy was signed and circulated in December 2020. It is based on eight practical measures for sharing an integrated overview of the company's ambitions for internal mobility, and measures to help employees construct their career path.

The main aim of this policy is to reinforce internal mobility, which is vital for putting the corporate mission statement into action and redeploying staff under the future organisation of industrial activities. For a sound, cross-functional approach, the policy reaffirms employees' responsibility in development of their own career paths. It provides a number of devices to give employees better knowledge of the internal RTE job market.

A focus on behavioural skills

Changes in the corporate ecosystem, whether of a technical, regulatory or economic nature, are leading RTE to plan ahead and make adjustments that involve redefining its activities and its employees' skills. The adaptation expected of employees will hinge on personal skills such as open-mindedness, curiosity, optimism, and learning capacities. In 2020, experiments were conducted with dialogue on these skills during the career interviews session for the 700 employees in the North region, with a view to extending this to all employees in late 2021.

Supporting managers, the essential vectors for change

Partly under the impetus of the younger generations, society's aspirations are translating into a clearly-expressed need for greater autonomy, initiative and facilitation of work, with the result that the function of a manager is being questioned and challenged.
Managers at RTE must now broaden their scope of action beyond the initial focus on performance control, resource management and technical expertise, to encompass support for employee development, collaborative work and collective construction.
The company's 800 managers can draw support from several channels: a full range of training for managers and top managers, and services such as coaching, co-development and mentoring.

Innovative recruitment and mobility practices

In 2020, RTE expanded the practice of co-hiring, in which the company hires an external candidate for a succession of two different jobs: the employee acquires skills rapidly in the first job before moving on to a second, predetermined job. This practice promotes cross-function exchanges, limits over-compartmentalised operation and develops cooperation. A similar practice called "co-mobility" exists for internal transfers. Another form of co-hiring, the "job switch" system, concerns two candidates hired from outside the company, who swap their jobs after a certain period.

In 2020 RTE made 20 co-hires, 10 co-mobility transfers and a small number of "job switch" hires. All these practices are set to become more common in the future.

In-depth renewal of professional development for employees

Employee training needs to be reinvented, both for RTE's "traditional" activities where the existing training provision requires renovation in today's sensitive "safety/accidentology" context, and for its new industrial activities, where development of employee skills must be assured in parallel to their deployment.

RTE is therefore rethinking and expanding its professional development provisions. It aims to combine face-to-face and self-managed distance learning whenever possible, building on the company's know-how and available channels at every stage of skill acquisition: from initial training to practical application, specialisation and skill assessment.

Examples of some of the striking actions completed in 2020 include:

- continued renewal of the professional development training offered to employees in charge of overhead line maintenance (especially for new foremen) and dispatchers;
- introduction of a programme to raise awareness of the challenges of the offshore environment, and a new course for technicians in charge of maintenance of current-carrying links;
- developing the distance training available, in all areas: remote management training for managers, experiments with remote recycling for work with live equipment, renewal of accreditations for operations managers, etc.;

- preparation for the future 24-hour control centres, with priority for information systems/telecoms whose first 24-hour centre will begin operations in September 2021: four courses are ready (Coordinators, Cyber, Telecoms and Data Centre).

The teams in charge of training also had to adapt to the public health situation throughout 2020. The training centre was closed from late February to the end of May, and the team quickly launched distance learning courses. Prioritisation of the courses to be continued at the training centre was revised several times, due to restrictions on the number of trainees. At the end of 2020 only training that was absolutely necessary to ensure human safety and network safety and security was still taking place at the centre.

RTE's capacity for adaptation is illustrated by two quantitative indicators concerning both its training teams and its employees:

- 120 online training modules are now available to RTE's employees;
- the professional development intranet platform was the application RTE's employees used the most during the national lockdowns.

The COVID-19 pandemic's impact on the company's training indicators is clearly shown in the following table:

TRAINING INDICATORS	2017	2018	2019	2020
Total hours of training	465,000	486,000	441,000	252,000
Average annual hours of training per employee	51	53	45	27
Training budget as % of total payroll	7.7%	7.4%	7.0%	5.5%

Emergence of the Campus Transfo

Four years ago RTE decided to group, at Jonage near Lyon training and the activities of the network expertise department and IT and telecommunications teams, previously located in Paris. The new campus was completed in December 2020 after two years of work. This was an exceptionally large-scale real estate project for RTE: 24,000 m^2 of extension to the existing training centre, 370 workstations, and €74 million of investment. The new Campus Transfo site was opened on 4 January 2021.

Throughout 2020, RTE worked actively towards opening this campus in the best conditions and as soon as possible. It succeeded in limiting delays on the initial schedule to four months, despite the disruption caused by the COVID-19 pandemic. The company also safely moved the hundred employees concerned to the Lyon region. Finally, when the technical expertise and teaching platforms were to be transferred to the campus, the teams were careful to make arrangements that minimised the impact on research and training activities.

RTE's new training site is unique in Europe, containing all the equipment found in the high- and low-voltage electricity transmission network. It will be possible to practice, experiment, test and develop digital equipment that will be vital for electricity network management in the future: command and control, power electronics, telecommunications and information systems, and more.

RTE's teams are now going to concentrate on the initial ambitions:

- **encouraging** synergies between the network infrastructure and digital technologies, between training, advisory and testing activities;
- **building** on the opportunities offered by the campus to make RTE a learning company, by fostering collaboration between trainers and experts;
- **developing** new collaborations with other European network operators and the academic, energy and digital ecosystem.

4.6.3 PROMOTING SOCIAL DIALOGUE

— DESCRIPTION OF THE CHALLENGE

RTE is aware of the challenges associated with the need for social cohesion, and has always considered social dialogue very important in implementing its human resources policy. Its role has grown in accordance with the changes in French laws in recent years (particularly the "Macron orders"), which are increasingly making collective negotiations a required first step in policy-making with social consequences. With its strong public service mission culture, RTE has always favoured social dialogue to support organisational change.

The channels of social dialogue have evolved over the last few years so that more consideration is given to employees' views: as well as the traditional channels of hierarchy and employee representation, a participatory channel is used. For example, RTE increasingly refers to its internal "social barometer" survey to prepare action plans, and in October 2019 it set up a collaborative platform for employees, to encourage everyone to participate in the execution of the Impetus & Vision mission statement.

— RTE'S ACTIONS AND COMMITMENTS

Management of the crisis caused by the COVID-19 pandemic led to reinforced social dialogue in 2020, in the form of regular meetings with all social actors at national, regional and local level. It also stimulated reflection on RTE's own work organisation and managerial practices.

Transforming social dialogue

In 2019 the social landscape was recast by the "Macron orders" of 2017. After several months of negotiation, an agreement on social dialogue was signed on 13 June 2019, leading to introduction of new employee representation and union bodies with effect from the elections of November 2019. The declared aim of this new architecture was to have more strategic, effective, locally-attuned social dialogue that is more appropriate to the company's needs.

In 2020, one notable outcome of the establishment and interrelations of these new bodies was the professionalisation of actors in charge of labour relations at all levels of the company (chairs of corporate social and economic committees, chairs of health and safety and working conditions commissions, prevention officers, coordinators of local representatives, etc.). But beyond professionalisation, although interactions with these social actors were initiated, they were adversely affected by the COVID-19 pandemic, which resulted in restrictions on face-to-face meetings.

For 2021, the aim is to stabilise these bodies, ensure they are fully active at every level of the company, and establish links between them in order to have mature, constructive social dialogue.

Developing a social diagnosis process

RTE has decided to begin a "social diagnosis" process with all the relevant actors. The objective of this process is to have all the necessary elements for mediation, enabling the company's social contacts to establish priorities for action and areas for improvement in social dialogue, based on an independently-conducted analysis of the current situation.

This diagnosis was officially launched in early November, and will be completed during the first half of 2021.

Support for change under the corporate mission statement

This support mainly takes the form of:
- bilateral consultation meetings on changes to the themes in the corporate mission statement, following a schedule developed in 2019 and early 2020;
- negotiations and consultations in 2020-2025 to support change (working time, measures to support mobility, etc.).

In 2020, the following steps were taken:
- consultation concerning the introduction of a new financial support package for geographically mobile employees; the related decision will take effect from 1 January 2021;
- consultation concerning the introduction of career development support measures and the validity of posts in the event of reorganisation; again, the related decision will take effect from 1 January 2021;
- consultation concerning HR support measures under the corporate mission statement.

Meanwhile, negotiation of special working time arrangements in the future 24-hour control centres began in October 2020 and should end in March 2021.

Negotiation of working time for future work on offshore platforms and undersea links is due to begin in March 2021.

Rethinking RTE's work organisation and managerial practices

In the exceptional circumstances of the COVID-19 pandemic that cast its shadow over the whole year 2020, RTE had to adapt fast and rethink its working methods daily. The public health situation not only required an emergency response so that the company's activities could continue, it also triggered a deeper change: it led the company to a new way of organising work, notably expanding the use of teleworking (working from home).

This rethink also resulted in a reconsideration of other factors that were all significantly impacted by the consequences of the pandemic: managerial practices, the operation of work groups, the use of digital equipment, and management of work spaces.

For the short term, an agreement signed in early July 2020 allowed more flexible teleworking rights and conditions until 31 December 2020.

In parallel, a more general process was begun to draw the company into more agile ways of working that better reflect cultural changes in society.
In practice, this translated into a survey of all RTE employees in the summer of 2020, to elicit their perception of the situation and the changes they wanted. Participative workshops will be held in early 2021 to explore certain themes in more depth.
This process aims to review at least the current agreement on teleworking, and to identify the work to be done to facilitate integration of the new work organisation into everyday practices.

Collective agreements signed at RTE in 2020

- agreement on social dialogue at RTE during the COVID-19 pandemic.
- agreement for the end of the COVID-19 crisis: HR recognition and support measures.
- agreement on the method for allocating the additional profit share paid for 2019 and management of the COVID-19 crisis.
- collective agreement on gender equality at work at RTE.
- agreement on the negotiation method for working time and special arrangements for shift work.

4.6.4 ENCOURAGING DIVERSITY, INCLUSION AND WORKPLACE EQUALITY

— DESCRIPTION OF THE CHALLENGE

Diversity, gender balance, and inclusivity are necessary in every company to maintain social cohesion and prosperity. They are even more essential at RTE due to its presence across the whole of French territory, the diversity of its business activities, and its societal mission.

— RTE'S ACTIONS AND COMMITMENTS

RTE is committed to developing every employee's potential and the diversity of profiles at the company by promoting gender equality, employment for young people and integration of disabled employees.

Since its reorganisation in July 2020, the HR division has clearly expressed its intention to develop a specific intercultural policy, whose scope remains to be defined, in order to promote detection of talents with unusual profiles, and to improve inter-generational relations.

An ongoing ambitious policy for gender equality at work

A new agreement on gender equality and the gender balance was signed with all the unions for the 2020-2024 period, renewing RTE's commitment to respecting equality between men and women at work. The agreement has been enriched with a fifth theme, sexist and sexual abuse and assault at work and domestic violence, and new clauses (measures in favour of extended paternity leave, and to promote women's access to positions of responsibility and managerial and technical jobs) have been added to the four themes already contained in the previous agreement.

At RTE, gender equality at work is a factor that is taken into consideration in decisions regarding pay rises, and starting salaries are identical for men and women with equivalent skills.

Recruitment remains an essential lever for increasing the proportion of female employees in the company, and RTE is continuing its efforts on that point. RTE requires each shortlist presented by recruitment consulting firms to include at least one female candidate. In 2020, the proportion of externally-hired female employees reached 26%, whereas the proportion of qualified women is very often lower in the functions for which RTE principally recruits.

— Percentage of women in RTE's workforce

2018	2019	2020
22.4%	22.7%	22.9%

Progress may appear slow, but the inertia effect due to the generally low staff turnover at RTE plays a part. It should also be noted that the proportion of women in the management committees is higher than the proportion of women in the company overall, even though it decreased in 2020. In fact the decrease reflects a change of method and introduction of a harmonised data collection method across the whole network of gender equality officers.

— Percentage of women in the management committees

	2018	2019	2020
Percentage of women	20.6%	25.4%	23.02%

RTE's new Executive Board has a majority of women for the first time (three women out of a total five members).

Action to promote diversity and integration

To encourage employment of young people, RTE accentuated its policy of hiring under work-study programmes, taking on nearly 449 work-study students in 2020, 29.6% of them women. These students accounted for 5.2% of the company's total workforce.

In 2020, 97% of employees on work-study contracts at RTE passed their final year of training.

Despite the COVID-19 pandemic, RTE kept up its work-study programme recruitment campaign, and hired 265 work-study employees at the end of September 2020, more than its initial target of 230. RTE achieved this result thanks to numerous communication campaigns on the social networks, participating in "job dating" events, and conducting a large number of interviews online.

	2018	2019	2020
Percentage of workforce on work-study contracts	5.8%	5.4%	5.2%
Number of interns	305	223	182

More generally, RTE's recruitment policy means that 39% of new employees hired were aged under 26, and 61% under 30. The 45-and-over age group accounts for 5% of new recruits (stable compared to 2019).

Finally, RTE pays close attention to "unusual" profiles: candidates changing careers or with non-standard experience, or who have had breaks in their working life. The company hired four young people from migrant hostels, and has also recruited refugees.

Integration of disabled employees

The 2018-2020 agreement for integration, retention and career development of disabled employees terminated on 31 December 2020. Negotiations began on 4 November with a view to signing a new three-year agreement at the beginning of 2021.

The principal quantitative results of the agreement that has just ended are as follows.

— Results for recruitment of disabled employees and integration of disabled work-study students and interns

	OBJECTIVES	RESULTS			TOTAL
		2018	2019	2020	
Disabled employees hired	30	8	15	10	**33**
Disabled people hired under work-study contracts	30	7	13	4	**24**
Disabled interns	60	18	29	13	**60**

— Transactions with the protected and sheltered sectors

RTE's aim of purchasing €3 million of services from the protected and sheltered sectors by the end of 2020 could not be achieved due to the circumstances this year, but there was a steady rise in purchases from these sectors.

2018	2019	2020
€1,643,627	€1,906,048	€2,280,079

RTE also continued more qualitative actions, including:

- participation in the Hello Handicap recruitment fairs promoting employment of disabled employees in April and November 2020;
- renewal for 4 years on 1 January 2020 of the partnership with French paralympic athlete Timothée Adolphe, a sprinter who holds several records;

- launch in September 2020 of a new monthly newsletter called "Handiscuter" on the theme of disability, to help change attitudes towards disability;
- participation in the annual European Disability Employment Week on 16-22 November 2020, organising awareness-raising workshops all over France.

Promoting the anti-discrimination prevention and whistleblowing procedure

RTE's anti-discrimination guide, co-constructed with all the trade unions, was distributed to all employees and at national level in early 2020.

Reinforcing the fair pay policy

New employees' initial salaries are set by the recruiters' network, based on rules laying down the "principles for starting salaries". A level of remuneration is defined for each qualification depending on its characteristics (type of school/university, work-study training, etc.). The value of experience is based on certain criteria (match for the post, scarcity of skills, and comparison with the market). To ensure fair treatment, each salary offer also takes into consideration the salary paid to the population of existing employees with the same job.
Pay rises and performance-related pay for existing employees are managed and analysed by reference to several criteria for equity, including the employee's category and gender.

4.6.5 COMMITMENT TO THE COMMUNITY

— DESCRIPTION OF THE CHALLENGE

All the partnerships and initiatives undertaken by RTE, whatever their nature (for the environment, the company, society as a whole), support corporate life with their firm rooting in the regions and local action. They all continued in 2020.

— RTE'S ACTIONS AND COMMITMENTS

Skill sponsorship

Skill sponsorship is a practical expression of RTE's role in society that engages its employees. France's PACTE law of April 2019 for growth and change in businesses institutionalised these links between the business world and the world of associations.
This voluntary, pro bono provision of employees' occupational skills for the public good meets a need in employees who want meaning, openness, and new avenues to explore in their work. It concerns fields as varied as missions for the charity Électriciens sans frontières (Electricians without borders – ESF), the institut de l'engagement (Commitment Institute), the RTE Foundation, France's voluntary fire brigade, the French Armed Forces Ministry's military reserve force, and the SQUAD Emploi employment assistance agency in the North of France.
RTE employees who work with these entities make a practical contribution to generalising access to energy, supporting young people on their way to employment, fostering solidarity between geographical areas, supporting the military reserve forces, and helping their fellow citizens. They provide expertise, enthusiasm and a fresh approach and in return, they have new opportunities to develop their adaptability and their skills (for example in leadership or project management).

Socially-responsible commitment to the regions and local areas in France

— Commitment Institute

The Institut de l'engagement is a French charity created in connection with the national volunteer service *(service civique)* to offer young people engaged in volunteer work a future commensurate with their high potential, regardless of their social, geographical, educational or cultural background. Every year it advises nearly 3,000 young people and helps them structure their plans for the future.

RTE renewed its three-year partnership with the Institut de l'engagement at the end of 2020, making a commitment to contribute to its campaigns by means of financial, human and material support.

The new agreement follows on from the previous agreements and makes RTE's financial contribution to the Institute's summer conference (initiated in 2019) a permanent pledge.

As well as a larger financial contribution in 2020 and continued practical support (for example, lending RTE premises for use by the Institute's regional decision panels), this partnership covers concrete involvement by RTE employees in a range of actions: examination and evaluation of the projects submitted; participation in the guidance and admission interviews, sponsorships, and leading workshops for the successful candidates.

Although, in quantitative terms, RTE employee involvement was lower in 2020 than in previous years due to the COVID-19 pandemic, two collective panel sessions were held at the RTE head office before the first national lockdown, with 150 applications examined.

— France Active

France Active is a charity network with local branches all over France, formed to help people in difficulty to set up their own business or find employment.

RTE continued its commitment to promoting employment together with this charity by adding 200% to every donation by an RTE employee to the Cap'Jeunes programme run by France Active, which supports and funds business creation projects by young people under 26 who are unemployed or in a precarious situation. RTE has supported this programme since 2017.

— Solidarity with the Pablo-Picasso district in Nanterre

The Pablo-Picasso district in Nanterre, near RTE's two sites at La Défense, just outside Paris, was particularly hard hit by the COVID-19 pandemic. RTE therefore made contact with local association Authenti-Cité, which supports local families by providing help with schooling, assistance with administrative paperwork, and training in the use of digital equipment.
A first practical action, in July, was the donation of five laptop computers and a printer, which were used by school students at catch-up lessons given by the association. RTE has promised to continue this action, and to make an annual donation of 10 computers for three years to provide long-term help for families affected by technological inequality. This is also an eco-friendly step, because it gives a "second life" to the company's old IT equipment.
In November 2020, RTE set up a scheme for employees at its Window and Palatin office sites to volunteer to help children in difficulty with their schoolwork, outside their working time. New ways of helping local families are being developed for 2021, such as short internships for middle school pupils to discover life in a company, help with CV writing, and preparation for job interviews.

Continued socially responsible commitment beyond national borders

RTE's support for the charity ESF is another offshoot of the company's values of solidarity and social responsibility. RTE has chosen to support work that meets vital needs, with a particular focus on access to energy and water.

Employees are seconded to ESF on a voluntary, temporary basis, and RTE makes an additional 100% contribution up to a maximum amount set by agreement.

Sponsorship of projects supported by the RTE Foundation

The RTE Foundation is consolidating its action to stimulate local area dynamics and support entities leading countryside projects by providing sponsorship for co-funded projects, all devoted to economic, social and cohesive development in rural areas.

Nearly 100% of the projects supported in 2020 benefit from assistance from a current RTE employee, who is the project's designated sponsor alongside the Foundation. The task of these employees is to help the Foundation to monitor the project's implementation, notably verifying that the funding is used correctly, and report on progress to the entities in charge, as an ambassador of the RTE Foundation. Sometimes employees make longer-term commitments. The 400 individual project sponsors designated since 2008 have embodied the company's values of open-mindedness, dedication and solidarity with regard to rural areas.

Almost 50 projects were supported in 2020 in the most rural counties of France, with grants of a total €1.2 million, and investments of €6 million. The Foundation fosters cooperation between local public and private actors to increase the impact of these projects.
As a laboratory for social innovation, the RTE Foundation also contributed to reflection, experimentation, action research, and capitalisation and implementation of innovative multi-actor, inter-area cooperation projects to benefit the rural world.

05

Economic and financial performance

5.1 ECONOMIC ENVIRONMENT

Operation of the French and European electricity system was significantly affected by the COVID-19 crisis, particularly as regards consumption behaviour, generation, and exchanges with neighbouring countries.

Gross consumption in mainland France (including Corsica) totalled 449 TWh, down by 5% from 2019. The effects of the crisis were perceptible throughout the year, with substantial variations reflecting the government measures taken to halt and manage the pandemic (lockdowns, lifting of lockdowns, curfews).

Consumption by industrial sites directly connected to the public transmission network registered a 12% decrease compared to 2019 (at 30 November). The sectors connected to RTE's network that were the most affected were the iron and steel, automobile and rail transport sectors.

The highest peak in electricity consumption in 2020 was 83.2 GW, at 7 pm on 22 January. This peak was recorded before the COVID-19 crisis began and is consistent with the average peak level for the last twenty years in France. The year's lowest level of electricity consumption was observed on Sunday 10 May at 28.7 GW, the lowest since 2003. The fact that this low point occurred in May instead of August as in previous years is essentially explained by sunny bank holiday week-end weather, and the end of France's first national lockdown on 11 May.

Total electricity output in France in 2020 was 500 TWh, a record year-on-year decrease of 7% (37 TWh) from 2019.

Nuclear power generation was particularly hit by the COVID-19 crisis, registering a 12% (around 44 TWh) year-on-year decrease as many reactor outages for maintenance had to be extended. In contrast, renewable energy output was up by 5% (0.6 TWh) for solar power, 8% (5 TWh) for hydropower, and 17% (5.7 TWh) for wind power.

At the end of 2020, the generation fleet in mainland France had a stable installed capacity of over 135 GW despite the closure of two nuclear reactors at Fessenheim in February and June. Installed wind power capacity exceeded 17 GW, an increase of 5% since 2019. Total installed solar power capacity was over 10 GW, up by 7% from 2019.

Although France remained the largest power exporter in Europe, 2020 saw a 7% decline in export volumes, to 78 TWh, and a 22% increase in import volumes, to 34.6 TWh. This lower net export balance is mainly attributable to lower electricity output in France, and a fall in demand for electricity in Europe.

France was nonetheless a net exporter across all of its borders. Exports were clearly dominant until June, then retreated during the summer until imports dominated in September. This was the first time in more than twenty years that France has been a net importer in September, a month when it usually makes substantial exports. It returned to a net export position at the end of the year, notably because of better nuclear plant availability and lower consumption in the last few months of the year compared to 2019.

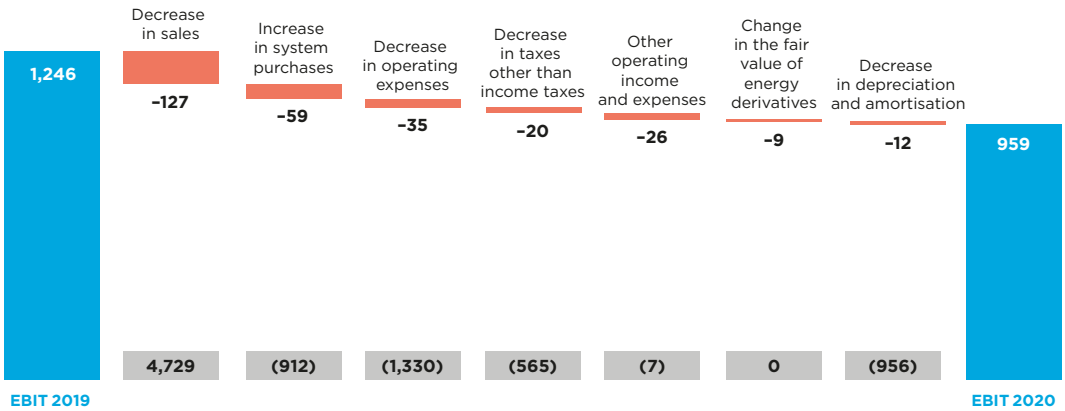
5.2 RESULTS, EBIT AND FINANCIAL STRUCTURE

These results are presented under IFRS.

5.2.1 BUSINESS AND RESULTS IN 2019

5.2.1.1 Change in EBIT: -€288 million

(in millions of euros)



RTE's EBIT for 2020 was down by €288 million (–23%) compared to 2019, totalling €959 million.

The explanations for this decrease concern the items presented below.

RTE's sales for 2020 amounted to €4,729 million compared to €4,856 million in 2019.

The **€127 million (–3%) decrease in 2020** is the combined result of the following effects:

- network access income (withdrawals and injections) was down by €206 million (–5%) to €4,072 million. This decline was principally due to the weather effect, which was unfavourable overall to RTE in 2020, and the lower level of withdrawals as a result of the COVID-19 pandemic. The structural decrease in withdrawals and capacities of industrial actors and distributors also contributed, to a lesser degree, but this effect was mitigated by the impact of tariff increases[1] introduced in 2019 and 2020;
- income from interconnections increased by €95 million (+21%) to €546 million, and includes:
  - capacity revenues from interconnections, which are based on price differentials between national electricity markets, and were €86 million lower than in 2019,
  - the sale of interconnection capacity guarantees via the EPEX market, generating profits of €182 million;
- income from services was down by €16 million to €111 million, notably due to a decrease in travel as a result of the COVID-19 pandemic, and undergrounding and modification work on facilities.

The total amount of electricity system operation purchases was **€912 million** in 2020, up by **€59 million** from 2019.

Electricity system operation purchases comprise:

- purchases of energy and capacity guarantees to compensate for electricity losses from the network (€499 million in 2020), which are auctioned and bid for by many actors, and operations on organised markets (EPEX Spot and EEX EPD);

(1) As RTE is a regulated monopoly, network access income does not correspond to a market price but results from the TURPE tariff for use of the public electricity transmission network, which is set in a regulation issued by the French electricity market regulator CRE, an independent administrative authority. Following the CRE's decision of November 2016 defining the rules for the new TURPE 5 tariff, which took effect on 1 August 2017, the hourly/seasonal adjustments in the tariff were reinforced. The subsequent tariff rises decided by the CRE were 2.16% from 1 August 2019 and 1.08% from 1 August 2020.

- purchases for voltage ancillary services and balancing reserves (€301 million in 2020), on economic terms approved by the French energy regulator CRE;
- congestion costs (€21 million in 2020), i.e. the surplus costs generated by output adjustments in response to the operating constraints for the internal network or interconnection lines;
- interruptible load contracts (€59 million in 2020): these were introduced for the first time in 2014 and reinforced by France's law on the energy transition for green growth, and follow an annual tender procedure;
- the balance of the "Balance Responsible Entity – Balancing Mechanism" account (€3 million in 2020), used for all income and expenses intended to maintain the supply-demand balance in the electricity system;
- exchange contracts between TSOs (nil balance in 2020): mutual assistance services to neighbouring TSOs for the requirements of their own supply-demand balance;
- RTE's contribution to the balancing mechanism for international transit costs between European network operators (€20 million in 2020);
- load-shedding contracts (€9 million) to temporarily reduce the level of withdrawals by a consumption site; since 2018, the cost borne by RTE has been reimbursed by the contribution to the public electricity service (CSPE) levy.

The **€59 million** increase in electricity system operation purchases is mainly explained by the following effects:

- the higher cost of electricity purchases to compensate for network losses, in line with the lower rate of losses(1) (2.22% in 2019 versus 2.31% in 2020). The price effect was negative overall, which also contributed to this change;
- higher congestion costs, i.e. the surplus costs generated by output adjustments in response to the operating constraints for the internal network or interconnection lines;
- the higher cost of load shedding (up by €3 million), reflecting the complementary 2021 tender procedure covering November and December 2020, with an impact of the same amount;
- a downturn in charges related to interruptible load contracts due to the lower amount tendered (€73 million in 2020 after €87 million in 2019, a reduction of €13 million), and activation of the force majeure clause leading to a €4 million decrease in the bonus paid to market actors;
- the lower cost of system services, due to a favourable price effect in comparison to 2019.

Operating expenses rose by €35 million from 2019 to **€1,330 million.**

The main changes observed concerned:

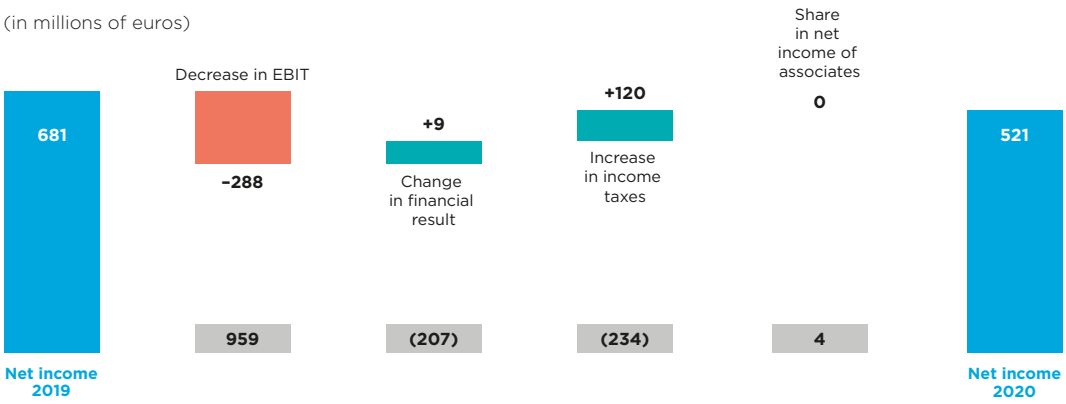
- **other purchases and services(2)** (€573 million in 2020), which were down by €1 million from 2019, notably due to the decrease in travel expenses;
- **net personnel expenses(3)** (€757 million in 2020), whitch increased by €34 million. This increase is principally explained by the following two developments:
  - a €21 million increase resulting from the pay policy (mainly wage rises and employers' social security contributions);
  - a €13 million increase associated with long-term and post-employment benefits (effect of discount and inflation rates) and an increase in the capitalised share of labour costs;
- **other operating income and expenses,** that totalled a net expense of €7 million in 2020, a €26 million difference from 2019 that is largely explained by the smaller impact of proceeds from sales of assets in 2020 compared to 2019, when they included €35 million for the Cuirassiers site;

- **taxes other than income taxes,** that totalled **€565 million,** an increase of **+€20 million** from 2019. This change is primarily explained by the effect of local tax rates (principally the tax on pylons, and to a lesser degree transformers) which increased by around **€13 million.**

Depreciation and amortisation amounted to **€956 million,** up by €12 million from 2019.

(1) RTE's loss rate = RTE's network losses (total injections – total withdrawals) / (energy injected + imports). Injections are measured by reference to forecast consumptions.
(2) Reported net of the portion allocated to investments.
(3) The definition used also covers net increases to provisions for employees (for long-term and post-employment benefits, the employer's contribution to profit sharing on behalf of employees, etc.). This item is also reported net of the portion allocated to investments.

5.2.1.2 Change in net income: -€160 million



In 2020, the **net income decreased by €160 million** from 2019 and stood at **€521 million.**

The **financial result** was a **net expense of –€207 million:** financial expenses were €9 million lower than in 2019, mainly due to the €11 million decrease in the cost of unwinding the discount on pension provisions following application of the new discount rates (1.3% at 31 December 2019, compared to 0.9% at 31 December 2020).

Income taxes totalled €231 million for 2020, compared to €353 million in 2019, a decrease of €122 million. This change is explained by the lower pre-tax income (–€27 million) and the decrease in the effective tax rate, from 34.43% at 31 December 2019 to 32.02% at 31 December 2020 (in application of France's finance law for 2020).

RTE GROUP INCOME STATEMENT UNDER IFRS AT 31 DECEMBER 2020

(IN MILLIONS OF EUROS)	2020	2019	CHANGE 2020-2019
Sales	**4,729**	**4,856**	**(127)**
Network access: withdrawals	3,955	4,185	(198)
Network access: injections	117	90	(7)
Network access: interconnections	546	450	95
Other services	111	128	(16)
System purchases	(912)	(853)	(59)
Operating expenses	(1,330)	(1,295)	(35)
Other net purchases	(573)	(572)	(1)
Net personnel expenses	(757)	(723)	(34)
Taxes other than income taxes	(565)	(545)	(20)
Other operating income and expenses	(7)	20	(26)
EBITDA	**1,915**	**2,182**	**(267)**
Net changes in fair value on energy derivatives	–	9	(9)
Net depreciation and amortisation	(956)	(945)	(12)
EBIT	**959**	**1,246**	**(288)**
Financial result	(207)	(216)	9
Consolidated profit before tax	**752**	**1,031**	**(279)**
Income tax	(234)	(354)	120
Share in income of associates	4	4	(0)
Net income	**521**	**681**	**(160)**

RECONCILIATION BETWEEN RTE'S NET INCOME UNDER IFRS AND RTE SA'S NET INCOME UNDER FRENCH GAAP

(IN MILLIONS OF EUROS)	2020	2019
RTE net income under IFRS	**521**	**681**
Impact of subsidiaries, net of intragroup transactions	(4)	(8)
Impact of intragroup transactions via profit and loss[(1)]	3	4
Impact of differences in accounting treatment under French GAAP and IFRS	(86)	(105)
RTE SA net income under French GAAP	**434**	**573**

(1) Corresponding to elimination of internal dividends.

5.2.1.3 Changes in the return on capital employed and return on equity

Key figures for RTE under French GAAP

(IN MILLIONS OF EUROS)	2020	2019
Income statement		
Sales	4,672	4,792
EBIT	848	1,116
Financial result	(226)	(230)
Net income	432	573
Balance sheet		
Economic assets at 1 January	16,330	15,779
Fixed assets at 31 December		
Gross	35,687	34 334
Depreciation and amortisation	17,259	16 469
Net	18,428	17 865
Equity at 31 December	7,412	7,330
Net indebtedness (gross indebtedness adjusted for cash)	9,642	9,197
ROCE	5.2%	7.1%

Based on **RTE's individual financial statements** under French GAAP(1), the **return on capital employed (ROCE)(2),** calculated as the ratio of EBIT to capital employed by RTE for its business activity, was 5.2% for 2020, lower than in 2019.

This percentage can be compared to the ROCE expected by the regulator when setting the TURPE 5 tariff, which is calculated as the normal level of remuneration defined in the tariff (6.125%) adjusted for the effects of clearing regulation accounts or smoothing of network access income, as well as the reductions required by the CRE. The expected level of ROCE for 2020 was 5.1%.

The ROCE in 2020 was thus 0.1 point higher than the expected ROCE (5.2% compared to 5.1%). This difference is concentrated in items eligible for the income and expenses adjustment account (CRCP)(3).

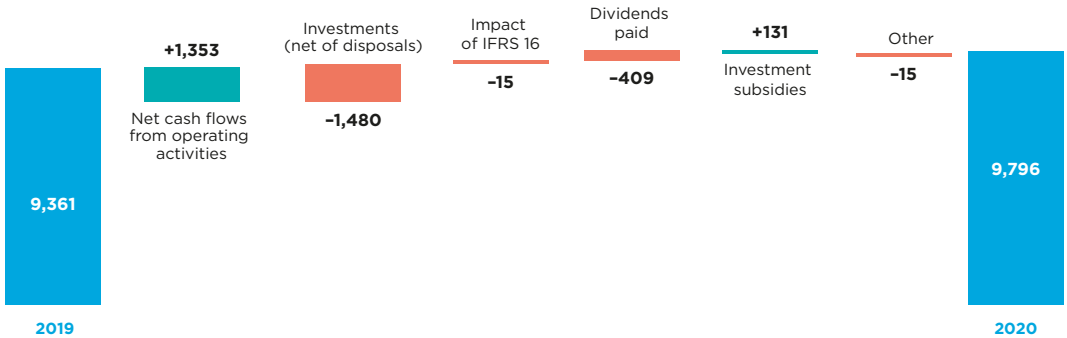
The return on equity (ROE)(4), calculated as the ratio of net income to equity, was 9.2% (11.9% in 2019).

(1) This basis for calculation is used to ensure consistency with the terms of calculation for the TURPE tariffs, which are based solely on RTE's financial statements under French GAAP.
(2) To remain coherent with the regulator's view, EBIT for the year is divided by the economic assets as reported in the balance sheet at 1 January of the year concerned.
(3) *Compte de régulation des charges et produits*, a mechanism to measure and offset differences between the actual figures and the forecasts on which tariffs are based.
(4) Return on equity is calculated for the RTE Group based on financial statements under IFRS, using the equity value at 31 December.

5.2.2 FINANCING

Increase in net indebtedness: +€435 million

(in millions of euros)



The year-on-year increase in RTE's net indebtedness is explained by:

- net cash flows from operating activities[1], which generated resources of €1,353 million;
- investments net of disposals, amounting to €1,480 million. Investment expenditure approved by the CRE for 2020 amounted to €1,529 million (see table below);
- the lease liability recognised under IFRS 16, which increased by €15 million in 2020;
- dividend payments out of 2019 profits, totalling €409 million;
- investment subsidies activated, amounting to €131 million.

INVESTMENT EXPENDITURE APPROVED BY THE CRE

CATEGORIES (IN MILLIONS OF EUROS)	2020	2019
Network	1,279	1,215
Major transmissions and interconnections	314	426
Regional networks	965	789
Information systems	161	161
Logistics	89	80
Total investments for the scope regulated by the CRE[1]	**1,529**	**1,456**

(1) Excluding disposals.

(1) Net cash flows from operating activities include the free cash flow and the change in working capital.

5.2.3. FINANCIAL STRUCTURE

Equity amounted to €5.655 billion at 31 December 2020.

Net indebtedness stood at €9.796 billion at 31 December 2020: €11.592 billion in financial indebtedness, less cash and short-term financial assets amounting to €2.156 billion.

The gearing (net financial indebtedness/equity) increased, from 1.63 at the 2019 year-end to 1.73 at the 2020 year-end.

(1) Investments net of disposals for the Group at 31 December 2020.
NB: figures for the RTE Group comply with IFRS, except for the return on capital employed, which is calculated based on the parent company RTE's individual financial statements under French GAAP, for reasons of comparability with regulation parameters.

5.3 OUTLOOK FOR 2021

The new TURPE 6 HTB network access tariff will take effect in 2021. The tariff increase from 1 August 2021 will be 1.09%, and changes for the following years will be based on the current year household consumer price index, an annual factor of 0.49%, and a correcting factor to balance the CRCP.

RTE's gross investment budget approved by the CRE for 2021 is €1,717.60 million, €188 million more than the actual investments made in 2020.

This increase is explained by the larger volume of link upgrades, and connections for offshore wind farms (principally the Fécamp, Saint-Brieuc, Saint-Nazaire, and Calvados projects). Digitisation expenses, particularly for renewal of substation command and control equipment, are set to rise. Work on the Savoy-Piedmont interconnector will continue, while the IFA2 interconnector (commissioned in January 2021) and connection of the West Brittany CCG plant will be completed. At the Avelin-Gavrelle line and Haute-Durance project, meanwhile, the volume of work will be lower. The 2021 investment budget also includes €162 million for information systems and €79 million for real estate and mobile assets. Both these amounts are regulated separately from the amounts for other types of investment.

In recent years the French State has clarified its framework for achieving carbon neutrality by 2050 (the SNBC) and bringing the share of renewable energies in the country's electricity output to 40% by 2030 (the PPE). It is now recognised that the road to carbon neutrality will involve large-scale electrification of the economy in order to avoid use of fossil fuels, and that dependence on renewable-source electricity will increase. To achieve this transition, the electricity networks are essential.

RTE's investment strategy therefore takes account of the expansion of renewable energies, and the fact that its network is ageing. The network must be structurally adapted to incorporate the new forms of renewable energy generation, and digitised to integrate the flexibility needed for network operation; also, renewal of the network must now be a priority.

On top of these factors, RTE's prospects remain dependent on weather effects, electricity generation plans (which affect the volumes withdrawn, network losses, congestion and damage), movements in electricity prices (which affect expenses to cover network losses and income from interconnections), capacity guarantee prices, and the general economic climate, especially the consequences of the COVID-19 pandemic.

5.4 DETAILS OF SUBSIDIARIES

5.4.1 SUBSIDIARIES AND INVESTMENTS AT 31 DECEMBER 2020

(IN THOUSANDS OF EUROS) COMPANY	SHARE CAPITAL	GROSS VALUE OF SHARES OWNED	IMPAIRMENT	% OF CAPITAL OWNED DIRECTLY BY RTE	LOANS AND ADVANCES[1]	SALES	EQUITY	NET INCOME	DIVIDENDS RECEIVED IN 2020
ARTERIA	650	650	–	100%	–	11,854	14,203	1,644	
RTE INTERNATIONAL	2,000	2,000	–	100%	2,000	11,606	3,700	841	
AIRTELIS	10,000	10,000	–	100%	10,460	17,115	17,410	336	–
RTE IMMO	763	6,865	–	100%	–	–	6,910	-18	–
IFA2	500	250	–	50%	–	179	465	0	–
CIRTÉUS	2,575	2,575	–	100%	500	12,240	7,715	1,042	
HGRT	52,119	20,854	–	34%	–	–	91,564	9,906	3,400
CORESO	NA	NA	–	16%	–	NA	NA	NA	–
INELFE	2,000	1,000	–	50%	–	8,745	16,719	80	–
CELTIC INTERCONNECTOR	100	50	–	50%	–	–	100	NA	–
JAO	NA	NA	–	5%	-	NA	NA	NA	NA
DECLARANET	NA	NA	–	12%	NA	NA	NA	NA	NA

NA: information not available.
(1) Made by RTE and still outstanding.

RTE comprises the parent company RTE, five subsidiaries which are directly fully-owned by RTE and fully consolidated, two jointly-controlled companies (INELFE and IFA2, consolidated as joint operations) and two companies in which RTE exercises significant influence (HGRT and Coreso, associates), which are accounted for by the equity method. RTE also holds investments in three other companies, JAO, Declaranet and Celtic Interconnector.

The activities of RTE's subsidiaries are described in section 2.2 "History of RTE".

5.5 OTHER FINANCIAL INFORMATION

5.5.1 SUBSEQUENT EVENTS

None.

5.5.2 INFORMATION ON SETTLEMENT OF SUPPLIER AND CUSTOMER INVOICES (ARTICLE L. 441-6-1, OF THE FRENCH COMMERCIAL CODE)

In application of the "LME" law, amended by law 2015-990, for growth, economic activity and equal economic opportunities, RTE reports below its amounts payable and receivable due (including taxes) at the year-end. These amounts are presented by maturity and as a percentage of the purchases and sales of the year (including taxes).

(IN THOUSANDS OF EUROS	0 DAY	1 TO 30 DAYS	31 TO 60 DAYS	31 TO 60 DAYS	31 TO 60 DAYS	TOTAL	0 DAY	1 TO 30 DAYS	31 TO 60 DAYS	31 TO 60 DAYS	31 TO 60 DAYS	TOTAL
A. Period overdue		**Invoices received**						**Invoices issued**				
Number of invoices	75					1,695	23					1,179
Total amount of invoices (incl. VAT)	–	10,059	2,358	(48)	1,705	–	–	(1,855)	13,988	1,693	9,329	–
% of the total amount of purchases of the year	–	0.53%	0.12%	0.00%	0.09%	–	–	–	–	–	–	–
% of the total amount of sales of the year (incl. VAT)	–	–	–	–	–	–	0.00%	0.03%	0.25%	0.032%	0.16%	–
B. Invoices excluded – payables and receivables in dispute or unrecognised												
Number of invoices excluded						–						–
Total amount of invoices excluded (incl. taxes)						–						–
C. Reference payment terms applied (contractual or statutory)												
Payment terms used to calculate periods overdue		Contractual deadlines				–		Statutory deadlines				–

The credit balance of receivables due is explained by the amount concerning the JAO (Joint Allocation Office).

The JAO, a market actor, is the single entity in charge of implementing and running auctions for annual, monthly and daily energy transmission capacities on shared borders. It is an operator of explicit interconnection capacity auctions and is active in some 15 countries on behalf of 27 electricity TSO.

Every month, RTE records all invoices for month M–1 and receipts for month M on interconnections managed by the JAO as intermediary. Customer accounts due within thirty days can thus show a credit or a debit at the year-end, depending on fluctuations in exchanges via the interconnections.

5.5.3 NON-DEDUCTIBLE EXPENSES CONCERNED BY ARTICLE 39-4 OF THE FRENCH TAX CODE

The amount of non-deductible expenses concerned by article 39-4 of the French Tax Code was €311,522 in 2020.

5.5.4 STATUTORY AUDITORS

As a result of the transposition of directive no. 2009/72/CE and in accordance with article L. 111-15 of the French Energy Code, RTE's individual financial statements must be certified by at least one auditor who does not certify the financial statements of any other party to the Vertically Integrated Enterprise as defined by the regulator in the decision of 11 January 2018 concerning certification of RTE, or the consolidated financial statements of such an entity.

To ensure compliance with this requirement, article 20 of RTE's bylaws requires such auditors to submit a document, prior to their appointment by the shareholders and subsequently each year before the General Shareholders' Meeting called to approve the annual financial statements, declaring whether or not they audit the financial statements of another party to the Vertically Integrated Enterprise.

RTE's statutory auditors are the two firms Mazars and KMPG.

Mazars, represented in the person of its partner, is designated as the statutory auditor that meets the requirement covered in article 20 of RTE's bylaws to have at least one auditor who is independent of the Vertically Integrated Enterprise.

Consolidated financial statements at 31 December 2020

CONSOLIDATED INCOME STATEMENT

(IN THOUSANDS OF EUROS)	NOTES	2020	2019
Sales	**6**	**4,729,058**	**4,855,705**
Energy purchases	**7**	(499,512)	(459,547)
Other external expenses	**8**	(818,991)	(799,404)
Personnel expenses	**10**	(923,508)	(889,014)
Taxes other than income taxes	**11**	(565,472)	(545,255)
Other operating income and expenses	**12**	(6,742)	19,718
Operating profit before depreciation and amortisation		**1,914,832**	**2,182,203**
Net changes in fair value on energy derivatives			8,860
Net depreciation and amortisation		(956,299)	(944,627)
Other income and expenses			–
Operating profit		**958,533**	**1,246,436**
Cost of gross financial indebtedness		(169,815)	(170,672)
Discount effect		(26,653)	(37,858)
Other financial income and expenses		(10,481)	(7,052)
Financial result	**13**	**(206,949)**	**(215,581)**
Consolidated profit before tax		**751,584**	**1,030,855**
Income taxes	**14**	(234,035)	(353,612)
Share in net income of associates	**17**	3,622	3,678
Consolidated net income		**521,171**	**680,921**
– net income attributable to non-controlling interests		–	–
– RTE net income		521,171	680,921
Earnings per share (RTE share) in euros		**2.44**	**3.19**

STATEMENT OF NET INCOME AND GAINS AND LOSSES RECORDED DIRECTLY IN EQUITY

(IN THOUSANDS OF EUROS)	2020	2019
Consolidated net income	**521,171**	**680,921**
Gross change in fair value of financial assets(1)	(1,176)	118
Related tax effect	119	38
Change in fair value of financial assets	**(1,056)**	**156**
Gross change in fair value of hedging instruments(2)	354	354
Related tax effect	(105)	(102)
Change in fair value of hedging instruments	**249**	**252**
Gains and losses recorded directly in equity that will be reclassified subsequently to profit or loss	**(807)**	**408**
Gross change in actuarial gains and losses on post-employment benefits	(249,720)	(375,389)
Related tax effect	62,208	96,298
Change in actuarial gains and losses on post-employment benefits	**(187,512)**	**(279,091)**
Impact of IFRS 16	–	3,416
Gains and losses recorded directly in equity that will not be reclassified subsequently to profit or loss	**(187,512)**	**(275,674)**
Total gains and losses recorded directly in equity	**(188,319)**	**(275,266)**
Net income and gains and losses recorded directly in equity	**332,852**	**405,655**

(1) These changes principally correspond to the effects of fair market valuation of negotiable debt instruments with maturity of over three months at the date of acquisition.
(2) In 2006 and 2011, the Group contracted financial instruments as pre-hedges to cover the interest rate risk associated with two highly probable bond issues. The balancing payments due upon termination of these hedges are spread over the residual duration of the hedged bond drawings.

CONSOLIDATED BALANCE SHEET

ASSETS (IN THOUSANDS OF EUROS)	NOTES	2020	2019
Intangible assets	15	430,238	376,255
Property, plant and equipment	16	18,398,896	17,876,729
Investments in associates	17	32,016	31,776
Non-current financial assets	18	13,789	13,878
Deferred tax assets	14	327,974	269,342
Non-current assets		**19,202,913**	**18,567,980**
Inventories	19	147,098	120,389
Trade and similar receivables	20	1,183,906	1,321,191
Current financial assets	18	1,963,069	1,311,189
Current tax assets		581	(342)
Other receivables	21	211,720	188,501
Cash and cash equivalents	22	193,269	160,836
Current assets		**3,699,644**	**3,101,764**
TOTAL ASSETS		**22,902,556**	**21,669,744**

EQUITY AND LIABILITIES (IN THOUSANDS OF EUROS)	NOTES	2020	2019
Share capital	23	2,132,286	2,132,286
RTE net income and consolidated reserves		3,522,851	3,598,594
Equity – RTE share		**5,655,136**	**5,730,879**
Equity – non-controlling interests		–	–
Total equity		**5,655,136**	**5,730,879**
Non-current provisions	24	2,139,389	1,852,741
Non-current financial liabilities	25	10,573,961	10,289,854
Non-current liabilities		**12,713,350**	**12,142,595**
Current provisions	24	132,646	128,239
Trade and similar payables	28	915,522	1,104,672
Current financial liabilities	25	1,378,472	543,187
Current tax liabilities		525	642
Other liabilities	28	2,106,905	2,019,530
Current liabilities		**4,534,070**	**3,796,270**
TOTAL EQUITY AND LIABILITIES		**22,902,556**	**21,669,744**

CONSOLIDATED CASH FLOW STATEMENT

(IN THOUSANDS OF EUROS)	2020	2019
OPERATING ACTIVITIES		
Consolidated profit before tax of consolidated companies	**751,584**	**1,030,855**
Depreciation and amortisation, provisions and changes in fair value	965,171	943,980
Dividends received from entities accounted for by the equity method	3,400	3,570
Financial income and expenses	180,296	178,926
Gains and losses on disposal of assets	23,751	25,985
Change in working capital	(159,208)	(103,714)
Net cash flow from operations	**1,761,597**	**2,076,031**
Net financial expenses disbursed	(193,185)	(190,505)
Income taxes paid	(215,554)	(380,680)
Net cash flow from operating activities	**1,352,859**	**1,504,846**
INVESTING ACTIVITIES		
Acquisitions of property, plant and equipment and intangibles	(1,532,105)	(1,458,273)
Disposals of property, plant and equipment and intangibles	47,743	4,382
Changes in financial assets	(654,312)	(127,491)
Net cash flow used in investing activities	**(2,138,674)**	**(1,581,382)**
FINANCING ACTIVITIES		
Issuance of borrowings	6,717,181	1,170,670
Repayment of borrowings	(5,618,010)	(804,283)
Dividends paid	(408,553)	(362,093)
Investment subsidies	131,358	116,971
Net cash flow from financing activities	**821,976**	**121,265**
Financial income on cash and cash equivalents	(3,727)	(1,039)
Net increase (decrease) in cash and cash equivalents	**32,433**	**43,691**
Cash and cash equivalents – opening balance	160,836	117,145
Cash and cash equivalents – closing balance	**193,269**	**160,836**

CHANGES IN CONSOLIDATED EQUITY

(IN THOUSANDS OF EUROS)	CAPITAL	CONSOLIDATED RESERVES AND NET INCOME	RESTATEMENT TO FAIR VALUE OF FINANCIAL INSTRUMENTS	EQUITY (RTE SHARE)	EQUITY (NON-CONTROLLING INTERESTS)	TOTAL EQUITY
Equity at 31 December 2018	**2,132,286**	**3,555,568**	**(224)**	**5,687,629**	**–**	**5,687,629**
Total gains and losses recorded directly in equity[1]	–	(279,091)	3,825	(275,266)	–	(275,266)
2019 net income	–	680,921		680,921		680,921
Net income and gains and losses recorded directly in equity	**–**	**401,830**	**3,825**	**405,655**	**–**	**405,655**
Dividends paid	–	(362,093)		(362,093)	–	(362,093)
Other changes			(312)	(312)	–	(312)
Equity at 31 December 2019	**2,132,286**	**3,595,305**	**3,289**	**5,730,880**	**–**	**5,730,880**
Total gains and losses recorded directly in equity[1]	–	(187,512)	(807)	(188,319)	–	(88,319)
2020 net income	–	521,171	–	521,171	–	521,171
Net income and gains and losses recorded directly in equity	**–**	**333,659**	**(87)**	**332,852**	**–**	**332,852**
Dividends paid	–	(408,583)	–	(08,553)	–	(08,553)
Other changes	–	(42)	–	(42)	–	(2)
Equity at 31 December 2020	**2,132,286**	**3,520,370**	**2,482**	**5,655,137**	**–**	**5,655,137**

(1) For details of these changes, see the statement of net income and gains and losses recorded directly in equity.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

RTE, Réseau de transport d'électricité ("RTE"), is a *société anonyme*, a French-domiciled publicly-traded limited company whose shares are unlisted.

RTE manages the French electricity transmission network, with responsibility for operating, maintaining and developing the network. It guarantees smooth and safe operation of the French electric system, providing on-demand, equitable access to all network users.

The consolidated financial statements of the RTE Group ("the Group") include the accounts of RTE, the accounts of five companies controlled exclusively by RTE which are fully consolidated, the accounts of two jointly-controlled companies consolidated as joint operations, and the accounts of two companies in which RTE exercises significant influence (associates) which are accounted for under the equity method. All these economic entities are collectively referred to as the "Group".

The five companies controlled exclusively by RTE are:
- Arteria, which markets:
  - use of optical fibres constructed by RTE,
  - "high points" (stand-alone radio transmitters or power system pylons), pre-equipped to host operators' mobile telephone facilities in order to carry broadband to the final customer at a lower cost, as a complement to optical fibres;
- RTE International (RTE I), which provides engineering, consulting and other services in all areas of an electricity transmission network operator's business;
- Airtelis, which markets services using one or more helicopters, and supplies products and equipment to enhance RTE's assets and/or skills (including operations, heliborne transport, and helicopter leases);
- RTE Immo, which operates mainly in acquisition, management, administration and sale of real estate properties and rights, execution of work on real estate properties to enhance their value, and provision of real estate services;
- Cirtéus, which provides services, studies and advice in the competitive sector of the market for maintenance, operation and development of high-voltage and very high-voltage electricity installations.

The companies controlled jointly by RTE are:
- INELFE (INterconnexion ÉLectrique France–Espagne), owned jointly with REE (Red Eléctrica de España SAU). INELFE was formed for the planning and construction of any new interconnection project between France and Spain, increasing interconnection capacity between the French and Spanish transmission networks;
- IFA2 (Interconnexion France-Angleterre 2), owned jointly with NG IFA2 (National Grid IFA2 Ltd). IFA2 was formed to construct the new interconnection line of the same name between the French and British transmission networks.

The Group's associates are:
- a holding company, HGRT (Holding des Gestionnaires de Réseau de Transport d'électricité, a French limited company), which holds an investment in EPEX Spot, a company that handles financial management for energy purchase and sale markets on European territory;
- Coreso, a Belgian company which supplies safety assessments and designs coordinated preventive or corrective solutions to control safe operation of the electricity system covering the west of Europe.

The Group's financial statements at 31 December 2020 were prepared under the responsibility of its Executive Board, which approved them on 26 January 2021.

NOTE 1 – GROUP ACCOUNTING POLICIES

1.1 DECLARATION OF CONFORMITY AND GROUP ACCOUNTING POLICIES

Pursuant to European regulation no. 1606/2002 of 19 July 2002 on the adoption of international accounting standards, the Group's consolidated financial statements for the year ended 31 December 2020 are prepared under the international accounting standards published by the IASB and approved by the European Union for application at 31 December 2020. These international standards are IAS (International Accounting Standards), IFRS (International Financial Reporting Standards), and SIC and IFRIC interpretations.

The Group has decided against early application of the standards and interpretations that were not mandatory in 2020.

1.2 CHANGES IN ACCOUNTING POLICIES AT 31 DECEMBER 2020

Apart from the changes indicated below, the accounting and valuation methods applied by the Group in the consolidated financial statements for the year ended 31 December 2020 are identical to those used in the consolidated financial statements for the year ended 31 December 2019.

1.2.1 STANDARDS AND AMENDMENTS ADOPTED BY THE EUROPEAN UNION THAT ARE MANDATORY

The following accounting standards and amendments have been adopted by the European Union and are mandatory for financial years beginning on or after 1 January 2020:

- "Amendments to references to the conceptual framework in IFRS standards". This document contains all changes made to IFRS 2, IFRS 3, IFRS 6, IFRS 14, IAS 1, IAS 8, IAS 34, IAS 37, IAS 38, IFRIC 12, IFRIC 19, IFRIC 20, IFRIC 22 and SIC-32. The changes have no impact for the Group;
- "Definition of material (amendments to IAS 1 and IAS 8)";
- "Interest rate benchmark reform (amendments to IFRS 9, IAS 39 and IFRS 7)". The Group's analysis concluded that these amendments will not result in any material impact;
- amendment to IFRS 3 clarifying the distinction between a business and a group of assets for stakeholders applying IFRS 3. The Group is not concerned by this amendments;
- "COVID-19-related rent concessions – amendment to IFRS 16", which could be applied early from 1 June 2020. The Group's analysis concluded that this amendment has no impact for RTE.

1.2.2 STANDARDS AND INTERPRETATIONS ADOPTED BY THE EUROPEAN UNION BUT NOT YET MANDATORY

There are currently no standards or interpretations that have been adopted by the European Union and are eligible for early application in the financial statements at 31 December 2020.

1.2.3 OTHER STANDARDS AND AMENDMENTS PUBLISHED BY THE IASB BUT NOT YET ADOPTED BY THE EUROPEAN UNION

The Group has not yet assessed the potential impacts of the following IASB publications:

- "Classification of liabilities as current or non-current (amendment to IAS 1)";
- "Property, plant and equipment – proceeds before intended use (amendments to IAS 16)";
- "Reference to the conceptual framework (amendment to IFRS 3)";
- "Onerous contracts – cost of fulfilling a contract (amendment to IAS 37)";
- "Interest rate benchmark reform – amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16";
- "Annual improvements – 2018-2020 cycle".

NOTE 2 – SUMMARY OF THE PRINCIPAL ACCOUNTING AND VALUATION METHODS

The following accounting methods have been applied consistently to all the periods presented in the consolidated financial statements.

2.1 VALUATION

The consolidated financial statements are based on historical cost valuation, with the exception of certain financial instruments and financial assets, which are stated at fair value.

The methods used to determine the fair value of these instruments are presented in note 2.15.

2.2 MANAGEMENT JUDGEMENTS AND ESTIMATES

The preparation of the financial statements requires the use of judgements, best estimates and assumptions in determining the value of assets and liabilities, income and expenses recorded for the period, considering positive and negative contingencies existing at year-end. The figures in the Group's future financial statements could differ significantly from current estimates due to changes in these assumptions or economic conditions.

The principal sensitive accounting methods for which the Group uses estimates and judgements are described below. Given their importance in the Group's financial statements, the impact of any change in assumption in these areas could be significant.

The Group's judgements and estimates also reflect the consequences of the COVID-19 pandemic, as presented in note 3.1.3.

2.2.1 PENSIONS AND OTHER LONG-TERM AND POST-EMPLOYMENT BENEFITS

The value of pensions and other long-term and post-employment benefit obligations is based on actuarial valuations that are sensitive to all the actuarial assumptions used, particularly concerning discount rates and wage increase rates.

The principal actuarial assumptions used to calculate these post-employment and long-term benefits at 31 December 2020 are presented in note 24.2. These assumptions are updated annually. The Group considers the actuarial assumptions used at 31 December 2020 appropriate and well-founded, but future changes in these assumptions could have a significant effect on the amount of the obligations and the Group's equity and net income. Sensitivity analyses are therefore presented in note 24.2.

2.2.2 IMPAIRMENT OF LONG-TERM ASSETS

Impairment tests and the useful lives of long-term assets are sensitive to the macro-economic assumptions used, and medium-term financial forecasts. The Group therefore revises the underlying estimates and assumptions based on regularly updated information.

2.2.3 FINANCIAL ASSETS AND LIABILITIES

The Group considers that the balance sheet values of cash and cash equivalents, negotiable debt instruments, trade receivables and trade payables are a good approximation of their market value due to the high liquidity of these items.

The market values of listed investment securities are based on their year-end stock market value. The net book value of other securities and current bank loans is a reasonable approximation of their fair value.

The fair value of financial liabilities was determined using estimated future cash flows, discounted at rates observable at the year-end for instruments with similar conditions and maturities.

2.2.4 ASSESSMENT OF CONTROL

Since application of IFRS 10, IFRS 11 and IFRS 12, the Group has used judgement to assess control or classify the type of partnership arrangement represented by a jointly-controlled entity.

2.2.5 OTHER JUDGEMENTS

When there is no standard or interpretation applicable to a specific transaction, the Group exercises judgement to define and apply accounting methods that will supply relevant, reliable information for preparation of its financial statements.

2.3 CONSOLIDATION METHODS

Subsidiaries are companies in which the Group exercises exclusive control and are fully consolidated. Exclusive control means the power to govern the enterprise's financial and operating policies either directly or indirectly so as to obtain benefit from its activities. The Group is presumed to have exclusive control when the three following conditions are fulfilled:

- the Group holds power over the entity's relevant activities, i.e. the activities that have a significant impact on returns;
- the Group is exposed, or has rights, to variable returns;
- the Group has the ability to use its power over the entity to influence the amount of the investor's returns.

The Group considers all facts and circumstances when assessing control. All substantive potential voting rights exercisable, including by another party, are also taken into consideration.

A joint operation is a joint arrangement in which the parties (joint operators) that exercise joint control over the entity have direct rights to its assets, and obligations for its liabilities. In application of IFRS 11, the Group, as an operator in a joint operation, reports the assets and liabilities and income and expenses related to its investment line by line.

Associates are entities in which the Group exercises significant influence over financial and operating policies, without having exclusive or joint control. Significant influence is presumed to exist when the Group's investment is at least 20%. Associates are accounted for under the equity method.

In application of IFRS 12, investments in associates are carried in the balance sheet at historical cost adjusted for the share of net assets generated after acquisition, less any impairment. The Group's share in net income for the period is reported under the income statement heading "Share in net income of associates".

All significant internal transactions between consolidated companies, including realised internal profits, are eliminated.

A list of subsidiaries, joint operations and associates is presented in note 33.

2.4 FINANCIAL STATEMENT PRESENTATION RULES

Assets and liabilities of dissimilar natures or functions are disclosed separately.

Assets and liabilities contributing to working capital used in the entity's normal operating cycle are classified as current. Other assets and liabilities are classified as current if they mature within one year of the closing date, and non-current if they mature more than one year after the closing date.

The income statement presents items by nature. The heading "Other income and expenses" presented below the operating profit before depreciation and amortisation comprises any items of an unusual nature or amount.

2.5 TRANSLATION METHODS

2.5.1 REPORTING CURRENCY AND FUNCTIONAL CURRENCY

The Group's financial statements are presented in euro, which is both its functional and reporting currency. All figures are rounded up or down to the nearest thousand.

2.5.2 TRANSLATIONS OF TRANSACTIONS IN FOREIGN CURRENCIES

In application of IAS 21, transactions expressed in foreign currencies are initially translated and recorded in the functional currency of the entity concerned, using the rate in force at the transaction date.

At each reporting date, monetary assets and liabilities expressed in foreign currencies are translated at the closing rate. The resulting foreign exchange differences are taken to the income statement.

IFRIC 22 "Foreign currency transactions and advance consideration", adopted on 28 March 2018, clarified a point of application of IAS 21 regarding the exchange rate that should be used when an advance payment is made before execution of the transaction. The purchase or sale transaction must be translated at the exchange rate of the date of initial recognition of the asset or liability corresponding to the advance payment. If several advance payments are made, an average exchange rate is determined for each transaction.

2.6 RELATED PARTIES

Related parties include the French State, companies in which the state holds majority ownership and certain of their subsidiaries (including EDF SA and certain subsidiaries), and companies in which RTE exercises joint control or significant influence. They also include members of the Group's management and governance bodies.

2.7 SALES

Sales essentially comprise income from energy transmission and services. Services include provision of interconnection capacity at national borders.

The Group accounts for sales when:
- there is a proven contractual relationship;
- delivery has taken place (or the service has been completed);
- a quantifiable price has been established or can be determined;
- and the receivables are likely to be recovered.

Delivery takes place when the risks and benefits associated with ownership are transferred to the buyer.

The Group applies IFRS 15 "Revenue from contracts with customers". Connection contracts qualify as contracts with customers under this standard, and income from those contracts has therefore been reclassified from a share of subsidies to sales.

RTE has opted to recognise the revenue over time. The income from a connection contract is thus spread over the period of use of the connection in the same way as the investment subsidy.

This decision corresponds to an economic approach: it is coherent to recognise income on connection in the same way as the associated expenses and depreciation, which are spread over the period of use of the connection.

Also, the service transferred to the customer is not the connection itself, but its use: the customer simultaneously receives and consumes its right to use the connection supplied by RTE. The service concerned by the contract is thus transferred to the customer continuously rather than at a specific date (see IFRS 15.35), and this is the reason why revenues from customer connections should be recognised progressively over the period of use of the connection.

Contract liabilities under IFRS 15 represent RTE's obligation to supply to its customers a service of connection to the network for which it has already received payment. These liabilities consist of advance payments received for the connection service (see note 28).

2.7.1 CAPACITY MECHANISM

A capacity mechanism has been set up in France to ensure secure power supplies during peak periods.

French law no. 2010-1488 of 7 December 2010 on the new organisation of the electricity market introduced an obligation in France to contribute to power supply security from 1 January 2017.

Operators of electricity generation facilities and load-shedding operators must have their capacities certified by RTE, and commit to a forecast level of availability for a given year of delivery. In return, they are awarded capacity certificates.

Meanwhile, electricity suppliers and purchasers of power to compensate for network losses (obligated actors) must hold capacity certificates equivalent to consumption by their customers in peak periods. Suppliers pass on the cost of the capacity mechanism to final customers through their sale prices.

The system is completed by registers for capacity trading between actors. Capacity auctions are held several times a year.

The Group is concerned by this system, as a certifier (RTE SA), an operator of electricity installations via its interconnections (RTE SA) and as an obligated purchaser (RTE SA – as a purchaser of power to compensate for network losses).

The operations are recorded as follows:

- sales of capacity certificates are recognised in income when the auctions or over-the-counter sales take place;
- stocks of capacity certificates held by RTE as obligated actor are stated at their purchase value on the market. Decreases in the stock of certificates follow the pattern of peak periods;
- if the stocks of capacity certificates do not cover the obligation, an expense is recorded equivalent to the best estimate of the expense necessary to extinguish the obligation.

2.8 OTHER EXTERNAL EXPENSES

Transactions related to RTE's responsibility for balancing electricity generation and consumption in the electricity transmission network are reported under "Other external expenses".

2.9 INCOME TAXES

Income taxes include the current tax expense (income) and the deferred tax expense (income), calculated under the tax legislation in force in the countries where the earnings are taxable.

In compliance with IAS 12, current and deferred taxes are recorded in the income statement, or in equity if they concern items directly recorded in equity.

The current tax expense (income) is the estimated amount of tax due on the taxable income for the period, calculated using the tax rates adopted at the year-end. This expense includes reclassification of certain tax credits as components of "Other operating income and expenses" in the income statement.

Deferred taxes result from temporary differences between the book value of assets and liabilities and their tax basis.

Deferred tax assets and liabilities are valued at the future tax rate for the period in which the asset will be realised or the liability settled, as adopted at the year-end. If the tax rate changes, deferred taxes are adjusted to the new rate and the adjustment is recorded in the income statement, unless it relates to an underlying for which changes in value are recorded in equity, for example in accounting for changes in actuarial gains and losses or fair value on hedging instruments and financial assets.

Deferred taxes are reviewed at each closing date, to take into account changes in tax legislation and the prospects for recovery of deductible temporary differences. Deferred tax assets are only recognised when it is probable that the Group will have sufficient taxable profit to utilise the benefit of the asset in the foreseeable future, or beyond that horizon, if there are deferred tax liabilities with the same maturity.

Since 1 January 2018, RTE SA has been part of the CTE Group's tax group. The tax group agreement stipulates that the tax to be borne by RTE SA is equal to the income tax that would have been payable on its taxable income and/or long-term capital gains of the year if it was taxed separately, less all deductions to which RTE SA would have been entitled if it was not part of a tax group.

2.10 EARNINGS PER SHARE

Earnings per share are calculated by dividing the Group's share of net income by the weighted average number of shares outstanding over the period. This weighted average number of shares outstanding is the number of ordinary shares at the start of the year, adjusted by the number of shares redeemed or issued during the year.

2.11 INTANGIBLE ASSETS

Intangible assets mainly consist of purchased or internally designed and developed software. These assets are amortised on a straight-line basis over their useful lives, which are generally between three and fifteen years.

Software licence acquisition costs or the cost of creating and developing software are reported at a value based on the costs incurred to acquire the software, or create it and put it into operation. Costs directly associated with production of identifiable, unique software that is controlled by the Group, and is likely to generate future economic benefits greater than the cost of the software over a period of more than one year, are capitalised. Costs directly associated with production include payroll costs for the personnel who developed the software and the internal and external expenses incurred in producing the asset.

Other research and development expenses are charged to expenses for the year they are incurred, unless they meet the requirements for capitalisation as defined by IAS 38.

2.12 PROPERTY, PLANT AND EQUIPMENT

2.12.1 INITIAL MEASUREMENT

Property, plant and equipment are recorded at acquisition or production cost.

The cost of facilities developed in-house includes all labour and parts costs, and all other production costs attributable to the construction of the asset.

When a part of an asset has a different useful life from the overall asset's useful life, it is identified as an asset component and depreciated over a specific period.

Borrowing costs attributable to the financing of an asset incurred during the construction period are included in the value of the asset provided it is a "qualifying asset" as defined by IAS 23. The capitalisation rate applied depends on the borrowing terms, as presented in note 25.2.1.

2.12.2 DEPRECIATION

Property, plant and equipment are depreciated on a straight-line basis over their useful life, defined as the period during which the Group expects to draw future economic benefits from their use.

Depreciation is calculated based on the gross value of the assets concerned, which will have zero residual value at the end of their useful life.

The estimated useful lives for the principal facilities are generally the following:

- lines and cables: 45 years;
- transformers: 40 years;
- cells and busbars: 45 years for "high voltage" equipment and 15 years for "low voltage" equipment;
- reactive power compensation and auxiliary equipment: 45 years;
- telecommunications and telecontrol equipment: 10 years.

2.12.3 SUBSEQUENT INVESTMENT EXPENDITURE

Subsequent costs are included in the book value of the asset, or recognised as a separate asset when it is probable that the future economic benefits from the asset will benefit the Group and the cost can be reliably measured.

2.12.4 MAINTENANCE AND COMPLIANCE EXPENSES

All repair and maintenance expenses are charged to the income statement during the period in which they are incurred.

The Group capitalises safety spare parts and compliance expenses incurred as a result of legal and regulatory obligations sanctioning non-compliance by an administrative ban from operation.

These expenses are amortised over the useful life of the relevant facilities.

2.12.5 PUBLIC TRANSMISSION NETWORK CONCESSION

RTE is by law France's public transmission network operator, and exercises this mission under the amendment signed on 30 October 2008 to the agreement of 27 November 1958, transferring the concession for the French public electricity transmission network to RTE. The assets operated under this concession are by law the property of RTE, and are included in "property, plant and equipment".

2.13 LEASES

Under IFRS 16, applicable since 1 January 2019, a contract is, or contains, a lease if it confers the right to control the use of an identified asset for a period of time in exchange for a consideration.

Identified arrangements that do not have the legal form of a lease contract but nonetheless convey the right to control the use of an asset or group of specific assets to the purchaser are treated by the Group as leases, and analysed by reference to IFRS 16.

IFRS 16 introduces significant changes to the accounting treatment of leases by the lessee. It eliminates the distinction between operating and finance leases and requires recognition of a right-of-use asset and a lease liability when a lease is set up.

The Group has applied this standard retrospectively since 1 January 2019, without restating comparative period figures (this is known as the "modified" retrospective approach).

Leases are recognised in the balance sheet at their inception, at the discounted value of future lease payments, in the form of a financial liability included in "Other financial liabilities (see note 25) and a "right-of-use" asset included in property, plant and equipment (see note 16). They are written down over the term of the lease.

The Group's lease contracts as lessee essentially concern real estate assets, and to a lesser extent transport vehicles.

The Group applies the two exemptions allowed by the standard for leases with a term of twelve months or less and leases of assets with individual value when new of less than $5,000.

The Group determines the lease liability by discounting the future lease payments over the term of the lease using a rate based on an incremental borrowing rate reflecting the Group's specific features. The maturity of the chosen rate depends on the term of each lease contract.

The term of the lease is the maximum period during which the lessee will have the right to use the leased asset, i.e. the period during which the lease cannot be terminated by the lessor, plus all possible extensions at the lessee's sole initiative as set out in the contract.

2.14 IMPAIRMENT OF INTANGIBLE ASSETS AND PROPERTY, PLANT AND EQUIPMENT

At the year-end and at each interim reporting date, the Group assesses whether there is any indication that an asset could have been significantly impaired. If so, an impairment test is carried out in compliance with IAS 36.

2.15 FINANCIAL ASSETS AND LIABILITIES

Financial assets include assets (non-consolidated investments, investment securities), loans and receivables at amortised cost, including trade and similar receivables, and the positive fair value of derivatives.

Financial liabilities comprise financial borrowings and debts, trade and similar payables, bank credit and the negative fair value of financial derivatives.

Financial assets and liabilities are recorded in the balance sheet as current if they mature within one year and non-current if they mature after one year, apart from derivatives held for trading, which are all classified as current.

Operating debts and receivables, and cash and cash equivalents are governed by IFRS 9 and reported separately in the balance sheet.

2.15.1 FINANCIAL ASSETS (EXCLUDING DERIVATIVES)

Financial assets that give rise to cash flows which are not Solely Payment of Principal and Interest (SPPI) must be carried at fair value through profit and loss. However, IFRS 9 offers an irrevocable option, which must be exercised at inception for each individual investment, allowing investments in equity instruments to be carried at fair value through other comprehensive income, with no subsequent transfer to profit and loss even in the event of sale. Under this option, only dividends are recorded in income.

Financial assets that give rise to cash flows which are SPPI are carried at amortised cost under the effective interest rate method.

Financial assets carried at fair value through profit and loss are recognised at the transaction date at fair value, which is generally equal to the amount of cash paid out. Transaction costs directly attributable to the acquisition are recorded in the income statement. At each subsequent reporting date they are adjusted to fair value, which is determined by reference to (i) quoted prices on an active market (level 1), (ii) observable data from a market (level 2), or (iii) data that cannot be observed on a market (level 3).

Changes in fair value are recorded in the income statement under the heading "Other financial income and expenses".

Dividends and interest received on assets stated at fair value are recorded in the income statement under "Other financial income and expenses".

In the case of non-current financial assets carried at amortised cost, impairment is assessed on an individual basis, taking into consideration the counterparty's risk profile and the guarantees received. Upon initial recognition of these non-current financial assets, impairment equal to the expected credit losses over a twelve-month horizon is systematically booked. If there is a significant deterioration in the counterparty's creditworthiness, additional impairment is booked so that the total expected credit loss over the receivable's residual term is covered.

For sales receivables, the Group reviews customer receivables individually, taking into consideration the probability of default by the counterparty and the degree to which the receivables are covered by provisions, and uses the simplified method allowed by IFRS 9, which consists of establishing provisions to cover expected credit losses over the receivables' residual term.

2.15.2 FINANCIAL LIABILITIES (EXCLUDING DERIVATIVES)

Financial liabilities are recorded at amortised cost, with separate reporting of embedded derivatives where applicable. Transaction costs are deducted from the financed amount reported under financial liabilities. Interest expenses, calculated under the effective interest rate method including transaction costs related to financial liabilities, are recorded under the heading "Cost of gross financial indebtedness" over the duration of the financial liability. The fair value is determined by discounting future cash flows at market rates.

2.15.3 DERIVATIVES

2.15.3.1 Scope

The scope of derivatives applied by the Group corresponds to the principles set out in IFRS 9.

In particular, forward purchases for physical delivery of energy are considered to fall outside the scope of application of IFRS 9 when the contract concerned has been entered into as part of the Group's normal business activity ("own use").

This is demonstrated to be the case when all the following conditions are fulfilled:

- a physical delivery takes place under all such contracts;
- the volumes purchased or sold under the contracts correspond to the Group's operating requirements;
- these contracts cannot be considered as options as defined by the standard.

The Group thus considers that transactions negotiated with a view to balancing the volumes of purchase commitments and the actual level of losses are part of its normal business as operator of the electricity transmission network, and are outside the scope of IFRS 9.

In compliance with IFRS 9, the Group analyses all its contracts, of both a financial and non-financial nature, to identify the existence of any "embedded" derivatives. Any component of a contract that affects the cash flows of that contract in the same way as a stand-alone derivative corresponds to the definition of an embedded derivative.

If they meet the conditions set out by IFRS 9, embedded derivatives are accounted for separately from the host contract at inception date.

2.15.3.2 Measurement and recognition

Derivatives are initially recorded at fair value, based on quoted prices and market data available from external sources. If no quoted prices are available, the Group may refer to recent comparable transactions or, if no such transactions exist, base its valuation on internal models that are recognised by market participants, giving priority to information derived directly from observable data, such as over-the-counter listings.

Changes in the fair value of these derivatives are recorded in the income statement, unless they are classified as hedges for a cash flow. Changes in the fair value of cash flow hedging instruments are recorded directly in equity, excluding the ineffective portion of the hedge.

In application of IFRS 13, the fair value of derivatives incorporates the counterparty credit risk for derivative assets and the own credit risk for derivative liabilities.

2.15.3.3 Financial instruments classified as hedges

The Group may use derivative instruments to hedge its foreign exchange and interest rate risks, and risks related to certain energy contracts.

The Group applies the criteria defined by IFRS 9 in classifying derivatives as hedges:
- the instrument must hedge changes in fair value or cash flows attributable to the risk hedged, and the effectiveness of the hedge (i.e. the degree to which changes in the value of the hedging instrument offset changes in the value of the hedged item or future transaction) must be between 80% and 125%;
- in the case of cash flow hedges, the future transaction being hedged must be highly probable;
- reliable measurement of the effectiveness of the hedge must be possible;
- the hedge must be supported by appropriate documentation from its inception.

The hedging relationship ends when:
- a derivative ceases to be an effective hedging instrument;
- a derivative expires, or is sold, terminated or exercised;
- the hedged item expires, is sold or redeemed;
- a future transaction ceases to be considered as highly probable.

The Group uses the following categories for hedges:

— (A) Fair value hedges

These instruments hedge the exposure to changes in the fair value of an asset or liability recorded in the balance sheet, or a firm commitment to purchase or sell an asset. Changes in the fair value of the hedged item attributable to the hedged component of that item are recorded in the income statement and offset by corresponding variations in the fair value of the hedging instrument. Only the ineffective portion of the hedge has an impact on income.

— (B) Cash flow hedges

These instruments hedge highly probable future transactions for which the variability in cash flows generated by the hedged transaction is offset by changes in the value of the hedging instrument.

The effective portion of accumulated changes in the hedge's fair value is recorded in equity, and the ineffective portion (i.e. changes in the fair value of the hedging instrument in excess of changes in the fair value of the hedged item) is recorded in the income statement.

When the hedged cash flows materialise, the amounts previously recognised in equity are transferred to the income statement in the same way as for the hedged item.

2.15.3.4 Derecognition of financial assets and liabilities

Derecognition is applied for all or part of:
- a financial asset, when the contractual rights making up the asset expire, or the Group transfers substantially all the significant risks associated with ownership of the asset;
- a financial liability, when the liability is extinguished due to cancellation or expiry of the obligation. When a debt is renegotiated with a lender giving rise to substantially different terms, a new liability is recognised.

2.16 INVENTORIES

Inventories are stated at the lower of historical cost and net realisable value. The cost of inventories is determined by the weighted average unit cost method, including both direct and indirect purchase costs. Inventory accounts include:
- operating materials and equipment such as spare parts supplied under a maintenance programme;
- certificates issued under capacity obligation mechanisms (capacity guarantees in France) (see 2.7 above).

Impairment of inventories depends on the turnover of materials, their estimated useful lives and the degree of technical obsolescence.

2.17 TRADE AND SIMILAR RECEIVABLES

On initial recognition, trade and similar receivables are recorded at the fair value of the consideration received or to be received (which generally corresponds to their nominal value). Impairment is recorded when their carrying amount, based on the probability of recovery assessed according to the type of receivable, is less than their book value. Depending on the nature of the receivable, the risk associated with doubtful receivables is assessed individually.

Trade receivables also include the value of unbilled receivables for energy already supplied.

2.18 CASH AND CASH EQUIVALENTS

Cash and cash equivalents comprise immediately available liquidities and very short-term investments that are readily convertible into a known amount of cash, usually maturing within three months or less of the acquisition date, and with negligible risk of fluctuation in value.

Securities held short-term and classified as cash equivalents are recorded at fair value. Changes in the fair value of these securities are included in the heading "Other financial income and expenses".

2.19 EQUITY – IMPACT OF RESTATEMENT TO FAIR VALUE OF FINANCIAL INSTRUMENTS

This impact results from the adjustment to fair value of financial assets and certain hedging instruments.

2.20 PROVISIONS OTHER THAN EMPLOYEE BENEFIT PROVISIONS

The Group recognises a provision if the following three conditions are met:

- the Group has a present obligation (legal or constructive) towards a third party that arises from an event prior to the closing date;
- it is probable that an outflow of resources will be required to settle the obligation, without an equivalent consideration;
- the obligation amount can be estimated reliably.

Provisions are determined based on the Group's estimate of the expected cost necessary to settle the obligation. Estimates are based on assumptions adopted by the Group, and if necessary experience of similar transactions, or in some cases based on independent expert reports or contractor quotes. The various assumptions are reviewed for each closing of the accounts.

If it is anticipated that all or part of the expenses covered by a provision will be reimbursed, the reimbursement is recognised under receivables if and only if the Group is certain of receiving it.

2.21 EMPLOYEE BENEFITS

The Group grants its employees post-employment benefits (pension plans, retirement indemnities, etc.) and other long-term benefits (e.g. long-service awards) in compliance with the specific laws and measures in force for the electricity and gas (IEG) sector in France.

2.21.1 CALCULATION AND RECOGNITION OF EMPLOYEE BENEFITS

Obligations under defined-benefit plans are subject to actuarial valuation. They are calculated by the projected unit credit method, which determines the present value of entitlements earned by employees at year-end to pensions, post-employment benefits and long-term benefits, taking into consideration economic conditions and expected wage increases.

In calculating post-employment benefit obligations, this method takes the following factors into consideration:

- career-end salary levels, with reference to employee seniority, projected salary levels at the time of retirement based on the expected effects of career advancement, and estimated trends in pension levels;
- retirement age, determined on the basis of the applicable rule (such as the degree of "active work" and number of children, taking into account the longer employee contribution period to qualify for a full pension);
- forecast numbers of pensioners, based on employee turnover rates and available mortality data;
- reversion pensions, taking into account both the life expectancy of the employee and his/her spouse and the marriage rate observed for the population of employees in the IEG sector;
- a discount rate that depends on the duration of the obligations; in compliance with IAS 19 (revised), this rate is determined as the market yield on high quality corporate bonds or the year-end rate on government bonds with a similar duration to the company's commitments to employees.

The provision reflects the value of the fund assets that cover post-employment benefits, which are deducted from the value of the obligation as determined above.

For pensions and other post-employment obligations, all actuarial gains and losses generated by changes in actuarial assumptions (discount rate, inflation rate, wage laws, mortality, retirement age, etc.) are immediately recognised in the statement of net income and gains and losses recorded directly in equity.

For long-term employee benefits, actuarial gains and losses and the entire past service cost are recognised immediately in the provision.

The net expense booked for employee benefit obligations during the year thus includes:
- the cost of additional vested benefits, and the financial discount cost on existing benefits;
- the income corresponding to the expected return on fund assets;
- the income or expenses related to amendments or settlements of benefit plans or introduction of new plans;
- the change in actuarial gains and losses on long-term benefits.

2.21.2 POST-EMPLOYMENT BENEFIT OBLIGATIONS

When they retire, Group employees covered by the IEG sector system benefit from pensions determined under the statutory IEG rules.

Since the financing reform for the IEG sector system took effect on 1 January 2005, the CNIEG (Caisse Nationale des IEG, the sector's specific pension body) has managed not only the special IEG pension system, but also the work-related accident, invalidity and death insurance system for the sector.

The CNIEG is a social security body governed by private law, formed by the law of 9 August 2004. It has legal entity status and reports to the French Government, operating under the joint supervision of France's ministers for the Budget, Social Security and Energy. Under the funding arrangements introduced by the law, IEG companies establish pension provisions to cover entitlements not funded by France's standard systems (CNAV, AGIRC-ARRCO), to which the IEG system is affiliated, or by the CTA (*contribution tarifaire d'acheminement*) levy on gas and electricity transmission and distribution services.

The provision for pensions thus covers:
- specific benefits earned by employees from 1 January 2005 for the regulated transmission activity (past benefits were financed by the CTA levy);
- specific benefits of employees benefiting from early retirement before the standard legal retirement age.

In addition to pensions, other benefits are granted to IEG status employees not currently in active service, as detailed below:

— Benefits in kind (electricity/gas)

Article 28 of the IEG National Statutes entitles all employees (active or inactive) to the same benefits in kind in the form of supplies of electricity or gas at the preferential "employee price". The Group's obligation for supplies of energy to employees corresponds to the probable present value of kWh supplied to beneficiaries during their retirement, valued on the basis of the unit cost, taking into account the payment received under the energy exchange agreement with Engie.

— Retirement gratuities

These gratuities are paid upon retirement to employees due to receive the statutory old-age pension, or to their dependents if the employee dies before reaching retirement. These obligations are almost totally covered by an insurance policy.

— Bereavement benefit

This benefit is paid out upon the death of an inactive or disabled employee, in order to provide financial assistance for the expenses incurred at such a time (article 26, §5 of the National Statutes). It is paid to the deceased's principal dependants (statutory indemnity equal to three months' pension) or to a third party that has paid funeral costs (discretionary indemnity equal to the costs incurred).

— Bonus pre-retirement paid leave

All employees eligible to benefit immediately from the statutory old-age pension and aged at least 55 at their retirement date are entitled to eighteen days of bonus paid leave during the last twelve months of their employment.

— Cost of studies indemnity and study grants

The cost of studies indemnity is a family benefit not defined by the statutes, intended to provide assistance to inactive employees (or their dependants) whose children are still in education. It is also paid to beneficiaries of the orphan's pension. An agreement on education fees that came into force on 1 October 2011 introduced study grants, which are progressively replacing the cost of studies indemnity. In November 2017 the unions and employers' groups signed an amendment to the agreement of 7 March 2011, agreeing to review and improve the study grant system, notably to simplify the qualifying conditions. This amendment took effect on 1 January 2018.

— Time banking for additional retirement leave

Following the 2008 pension reform, an agreement was reached in 2010 that replaced the early retirement arrangements for "active work" (i.e. non-sedentary) employees joining the Group on or after 1 January 2009. Under this agreement:

- the employee earns ten days of additional retirement leave for each year of 100% "active work";
- days are attributed on a prorated basis if the proportion of "active work" is less than 100%;
- no days are attributed if the proportion of "active work" is less than 20%.

The employee retains his/her entitlement to days of leave earned under this time banking system if he/she leaves the IEG sector or is transferred to an IEG status company. This leave can only be taken when he/she retires, between the date at which he/she qualifies for a pension and the age limit set by article 4 of the National Statutes for IEG personnel.

2.21.3 OTHER LONG-TERM BENEFIT OBLIGATIONS

These benefits concern employees currently in service, and are earned according to IEG statutory regulations. They include:

- annuities and benefits following invalidity, industrial accident or work-related illness; like their counterparts in the general national system, IEG employees are entitled to financial support in the event of industrial accident or work-related illness, and invalidity annuities and benefits. The obligation is measured as the probable present value of future benefits payable to current beneficiaries, including any possible reversions;
- long-service awards;
- specific benefits for employees who have been in contact with asbestos.

2.22 INVESTMENT SUBSIDIES

Investment subsidies received by Group companies, principally for connecting customers to the transmission network, are included in liabilities under the heading "Other current liabilities" and transferred to income as and when the economic benefits of the corresponding assets are utilised.

In accordance with IFRS 15(1), investment subsidies associated with connection contracts have been reclassified as sales revenues and are recognised progressively over the useful life of the corresponding asset.

2.23 ENVIRONMENTAL EXPENSES

Environmental expenses are identifiable expenses incurred to prevent, reduce or repair damage to the environment that has been or may be caused by the Group as a result of its business. Two possible treatments apply to these expenses:

- they are capitalised if they are incurred to prevent or reduce future damage or preserve resources;
- they are recognised as expenses if they are operating expenses for the bodies in charge of environmental concerns, environmental supervision, training and skill enhancement in environmental matters, environmental duties and taxes, and waste processing.

(1) See Note 2.7 "Sales"

NOTE 3 – SIGNIFICANT EVENTS AND TRANSACTIONS OF 2020 AND 2019

3.1 SIGNIFICANT EVENTS AND TRANSACTIONS OF 2020

3.1.1 INVESTMENT PROGRAMME FOR 2020

In response to the challenges of the energy transition, RTE's investment programme serves substantial needs, concerning not only reinforcement of interconnections with neighbouring European networks, but also the incorporation of new types of generation facilities, adaptation of the network to changes in modes of consumption, and upgrades of physical assets to maintain a quality service. Investment expenditure for 2020 amounted to €1,529 million, 85% of the amount authorised by the French energy regulator CRE.

The principal investment expenditure of 2020 concerned major transmission projects, particularly the IFA2 and Savoy-Piedmont interconnection projects, connection of the Saint-Nazaire offshore wind farm, reconstruction of the Avelin-Gavrelle line, and regional projects such as reinforcement of the Haute-Durance valley electricity line.

3.1.2 TURPE 5 NETWORK ACCESS TARIFF

The TURPE 5 transmission network access tariff came into force on 1 August 2017 for a four-year period, with revisions on 1 August every year to reflect inflation and the gradual balancing of the CRCP(1).

The "TURPE 5 HTB" tariffs for use of the high-voltage public electricity transmission network were decreased by 1.08% from 1 August 2020 in application of the CRE's decision of 14 May 2020.

3.1.3 CONSEQUENCES OF THE COVID-19 PANDEMIC

The public health crisis caused by the COVID-19 pandemic, and the emergency measures taken by the public authorities from 17 March 2020, led to a general decrease in electricity consumption by customers. In detail:

- France's first lockdown (17 March to 10 May 2020) had a particularly strong impact on transport activities, especially rail transport, which is a big electricity consumer. This caused a substantial decrease in electricity consumption, which dropped by 16% in March (after adjustment for weather effects), before slowly and gradually returning to normal levels. In June 2020, consumption was 6% below the expected level at equivalent temperatures;
- a second national lockdown (30 October 2020 to 15 December), less restrictive than the first, was imposed in view of rising infection rates. The actors affected were prepared for this; they already had business continuity plans, and the decreases in electricity levels were much smaller.

— Estimated impacts of the COVID-19 pandemic on the financial statements at 31 December 2020

In accordance with the recommendations of the French financial market regulator AMF and French Accounting Standards setter ("ANC") RTE did not make any changes to its habitual classifications in the income statement as a result of the public health crisis.

- The first national lockdown and its economic consequences led to a decrease in network access income estimated at €62 million for the first half of 2020. The second lockdown resulted in a €26 million decrease in sales. The total estimated decrease in sales over the year 2020 is thus €88 million.
- The COVID-19 crisis had a limited impact on external purchases, as the additional expenses incurred during the period (for masks, sanitisers, cleaning products, etc.) were offset by the lower level of purchases resulting from the lockdown (less travel, training and seminars, etc.).
- For current financial assets, the negative changes in fair value observed as a result of the downturn on the financial markets had a slight impact on the financial result.
- No evidence of impairment to assets was identified.

Consequently, the estimated impact of the COVID-19 crisis on the consolidated net income principally concerns sales.

3.1.4 FINANCING TRANSACTIONS OF THE YEAR

In July 2020, RTE issued two new bonds:

- a €500 million bond with twelve-year maturity and an annual coupon of 0.625%;
- a €750 million bond with twenty-year maturity and an annual coupon of 1.125%.

(1) *Compte de régulation des charges et des produits*. The CRCP account for each tariff period records the differences between forecasts and actual results on certain items the CRE considers difficult to forecast or difficult to control (network access, energy purchases to compensate for network losses, interconnections). These differences are then passed on to network users through future tariff adjustments.

In October 2020 RTE repaid €100 million of an European Investment Bank (EIB) loan.

These operations contribute to the financing of RTE's investment programme and extend the average maturity of debt, which increased from 13.8 to 14.3 years between 31 December 2019 and 31 December 2020.

3.1.5 TAX INSPECTIONS

RTE is not currently involved in any significant tax litigation.

3.1.6 DIVIDENDS

On 4 June 2020, the Supervisory Board approved the proposal put forward by the shareholders at their General Meeting of 4 June 2020 to pay a dividend of €408 million or approximately €1.91 per share.

3.2 SIGNIFICANT EVENTS AND TRANSACTIONS OF 2019

3.2.1. INVESTMENT PROGRAMME FOR 2019

In response to the challenges of the energy transition, RTE's investment programme serves substantial needs, concerning not only reinforcement of interconnections with neighbouring European networks, but also the incorporation of new types of generation facilities, adaptation of the network in line with changes in consumption patterns, and upgrades of physical assets to maintain a quality service. Investment expenditure for 2019 amounted to €1,456 million, 89% of the amount authorised by the French energy regulator CRE.

The principal investment expenditure of 2019 concerned major transmission projects, particularly the IFA2 and Savoy-Piedmont interconnection projects, reconstruction of the Avelin-Gavrelle line, and regional projects such as reinforcement of the Haute-Durance valley electricity line, replacing the Carrières-Valescourt line by a new underground line, and the Saint-Nazaire offshore wind farm connection project.

3.2.2 TURPE 5 NETWORK ACCESS TARIFF

The TURPE 5 transmission network access tariff came into force on 1 August 2017 for a four-year period, with revisions on 1 August every year to reflect inflation and the gradual balancing of the CRCP.

The "TURPE 5 HTB" tariffs for use of the high-voltage public electricity transmission network were raised by 2.16% from 1 August 2019 in application of the CRE's decision of 6 June 2019.

3.2.3 FINANCING TRANSACTIONS OF THE YEAR

In September 2019, RTE issued two new bonds:
- a €700 million bond with thirty-year maturity and an annual coupon of 1.125%,
- a €500 million bond with eight-year maturity and an annual coupon of 0%.

In September 2019 RTE redeemed a bond totalling €600 million.

In October 2019 RTE repaid €200 million of an EIB loan.

These operations contributed to the financing of RTE's investment programme and extend the average maturity of debt, which increased from 9.1 to 13.8 years between 31 December 2018 and 31 December 2019.

3.2.4 TAX INSPECTIONS

RTE had no significant tax litigation in process in 2019.

The tax inspection concerning the years 2015 and 2016 was completed in December 2018. The financial consequences of this inspection were non-significant as the principal amounts only had a temporary financial impact in RTE's financial statements.

3.2.5 DIVIDENDS

On 5 June 2019, the Supervisory Board approved the proposal put forward by the shareholders at their General Meeting of 5 June 2019 to pay a dividend of €362 million or approximately €1.70 per share.

NOTE 4 – CHANGES IN THE SCOPE OF CONSOLIDATION

None.

NOTE 5 – SEGMENT REPORTING

In compliance with IFRS 8 "Operating segments", which requires segment reporting, the Group only reports one operating segment, corresponding to the electricity transmission activity as regularly reviewed by the Executive Board.

NOTE 6 – SALES

Sales are comprised of:

(IN THOUSANDS OF EUROS)	2020	2019
Transmission network access – distributors	3,562,418	3,736,213
Transmission network access – other users	509,641	541,501
Interconnections	545,529	450,152
Other services	111,469	127,840
Sales	**4,729,058**	**4,855,705**

NOTE 7 – ENERGY PURCHASES

(IN THOUSANDS OF EUROS)	2020	2019	VARIATION
Energy purchases	(499,512)	(459,547)	9%
Including: capacity guarantees	55,964	22,761	–

Energy purchases concern electricity purchases undertaken to compensate for transmission network losses. Each year they include settlement of forward energy purchase contracts concluded in previous years. They also include the impact of capacity guarantee purchases made in application of the capacity mechanism (see note 2.7).

NOTE 8 – OTHER EXTERNAL EXPENSES

Other external expenses comprise:

(IN THOUSANDS OF EUROS)	2020	2019
External services	(504,411)	(525,625)
System operation purchases (excluding energy purchases)	(412,782)	(393,621)
Other purchases	(193,798)	(275,231)
Change in inventories and capitalised production	292,000	395,073
Other external expenses	**(818,991)**	**(799,404)**

NOTE 9 – CONTRACTUAL OBLIGATIONS AND COMMITMENTS

In the course of its business, the Group has given and received commitments jointly with third parties.

At 31 December 2020, these commitments mature as follows:

COMMITMENTS GIVEN (IN THOUSANDS OF EUROS)	31.12.2020	MATURITIES			31.12.2019
		<1 YEAR	1-5 YEARS	>5 YEARS	
Operating contract performance commitments given	–	–	–	–	–
Commitments related to orders for operating items	925,628	743,869	180,418	1,342	884,677
Other operating commitments	–	–	–	–	–
Total operating commitments given	925,628	743,869	180,418	1,342	884,677
Financing commitments given	700,000	700,000	–	–	50,000
Investing commitments given	1,263,813	841,594	414,614	7,606	1,086,047
Total commitments given	**2,889,442**	**2,285,463**	**595,032**	**8,947**	**2,020,725**

COMMITMENTS RECEIVED (IN THOUSANDS OF EUROS)	31.12.2020	MATURITIES			31.12.2019
		<1 YEAR	1-5 YEARS	>5 YEARS	
Operating commitments received	445,480	337,061	108,369	50	350,176
Financing commitments received	2,200,000	700,000	1,500,000	–	1,550,000
Investing commitments received	498,313	142,988	355,324	–	498,313
Total commitments received	**3,143,793**	**1,180,050**	**1,963,693**	**50**	**2,398,489**

These commitments (given and received) represent existing rights and obligations with effects (inflows and outflows of resources) that are contingent on fulfilment of conditions or execution of future operations.

The Group expects to draw future economic benefits from operating commitments given.

The Group has entered into forward electricity purchases as part of its normal business. These commitments are included in “Commitments related to orders for operating items” and are stated at nominal value.

NOTE 10 – PERSONNEL EXPENSES

10.1 PERSONNEL EXPENSES

Personnel expenses comprise:

(IN THOUSANDS OF EUROS)	2020	2019
Wages and salaries	(561,584)	(543,896)
Social contributions	(307,987)	(308,243)
Employee profit sharing including employer contribution	(42,462)	(38,789)
Other expenses linked to short-term benefits	4,479	4,066
Short-term benefits	**(907,555)**	**(886,863)**
Benefits paid	78,204	73,271
Current year service cost	(78,894)	(62,119)
Plan amendment	–	–
Post-employment benefits	**(690)**	**11,152**
Benefits paid	13,722	10,607
Current year service cost	(13,786)	(12,615)
Actuarial gains and losses	(15,199)	(11,295)
Other long-term benefits	**(15,264)**	**(13,303)**
PERSONNEL EXPENSES	**(923,508)**	**(889,014)**

10.2 WORKFORCE

RTE's year-end workforce numbers were as follows:

	31.12.2020	31.12.2019
Executives	4,710	4,583
Supervisory and technical	3,705	3,743
Operational staff	381	382
Workforce with IEG status	**8,796**	**8,708**
Non IEG status	601	606
Total workforce	**9,397**	**9,314**

RTE's subsidiaries(1) have a total of 95 employees.

NOTE 11 – TAXES OTHER THAN INCOME TAXES

Taxes other than income taxes comprise:

(IN THOUSANDS OF EUROS)	2020	2019
Tax on pylons	(285,053)	(272,310)
Network tax	(102,677)	(102,137)
Local economic contribution	(95,443)	(94,424)
Real estate tax	(41,679)	(39,156)
Other taxes	(40,620)	(37,227)
Taxes other than income taxes	**(565,472)**	**(545,255)**

(1) Subsidiaries owned 100% by RTE.

NOTE 12 – OTHER OPERATING INCOME AND EXPENSES

Other operating income and expenses comprise:

(IN THOUSANDS OF EUROS)	2020	2019
Gains (losses) on disposal of fixed assets	(14,166)	11,015
Net variation in provisions on current assets	3,179	474
Net variation in provisions for operating contingencies and losses	5,018	(10,102)
Other income and expenses	(773)	18,331
Other operating income and expenses	**(6,742)**	**19,718**

"Other income and expenses" mainly include certain penalties paid and received.

NOTE 13 – FINANCIAL RESULT

13.1 COST OF GROSS FINANCIAL INDEBTEDNESS

(IN THOUSANDS OF EUROS)	2020	2019
Cost of gross financial indebtedness[1]	(169,815)	(170,672)

(1) Including €4,518 thousand of interest on the IFRS 16 lease liability.

The cost of gross financial indebtedness mainly comprises:

- interest expenses on bond issues, totalling €191 million;
- application of IAS 23, which requires borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset to be capitalised as part of the cost of that asset. The impact in 2020 was a positive €24 million (compared to €22 million in 2019);
- interest on the IFRS 16 lease liability, amounting to €5 million.

13.2 DISCOUNT EFFECT

(IN THOUSANDS OF EUROS)	2020	2019
Discount effect	(26,653)	(37,858)

The discount effect essentially concerns provisions for post-employment and long-term benefits.

13.3 OTHER FINANCIAL INCOME AND EXPENSES

Other financial income and expenses comprise:

(IN THOUSANDS OF EUROS)	2020	2019
Income (expenses) on cash, cash equivalents and available-for-sale financial assets	(1,112)	(959)
Gains (losses) on other financial assets	(9,032)	(7,215)
Other financial income (expenses)	(1,340)	(477)
Return on fund assets	1,002	1,599
Other financial income and expenses	**(10,481)**	**(7,052)**

NOTE 14 – INCOME TAXES

14.1 BREAKDOWN OF INCOME TAX

Details are as follows:

(IN THOUSANDS OF EUROS)	2020	2019
Current tax expense	(230,444)	(353,660)
Deferred taxes	(3,590)	48
Total	**(234,035)**	**(353,612)**

14.2 RECONCILIATION OF THE THEORETICAL AND ACTUAL TAX EXPENSE

(IN THOUSANDS OF EUROS)	2020	2019
Consolidated profit before tax of consolidated companies	**(751,584)**	**(1,030,855)**
Tax rate applicable	**32.02%**	**34.43%**
Theoretical tax expense	**(240,685)**	**(354,948)**
Differences in tax rate	3,661	(512)
Permanent differences (1)	(74)	(134)
Taxes without basis (2)	1,372	1,333
Other	1,692	651
Actual tax expense	**(234,035)**	**(353,612)**
Effective tax rate	**31.14%**	**34.30%**

(1) This principally includes the impact of restrictions on the deductibility of interest on borrowings.
(2) Tax credits reclassified as operating items.

14.3 BREAKDOWN OF DEFERRED TAXES BY NATURE

(IN THOUSANDS OF EUROS)	31.12.2020	31.12.2019
Differences between depreciation recorded for accounting and tax purposes	15,625	14,407
Financial instruments	23	213
Provisions for employee benefits	534,226	466,748
Investment subsidies	205,559	205,502
Other deductible temporary differences	5,366	9,010
Total deferred tax assets	**760,798**	**695,880**
Differences between depreciation recorded for accounting and tax purposes	(373,294)	(372,618)
Other taxable temporary differences	(59,531)	(53,920)
Total deferred tax liabilities	**(432,825)**	**(426,538)**
Net deferred taxes	**327,974**	**269,342**

NOTE 15 – INTANGIBLE ASSETS

Intangible assets essentially comprise purchased or internally designed and developed software. The Group recognised no impairment on intangible assets at 31 December 2020 or 2019.

Increases in gross value include acquisitions of assets and reclassifications. Decreases in gross value include disposals, retirements and reclassifications. Reclassifications mainly reflect the transfer of an asset from "Intangible assets in progress" to the corresponding asset account when an asset is commissioned.

15.1 AT 31 DECEMBER 2020

(IN THOUSANDS OF EUROS)	31.12.2019	INCREASES	DECREASES	31.12.2020
Intangible assets in progress	160,752	119,709	(72,527)	207,935
Other intangible assets	942,112	72,445	(340)	1,014,217
Intangible assets, gross	**1,102,864**	**192,154**	**(72,868)**	**1,222,151**
Amortisation	(726,610)	(65,644)	340	(791,914)
Intangible assets, net	**376,255**	**126,511**	**(72,527)**	**430,238**

15.2 AT 31 DECEMBER 2019

(IN THOUSANDS OF EUROS)	31.12.2018	INCREASES	DECREASES	31.12.2019
Intangible assets in progress	136,628	107,522	(83,398)	160,752
Other intangible assets	858,198	84,604	(690)	942,112
Intangible assets, gross	**994,826**	**192,126**	**(84,088)**	**1,102,864**
Amortisation	(667,535)	(59,074)	–	(726,610)
Intangible assets, net	**327,291**	**133,052**	**(84,088)**	**376,255**

NOTE 16 – PROPERTY, PLANT AND EQUIPMENT

The Group recognised no impairment on property, plant and equipment at 31 December 2020 or 2019.

Increases in gross value include acquisitions of assets and reclassifications. Decreases in gross value include disposals, retirements and reclassifications. Reclassifications mainly reflect the transfer of an asset from "Property, plant and equipment in progress" to the corresponding asset account when an asset is commissioned.

16.1 AT 31 DECEMBER 2020

(IN THOUSANDS OF EUROS)	31.12.2019	INCREASES	DECREASES	31.12.2020
Land	176,555	8,763	(526)	184,792
Buildings *(including IFRS 16 right-of-use assets)*	3,072,124	183,272	(53,686)	3,201,710
Networks	26,591,556	694,042	(119,481)	27,165,666
Other installations, machinery and equipment	1,170,226	85,502	(5,073)	1,250,835
Other property, plant and equipment	483,749	31,579	(18,584)	497,017
Property, plant and equipment in progress	2,178,020	1,440,811	(1,010,575)	2,608,256
Property, plant and equipment, gross	**33,672,230**	**2,443,969**	**(1,207,924)**	**34,908,276**
Land improvements	(66,592)	(2,813)		(69,405)
Buildings *(including IFRS 16 right-of-use assets)*	(1,434,546)	(105,092)	52,724	(1,490,706)
Networks	(13,174,898)	(687,593)	121,304	(13,737,448)
Other installations, machinery and equipment	(827,472)	(66,275)	4,914	(888,741)
Other property, plant and equipment	(291,993)	(36,654)	5,606	(323,080)
Depreciation	**(15,795,501)**	**(898,427)**	**184,548**	**(16,509,379)**
Property, plant and equipment, net	**17,876,729**	**1,545,542**	**(1,023,375)**	**18,398,896**

At 31 December 2020, the Group has not recognised any impairment on its right-of-use assets.

Increases in gross value include rights to use buildings. Decreases in gross value correspond to extinction of the right of use related to commercial leases.

(IN THOUSANDS OF EUROS)	01.01.2020	INCREASES	DECREASES	31.12.2020
Commercial leases	250,896	42,373	(48,070)	245,198
Vehicle leases	4,722	–	–	4,722
Gross value	**255,618**	**42,373**	**(48,070)**	**249,921**
Commercial leases	(18,752)	(31,637)	48,070	(2,319)
Vehicle leases	(1,562)	(1,566)	–	(3,129)
Depreciation	**(20,315)**	**(33,204)**	**48,070**	**(5,449)**
Net value	**235,303**	**9,168**	**–**	**244,472**

16.2 AT 31 DECEMBER 2019

(IN THOUSANDS OF EUROS)	31.12.2018	IFRS 16	01.01.2019	INCREASES	DECREASES	31.12.2019
Land	175,504	–	175,504	2,230	(1,179)	176,555
Buildings *(including IFRS 16 right-of-use assets)*	2,760,256	214,642	2,974,898	111,628	(14,402)	3,072,124
Networks	25,938,539	–	25,938,539	804,030	(151,013)	26,591,556
Other installations, machinery and equipment	1,081,761	–	1,081,761	105,299	(16,835)	1,170,226
Other property, plant and equipment	440,091	–	440,091	59,025	(15,367)	483,749
Property, plant and equipment in progress	1,894,831	–	1,894,831	1,346,860	(1,062,917)	2,178,020
Property, plant and equipment, gross	**32,290,983**	**214,642**	**32,505,625**	**2,429,073**	**(1,261,713)**	**33,672,230**
Land improvements	(64,311)	–	(64,311)	(2,466)	186	(66,592)
Buildings *(including IFRS 16 right-of-use assets)*	(1,356,309)	–	(1,356,309)	(90,610)	12,373	(1,434,546)
Networks	(12,620,735)	–	(12,620,735)	(665,873)	111,710	(13,174,898)
Other installations, machinery and equipment	(780,887)	–	(780,887)	(61,606)	15,021	(827,472)
Other property, plant and equipment	(271,936)	–	(271,936)	(34,264)	14,207	(291,993)
Depreciation	**(15,094,178)**	**–**	**(15,094,178)**	**(854,819)**	**153,496**	**(15,795,501)**
Property, plant and equipment, net	**17,196,805**	**214,642**	**17,196,805**	**1,574,254**	**(1,108,217)**	**17,876,729**

At 31 December 2019, the Group had not recognised any impairment on its right-of-use assets.

Increases in gross value include rights to use buildings. Decreases in gross value correspond to extinction of the right of use related to commercial leases.

(IN THOUSANDS OF EUROS)	01.01.2019	INCREASES	DECREASES	31.12.2019
Commercial leases	211,482	51,519	(12,105)	250,896
Vehicle leases	3,160	–	–	3,160
Gross value	**214,642**	**51,519**	**(12,105)**	**254,056**
Commercial leases	–	(30,858)	12,105	(18,752)
Vehicle leases	–	(1,562)	–	(1,562)
Depreciation	**–**	**(32,420)**	**12,105**	**(20,315)**
Net value	**214,642**	**19,099**	**–**	**233,741**

NOTE 17 – INVESTMENTS IN ASSOCIATES

Details of investments in associates are as follows:

	31.12.2020			31.12.2019		
(IN THOUSANDS OF EUROS)	% CAPITAL HELD	SHARE OF EQUITY	SHARE OF NET INCOME	% CAPITAL HELD	SHARE OF EQUITY	SHARE OF NET INCOME
HGRT	34%	31,256	3,368	34%	31,288	3,628
Coreso	16%	760	254	16%	488	50
Total		**32,016**	**3,622**		**31,776**	**3,678**

NOTE 18 – FINANCIAL ASSETS

18.1 BREAKDOWN BETWEEN CURRENT AND NON-CURRENT FINANCIAL ASSETS

Current and non-current financial assets break down as follows:

	31.12.2020			31.12.2019		
(IN THOUSANDS OF EUROS)	CURRENT	NON-CURRENT	TOTAL	CURRENT	NON-CURRENT	TOTAL
Financial assets	1,954,865	2,080	1,956,945	1,310,750	947	1,311,697
Loans and financial receivables[1]	8,204	11,709	19,913	439	12,931	13,370
Financial assets	**1,963,069**	**13,789**	**1,976,858**	**1,311,189**	**13,878**	**1,325,067**

(1) Net of impairment.

18.2 CHANGE IN CURRENT AND NON-CURRENT FINANCIAL ASSETS

The change in financial assets breaks down as follows:

18.2.1 AT 31 DECEMBER 2020

(IN THOUSANDS OF EUROS)	31.12.2019	INCREASES	DECREASES	CHANGES IN FAIR VALUE	IMPAIRMENT	31.12.2020
Financial assets	1,311,697	3,692,211	(3,044,442)	(2,522)		1,956,945
Loans and financial receivables	13,370	15,528	(8,974)		(11)	19,914
Financial assets	**1,325,067**	**3,707,740**	**(3,053,415)**	**(2,522)**	**(11)**	**1,976,858**

18.2.2 AT 31 DECEMBER 2019

(IN THOUSANDS OF EUROS)	31.12.2018	INCREASES	DECREASES	CHANGES IN FAIR VALUE	IMPAIRMENT	31.12.2019
Financial assets	1,177,026	135,349	–	(679)	–	1,311,697
Loans and financial receivables	21,239	3,216	(11,075)	–	(10)	13,370
Financial assets	**1,198,265**	**138,565**	**(11,075)**	**(679)**	**(10)**	**1,325,067**

18.2.3 BREAKDOWN OF FINANCIAL ASSETS

	31.12.2020			31.12.2019		
(IN THOUSANDS OF EUROS)	EQUITIES	DEBT SECURITIES/ INVESTMENT FUNDS	TOTAL	EQUITIES	DEBT SECURITIES/ INVESTMENT FUNDS	TOTAL
Liquid assets	–	1,954,865	1,954,865	–	1,310,750	1,310,750
Other securities	2,080	–	2,080	947	–	947
Financial assets	**2,080**	**1,954,865**	**1,956,945**	**947**	**1,310,750**	**1,311,697**

Liquid assets are financial assets consisting mostly of investment funds or negotiable debt instruments with maturity of over three months at the acquisition date, that are readily convertible into cash and are managed according to a liquidity-oriented policy. They are stated at fair value, determined under the principles presented in note 2.15. In view of the characteristics of the investment funds, the fair value at 31 December 2020 was lower than their acquisition cost.

NOTE 19 – INVENTORIES

Inventories mostly consist of technical equipment for internal use.

(IN THOUSANDS OF EUROS)	31.12.2020	31.12.2019
Inventories, gross value	**165,359**	**139,078**
Impairment	(18,261)	(18,689)
Inventories, net value	**147,098**	**120,389**
Including capacity guarantees	48,912	20,543

NOTE 20 – TRADE AND SIMILAR RECEIVABLES

(IN THOUSANDS OF EUROS)	31.12.2020	31.12.2019
Trade and similar receivables, gross value	**1,187,361**	**1,327,367**
Provisions	(3,454)	(6,176)
Trade and similar receivables, net value	**1,183,906**	**1,321,191**

The positive balance on the cross-border capacity mechanism account is classified in trade receivables (€324 million). At 31 December 2019 this account was classified in trade payables (€117 million).

All trade receivables mature within one year.

The credit risk on trade and similar receivables is shown below:

	31.12.2020			31.12.2019		
(IN THOUSANDS OF EUROS)	GROSS VALUES	PROVISIONS	NET VALUES	GROSS VALUES	PROVISIONS	NET VALUES
Trade receivables	**1,187,361**	**(3,454)**	**1,183,906**	**1,327,367**	**(6,176)**	**1,321,191**
Overdue by less than six months	19,867	124	19,990	788	(75)	713
Overdue by six to twelve months	4,681	(10)	4,671	2,905	(582)	2,323
Ooverdue by more than twelve months	6,624	(3,282)	3,342	9,877	(5,323)	4,554
Total overdue	**31,172**	**(3,168)**	**28,003**	**13,570**	**(5,979)**	**7,591**
Trade receivables not yet due	**1,156,189**	**(286)**	**1,155,903**	**1,313,797**	**(196)**	**1,313,601**

Most trade receivables not yet due concern invoices not yet issued.

NOTE 21 – OTHER RECEIVABLES

(IN THOUSANDS OF EUROS)	31.12.2020	31.12.2019
Payments in advance	28,580	14,231
Other receivables	170,701	160,835
Prepaid expenses	14,843	15,867
Other receivables, gross value	**214,123**	**190,933**
Provisions	(2,403)	(2,432)
Other receivables, net value	**211,720**	**188,501**

The majority of payments on other receivables are due within one year.
"Other receivables" mainly comprise amounts due from public authorities and the State, including VAT receivables.

The change in provisions on other receivables breaks down as follows:

(IN THOUSANDS OF EUROS)	31.12.2019	INCREASES	DECREASES	31.12.2020
Provisions on other receivables	(2,432)		29	(2,403)

NOTE 22 – CASH AND CASH EQUIVALENTS

Cash and cash equivalents as stated in the cash flow statements include the following amounts recorded in the balance sheet:

(IN THOUSANDS OF EUROS)	31.12.2020	31.12.2019
Cash	193,269	130,836
Cash equivalents	–	30,000
Cash and cash equivalents	**193,269**	**160,836**

NOTE 23 – EQUITY

23.1 SHARE CAPITAL

At 31 December 2020, the share capital amounted to €2,132,285,690 and comprised 213,228,569 fully subscribed and paid-up shares with nominal value of €10 each, held by CTE.

In application of article 7 of the law of 9 August 2004, all of RTE's share capital must be held by EDF, the French State, or other public-sector companies or organisations.

23.2 DIVIDENDS

On 4 June 2020, the Supervisory Board approved the proposal put forward by the shareholders at their General Meeting of 4 June 2020 to pay a dividend of €408 million or approximately €1.91 per share.

NOTE 24 – PROVISIONS

24.1 BREAKDOWN BETWEEN CURRENT AND NON-CURRENT PROVISIONS

The breakdown between current and non-current provisions is as follows:

	31.12.2020			31.12.2019		
(IN THOUSANDS OF EUROS)	CURRENT	NON-CURRENT	TOTAL	CURRENT	NON-CURRENT	TOTAL
Provisions for employee benefits	106,918	2,112,789	2 219 707	106,111	1,822,272	1,928,383
Other provisions	25,727	26,601	52,328	22,128	30,469	52,597
Provisions	**132,646**	**2,139,389**	**2,272,035**	**128,239**	**1,852,741**	**1,980,980**

24.2 EMPLOYEE BENEFITS

24.2.1 BREAKDOWN OF CHANGES IN PROVISIONS FOR EMPLOYEE BENEFITS

(IN THOUSANDS OF EUROS)	OBLIGATIONS	FUND ASSETS	PROVISION IN THE BALANCE SHEET
Balance at 31.12.2019	2,005,475	(77,092)	1,928,383
Net expense for 2020	119,334	(1,002)	118,331
Actuarial gains and losses	272,998	(8,079)	264,919
long-term benefits	15,199	–	15,199
post-employment benefits	257,799	(8,079)	249,720
Contributions to funds	–	–	–
Benefits paid	(96,426)	4,500	(91,926)
Balance at 31.12.2020	**2,301,381**	**(81,673)**	**2,219,707**

The change in provisions since 31 December 2020 results from changes in vested benefits, discounting of the liability, payments to external funds, benefits paid, changes in actuarial gains and losses and the past service cost.

24.2.2 POST-EMPLOYMENT AND LONG-TERM EMPLOYEE BENEFIT EXPENSES

(IN THOUSANDS OF EUROS)	31.12.2020	31.12.2019
Current service cost	92,680	74,734
Actuarial gains and losses – long-term benefits	15,199	11,295
Plan curtailments or settlements	–	–
Net expenses included in operating expenses	**107,879**	**86,029**
Interest expense (discount effect)	26,653	37,086
Return on fund assets	(1,002)	(1,599)
Net expenses included in financial result	**25,651**	**35,487**
Employee benefit expense recorded in the income statement	**133,530**	**121,516**
Actuarial gains and losses – post-employment benefits	257,799	385,469
Actuarial gains and losses – fund assets	(8,079)	(10,080)
Actuarial gains and losses	**249,720**	**375,389**
Gains and losses on employee benefits recorded directly in equity	**249,720**	**375,389**

Actuarial gains and losses on post-employment benefits break down as follows:

(IN THOUSANDS OF EUROS)	LONG-TERM BENEFITS	POST-EMPLOYMENT BENEFITS	31.12.2020
Experience adjustments	5,824	73,906	79,730
Changes in demographic assumptions	3,502	20,560	24,062
Changes in financial assumptions[1]	5,873	163,333	169,206
Actuarial gains and losses on obligations	**15,199**	**257,799**	**272,998**

(1) Financial assumptions mainly concern the discount rate, inflation rate and wage increase rate.

24.2.3 BREAKDOWN BY NATURE OF PROVISIONS FOR EMPLOYEE BENEFITS

(IN THOUSANDS OF EUROS)	OBLIGATIONS	FUND ASSETS	PROVISION IN THE BALANCE SHEET
Provisions for post-employment benefits at 31 December 2020	2,142,523	(81,673)	2,060,849
Including:			
Pensions	664,104		664,104
Benefits in kind (electricity/gas)	1,222,378		1,222,378
Retirement gratuities	96,757	(81,673)	15,083
Bereavement benefit	112,442		112,442
Other post-employment benefits	46,841		46,841
Provisions for other long-term benefits at 31 December 2020	**158,858**		**158,858**
Including:			
Annuities following invalidity, industrial accident or work-related illness	89,719		89,719
Long-service awards	21,853		21,853
Other long-term benefits	47,286		47,286
Provisions for post-employment benefits at 31 December 2020	**2,301,381**	**(81,673)**	**2,219,707**

Fund assets amounted to €82 million at 31 December 2020 (€77 million at 31 December 2019).

They cover retirement gratuities and take the form of insurance contracts comprising 36.8% equities and 63.2% bonds at 31 December 2020 (respectively 34.2% and 65.8% at 31 December 2019).

24.2.4 FUTURE CASH FLOWS

Cash flows related to future employee benefits are as follows:

(IN THOUSANDS OF EUROS)	31.12.2020	
	CASH FLOW UNDER YEAR-END ECONOMIC CONDITIONS	AMOUNT COVERED BY PROVISION (PRESENT VALUE)
Less than one year	75,572	75,234
One to five years	253,658	247,174
Five to ten years	247,877	231,862
More than ten years	2,351,402	1,747,111
Cash flows related to employee benefits	**2,928,509**	**2,301,381**

24.2.5 ACTUARIAL ASSUMPTIONS

The main actuarial assumptions used in calculating employee benefit obligations are summarised below:

(IN %)	2020	2019
Discount rate/ Return on fund assets	0.90	1.30
Inflation rate	1.20	1.30

24.2.6 SENSITIVITY ANALYSIS

(IN %)	2020	2019
Impact of a 25-bp increase or decrease in the discount rate		
– On the amount of the obligation	–6.0 / +6.6	–5.7% / +6.2%
– On the net expense for the following year	–3.3 / +3.6	–3.1% / +3.4%
Impact of a 25-bp increase or decrease in the inflation rate		
– On the amount of the obligation	+6.2 / –5.6	+5.8 / –5.3
– On the net expense for the following year	+7.9 / –7.1	+7.4 / –6.7

24.3 OTHER PROVISIONS

Details of changes in other provisions are as follows:

(IN THOUSANDS OF EUROS)	31.12.2019	INCREASES	DECREASES[1]		OTHER MOVEMENTS	31.12.2020
			UTILISATIONS	REVERSALS		
Employer contribution to profit sharing	15,847	16,266	(15,847)	–		16,266
Other provisions	36,750	9,413	(13,481)	–	3,380	36,061
Other provisions	**52,597**	**25,679**	**(29,328)**	**–**	**3,380**	**52,327**

(1) Only provisions utilised.

"Other provisions" notably include an indemnification agreement and a litigation with social security bodies.

24.4 CONTINGENT LIABILITIES

The Group was a lessor in two construction leases which terminated in 2019. Discussions are in progress with the counterparty about the scope of RTE's obligations in connection with these leases.

NOTE 25 – FINANCIAL LIABILITIES

25.1 BREAKDOWN BETWEEN CURRENT AND NON-CURRENT FINANCIAL LIABILITIES

Current and non-current financial liabilities break down as follows:

(IN THOUSANDS OF EUROS)	31.12.2020			31.12.2019		
	NON-CURRENT	CURRENT	TOTAL	NON-CURRENT	CURRENT	TOTAL
Bonds	9,177,924	835,551	10,013,475	8,678,149	82,716	8,760,865
Other financial liabilities *(including the IFRS 16 lease liability)*[1]	1,396,037	542,921	1,938,957	1,611,705	460,471	2,072,176
Financial liabilities	**10,573,961**	**1,378,472**	**11,952,433**	**10,289,854**	**543,187**	**10,833,041**

(1) The IFRS 16 lease liability amounts to €274,554,000 at 31 December 2020.

"Other financial liabilities" essentially include RTE's borrowings from the EIB, amounting to €1,250 million at 31 December 2020 (€1,350 million at 31 December 2019), and the IFRS 16 lease liability amounting to €275 million.

25.2 LOANS AND OTHER FINANCIAL LIABILITIES

25.2.1 CHANGES IN LOANS AND OTHER FINANCIAL LIABILITIES

(IN THOUSANDS OF EUROS)	BONDS	OTHER FINANCIAL LIABILITIES (INCLUDING THE IFRS 16 LEASE LIABILITY)(1)	ACCRUED INTEREST	TOTAL
Balance at 31 December 2018	**8,088,236**	**2,036,540**	**84,080**	**10,208,855**
Increases	1,185,136	252,873	82,775	1,543,730
Decreases	(595,223)	(217,296)	(84,080)	(919,545)
Balance at 31 December 2019	**8,678,148**	**2,072,110**	**82,775**	**10,833,041**
Increases	1,250,297	5,532,017	1,124,880	7,907,194
Decreases	(3,450)	(5,665,245)	(1,119,107)	(6,787,802)
Balance at 31 December 2020	**9,924,995**	**1,938,890**	**88,547**	**11,952,433**

(1) Breakdown of the change in the IFRS 16 lease liability:

(IN THOUSANDS OF EUROS)	LEASE LIABILITY IFRS 16
Balance at 1 January 2019	**259,306**
Increases	48,129
Decreases	(32,880)
IFRS 16 lease liability at 1 January 2020	**274,554**

All debts are in euros.

In July 2020, RTE issued two new bonds:
- a €500 million bond with twelve-year maturity and an annual coupon of 0.625%,
- a €750 million bond with twenty-year maturity and an annual coupon of 1.125%.

In October 2020 RTE repaid €100 million of an EIB loan.

The nominal values of the Group's principal borrowings at 31 December 2020 are as follows:

(IN THOUSANDS OF EUROS)	ISSUANCE DATE	MATURITY	AMOUNT	CURRENCY	RATE
Bond	2010	2022	(750,000)	EUR	3.875%
Bond	2011	2021	(500,000)	EUR	4.125%
Bond	2011	2021	(250,000)	EUR	4.125%
Bond	2013	2023	(500,000)	EUR	2.875%
Bond	2013	2028	(100,000)	EUR	3.380%
Bond	2014	2024	(500,000)	EUR	1.625%
Bond	2014	2029	(600,000)	EUR	2.750%
Bond	2014	2034	(250,000)	EUR	2.625%
Bond	2015	2025	(1,000,000)	EUR	1.625%
Bond	2016	2026	(650,000)	EUR	1.000%
Bond	2016	2036	(700,000)	EUR	2.000%
Bond	2017	2037	(750,000)	EUR	1.875%
Bond	2018	2030	(500,000)	EUR	1.500%
Bond	2018	2038	(500,000)	EUR	2.125%
Bond	2019	2027	(500,000)	EUR	0.000%
Bond	2019	2049	(700,000)	EUR	1.125%
Bond	2020	2032	(500,000)	EUR	0.625%
Bond	2020	2040	(750,000)	EUR	1.125%

The Group's bonds contain no financial covenant-type clauses.

25.2.2 MATURITY OF LOANS AND OTHER FINANCIAL LIABILITIES

(IN THOUSANDS OF EUROS)	BONDS	OTHER FINANCIAL LIABILITIES (INCLUDING THE IFRS 16 LEASE LIABILITY)(1)	TOTAL
Less than one year	82,716	577,848	660,564
From one to five years	2,493,617	205,465	2,699,082
More than five years	6,184,531	1,288,863	7,473,395
Total loans and other financial liabilities at 31 December 2019	**8,760,865**	**2,072,176**	**10,833,041**
Less than one year	835,551	542,921	1,378,472
From one to five years	3,389,279	148,396	3,537,675
More than five years	5,788,645	1,247,641	7,036,286
Total loans and other financial liabilities at 31 December 2020	**10,013,475**	**1,938,957**	**11,952,433**

(1) Maturity of the IFRS 16 lease liability:

(IN THOUSANDS OF EUROS)	IFRS 16 LEASE LIABILITY
Less than one year	30,353
From one to five years	116,671
More than five years	127,530
IFRS 16 lease liability at 31 December 2020	**274,554**

25.2.3 CREDIT LINE

(IN THOUSANDS OF EUROS)	TOTAL	MATURITY		
		<1 year	1–5 years	>5 years
Confirmed credit line	1,500,000		1,500,000	

On 21 June 2016 RTE signed a new bank credit facility that can be used to a maximum value of €1,500 million and is available for a period of five years, which can be extended for two further one-year periods. At 31 December 2020, the amount available on this credit facility was €1,500 million.

25.2.4 FAIR VALUE OF LOANS AND OTHER FINANCIAL LIABILITIES

(IN THOUSANDS OF EUROS)	31.12.2020		31.12.2019	
	FAIR VALUE	NET BOOK VALUE	FAIR VALUE	NET BOOK VALUE
Bonds	11,893,397	10,013,475	10,170,269	8,760,865
Loan from EIB	1,275,838	1,250,000	1,340,537	1,350,000
Total	**13,169,235**	**11,263,475**	**11,510,806**	**10,110,865**

25.3 NET INDEBTEDNESS

Net indebtedness is not defined by accounting standards. It comprises total loans and financial liabilities, less cash and cash equivalents and liquid assets. Liquid assets are financial assets consisting of funds or negotiable debt instruments with initial maturity of over three months that are readily convertible into cash, and are managed according to a liquidity-oriented policy.

(IN THOUSANDS OF EUROS)	31.12.2020	31.12.2019
Loans and other financial liabilities	11,952,433	10,833,041
Cash and cash equivalents	(193,269)	(160,836)
Current financial assets	(1,963,069)	(1,311,189)
Net indebtedness	**9,796,094**	**9,361,016**

25.4 CHANGE IN NET INDEBTEDNESS

(IN THOUSANDS OF EUROS)	2020	2019
Operating profit before depreciation and amortisation (EBITDA)	**1,914,832**	**2,182,203**
Cancellation of non-monetary items included in EBITDA	5,973	(2,459)
Change in working capital	(159,208)	(103,714)
Other	–	–
Net cash flow from operations	**1,761,597**	**2,076,031**
Acquisitions of property, plant and equipment and intangibles	(1,532,105)	(1,458,273)
Disposals of property, plant and equipment and intangibles	47,743	4,382
Net financial expenses disbursed	(193,185)	(190,505)
Income tax paid	(215,554)	(380,680)
Free cash flow	**(131,504)**	**50,955**
Repayment of the lease liability	(15,248)	(259,306)
Adjusted free cash flow	**(146,752)**	**(208,351)**
Investments net of disposals	4,275	(3,042)
Dividends paid	(408,553)	(362,093)
Investment subsidies	131,358	116,971
Other changes	(4,917)	(2,346)
(Increase)/Decrease in net indebtedness, excluding the impact of changes in scope of consolidation and exchange rates	**(424,588)**	**(458,860)**
Effect of other non-monetary changes	(10,489)	2,109
(Increase)/Decrease in net indebtedness	**(435,078)**	**(456,751)**
Net indebtedness at beginning of period	**(9,361,016)**	**(8,904,265)**
Net indebtedness at end of period	**(9,796,094)**	**(9,361,016)**

NOTE 26 – MANAGEMENT OF FINANCIAL RISKS

See section 3.5 of the management report, “Financial risks”.

NOTE 27 – DERIVATIVES

The Group may use derivatives in a range of hedging or macro-hedging strategies to limit the interest rate risk. Details of interest rate hedging derivatives held for trading (interest rate swaps) that are not classified as hedges are as follows at 31 December 2020:

(IN THOUSANDS OF EUROS)				NOTIONAL AT 31.12.2020	NOTIONAL AT 31.12.2019	FAIR VALUE	
	<1 YEAR	1 TO 5 YEARS	>5 YEARS	TOTAL	TOTAL	31.12.2020	31.12.2019
Fixed rate payer/ floating rate receiver	700,000	–	–	700,000	50,000	(123)	16
Floating rate payer/ fixed rate receiver	–	–	–	–	–	–	–
Derivatives	**700,000**	**–**	**–**	**700,000**	**50,000**	**(123)**	**16**

NOTE 28 – TRADE AND OTHER PAYABLES

Details of trade and other payables are as follows:

(IN THOUSANDS OF EUROS)	31.12.2020	31.12.2019
Advance payments received	273,993	251,079
Trade payables	915 522	1,104,672
Tax and social charges	619,963	596,642
Deferred income	1,203,579	1,166,464
Other	9,369	5,344
Trade and other payables	**3,022,427**	**3,124,202**

The positive balance on the cross-border capacity mechanism account is classified in trade receivables (€324 million). At 31 December 2019 this account was classified in trade payables (€117 million).

NOTE 29 – RELATED PARTIES

29.1 TRANSACTIONS WITH EDF AND COMPANIES CONTROLLED BY EDF

Details of the main transactions with EDF or companies controlled by EDF (Enedis, EDF Trading, etc.) are as follows:

(IN THOUSANDS OF EUROS)	31.12.2020	31.12.2019
Financial assets		
Investments	–	–
Other assets		
Trade and similar receivables	991,387	1,004,287
Other receivables	–	–
Advances and progress payments on orders	–	–
Financial liabilities		
Other liabilities		
Advances and progress payments on orders	93,390	79,498
Trade and similar payables	93,737	74,173
Other liabilities	–	–
Operating income and expenses		
Sales	3,580,834	3,780,663
Purchases for operation of the electricity system	248,614	220,846

"Trade and similar receivables" and "Sales" essentially correspond to invoicing for access to the electricity transmission network.

All transactions with related parties take place under normal market conditions and require the approval of the CRE, in application of article L. 111-17 of the French Energy Code.

29.2 RELATIONS WITH THE FRENCH STATE AND OTHER ENTITIES OWNED BY THE STATE

In accordance with the legislation applicable to all companies having the French State as their majority shareholder, RTE is subject to certain inspection procedures, in particular economic and financial inspections by the state, audits by the French court of auditors (Cour des comptes) or Parliament, and verifications by the French general finance inspectorate (Inspection générale des finances).

The French State intervenes through the regulation of electricity and gas markets, particularly for establishment of transmission tariffs, setting the ARENH (regulated access to historical nuclear electricity) price under the "NOME" law for modernisation of the electricity market, and the level of the CSPE.

The Group carries out transactions with certain public-sector entities, essentially for invoicing of network access.

29.3 BOARD COMPENSATION

The Group's key management personnel are the members of the Executive Board and the Supervisory Board.

(IN EUROS)	2020	2019
Compensation of Executive Board members	1,342,086	1,469,498
Compensation of Supervisory Board members[1]	353,145	332,134
Total	**1,695,232**	**1,801,632**

(1) Other than members representing shareholders and the state.

The compensation paid to members of the Executive Board includes short-term benefits (basic salaries, performance-related salary, benefits in kind and indemnities) excluding social security charges.

The compensation paid to Supervisory Board members comprises the salary and benefits in kind (excluding social security charges) paid by RTE to the Chairman of the Supervisory Board and board members who are employee representatives and have an employment contract with the Group.

Board members who belong to the IEG regime benefit from the employee benefits (as defined by IAS 19) attached to that status. They receive no other special pension system, starting bonus or severance payment.

NOTE 30 – STATUTORY AUDITORS' FEES

The following table sets forth the fees paid to the statutory auditors for services during the 2020 financial year:

(IN THOUSANDS OF EUROS)	KPMG	MAZARS
Statutory audit of RTE's individual and consolidated financial statements	377	377
Review of the individual financial statements of fully-consolidated entities	20	33
Non-audit services	76	82
Total	**473**	**492**

NOTE 31 – ENVIRONMENT

Expenses for the protection of the environment are described in chapter 4 of the Group's 2020 management report.

NOTE 32 – SUBSEQUENT EVENTS

None.

NOTE 33 – SCOPE OF CONSOLIDATION

The scope of consolidation at 31 December 2020 is as follows:

COMPANY	HEAD OFFICE	% OWNERSHIP	% VOTING RIGHTS	CONSOLIDATION METHOD	BUSINESS SECTOR
RTE, Réseau de transport d'électricité				Parent company	T
ARTERIA	Immeuble Window 7C, place du Dôme 92073 Paris-la Défense	100%	100%	FC	S
RTE INTERNATIONAL		100%	100%	FC	S
RTE IMMO		100%	100%	FC	S
AIRTELIS		100%	100%	FC	S
CIRTÉUS		100%	100%	FC	S
IFA2		50%	50%	JO	S
HGRT		34%	34%	EM	S
INELFE	Tour Cœur Défense B 100, esplanade du Général-de-Gaulle 92932 Paris-la Défense Cedex	50%	50%	JO	S
CORESO	71, avenue de Cortenbergh 1000 Bruxelles	16%	16%	EM	S

Consolidation methods: FC = full consolidation, JO = joint operation, EM = accounted for under the equity method.
Business segments: T = Transmission, S = Services.

APPENDIX

DETAILS OF METHODOLOGY FOR THE DECLARATION OF NON-FINANCIAL PERFORMANCE

To prepare the declaration of non-financial performance in the 2020 management report, the finance division worked with the main departments able to meet the requirements of articles L. 225-102-1 and R. 225-105-2 of the French Commercial Code. RTE publishes a declaration of non-financial performance voluntarily; the regulatory requirement applies to CTE.

These non-financial indicators derive from analysis of the risks presented in chapter 3 of this management report. They cover RTE's main environmental, social and societal risks.

SCOPE OF NON-FINANCIAL REPORTING

The non-financial reporting concerns the full scope of the RTE Group, using its own methods which are applied across the whole year. The rules for inclusion in the reporting scope and consolidation of non-financial data are as follows:

- qualitative information: the scope comprises RTE SA and its fully-owned subsidiaries under exclusive control;
- quantitative environmental information: the scope comprises RTE SA and its fully-owned subsidiaries under exclusive control. Some RTE sites are ICPE, which are included in the non-financial reporting scope. RTE does not have any "Seveso" sites;
- quantitative company information: RTE SA, excluding subsidiaries (except for the workforce numbers reported in 4.6).

Fully-owned subsidiaries under exclusive control (Arteria, Cirtéus, RTE Immo, Airtelis, RTE International) account for 1.05% of the workforce.

COLLECTION, CONSOLIDATION AND CONTROL OF DATA

— Reporting system

Each business function has its own specific computer system for recording and consolidating the data used to form indicators.

RTE has an HR system that centralises most of the data for human resource management, taking data from the monitoring systems and the associated supporting documents. Data on training comes from a dedicated system.

For safety reporting, in October 2018 RTE set up an IT system to dematerialise the process for declaring accidents to the CARSAT(1).

For environmental information, the department in charge of environmental coordination uses a balanced scorecard to collect all the information required in the environmental management system. Some of these indicators are presented in the societal section of this report. There are also two dedicated information systems for biodiversity and waste management.

— Consolidation process

Information from the HR system is reported monthly, as of the end of each month. It is consolidated in the regions, then passed on to national level, to the department in charge of contract management and payroll.

Environmental information is consolidated by the regions, which collect data from the local sub-units on their territory. The key data are reported to the department in charge of environmental coordination at

(1) *Caisses d'assurance retraite et de la santé au travail,* a workplace health body.

national level three times a year for the purposes of the environmental management system. Other data are reported at variable frequencies.

— Internal control procedures

Internal control procedures are rolled out through a network of local, regional and national correspondents. Data consolidation at regional, then national level is subject to coherence checks, and any significant variances must be explained.

METHODOLOGICAL DETAILS

The indicator definitions are based on several national and international references (social review, ISO 14001 and ISO 26000).

The choice of the key performance indicators presented reflects the specificities of the activity of a transmission network operator covering French territory only, and some require technical explanation.

— Time scope

The time scope for all indicators is 1 January to 31 December of the year concerned, including for the percentage of women in the management committees in 2020 (in the 2019 management report this indicator was measured at 31 October).

— Definitions of specific indicators

Indicators are presented in three categories: social, environmental and societal. The table summarises the indicators and the associated risks, giving the reference to the relevant section on RTE commitments (chapter 4).

SOCIAL INDICATORS

SOCIAL INDICATORS	
Total workforce	Used for several KPIs **Chapter 2.1** "Business model"
Accident frequency rate (employees and contractors)	**Chapter 3.2.2** "Risk concerning safety of employees, contractors and third parties **Chapter 4.6.1** "Continuous enhancement of safety and quality of life at work"
Percentage of employees who benefited from a professional development measure	**Chapter 3.2.2** "Risk of inability to make the changes set out in the Impetus & Vision corporate mission statement by 2025" **Chapter 4.6.2** "Encouraging skill development"
Percentage of women on management committees	**Chapter 4.6** "Looking after employees and rewarding talents" **Chapter 4.6.4** "Encouraging diversity, inclusion and workplace equality"
Employee pride score	**Chapter 3.2.2** "Risk of social crisis or lack of internal cohesion entailing significant media consequences" **Chapter 4.6.3** "Promoting social dialogue"
Percentage of employees trained	**Chapter 4.6** "Looking after employees and rewarding talents" **Chapter 4.6.2** "Encouraging skill development"

- The social indicators presented concern the entire workforce (IEG and non-IEG status, fixed-term and permanent contracts) whose work contract is in force at 31 December of the year. RTE SA employees seconded to Group subsidiaries are therefore included. Employees on secondment to subsidiaries owned less than 100%, employees on pre-retirement paid leave and leave associated with training for promotion, and absent employees whose contracts are suspended (unpaid leave) are not included. The distribution of employees by geographical zone is not presented, as all Group entities are located in mainland France.
- Fixed-term contracts include apprenticeship and professionalisation contracts.
- The figures for work-related accidents concern all accidents at work (excluding the journey between home and work) declared by RTE and its contractors for the scopes of maintenance and development & engineering between 1 January and 31 December 2020. Accidents that happened at contractors' premises outside these scopes are monitored by RTE but not included in calculation of the frequency rate since the total contractors' hours worked is not available. The principle is that only accidents recognised by the pension and workplace health body CARSAT and the social security body CPAM[1] are included, although all accidents declared from mid-November are included regardless of the CARSAT and CPAM decisions, since their decisions are issued up to two months after the first registration of the accident.

(1) *Caisse primaire d'assurance maladie.*

- To calculate the overall accident frequency rate, the ratio of "fatal accidents at work/hours worked" is used for both RTE employees and contractors' employees. The number of accidents at work comprises accidents that happened to RTE employees and accidents that happened to contractors' employees recorded for operations undertaken by the two main entities (maintenance, and development & engineering). The volume of hours worked is calculated on the following basis: for RTE employees, it comprises actual hours worked, considered equivalent to theoretical hours worked as defined in their contracts, plus overtime, less absences; for contractors, the number of hours consumed is based on the amounts validated in contracts for transmission network infrastructures, painting and pruning issued by the three main RTE entities working with contractors (maintenance, development & engineering).
- Percentage of women in the management committees: this indicator excludes members of the Executive Committee and the Executive Board. It includes members of the management committees for the establishments, centres and sections.
- Employee pride score: this indicator is taken directly from RTE's internal "social barometer" survey, which is published annually.
- Percentage of employees who benefited from a professional development measure (total): this is the percentage of RTE's total workforce at year-end (excluding management executives) who attended at least one training or awareness-raising session during the year. Anyone starting a professional development measure during the year is counted, regardless of whether it was completed in 2020 or not.
- Percentage of employees trained in the Sapin 2 law: this is the percentage of RTE's total workforce, excluding employees on pre-retirement paid leave, who have followed and completed the "Sapin 2 anti-corruption law" e-learning course since the module was launched.

ENVIRONMENTAL INDICATORS

ENVIRONMENT (CHAPTER 4.4)	
Recovery rate for hazardous waste tracking documents	**Chapter 3.2.2** "Risk of non-compliance with the law"
Waste recycling rate	**Chapter 3.2.2** "Risk of environmental damage: pollution, waste, biodiversity"
Area of land made biodiversity-friendly	**Chapter 3.2.2** "Risk of environmental damage: pollution, waste, biodiversity" **Chapter 3.2.2** "Public opposition to transmission facilities"
Percentage of "zero-phyto" sites	**Chapter 3.2.2** "Risk of environmental damage: pollution, waste, biodiversity"
Renewable energy power connected to the HTB high-voltage network	**Chapter 3.2.2** "Risk of inability to implement the strategic orientations set out in the SDDR roadmap for 2021-2035" **Chapter 4.2.1** "Facilitating the expansion of renewable energies and changes in the energy mix"
Equivalent outage time	**Chapter 3.2.2** "Risk of incident affecting the electricity network that could cause a blackout" **Chapter 3.2.2** "Beyond-design-basis event with a significant impact on the infrastructure" **Chapter 4.5.2** "Greater sensitivity to the quality of electricity"
Equivalent outage time caused by weather events	**Chapter 3.2.2** "Risk concerning "Ability to adapt the infrastructure, activities and organisation to the consequences of climate change"
Percentage of sites subjected to an environmental regulation compliance assessment	**Chapter 3.2.2** "Risk of non-compliance with the law"
Volume of SF_6 leaks	**Chapter 3.2.2** "Risk of environmental damage: pollution, waste, biodiversity"
Volume of oil leaks	**Chapter 3.2.2** "Risk of environmental damage: pollution, waste, biodiversity"
CO_2 emissions from electricity losses and SF_6 discharge	**Chapter 3.2.2** "Risk of environmental damage: pollution, waste, biodiversity"

- Recycling rate for waste produced by RTE: this is the percentage of total waste resulting from RTE's activities that has entered a recycling process.
- The "Overall waste recycling rate" indicator corresponds more specifically to the portion of waste that has entered a recycling process for waste produced directly by RTE's activities and waste produced by its contractors.
- Area of land made biodiversity-friendly: this is the measurement of sites made biodiversity-friendly in the areas around network installations.
- "Zero-phyto" office sites, new substations and existing substations: the percentage of RTE's office sites, new substations and existing substations managed under a "zero-phyto" approach. This is calculated based on the maintenance instructions given to contractors.
- Renewable energy power connected to the HTB high-voltage network: this is the renewable energy connected to RTE's network with power above 12 MW.
- Equivalent outage time: this indicator, defined in minutes, measures the quality of the electricity delivered to customers. The equivalent outage time also has an index reflecting the scale of power cuts, in the form of percentage of undistributed energy to the average annual power supply during one year.
- Equivalent outage time caused by weather events: this indicator is used to monitor the duration and percentage of equivalent outage time affecting customers that is attributable to atmospheric conditions. It only reflects the share of outages with consequences for customers that results from weather conditions.
- Percentage of environmentally compliant sites: this indicator consists of the number of sites that underwent a finalised ECR (évaluation de conformité réglementaire environnementale) assessment for environmental regulation compliance during the 2016-2020 period, as a percentage of the total number of sites to be assessed over the same period.
- Volume of SF_6 leaks: this indicates volumes of leaks of SF_6 based on the volumes added to the facilities during the year.
- Volume of oil leaks: the quantity of oil spilled or lost in the environment from substations and underground links, measured to the nearest 5 litres based on replacement oil. Small leaks (such as leaks from hydraulic controls and circuit-breakers) are not included in this indicator, but they are traced for improvement plans and equipment monitoring.
- Recovery rate for hazardous waste tracking documents: this is calculated on the basis of documents returned between 1 July the previous year and 30 June of the year concerned by the management report. These documents must be returned no later than six months after they are sent by RTE. This time-lag is taken into account in calculation of the indicator.
- CO_2 emissions from electricity losses and SF_6 discharge: this indicator reports the CO_2 equivalent of electricity losses and SF_6 discharge. These equivalent emissions concern part of RTE's scope 1 and scope 2. They are calculated by multiplying the volume of losses by the CO_2 equivalent emission factor per kWh of electricity (average mix) excluding network losses, and multiplying the volume of SF_6 discharge by the CO_2 equivalent emission factor for SF_6.

SOCIETAL INDICATORS

SOCIETAL	
Customer satisfaction score	**Chapter 3.2.2** "Risk of beyond-design-basis event with a significant impact on the infrastructure" **Chapter 4.5.4** "Supporting and facilitating customer change"
Percentage of employees trained in "cyber-awareness"	**Chapter 3.2.2** "Risk of large-scale conventional or cyberattacks on RTE's IS or vital infrastructures"
Percentage of employees who have taken the e-learning course on "GDPR" risk prevention	**Chapter 3.2.2** "Risk of non-compliance with the law"
Percentage of employees who have taken the e-learning course on "Sapin 2" risk prevention	**Chapter 3.2.2** "Risk of non-compliance with the law"
Number of breaches of the large-scale incident threshold	**Chapter 3.2.2** "Risk of incident affecting the electricity network that could cause a blackout"
Percentage of purchases from SMEs	**Chapter 3.2.2** "Risk of public opposition to transmission facilities"

- The customer satisfaction score is calculated annually by an external firm.
- The percentages of employees who have benefited from awareness-raising or training are defined in the social impacts.
- Percentage of employees trained in "cyber-awareness": this is the ratio of employees (excluding management executives) who have followed and completed the e-learning module "Cybersecur: how to be an actor of Information systems security" since it was launched, to the workforce in the "IT Asset management" system (excluding temporary staff, contractors, seasonal staff and managed service providers).
- Percentage of employees trained in "GDPR" risk prevention: this is the ratio of the RTE employees (excluding management executives) who have followed and completed the e-learning module "GDPR – personal data protection awareness (DCP)" since it was launched, to the total workforce at 31 December, excluding employees on pre-retirement paid leave.
- Number of breaches of the large-scale incident threshold: this indicator reports serious situations when which the thresholds for large-scale incident have been exceeded. This indicator monitors the generation plants' response to orders issued by RTE. Breaches of the large-scale incident threshold are among the significant safety events of the highest gravity (type A or B).
- Percentage of purchases from SMEs: the percentage of total purchases that were made from SMEs. Some expenses that are not covered by a purchase procedure (e.g. donations, duties, taxes) are excluded from this indicator.

EXTERNAL AUDIT

Mazars has verified the compliance of the declaration of non-financial performance in the 2020 management report and the sincerity of the information published, in accordance with articles L. 225-102-1 and R. 225-105-2 of the French Commercial Code.

TABLE OF CONCORDANCE WITH THE DECLARATION OF NON-FINANCIAL PERFORMANCE

SECTIONS OF THE DECLARATION OF NON-FINANCIAL PERFORMANCE	LINKS TO THE RELEVANT CHAPTERS OF THE REPORT
Business model	**Chapter 2.1** "Business model"
Analysis and presentation methodology for major non-financial risks	**Chapter 3.1** "RTE's general business control" **Chapter 3.2** "Risk control"
Presentation of policies and procedures for major non-financial risks	**Chapter 3.2** "Risk control" **Chapter 4.3** "Maintaining and adapting the network for the electricity landscape of the future" **Chapter 4.6** "Looking after employees and rewarding talents" **Chapter 4.4** "Fighting climate change, protecting biodiversity and resources" **Chapter 3.7** "Vigilance plan"
Key performance indicators	**Chapter 3.2** "Risk control"

TABLE OF CONCORDANCE WITH THE REQUIRED THEMES STATED IN ARTICLE L. 225-102-1

ELEMENTS OF THE DECLARATION OF NON-FINANCIAL PERFORMANCE	LINKS TO THE RELEVANT CHAPTERS OF THE REPORT
Social consequences of the company's activity	**Chapter 3.2.2** Risks of "Public opposition to transmission facilities", "Safety of employees, contractors and third parties" and "Inability to make the changes set out in the "Impetus & Vision" corporate mission statement by 2025" **Chapter 3.7** "Vigilance plan" **Chapter 4.6** "Looking after employees and rewarding talents"
Environmental consequences of the company's activity	**Chapter 3.2.2** "Risk of environmental damage: pollution, waste, biodiversity" **Chapter 3.7** "Vigilance plan" **Chapter 4.4** "Fighting climate change, protecting biodiversity and resources"
Respect of human rights	**Chapter 3.2.2** "Risk of non-compliance with the law" **Chapter 3.7** "Vigilance plan"
Anti-corruption measures	**Chapter 3.2.2** "Risk of non-compliance with the law" **Chapter 3.8** "Anti-corruption compliance"
Anti-tax avoidance measures	**Chapter 3.5.2** "Action against tax avoidance"
The climate change impact of the company's activity and use of the goods and services it produces	**Chapter 3.2.2** "Risk concerning ability to adapt the infrastructure, activities and organisation to the consequences of climate change" **Chapter 4.4.1** "Action against climate change"
Societal commitment to promote the circular economy	**Chapter 3.2.2** "Risk of environmental damage: pollution, waste, biodiversity" **Chapter 4.4.2** "Preserving resources (circular economy) and biodiversity"
Collective agreements signed in the company and their impacts on its economic performance and employees' working conditions	**Chapter 3.2.2** "Risk of social crisis or lack of internal cohesion entailing significant media consequences" **Chapter 4.6.3** "Encouraging social dialogue"
Action against discrimination and to promote diversity	**Chapter 4.6.4** "Encouraging diversity, inclusion and workplace equality"
Societal commitment to reduce food waste	Theme not relevant to RTE due to the nature of its activities
Measures in favour of people with disabilities	**Chapter 4.6.4** "Encouraging diversity, inclusion and workplace equality"
Societal commitment to reduce food insecurity	Theme not relevant to RTE due to the nature of its activities
Societal commitment to promote animal welfare	Theme not relevant to RTE due to the nature of its activities
Societal commitment to promote responsible, fair, sustainable food	Theme not relevant to RTE due to the nature of its activities
Societal commitment to promote sustainable development	**Chapter 3.2.2** "Risk of environmental damage: pollution, waste, biodiversity"

GLOSSARY

ACER	Agency for the cooperation of energy regulators
ADEME (Agence de l'environnement et de maîtrise de l'énergie – Agence de la transition écologique)	French agency for the environment and energy control
AFNOR (Association française de normalisation)	The French national organisation for standardisation
ANSSI (Agence nationale de la sécurité des systèmes d'information)	The ANSSI is France's national authority for information systems security. It proposes rules to apply to protect state information systems and verifies application of the measures adopted.
AVERE-France (Association nationale pour le développement de la mobilité électrique)	A French association promoting development of electric mobility
CRE (Commission de régulation de l'énergie)	France's independent energy market regulator set up by law no. 2000-108 of 10 February 2000. The CRE's main mission is to oversee the operation of the electricity and gas market and ensure there is no discrimination, cross-subsidy or anticompetitive practice
EirGrid	The Irish TSO
ENTSO-E (European Network of Transmission System Operators for Electricity)	Association of 41 TSOs from 34 member countries, formed to promote important aspects of electricity policies such as safety, the rise of renewable energies and the electricity market
TSO	Transmission system operator
MESIL	A negotiated procedure for buying installations at local instigation
ORTEC ***(Organisation de RTE en cas de crise)***	RTE's crisis management procedure
Electricity losses	Some electricity is lost during transmission between the point of generation and the point of delivery. The volume of the loss depends on the current, the distance and the network characteristics. These are referred to as electricity (or network or line) losses. Although they are invisible, electricity losses are real and unavoidable, but RTE works to reduce them
Multi-year energy plan PPE ***(Programmation pluriannuelle de l'énergie)***	France's policy instrument setting out the priorities for action by the public authorities in relation to the energy transition, in accordance with the commitments made in the law on the energy transition for green growth
PSEM	The first metal-enclosed substation
TURPE ***(tarif d'utilisation des réseaux publics d'électricité)***	Tariff for use of the public electricity transmission network

SDDR ***(schéma décennal de développement du réseau)***	RTE's ten-year network development plan
SF_6	Sulphur hexafluoride, a powerful greenhouse gas with a warming potential that is 23,500 times stronger than CO_2. This synthetic gas is used in the electricity industry as an insulator, especially in metal-enclosed substations due to its compactness, and in overhead circuit-breakers. SF_6 emissions may be caused by accidental leaks from facilities, the age of facilities, maintenance operations, or decommissioning of equipment at the end of its life
SNBC **(Stratégie nationale bas carbone)**	France's national low-carbon strategy
S3REnR ***(schéma régional de raccordement au réseau des énergies renouvelables)***	Regional renewable energy connection plans
UFE **(Union française de l'électricité)**	Association of employers in the French electricity sector

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Share capital: €2,132,285,690

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REPORT BY THE INDEPENDENT THIRD PARTY ON THE CONSOLIDATED NON-FINANCIAL STATEMENT INCLUDED ON A VOLUNTARY BASIS IN THE GROUP MANAGEMENT REPORT

For the year ended December 31st 2020

This is a free translation into English of the independent third party's report issued in French and is provided solely for the convenience of English speaking readers. This report should be read in conjunction with, and construed in accordance with, French law and professional standards applicable in France.

To the shareholders,

In our capacity as independent third party, accredited by COFRAC number 3-1058 (scope available at www.cofrac.fr), and member of the Mazars network one of the company's statutory auditors, we hereby report to you on the non-financial statement for the year ended 31 December 2020 (hereinafter the "Statement"), included on a voluntary basis in the Group management report pursuant to the requirements of articles L. 225-102-1, R. 225-105 and R. 225-105-1 of the French Commercial Code.

THE ENTITY'S RESPONSIBILITY

The Board of Directors is responsible for preparing the Statement, including a presentation of the business model, a description of the principal non financial risks, a presentation of the policies implemented considering those risks and the outcomes of said policies, including key performance indicators.

The Statement has been prepared in accordance with the entity's procedures (hereinafter the "Guidelines"), the main elements of which are presented in the Statement or are available on request at company headquarters.

INDEPENDENCE AND QUALITY CONTROL

Our independence is defined by the requirements of article L. 822-11-3 of the French Commercial Code and the French Code of Ethics *(Code de déontologie)* of our profession. In addition, we have implemented a system of quality control including documented policies and procedures regarding compliance with applicable legal and regulatory requirements, the ethical requirements and French professional guidance.

RESPONSIBILITY OF THE INDEPENDENT THIRD PARTY

On the basis of our work, our responsibility is to provide a report expressing a limited assurance conclusion on:

- the compliance of the Statement with the requirements of article R. 225-105 of the French Commercial Code;
- the fairness of the information provided in accordance with article R. 225-105, I, 3° and II of the French Commercial Code, i.e. the outcomes, including key performance indicators, and the measures implemented considering the principal risks (hereinafter the "Information").

However, it is not our responsibility to comment on the entity's compliance with other applicable legal and regulatory requirements, in particular the French duty of care law and anti-corruption and tax avoidance legislation nor on the compliance of products and services with the applicable regulations.

NATURE AND SCOPE OF OUR WORK

The work described below was performed in accordance with the provisions of articles A. 225-1 *et seq.* of the French Commercial Code, as well as with the professional guidance of the French institute of statutory auditors (CNCC) applicable to such engagements and with ISAE 3000(1):

- we obtained an understanding of all the consolidated entities' activities and the description of the principal risks associated;
- we assessed the suitability of the criteria of the Guidelines with respect to their relevance, completeness, reliability, neutrality and understandability, with due consideration of industry best practices, where appropriate;
- we verified that the Statement includes each category of social and environmental information

(1) Assurance engagements other than audits or reviews of historical financial information.

set out in article L. 225-102-1 III as well as regarding compliance with human rights and anti corruption and tax avoidance legislation;

- we verified that the Statement provides the information required under article R. 225-105, II of the French Commercial Code, where relevant with respect to the principal risks, and includes, where applicable, an explanation for the absence of the information required under article L. 225-102-1, III, paragraph 2 of the French Commercial Code;
- we verified that the Statement presents the business model and a description of principal risks associated with all the consolidated entities' activities, including, where relevant and proportionate, the risks associated with their business relationships, their products or services, as well as their policies, measures and the outcomes thereof, including key performance indicators associated to the principal risks;
- we referred to documentary sources and conducted interviews to:
  - assess the process used to identify and confirm the principal risks as well as the consistency of the outcomes, including the key performance indicators used, with respect to the principal risks and the policies presented, and
  - corroborate the qualitative information (measures and outcomes) that we considered to be the most important presented in Appendix 1; concerning certain risks (societal opposition, legal non-compliance, and environmental degradation), our work was carried out on the consolidating entity, for the others risks, our work was carried out on the consolidating entity and on a selection of entities (see Appendix 1);
- we verified that the Statement covers the scope of consolidation, i.e. all the consolidated entities in accordance with article L. 233-16 of the French Commercial Code within the limitations set out in the Statement;
- we obtained an understanding of internal control and risk management procedures the entity has put in place and assessed the data collection process to ensure the completeness and fairness of the Information;
- for the key performance indicators and other quantitative outcomes that we considered to be the most important presented in appendix 1, we implemented:
  - analytical procedures to verify the proper consolidation of the data collected and the consistency of any changes in those data,
  - tests of details, using sampling techniques, in order to verify the proper application of the definitions and procedures and reconcile the data with the supporting documents. This work was carried out on a selection of contributing entities (see Appendix 1) and covers between 28% and 100% of the consolidated data relating to the key performance indicators and outcomes selected for these tests;
- we assessed the overall consistency of the Statement based on our knowledge of all the consolidated entities.

We believe that the work carried out, based on our professional judgement, is sufficient to provide a basis for our limited assurance conclusion; a higher level of assurance would have required us to carry out more extensive procedures.

MEANS AND RESOURCES

Our work was carried out by a team of five people between October 2020 and January 2021 and took a total of six weeks.

We conducted 15 interviews with the people responsible for preparing the Statement, representing in particular the CSR department, the risk department, the human resources department, the health and safety department, the environment department and the purchasing department.

CONCLUSION

Based on the procedures performed, nothing has come to our attention that causes us to believe that the non-financial statement is not presented in accordance with the applicable regulatory requirements and that the Information, taken as a whole, is not presented fairly in accordance with the Guidelines, in all material respects.

Paris-la Défense, on 15 February 2021
The statutory auditors
French original signed by **Mazars SAS**

Francisco Sanchez
Partner

Edwige Rey
CSR and sustainable development partner

APPENDIX 1: LIST OF AUDITED NON-FINANCIAL INFORMATION AND SELECTED CONTRIBUTING ENTITIES

QUALITATIVE INFORMATION (ACTIONS AND RESULTS) RELATING TO THE MAIN RISKS

- Safety (employees and service providers)
- Major operating incident
- Attack
- Impulse & Vision 2025 corporate project
- Strategic orientations defined in the SDDR
- Societal opposition
- Legal non-compliance
- Major infrastructure event
- Climate change
- Environmental degradation

QUANTITATIVE INDICATORS INCLUDING KEY PERFORMANCE INDICATORS

THEME	KEY PERFORMANCE INDICATORS	AUDITED ENTITIES/ DIRECTIONS
Societal	Customer satisfaction rate	RTE
	Cyber risk awareness rate	RTE
	"GDPR" prevention e-learning training rate	RTE
	E-learning prevention training at "Sapin II" law rate	RTE
	Duration/number of non-compliances with large-scale incident criteria	RTE
	Part of purchases from SMEs	RTE
Social	Total number of employees	RTE
	Accident frequency rate (employees and external providers)	RTE
	Percentage of employees who have benefited from a professionalization program	RTE
	Feminization rate of management committees	RTE
	Employee pride rate	RTE

THEME	KEY PERFORMANCE INDICATORS	AUDITED ENTITIES/ DIRECTIONS
Environment	Recovery rate of hazardous waste notes	CM of Nantes CM of Nanterre
	Waste recovery rate	CM of Nantes CM of Nanterre
	Hectares of areas favourable to biodiversity	CM of Nantes CM of Nanterre
	Part of “zero-phyto” sites	RTE
	Renewable power connected to the HTB network	RTE
	Average outage time due to climatic event	RTE
	Annual average outage time	RTE
	Percentage of sites having an environmental regulatory compliance assessment	RTE
	SF_6 leakage volume	CM of Nantes CM of Nanterre
	Oil leakage volume	RTE
	CO_2 emissions from losses and SF_6	RTE

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