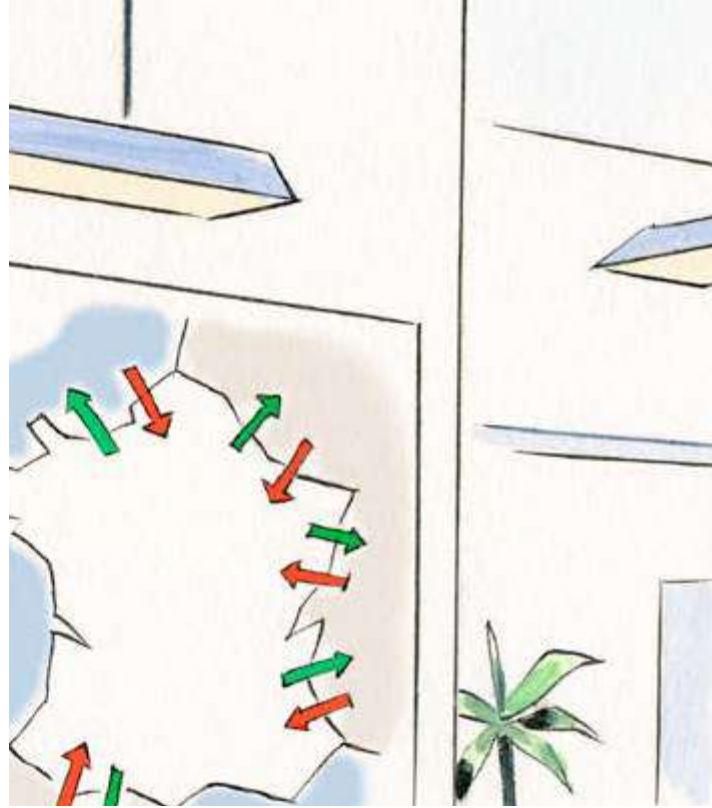


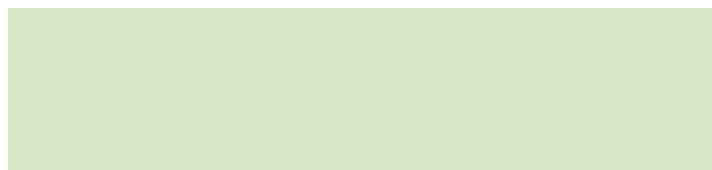


Le réseau
de transport
d'électricité



MANAGEMENT REPORT

2022



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1.

Message from the Chairman of the Executive Board





RTE actively contributed all year long to France's national effort to cope with the energy crisis.

After two years marked by the Covid-19 pandemic, 2022 was to be the year of a return to normal. That aspiration was soon thwarted by the start of the Russian-Ukrainian conflict, which upset the fundamentals in many sectors, and the energy sector in particular.

But this situation did not stop RTE pursuing its growth. The company finalised the commissioning of major infrastructures and made a direct contribution to increasing France's power supply security:

- The connection facilities were handed over for the Saint-Nazaire offshore wind farm which has total capacity of 480 MW.
- Several interconnection projects with our European counterparts were completed, including the start of operations by the first line in the HVDC bipole connection between France and Italy (600 MW), reinforcement of the Avelin-Avelgem

line, reconstruction of the Avelin-Gavrelle link which enhances exchange capacities with Belgium, and commissioning of a private interconnector between France and England that added 1,000 MW of capacity on that border.

Meanwhile, RTE actively contributed all year long to France's national effort to cope with the energy crisis:

- by launching a secure winter power supply plan designed to restore some latitude to the electricity system; this was reflected in the adherence of businesses, local authorities and individuals to the EcoWatt scheme and promotion of energy-saving habits;
- by setting up a system for monthly updates to RTE's supply-demand balance forecasts during the winter, and publishing weekly national consumption data;

- finally, by passing on €1.9 billion to customers of the national electricity transmission network earlier than would normally be required.

Paradoxically, the crisis period we are currently experiencing has accentuated the need to accelerate the pace of the energy transition.

To achieve that objective, we need to find solutions now to manage an electricity system that is undergoing profound change and will soon need more flexibilities of all kinds, for both generation sources and uses. This winter has shown us that in addition to price signals, the French public are ready to play an active role in their electricity consumption.

The investment trajectory growth presented in the 2019 Ten-year network development plan (SDDR) is beginning to take shape: our industrial infrastructure is being renewed, modernised and expanded. This will continue and intensify until 2030 and beyond, driven by major interconnection projects (with Ireland and Spain), the ongoing connection

programme for offshore and onshore renewable energies, and creation of hosting capacities in the network for industrial customers who are reducing their carbon footprint.

Contributing to the energy transition also means taking part in optimisation of the electricity system as a whole – not only its infrastructure, but also its operation. The crisis has made it clear that it is vital to narrow the gap between production cost and the cost for the final consumer, while still upholding a model of exchange and solidarity that continues to prove its importance. These concerns are very relevant to the reorganisation of the European electricity market instigated by the European authorities, and RTE will be proud to contribute by offering its expertise as a central actor in the electricity system.

With the transformation of the energy world, RTE is continuing to evolve into a more effective organisation capable of meeting the increasing demands of stakeholders. The company's Corporate Mission is now entering the operational phase which involves remodelling the Customers, Connections and Markets activities, and 2023 will see the opening of the first Electricity System Control Centre with modernised management tools. The way we work is also evolving, and is the subject of the "New ways of working" agreement now in force in the company, aiming to establish a new, more modern, more flexible relationship with work, in line with the aspirations of both the company and its employees.

2023 will be the year of concrete realisation for RTE. Operating, optimising, informing: France expects all this of us, and the company's 9,500 employees are fully committed to serving those expectations.

Xavier Piechaczyk,
Chairman of RTE's Executive Board



RTE is continuing to evolve into a more effective organisation capable of meeting the increasing demands of stakeholders.



2.

Presentation of RTE



2.1 HISTORY OF RTE AND GROUP STRUCTURE

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 in the electricity flows through the network at all times.

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 EU's internal energy market, which had recently been opened up to competition. To avoid any risk of discrimination between different network users, this law required 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.

Subsequently, 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⁾.

In 2012, the French energy regulator *Commission de régulation de l'énergie* (CRE) certified RTE as an ITO (Independent Transmission Operator) following the approval of the European Commission (EC), in compliance with directive 2009/72/EC which was transposed into French law in 2011. That law requires separation of assets or stronger guarantees of ITO independence with regard to shareholders that own electricity generation and supply activities.

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%, including 0.96% held by its subsidiary CNP Retraite).

RTE's certification as an ITO was renewed in 2018.

RTE has set up the following joint ventures with 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 monopolistic public service missions: Airtelis, RTE International, Cirteus, Arteria and RTE Immo.

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

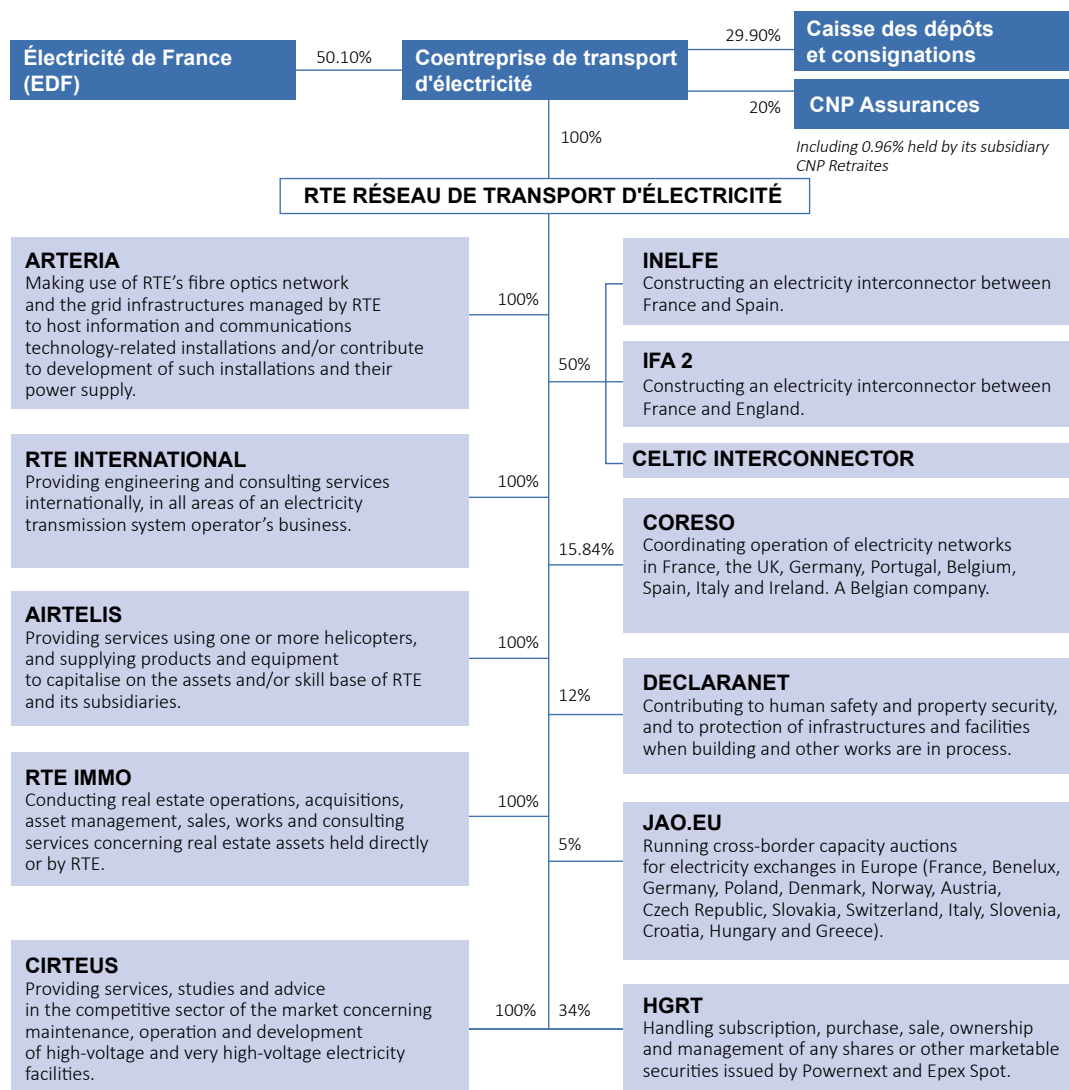
(1) French law no. 46-628 of 8 April 1946 on nationalisation of electricity and gas.

(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.



Finally, RTE holds minority investments in companies that enable it to fulfil the missions assigned to it by the law: Coreso, Declaranet, HGRT, and JAO.EU.

2.2 RTE'S *RAISON D'ÊTRE* AND CORPORATE SOCIETAL RESPONSIBILITY

France's "PACTE" law of 22 May 2019⁽¹⁾ introduced a legal requirement for all companies in France to take into consideration the social and environmental aspects of their business activity. This law also introduced the concept of the *raison d'être*, in which a company defines how it contributes to society beyond the pursuit of economic profit.

After an iterative, collaborative process, the following *raison d'être* was incorporated into the company's bylaws at an extraordinary general shareholders' meeting held on 3 January 2022: "Drawing strength from its network and with dedication to its public service mission that makes an essential contribution to French life, RTE is at work every second of the day to ensure durable access to carbon-free electricity.

The women and men of RTE are conscientiously, passionately committed to achieving a successful energy transition at local, national and European level, through the pursuit of three industrial ambitions:

- optimising the French electricity system through a combination of efficiency, solidarity and environmental concern;
- operating the energy transition by innovating and transforming our industrial infrastructure for the benefit of customers and local actors;
- informing public authority decisions and the choices made by regions and citizens, using our expertise and vision.

This *raison d'être* provides a long-term grounding for RTE's three roles – as network operator, electricity system optimiser, and informer of collective choices relating to the energy transition.

And to embody its *raison d'être* RTE defined a new CSR policy in late 2021 which follows the materiality matrix presented in 7.1 "Non-financial dimension of major risks".

(1) French law no. 2019-786 of 22 May 2019 adopting an action plan for growth and change in businesses.

To respond to societal, environmental, economic and regulatory changes and support the carbon neutrality ambitions pursued by France and Europe, RTE asserts its strategic vision and is making its CSR policy a fundamental lever of value creation. This approach expresses the company's *raison d'être* and promotes RTE as a responsible, committed actor in the energy transition.

Our *Raison d'Être*

Drawing strength from its network ❶ and with dedication to its public service mission ❷, that makes an essential contribution to French life, RTE is at work every second of the day to ensure durable access to carbon-free electricity.

The women and men of RTE ❸ are conscientiously, passionately ❹ committed to achieving a successful energy transition ❺ at local, national and European level ❻ through the pursuit of three ambitions: informing, operating and optimising.

Our Corporate Societal Responsibility Policy to embody our *Raison d'Être*

Challenges as **operator** of the energy transition

- Network performance, crisis prevention and management in France and Europe ❶
- Developing flexibilities for electricity system operation ❶
- Adjusting to the consequences of climate disruption ❷
- Adaptation and support for the energy transition ❺
- Responsible purchasing and sustainable local action ❸

Challenges as **pathfinder** informing public decision-making

- Developing a forward-looking vision for French and European public energy policies ❷
- Transparency, dialogue and co-construction with stakeholders ❸

Challenges as **optimiser** of the electricity system

- Fighting climate change and protecting biodiversity and landscapes ❺
- Preserving resources, and the circular economy ❸

Fundamental challenges for realising our strategic ambitions

- Governance and business ethics ❹
- Diversity, equal opportunities and inclusion ❸
- Health, safety and wellbeing of internal and external stakeholders ❹
- Skill development and talent management ❹

2.3 BUSINESS MODEL

ENERGY SECTOR TRENDS



Electricity consumption growth in an increasingly decarbonised world

OUR RESOURCES

HUMAN RESOURCES

9,586 employees including **470** on work-study contracts

FINANCIAL RESOURCES

91.20% Debt / Regulated Asset Base⁽¹⁾

10.20% FFO / Net debt⁽²⁾

1,845 M€ of EBITDA

INDUSTRIAL RESOURCES

1,722 M€ of investments in the grid

105,817 km of overhead and underground links

2,900 RTE substations in operation

46 M€ of investments in interconnectors (CELTIC, Savoy-Piedmont, reinforcement of the France-Belgium line)

52 cross-border lines

RESEARCH RESOURCES

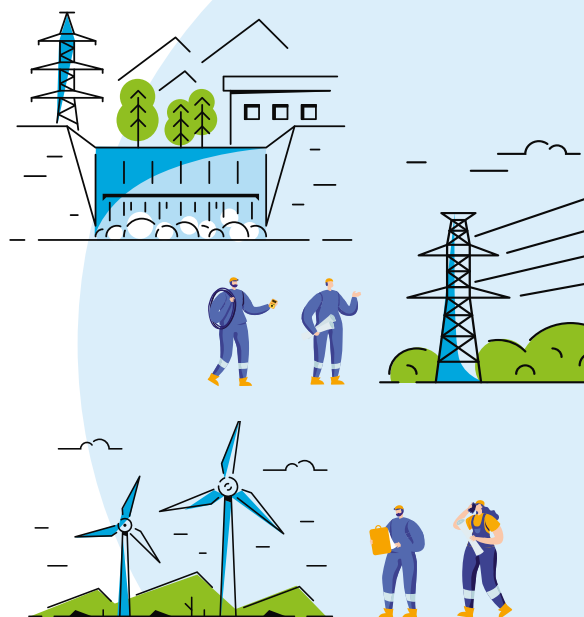
A hundred employees working on R&D activities

Nearly **40 M€** per year allocated to R&D

OUR BUSINESS MODEL

OUR RAISON D'ÊTRE

Drawing strength from its network and with dedication to its public service mission that makes an essential contribution to French life, RTE is at work every second of the day to ensure durable access to carbon-free electricity.



OUR CONTRIBUTION TO SUSTAINABLE DEVELOPMENT OBJECTIVES



Principal sustainable development objectives – see. 7.1 Non-financial dimension of major risks

OUR MISSIONS

- To **inform** public policies
- To **optimise** operation of the electricity system
- To be the industrial **operator** of a key infrastructure



New demands
and societal needs



Evolving
energy mix

OUR VALUE CREATION

FOR THE ENVIRONMENT AND LOCAL/REGIONAL AREAS

56,431 MW of renewable energies connected to the high-voltage and very high voltage networks in France / installed power on the French national grid

88.2% of energy output by installations connected to RTE's network is carbon-free
(provisional data at 1 January; the final figure will be published in the 2022 Electricity report)

92% of waste recycled

1,719 hectares of land made biodiversity-friendly

FOR EUROPE

24.8Twh imported⁽³⁾

8.3Twh exported⁽³⁾

(provisional data at 1 January; the final figure will be published in the 2022 Electricity report)

FOR THE ECONOMY

74,695⁽⁴⁾ jobs supported

6.6 Bn€⁽⁴⁾ contribution to GDP in France

2 Bn€ of purchases

FOR OUR CUSTOMERS

3 min 8 seconds of annual average outage time

92% customer satisfaction score

FOR OUR EMPLOYEES

5° Best Employer in France (in the Glassdoor 2022 rankings)

1:17 ratio between the lowest and highest salary

FOR OUR SHAREHOLDERS

3.9% ROCE

6% dividend/equity ratio

(1) Ratios including CTE's debt, S&P adjustments and the effect on net debt of early distribution of the CRCP balance.

(2) FFO S&P adjustments.

(3) A new calculation convention is used from 2022, in line with the method used in the Eco2mix and the Electricity report.

(4) Source : study of the 2021 socio-economic footprint based on 2020 data.

THE CHALLENGES FOR RTE

- **Supporting** the move to carbon neutrality by 2050
- **Responding** to environmental and societal issues
- **Renewing** and adapting the network
- **Exploiting** electricity flows, making increasing use of digital technologies

2.4 REGULATION MODEL

France's Energy Code stipulates that all costs borne by RTE, provided they correspond to the costs of an efficient network operator, are to be covered by the network access tariffs.

Accordingly, for every tariff period (four years) the CRE⁽¹⁾ examines RTE's forecast charges and sets an appropriate network access tariff ("TURPE") to cover them. It also defines the regulation framework defining how risks and contingencies are to be shared between the companies and users of the public transmission network with respect to unpredictable events that cause RTE's income and expenses to differ substantially from the initial forecasts. For

cost and income items that are difficult to forecast and largely beyond RTE's control, the income and expenses adjustment account (CRCP⁽²⁾) is a tool for neutralising such effects for RTE by adjusting the tariff.

The regulation framework also contains incentives for RTE to control its expenses and improve the service quality for network users. All these factors contribute to determination of RTE's authorised revenue. In practice, the TURPE 6 tariff is adjusted each year based on an inflation index plus a cost factor of 0.49% and a clearance coefficient to balance items in the income and expenses adjustment account (CRCP).



RTE's authorised revenue is used to calculate the network access tariffs payable by all network users. For consumers and distributors, the tariff comprises a fixed component for the subscribed power and a variable component proportional to the energy withdrawn. For producers, the tariff is variable and proportional to the energy injected.

Normative capital expenses include returns and depreciation on the capital tied up in assets. These two components are calculated based on:

- the value of, and changes in, the assets operated by RTE less subsidies and contributions received from third parties, resulting in a return of 4.6% per year (RTE's regulated WACC) for the period 2021-24,
- fixed assets under construction, which receive a risk-free return of 2.7% per year for the period 2021-24.

The trajectory of capital expenditure on IT and real estate investments is fixed and non-adjustable for 4 years. The equivalent trajectory for investments in network infrastructures is based on actual expenses incurred (any variance from the forecast trajectory is covered by the CRCP).

RTE's OPEX (operating expenses) consist of:

- purchases made for operation of the electricity system (electricity losses, congestion, system services, etc) which are by nature difficult for RTE to predict and control; changes in these items are largely neutralised by the CRCP,
- RTE's gross expenses (essentially personnel expenses and external purchases, largely for management of assets) for which the regulator sets a non-adjustable trajectory for a 4-year period.

As a performance incentive for RTE, the regulator has set up several ad hoc bonus and penalty mechanisms for RTE. For the period 2021-24, these incentives mainly concern continuity of supply, management and development of assets, the volume of network losses and associated purchase costs, the development of interconnections, and an efficient electricity market.

As the owner and manager of electricity interconnectors between France and its neighbouring countries, RTE receives income generated by interconnection capacity allocation and the capacity mechanisms set up in France and the countries with which it shares borders. Any surplus or shortfall compared to the forecast trajectory is entirely passed on to users via the CRCP.

The CRCP is the account used to repay to users the excess amounts received by RTE/to pay RTE for excess charges, under the rules for sharing the risks and contingencies defined in the regulatory framework. This account is cleared annually for variances of up to +/-2%. In the event of a larger variance, the balance, discounted to present value using the risk-free rate of 1.7% for the period 2021-24, is cleared in subsequent years.

(1) <https://www.cre.fr/en>.

(2) *Compte de régulation des charges et des produits.*

3 ■



Corporate governance

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 (TSO – transmission system operator). 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 the activities necessary to prepare and implement the ten-year network development plan. 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 oversight 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 outlook, 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: this committee issues an opinion on the setting of all kinds of remuneration that may be paid to key corporate officers for their duties.

Composition of the Supervisory Board

The Supervisory Board consists of twelve members⁽¹⁾ distributed as follows in application of article 13 of RTE's bylaws:

- one third of employee representatives;
- members representing the French State and a member nominated by the State⁽¹⁾ 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 state shareholdings, up to a maximum of one third of board members;
- representatives of the shareholder, CTE: their number depends on the number of members appointed as set out in the previous point.

Supervisory Board members are appointed for a five-year term of office.

(1) The French State, as a legal entity, can be appointed by the shareholders at an ordinary general meeting. In this case it is represented by an individual designated by official decision. The State can also nominate one or more persons for appointment to the Supervisory Board by the shareholders at an ordinary general meeting.

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 as regards independence of other companies included in the Vertically Integrated Enterprise.

Philippe Dumarquez has been RTE's General Compliance Controller since 1 September 2021.

He is entitled to attend General Shareholders' Meetings, Supervisory Board meetings, specialist committee meetings and all meetings relevant for performance of his duties.

He has all powers to investigate documents on site for execution of his mission. Apart from any information he is required to report to the CRE, he has a professional duty of discretion regarding commercially-sensitive information collected in the course of his 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 powers of 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.

Composition of the Executive Board

The Chairman of the Executive Board, Xavier Piechaczyk, was appointed by the Supervisory Board for a 5-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 in 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.

The Executive Board thus consists of:



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

4.

Significant events



January

— RTE's first green bond issue

RTE successfully issued its first green bond on 5 January 2022. Investor demand was four times as high as the debt value, and €850 million was issued with a 0.75% coupon and 12-year maturity. This operation confirmed investors' confidence in both RTE's creditworthiness and its strategic role in the energy transition, and has given RTE access to a new base of bond investors that manage funds classified as "green".

The funds raised from these green bonds will be used to finance and refinance several sustainable development projects such as offshore wind farm connections and electricity interconnector projects between France and neighbouring European countries that will help to optimise the energy mix.

— Renewal of the "Responsible supplier relations and purchasing" label

The committee that awards the French *RFAR*⁽¹⁾ label for Responsible supplier relations and purchasing, acting under the supervision of the Ministry of the Economy, unanimously approved renewal of RTE's label for three years (it was first awarded to RTE in January 2019).

This label gives official recognition to businesses that have proven long-term, balanced relations with their suppliers. Backed by standard ISO 20400 since 2017, it is the only supplier relations label issued by the French authorities, and only 60 companies have received the label to date. RTE's label was renewed upon the recommendation of the independent assessor ASEA (a firm accredited by the French corporate mediation service), after an audit in autumn 2021 based on documentary analysis and around thirty interviews with various members of RTE and representatives of its suppliers.

February

— Publication of supplements to the "Energy Pathways to 2050" report

In October 2021, RTE published the key results of the "Energy Pathways to 2050" report, which

presents changes in consumption and compares six electricity mix scenarios that would give a secure power supply while enabling France to reach carbon neutrality by 2050. In line with the commitments made during the consultation procedure and the publication timetable defined in autumn 2021, on 16 February 2022, RTE published more detailed analyses and supplements to the primary results.

Those results notably concerned:

- comparative analysis of six generation mixes in the "sufficiency" and "extensive reindustrialisation" scenarios;
- problematisation of the societal issues linked to the various scenarios, with the emphasis on the underlyings of the "sufficiency" scenario;
- full environmental analysis, notably including a section on air quality.

These additional analyses confirm and refine the results and takeaways published in October 2021.

Publication of these more detailed results closed the first cycle of studies for the Energy Pathways to 2050. As part of its public service mission, RTE may extend certain studies on key topics of public debate. This will be the case, for example, for the "thwarted globalisation" variant, with further exploration of the energy transition consequences of tensions on supply and production chains, considering the recently observed macroeconomic, geopolitical and climate situation.

— Mobilisation of RTE's employees after storm Eunice hit the North of France

With gusts of up to 175 km/h, storm Eunice caused a great deal of damage in the north of France during the weekend of 19/20 February. This rare weather event had significant repercussions for the electricity grid: 160,000 homes were left without power and 11 high-voltage lines were brought down, causing temporary power cuts for seven industrial customers.

To restore the electricity supply as swiftly as possible, a regional crisis unit had been set up in advance, six hours ahead of the storm's arrival. The maintenance teams were also on call ready to deal with damage, and reinforcements were assigned to the operating teams to identify which lines should

(1) *Relations fournisseurs et achats responsables.*

be inspected in priority if any were tripped out (as gales can cause automatic outages by triggering protective mechanisms, but facilities must be inspected on-site by RTE's teams before the current is restored).

March

— Synchronisation of Ukraine and Moldova with the European electricity grid

On 16 March 2022, the Ukrainian and Moldovan electricity systems were connected to the continental European power system. The connection, requested by Ukraine and Moldova, was completed in just a few weeks. This was an unprecedented technical and political feat, and a strong signal of European solidarity in matters of energy.

The connection process had been started by Ukraine five years earlier, with synchronisation initially scheduled for 2023. The process included a test of the Ukrainian electricity system's operation in island mode from 24-27 February 2022, and as planned for that purpose, Ukraine disconnected from the Russian network which normally provided its electricity supplies at around midnight on 24 February. Just a few hours later, the Russian invasion began. Ukraine immediately decided not to reconnect to the Russian network, for political reasons, but also due to fears of deliberate destabilising action if the reconnection took place.

From that date, a European task force was set up, with significant input from RTE, to analyse the necessary conditions (particularly technical and legal) for trial synchronisation with the European system. By 16 March 2022, less than a month after the disconnection from the Russian grid, the European system operators had taken the action needed to make that synchronisation possible.

The main technical risk identified before the synchronisation was the occurrence of inter-area oscillations, which already existed but could potentially be accentuated by connecting Ukraine. This did not actually happen, or if it did, remained within acceptable proportions.

The permanent synchronisation process is still ongoing, with the aim of having all nominal requirements validated by mid-2023.

— Signature of the public service contract between RTE and the French State

After several months of preparatory work by RTE and the French government's energy and climate department, on 29 March 2022 Barbara Pompili, France's Minister for the Ecological Transition, and Xavier Piechaczyk signed the new public service contract between the French State and RTE. The previous contract dated from 2017.

This public service contract is deliberately clearly distinguished from other strategic documents (the ten-year network development plan, the corporate mission statement) and the concession agreement established by decree, to make it a recognised reference document that will be used more than in the past. It therefore carries a smaller number of objectives than the previous public service contract, but they are presented in more detail. The forty objectives in the contract correspond to the principal challenges facing RTE in the current period, notably:

- making the energy transition possible by transforming the electricity transmission network, while promoting its acceptability in society, and local development;
- operating the national network and preserving its resilience by adapting to changes in the electricity system;
- informing the energy choices made by the government, local authorities and ordinary citizens.

April

— Activation of the amber EcoWatt⁽¹⁾ signal due to tensions in the supply-demand balance

On Saturday 2 April 2022, RTE triggered the amber EcoWatt warning due to expected pressures on the supply-demand balance on Monday 4 April. Since electricity consumption was rising due to below-normal temperatures for the season and 27 nuclear reactors were offline for maintenance, individuals, local authorities and businesses were asked to take steps to reduce their energy use.

(1) EcoWatt is a scheme established by RTE to provide real-time information about the situation of France's electricity system.

May**— Completion of tunnel boring for undergrounding of power lines between Saint-Denis and Épinay-sur-Seine**

After a year of work, on 27 May 2022, the tunnel borer Ambre finished digging the 2.4 km underground passage from Saint-Denis to Épinay-sur-Seine which will house six 225 kV lines and thus make it possible to remove 15 km of overhead lines and 27 pylons, particularly in the zone where the 2024 Olympic village will be located. This will free up 80 hectares of land at Saint-Denis, L'Île-Saint-Denis and Villeneuve-la-Garenne in the Paris region for urban redevelopments including the Olympic village and a riverside eco-district.

The project continued with dismantling of the tunnel borer, and equipment installation for the two access wells and the tunnel. Completion of this work will be spread over 2023 as the new underground facilities are gradually commissioned, and work to take down the overhead lines will then begin in early 2024.

— Commissioning of ElecLink, the first private interconnector between France and England

The private electricity interconnector between France and the United Kingdom, ElecLink, began operations on 25 May 2022 after six years of work. With capacity of 1,000 MW, ElecLink is the only entirely privately-funded cross-Channel interconnector, and following its designation as a Project of Common Interest (PCI) by the European Commission in 2013 it was given a 25-year regulatory exemption for its operation.

This project, headed by the GetLink group (also owner of the Channel Tunnel concession operator Eurotunnel) has created a HVDC power link of a total 69 km in length, 52 km of which runs through the Channel Tunnel. Two other interconnectors already exist between France and the UK but they use cables laid directly on the seabed.

RTE conducted a long consultation procedure to develop the new contractual framework for this private interconnector status, covering everything from the connection procedure to the standard agreement models, and agree on the connection terms.

— Start of the new railway metering service DECOFER

RTE and SNCF Réseau, France's principal operator of railway infrastructures, began a project to modernise the railway metering service in 2018. Railway metering consists of allocating electricity flows in the French railway sector between the railway infrastructure operators and the freight and passenger rail service operators that use their rail networks. Historically, this was always done by the railway infrastructure operators.

Since 1 May 2022, RTE has offered a new ancillary service, providing railway actors with quantified electricity consumption data via the DECOFER (*DÉCompte de l'Énergie FERroviaire*) platform developed by RTE. This service is the first of its kind in Europe, and will bring benefits for rail operators, optimising energy consumption and their access to the electricity markets.

Using remotely-read onboard captors, RTE can now take a precise measurement of the energy consumed by each train, and the consumption by each railway company with trains running in France. There are nearly 4,500 electric trains in circulation in France, and 1,000 of them are already equipped with these captors and can thus be integrated into the DECOFER service.

As the average annual electricity consumption by the French railway sector is 7 TWh, measuring consumption in the sector is a very important facility, particularly at this time when France is opening up the railway market to competition.

June**— Saint-Nazaire offshore wind farm: France's first electricity output from offshore wind turbines**

The first wind turbines of the Saint-Nazaire wind farm went up in mid-April off the coast at Guérande in north-west France, and by June, 27 turbines had been installed at sea by the consortium formed by EDF Renewables and EIH SARL (a subsidiary of Enbridge Inc. and CPP Investments). RTE's teams were in charge of connecting the facility to the national electricity grid by providing two underwater connection structures (on 6 and 30 June).

The power produced by this wind farm has been gradually injected into France's electricity transmission network since 6 June. By the end of 2022, all of its 80 turbines were in place and the total capacity was 480 MW.

September

— Forecasts for the winter of 2022-2023

In the ongoing energy crisis situation, RTE published its forecasts for the winter 2022-2023 in early September. In a departure from the norm, the 2022 vigilance period began in the autumn and covered a period of several months.

For the great majority of situations, RTE only expected a few red Ecowatt signals during the six months of the winter period. When the electricity system is under great pressure, the risk of power cuts could not be totally ruled out, but that risk could be avoided by reducing national consumption by 1-5% in most cases, and up to 15% in the event of extreme weather or substantial deteriorations in the European energy production situation.

RTE therefore expanded its EcoWatt scheme, which warns the French public, businesses and local authorities in advance, so they can take action and adopt effective measures to bring their power consumption down.

A red EcoWatt signal indicates great tensions on the electricity system and means that power cuts are inevitable unless consumption is reduced. The objective is to send out a simple message calling individuals, businesses and local authorities to voluntarily cut back on consumption in peak periods. Analysis of energy-saving habits shows that the most effective steps concern energy use for heating, lighting and cooking.

The vast majority of high-risk situations appear to be in the morning between 8 am and 1 pm, and in the evening between 6 and 8 pm. They do not seem to concern entire days or weekends, and France is not exposed to a risk of blackout or total loss of control of the electricity system. RTE has appropriate, proportionate protective measures for the system, which vary according to the scale of the potential imbalance.

The forecasts for the winter showed that the principal uncertainties related to gas supplies, the energy situation in neighbouring European countries, changes in demand and the pace of recoupling of French nuclear reactors. RTE tested and combined several scenarios for availability of power output (baseline, amplified and stressed scenarios) and weather conditions (mild, median, cold or very cold winter).

RTE subsequently released a monthly update to this original diagnosis based on revised assumptions, particularly for nuclear plant availability, consumption levels and short-term weather forecasts.

October

— Communication on the EcoWatt scheme

Several campaigns targeting different actors were undertaken to spread information about the EcoWatt scheme as widely as possible.

On Tuesday 11 October, RTE held a meeting for over 90 business managers attended by Bruno Le Maire, France's Minister for the Economy, Public Finance and Industrial Sovereignty, to formalise their commitment to pass on EcoWatt alerts (to their tens of millions of customers, spectators, subscribers or users), moderate or defer power consumption in the event of an EcoWatt alert, and raise awareness, among the hundreds of thousands of people working in their organisations, of appropriate action in response to an alert. RTE also organised similar initiatives at regional level (in the Auvergne-Rhône-Alpes and the South-East regions), taking the number of businesses that have signed an EcoWatt charter to over 200.

90 more charters have been signed with local authorities (regions, counties, municipalities, energy trade associations, etc.) and their commitment was formally expressed in a public announcement made on 22 November at the National Meeting of Mayors and Local Authorities.

An EcoWatt mobile app was released on 19 October 2022 to complement the EcoWatt scheme. It has already been downloaded nearly 3 million times.

November

— Partial commissioning of the French-Italian Savoy-Piedmont interconnector

The first line of the Savoy-Piedmont electricity interconnector was commissioned on 7 November 2022 after seven years of work. This new direct-current interconnector comprises two links that can each carry up to 600 MW, equivalent to one and a half times the consumption of the Savoy region.

This underground facility runs for nearly 190 km between France and Italy, crossing the Fréjus tunnel. The second line is due to be commissioned in the first half of 2023 and will help to reinforce mutual support between the two national network operators RTE and Terna, by increasing exchange capacities between France and Italy.

— Transfer of “windfall” revenues from interconnections

In early 2023, RTE will pass on €1.9 billion to its users, in compliance with the CRE decision of 17 November proposing to require exceptionally early payment of part of the balance of RTE’s income and expenses adjustment account (CRCP).

This “windfall” consists mainly of interconnection revenue, which depends on the volume of cross-border exchanges and electricity price differentials between France and its neighbouring countries. The very high electricity prices this year induced additional costs for RTE (purchasing electricity to compensate for losses in transmission and purchasing reserves, bearing the cost of electricity that could not be delivered because of network congestion), but the widening price differentials between France and nearby countries led to a considerable increase in revenue from cross-border interconnections.

Under current rules, when RTE’s income exceeds the CRE-approved forecasts, the surplus is repaid to transmission network users through adjustments to the annual tariff increases. However, strict application of these rules would have resulted in the “windfall” of 2022 taking more than six years to pass on.

Consequently, following a proposal by RTE and in view of soaring energy prices, the CRE allowed early

repayment so that RTE’s network users, particularly the large industrial sites, can benefit from this support as soon as early 2023. Nearly one third of the tariff paid in 2022 by users of the public electricity transmission network could thus be transferred back to them.

— Signature of technical and financial agreements for the Celtic interconnector with Ireland

The Celtic Interconnector project, led by RTE and its fellow TSO EirGrid, exists to create a HVDC electricity interconnector approximately 575 km long (including around 500 km offshore) for direct power exchanges between France and Ireland. With 700 MW capacity, it will connect the north coast of Brittany in France to the south coast of Ireland. This will be Ireland’s first interconnector with continental Europe and is expected to be commissioned in 2026.

The project achieved several milestones in late 2022, paving the way for the start of work on the operational phase in 2023:

- purchase contracts between the subsidiary in charge of the project (CIDAC) and the suppliers of the two converter stations (Siemens) and the undersea cables (Nexans) were signed in November;
- the French and Irish regulators reached agreement on the target project cost, set at €1.6 billion, and the allocation of costs: 65% for EirGrid and 35% for RTE up to approximately €1.18 billion, and equal shares beyond that amount. The €530 million of European funding granted is also allocated 65% to EirGrid and 35% to RTE.

These significant steps forward gave rise to technical and financial agreements signed by Xavier Piechaczyk and Mark Foley, Group Chief Executive of EirGrid. The signing took place at the Irish Embassy in Paris on 25 November in the presence of the Irish Tánaiste (Prime Minister) Micheál Martin, the French Minister for the Ecological Transition Agnès Pannier-Runacher and the Irish Minister Eamon Ryan.

— Weekly summary of electricity consumption in France

Amidst unprecedented uncertainties caused by the current energy crisis, after the analyses published on 14 September, RTE placed autumn and winter 2022-

2023 under particularly close vigilance. Among the parameters scrutinised, control of consumption is an essential lever for improving power supply security in the short term.

RTE therefore began to release a new weekly report for monitoring electricity consumption. The analyses performed will quickly highlight the structural effects of the changes observed, such as implementation of the French government's energy sufficiency plan presented on 6 October.

Electricity consumption in normal temperatures (after adjustment for weather conditions) was distinctly lower than in previous years at the same period, across all sectors. Total national consumption declined by an average 9% at the end of 2022 compared to average consumption for the period 2014-2019 (before the Covid-19 pandemic). The decline was first observed in the industrial sector, where it was notably driven by rising energy prices. It was then also visible (and confirmed, including in cold periods) in the residential and tertiary sectors. The consumption decreases were larger than expected in the September analysis, and their continuation was set to reduce the supply security risk for the rest of the winter.

December

— CRE decision updating the TURPE 6 tariff

In a decision of 1 December 2022, the CRE modified its decision of 21 January 2021 concerning the TURPE 6 Transmission (high voltage B) network access tariff. RTE had requested a revision so that the CRE could take into consideration the sudden changes of context that had arisen since the TURPE 6 tariff decision was taken:

- electricity prices had soared, with direct and indirect effects on a large portion of RTE's expenses (network losses, congestion, reserves, the Inter-Transmission Compensation (ITC) fund, etc.);
- the boom in applications for connection (which more than doubled).

The CRE amended its initial decision to give RTE better protection against the effects of soaring prices on system purchases, by modifying the way the CRCP works.

— Reinforcement of the French-Belgian Avelgem-Avelin electricity interconnector

The line connecting the Avelin substation in the south of the Lille conurbation in France to the Avelgem substation near Tournai in Belgium is a key channel of European power transit. For optimum security between the Belgian and French networks, and to incorporate new wind power facilities which are expanding fast in northern Europe, RTE and its Belgian counterpart Alia made the joint decision to reinforce this interconnector by installing more efficient cables. After nearly four years of work, RTE and Elia were able to inaugurate the reinforced link on 2 December 2022.

To increase this interconnector's transit capacity from 3 to 6 GW, work was needed not only on the cables, but also on the pylons and the substations at either end. In the substations, replacement of high-voltage equipment was necessary (four circuit breakers, one feeder disconnector, fifteen current transformers, twelve insulating pillars, etc.). For the lines, in preparation for cable replacement RTE brought forward the replacement of five pylons and reinforced the foundations of over 30 other support structures. The final stage in replacing the existing cables with low-expansion cables specially designed for this 400 kV line, involving over 260 km of cables to lay, took place in 2022.

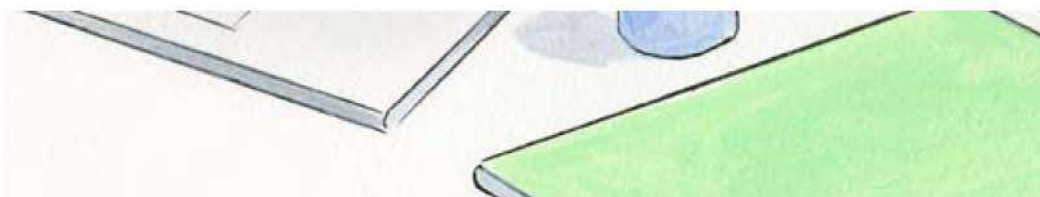


5.

Strategic orientations

In 2021, RTE drew up and communicated to personnel its **strategic orientations** and the resources for achieving them for the period 2022-2024.

These strategic orientations integrate objectives set by the public authorities (through the energy and climate law, the national multi-year energy plan (PPE), the national low carbon strategy (SNBC) and the public service contract), which for RTE principally translate into its ten-year network development plan (SDDR).



5.1 RTE, INFORMING PUBLIC DECISIONS

As part of its statutory missions, RTE regularly publishes prospective analyses to inform public policy decisions concerning the medium and long-term evolution of the electricity system.

RTE has made this role of pathfinder and optimiser for public policies a key focus of its work in recent years, substantially broadening the themes covered, since the need to accelerate the energy and climate transition has never been more urgent.

More generally, the public debate on energy in France and Europe now concerns the possible options for exiting fossil fuels to achieve carbon neutrality by 2050, in line with the commitment made in the 2015 Paris agreement. In addition to that 2050 goal, the interim milestones set out in the European Commission's latest climate package (particularly the target of a 55% reduction in net greenhouse gas emissions by 2030 compared to 1990 levels) are very demanding. Achieving all these objectives requires modifications to the French electricity system on a scale that has not been seen since France's nuclear electricity programme, and all system components are affected.

Over the last three years, RTE has supplied in-depth information about the challenges associated with integration of new electricity uses by 2035: reports on electric mobility, development of low-carbon hydrogen and the impact of energy policies on the building industry.

In October 2021 and February 2022, RTE published the results of the *Energy Pathways to 2050* study begun two years earlier, to determine possible trajectories to carbon neutrality and reflect on the electricity system of the future. Since then the various scenarios presented have been widely used in the energy debate and taken up by many actors, feeding into France's decarbonisation strategy orientations announced by the French President in Belfort in February 2022.

This followed the publication on 7 January 2021, at the request of the Minister for the Ecological and Inclusive Transition, of a report prepared in partnership with the IEA (International Energy Agency)

entitled *Conditions and Requirements for the Technical Feasibility of a Power System with a High Share of Renewables in France Towards 2050*. These studies are part of a vast concerted effort with all stakeholders, involving many working groups, plenary meetings and public consultations.

For example, for the *Energy Pathways to 2050* report, nine technical working groups were formed and nearly 50 meetings were held, attended by representatives of over a hundred different organisations. The public consultation also collected a large number of stakeholders' and citizens' opinions of the assumptions used in the study. Some 4,000 comments were received, from a much broader range of actors than in a typical consultation of experts on the electricity system.

This demanding work required an enormous number of specific expert assessments by RTE to address all the topics of debate. The benefits of these studies are unanimously acknowledged today in the energy world, but the expertise on the topics concerned must be maintained and strengthened internally at RTE.

Further work on the *Energy Pathways to 2050* is now under way, studying variants of the major parameters of the study for 2030/35 as a result of the geopolitical situation and the current energy crisis, as well as the pressures on certain supply chains. The findings of this work will be reported in the 2023 Generation Adequacy report.

5.2 THE CHANGING VIEW OF THE ENERGY SYSTEM

5.2.1 CARBON NEUTRALITY BY 2050 REMAINS THE KEY OBJECTIVE OF EUROPEAN AND NATIONAL ENERGY POLICY

France aims to attain carbon neutrality by 2050. The country has made this objective a commitment to the European Union and the United Nations through the Paris climate agreement.

To achieve it, France's energy system must be completely transformed so that electricity can replace fossil fuels as the country's number one energy source.

The most recent national low-carbon strategy (SNBC 2) published in 2020 sets out the roadmap for achieving carbon neutrality through a trajectory of decreasing greenhouse gas emissions until 2050. The French strategy to move to a low-carbon economy is also expressed in the focal areas and priority actions for energy management defined in the **national multi-year energy plan (PPE)**.

The SNBC 2 also provided the framework for RTE's *Energy Pathways to 2050* study published in the autumn of 2021.

On the *demand* side, the SNBC is primarily founded on energy efficiency: it aims for a 40% reduction in final energy consumption in France over 30 years. This is a very ambitious target, situated in the higher end of the range of neighbouring countries' strategies.

On the *supply* side, the SNBC rests on two pillars: decarbonised electricity and domestically produced biomass. It thus excludes large-scale imports of green gases, non-sustainable biomass and decarbonised fuels, contrary to plans in some other European countries.

As a result, even with the ambitious energy efficiency targets contained in the SNBC, electricity consumption will follow an upward trajectory. In the *Energy Pathways to 2050* study RTE examines several different consumption trajectories, all involving higher levels than currently: a 35% increase in the baseline trajectory, a smaller 17% increase in an energy sufficiency scenario, and an increase of more than 50% if France pursues extensive reindustrialisation.

These trajectories will raise the portion of electricity in total energy consumption in France to around 55%, compared to 25% currently.

This means that more decarbonised electricity will have to be produced through an increasingly interconnected, agile, reliable electricity network, with progressive replacement of electricity facilities as they arrive at the end of their operating lives.

5.2.2 THE INITIAL PRINCIPLES OF FRANCE'S ENERGY POLICY ARE NOW KNOWN

Before the reorganisation of the French national strategy for energy and the climate, the President of France announced the guiding principles of France's energy policy in a speech given at Belfort in eastern France in February 2022. The principles are largely founded on the conclusions of the *Energy Pathways to 2050* report published by RTE in October 2021.

This new strategy, which went through a consultation procedure from October 2022, builds on large-scale development of all renewable energies with priority for photovoltaic solar power and offshore wind power, together with substantial investment in new nuclear reactors and extended operating lifetimes for the existing fleet.

The public policy principles for consumption concern significant decarbonisation of existing industries and in-depth reindustrialisation in certain sectors. As well as significant action for energy efficiency, the strategy makes mention of energy-efficiency renovations to buildings, and development of the carbon-free hydrogen option.

These principles are part of the development of France's five-year energy and climate programme law which should be adopted by mid-2023. It will lead to the new multi-year energy plan (PPE) for 2024-2033 and the new national low-carbon strategy, both due to be adopted by mid-2024 at the latest.

5.2.3 A MULTI-LEVEL ENERGY CRISIS

Since mid-2021, energy has been a central pre-occupation for the French population and the government.

At international level, fossil energies were the first to see their prices soar as the Covid-19 pandemic ended, due to the simultaneous worldwide business recovery. In Europe, Russia's sudden invasion of Ukraine triggered a crisis in fossil energy supplies from Russia, generating tension in electricity supply and prices on the European markets, which leapt up in the wake of rising gas prices.

Finally, after the discovery in early 2022 of “stress corrosion” in several French nuclear reactors, EDF launched a vast campaign of inspections and repairs in its current nuclear fleet. The resulting low availability of the nuclear power stations during the year put France in an exceptional net import situation, in contrast to its traditional position as the largest electricity exporter of all European countries.

Finally, extreme weather conditions in the spring and summer of 2022 affected hydropower stocks in France and across Europe, and this also contributed to electricity supply problems in an already tense situation.

But despite all this, the energy crisis did not call into question the conclusions of the prospective studies covering the period to 2050. Although it focused attention on the issue of European and national energy sovereignty, it simply revealed the urgency of reducing dependence on imported fossil energies and speeding up decarbonisation in our societies.

5.3 RTE'S INDUSTRIAL STRATEGY IS CONFIRMED

The public debate on the electricity sector mainly concentrates on sources of electricity production, but the operational reality involves establishing a network-based industry: all sources of electricity generation and sites of consumption are constantly connected to the network, with a requirement for instant balance that exists in no other industry. For every new generation, storage or consumption facility, connection and possibly network adaptation is needed. Networks thus play a major role in the energy transition equation.

To make the energy transition possible, our existing networks must now evolve more swiftly. The industrial dynamic of this evolution and its financing are by nature long-term matters. Establishing a new key installation takes several years of research and requires authorisations relating to planning laws, environment laws, and the energy sector policy. Once built and commissioned, certain infrastructures can remain in operation for over 80 years provided they are regularly maintained and adapted.

Connections to the networks are set to multiply in the next few years, and the pace of new connections will be a technical and managerial challenge that must be addressed in collaboration with the relevant stakeholders (local authorities, industries, producers, associations).

5.3.1 RTE'S 10-YEAR NETWORK DEVELOPMENT PLAN (SDDR): ESSENTIAL FOR THE ENERGY TRANSITION

Implementation of the SDDR and transformation of the industrial model remain essential for the energy transition.

RTE published its strategic 10-year network development plan (the SDDR) in 2019, and it was subsequently validated by the Minister for Energy and the CRE. With €33 billion of funding over 15 years, the plan is designed to bring the network to the required level to carry the energy mix defined in France's multi-year energy plan and begin renewal of existing infrastructures, some of which were built just after the Second World War. Since its validation the SDDR has been the pillar supporting RTE's industrial strategy.

For successful transformation, the following steps have been identified as necessary:

- (1) beginning the first renewal campaign for the network since its original establishment, and being in a position to step up efforts significantly (by around +30%) to overcome the barrier of upgrading lines that were put into service after the Second World War and will reach the end of their operating lifetime by 2030; this is a long-term priority for adapting RTE's industrial activity;
- (2) adapting the network to the new energy mix resulting in new, more variable, more powerful energy flows by increasing the capacity of existing lines, building new infrastructures, or removing less instrumental lines;
- (3) developing the necessary technologies to extend the use of existing infrastructures and reduce the need for new installations;
- (4) doubling France's interconnection capacity in fifteen years, by selecting the most cost-effective projects to draw the most benefit from European integration;

- (5) constructing a network to connect marine energies, i.e. a coherently, effectively planned marine network with onshore hosting capacities and the potential for offshore development, in order to contain costs.

RTE's industrial strategy relies on the company's ability to design the network of the future (through its "S3RENr" regional renewable energy connection plans), to share infrastructures (for offshore wind turbine connection, for example) and to use new digital technologies to optimise the transit of electricity flows as the networks are being adapted due to increasing electrification of electricity consumption.

This is just the first stage: adaptations will have to be made faster after 2030, both to adapt the network to the major changes in the electricity mix, and to upgrade its oldest components (lines constructed in the 1950s and 1960s).

The pace of work under the 10-year network development plan (SDDR) must be at least maintained in all scenarios, and significantly accelerated in the scenarios that involve a high share of renewable energies: for those scenarios, progress will have to be more than twice as fast.

The SDDR-defined actions currently in execution will be updated in 2023 to take account of the acceleration of work on the transmission network after 2030, to adapt it to changes in the electricity mix and support ambitions for a carbon-free economy.

— The rise of renewable energies

Under France's multi-year energy plan (PPE), onshore wind power capacity is due to be doubled, and photovoltaic solar power capacity is due to increase four-to-fivefold between 2018 and 2028; 5-6 GW of offshore wind power capacity are also due to be connected over the same horizon.

This strong expansion dynamic for renewable energies will have to be at least respected and if possible accelerated, so that France can achieve its climate objectives and exit fossil fuel energies. The *Energy Pathways to 2050* study clearly shows that development of a broad minimum base of renewable energies will be necessary in the next thirty years.

For forward planning, scheduling of network changes to include new onshore wind and solar power plants is guided by the studies and consultations held in connection with revision of the "S3RENr" regional renewable energy connection plans, to ensure timely connection at optimum cost for the community.

— Developing interconnections with neighbouring countries

Developing electricity interconnections is one of the pillars of European Union energy policy. Cross-border interconnectors are the foundations of the single electricity market and have facilitated a gradual shift from a national to a European approach to the operation of power stations. By exploiting energy complementarities between countries, interconnectors 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.

RTE's 10-year network development plan (SDDR) published in 2019 was founded on the aim of doubling France's interconnection capacity in fifteen years, from around 15 GW at the publication date to around 30 GW by 2035. This ambitious target is coherent with European Union and French policy priorities and connects up with the European Ten-Year Network Development Plan (TYNDP) developed by ENTSO-E. To reach it, interconnectors will have to be developed across all of France's borders. The SDDR will be updated in 2023, providing a full report of progress on current projects, and a revised strategy for the 2040 horizon.

There were significant developments during 2022 in several European interconnection projects led by RTE.

Details are given in section 2.4 "Significant events".

5.3.2 PREPARING TO OPERATE THE ELECTRICITY SYSTEM OF THE FUTURE

As well as connecting more generation plants, incorporating an increasing share of renewable energies into the electricity system requires a shift in modes

of operation. Adaptation of market mechanisms, integration of more flexibilities through dedicated tender offers, and the use of digital technologies (automata, captors, etc.) to optimise network operation are all key actions taken by RTE to maintain balance in an evolving system.

In particular, the higher share of variable renewable energies raises issues relating to forecasting and real-time management of the electricity system, both for the supply-demand balance and for flow management. Digital technology is being put to use to address these issues and construct responses to the challenge of integrating dozens of GW of wind and solar power.

RTE is also continuing its research and development work to plan ahead for operation of an electricity system which by 2050 will certainly have larger renewable energy components, connected via power electronics.

— 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 the electricity and digital networks.

The objective of this transformation is to put RTE's industrial facilities, and its operation and oversight capacity, 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.

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 substation groupings, such that all electric equip-

ment in the transmission network can be monitored round the clock. The new organisation will increase RTE's ability to solve technical problems and also to 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 information/telecommunications and cybersecurity systems will be monitored from a 24-hour control centre in Saint-Quentin-en-Yvelines. This centre opened in April 2021 and has been operational 24 hours a day since 1 September 2021. By the target date of 2023, by re-insourcing certain critical activities this centre will improve RTE's ability to detect and repair telecom incidents swiftly, deal with information system incidents in real time, and fight cyber-attacks.

Coordinated, 24-hour operation of these three types of control centre will enable the company to cope with more complex incidents more effectively, and respond more rapidly, than is currently the case. At any time of day or night, fuller real-time analyses of dysfunctions or incidents will be possible, to determine the causes and propose optimal solutions. 24-hour monitoring of the telecoms and information system infrastructures will also help RTE to foresee and prevent disturbances that could affect control centre operations.

5.3.2.1 Developing flexibilities in the electricity system

Transforming the electricity system entails large-scale requirements for the transmission network. To optimise these developments, use of the existing infrastructure can be extended through flexibility solutions and acceptance of the optimal dimensioning principle.

This is the principle behind the peak shaving that may be applied occasionally in certain specific zones: it avoids building network infrastructures that would in fact only be useful for a few hours every year.

To proceed with peak shaving, while keeping it to a minimum, RTE uses state-of-the-art digital technologies at national level, at local level in zones where the network is under constraint, and at every substation in the electricity network.

At the level of a single electricity network zone, a “new adaptive zone automaton” (NAZA) that resolves network equipment transit constraints by adapting the network topology and generation output in the relevant zone was developed and tested as early as 2019. RTE and Enedis reached a major milestone in 2022 with a NAZA in one zone: commissioning of automatic modulation of wind power generation connected on Enedis’ high-voltage A network, using an algorithm that continuously monitors the load flows on the lines and only activates reduction levers when necessary. This was a very important milestone, before generalisation to other zones in 2023 and an industrial rollout to come later.

Finally, at local level, RTE has been replacing command and control technologies in its electricity substations with digital technology since 2006. R#SPACE, the next-generation digital command and control technology for substations, will be an industrial foundation to facilitate large-scale incorporation of advanced automation and asset monitoring functions, which will notably benefit renewable energies.

Qualification of the components of the R#SPACE digital command and control technology for substations began in 2022. This technology will be integrated from spring 2023, and the first equipped pilot site is scheduled to start operations in October 2023.

5.3.2.2 Rolling out market mechanisms

To function adequately, the electricity system requires physical infrastructures (high-voltage lines, substations, interconnectors with neighbouring countries, etc.) and market mechanisms that guarantee coherence between commercial transactions and the physical flows of energy through the networks.

To maintain balance in the system, all the system actors must be coordinated to ensure real-time equilibrium between supply and demand in the network while guaranteeing its safe operation.

This is mainly 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, in transactions 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 could affect production and consumption, RTE is introducing mechanisms covering different time horizons, ranging from capacity reservations sometimes taken several years in advance, to real-time activation of such reservations.

These national and European market mechanisms contribute to an economically optimised electricity supply by sending out appropriate economic signals to encourage investment in generation or demand-response action. Similarly, with its cross-border infrastructures and implementation of supra-national mechanisms for fair, efficient allocation of interconnection capacities, RTE also contributes to the economy and the overall safety of interconnected European networks.

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

RTE’s activities are governed by fast-changing laws and regulations, both national and European. The primary objective is still to build a single market with European network codes⁽¹⁾ and guidelines that form a body of regulations common to all network operators, laying down the principles for managing the electricity system and cross-border interconnectors.

In 2022 RTE continued to cooperate at European level with all stakeholders concerned by the application of network codes and the Clean Energy Package.

(1) There are eight network codes and guidelines. They provide a common 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 jointly by European TSOs. The Capacity Allocation and Congestion Management (CACM) guideline and the Electricity Balancing Guideline (EB/GL) directly concern market mechanisms, and are two of the most important network codes, driving significant changes in electricity system management at European level.

To take the integration of European markets further, RTE ended the period of supervised operation of the European TERRE⁽¹⁾ platform, to which it connected in December 2020. RTE is now connected to this platform 24 hours a day, 7 days a week. Work at European level is continuing on two other projects for balancing platforms (PICASSO⁽²⁾ and MARI⁽³⁾), which are expected to open in 2023 and 2024, bringing transactions even closer to real time.

Also, like most European countries, France introduced a capacity mechanism in 2017, designed to respect the secure power supply criterion defined by the public authorities.

For the French capacity mechanism, in 2022, RTE implemented the required improvements to the existing mechanism. The company also began the consultation about the future mechanism, expected to apply from delivery year 2026.

Additionally, RTE runs an annual tender procedure on behalf of the French government to increase interruptible load contracts in order to meet France's national energy policy targets. In 2022, the capacity concerned was approximately 2,400 MW.

5.3.2.3 Support for research and development, innovation, experimentation

The evolving electricity landscape and the energy transition will entail a new real-time mode of network operation.

Renewable energies, connected by power electronics and distributed across the whole of the country, will have to contribute to the system's resilience through response modes that differ from traditional types of power generation. It is now up to R&D to devise and validate appropriate devices for this

new context, at the lowest cost possible, for timely deployment 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 optimise the performance and cost of maintenance, operation and development of its own infrastructures, adding criteria relating to life-cycle analysis of facilities and their environmental impact.

Through channels such as the European research project OSMOSE (<https://www.osmose-h2020.eu/>) which ended in 2022, RTE was able to quantify the flexibility requirements for the electricity system of the future incorporating more renewable energies, and to validate the most suitable technical options to fulfil them.

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 Eco₂Mix or trend analyses such as reports on the electricity system, which are levers of economic performance for local authorities.

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

(1) *Trans European Replacement Reserve Exchange.*

(2) *Platform for the International Coordination of the Automatic frequency restoration process and Stable System Operation (activation in less than 300 seconds).*

(3) *Manually Activated Reserves Initiative (activation in less than 15 minutes).*

5.3.3 ENVIRONMENTAL AND SOCIETAL DEMANDS REMAIN A KEY ISSUE FOR THE WORK OF RTE

Successful renewal and development of the transmission network is vital for a successful energy transition. Meeting society's "environmental demand" is key to the acceptability of all energy infrastructures: although they are essential to the energy transition, they are a central concern in debates about carbon reduction scenarios. RTE is responding to these societal changes and introducing system optimisation that includes flexibilities (new uses) and takes life-cycle analyses into consideration.

RTE produces pioneering energy and environmental analysis reports to inform the ecological transition (*Energy pathways to 2050; Integration of electric vehicles into the power system in France; Reduction of CO₂ emissions, impact on the power system*).

All these environmental and societal considerations are thus incorporated into RTE's strategy and addressed by specific action plans monitoring factors such as SF₆ discharge, use of phytosanitary products, and waste management.

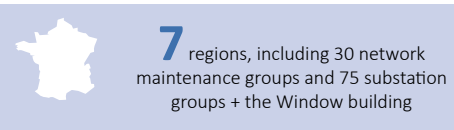
5.4 CORPORATE MISSION STATEMENT: IMPETUS & VISION

The corporate mission statement underpins the company's organisational transformation and plans several adjustments to support RTE's future growth and challenges (described in sections 5.1 to 5.3).

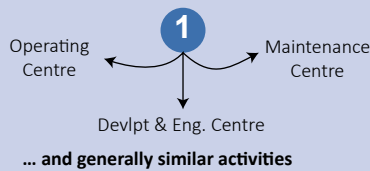
This transformation is achieved through the promotion of four values:

- responsibility, which is at the heart of all our actions;
 - team spirit: a collective approach gives momentum to our projects and performance;
 - trust, to foster initiative-taking and respect for the right to make mistakes;
 - open-mindedness, to respond to the demands and needs of society, local areas and customers.
- In 2022, the corporate mission statement supported the following transformations in line with the roadmap:
- **creation of an Engineering Department for Interconnections and Offshore Networks**, to oversee offshore industrial interconnection and network programmes, engineering for offshore wind farm connection projects, and undersea and overland HVDC technology interconnection projects;
 - **reorganisation of activities in liaison with customers, services and markets**. Two new entities resulted from this reorganisation:
 - a new **"Markets" entity** to make interactions smoother, achieve the expected cross-functional approach for market activities, and make changes in market mechanisms and services secure. This means that design must take implementation constraints into consideration from the outset, and vice versa,
 - a new **"Customers and Services" entity** to ensure an effective connection process together with the units in charge of designing official standards and procedures and contractualising connections under the same leadership, to provide appropriate, consistent, quality responses. The sales organisation was redesigned to ensure better collective effectiveness (knowledge, official positions, etc.) and optimal customer relations;
 - given the significant investments required for the electricity network (upgrading, rising applications for connection, etc.), the Division in charge of network development and renewal launched the DI&GO programme, with the objective of adapting the current organisation in response to these challenges.

TODAY



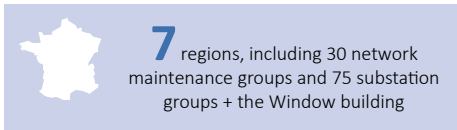
In each region



1

- Dispatching centre per région, open 24 h/24
- National Dispatching centre

In 2026



In the regions

1 common core of activities in all regions

- Management of assets
- General maintenance
- Project oversight, consultation
- Work for network expansion, etc.



Specific activities for each region

The 24-hour control centres project

1

- At least one 24-hour control centre in each region, contributing to:
 - oversight of electricity flows, voltage and supply-demand balance
 - equipment monitoring
 - or IT, telecoms and cyber oversight

Actions were undertaken in 2022 on this basis to make sure that RTE's region-specific challenges will not be forgotten in the forthcoming transformations. For example, in the spring of 2022 regional concerns were added to the analysis grid for assessing the impacts of a proposed transformation during the project design phase.

Given the large number of changes to be made, the Human Resources Division and the business functions are working to support employees and managers so that everyone can find their place in the future RTE. This support (developing the managerial culture, recruitment questions, etc.) is discussed in section 7.2.1.4 "Skill development and talent management".

— In 2022 the corporate mission statement supported changes in the way RTE employees work:

RTE held a general reflection on ways of working for all of its employees. The framework covered working from home, organisation of working time, and more broadly the relationship to work. The ambition is to move towards working arrangements that are

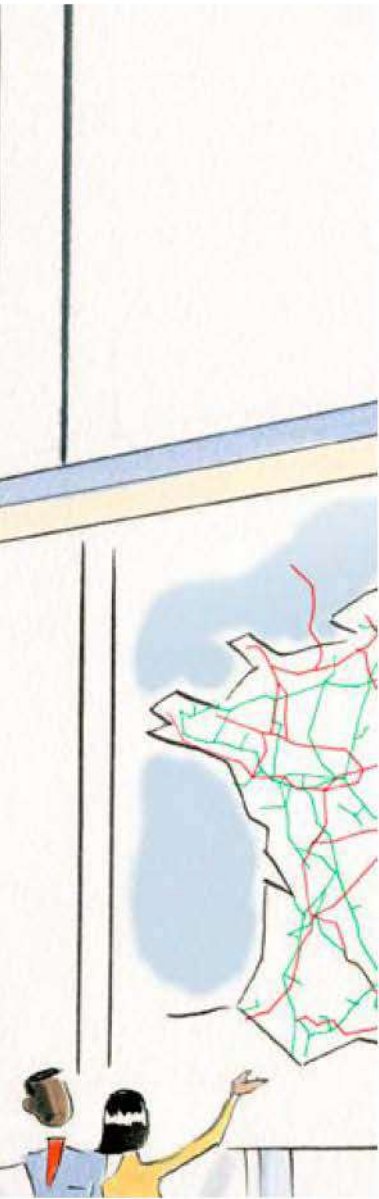
more flexible for employees and better suited to the company's activity, in order to contribute to its factors of economic and social performance. Individual managers and their teams are central to this reflection: more trust and responsibility, stronger team spirit with solidarity and mutual assistance, to work better together.

Among other things, this ambition is reflected in a determination to modernise the system based on a standard number of days worked with a view to offering it to a larger number of employees, and to renovate the framework for working-from-home arrangements.

These changes led the management and unions to sign several agreements in August 2022, which were progressively implemented between summer 2022 and the start of 2023.

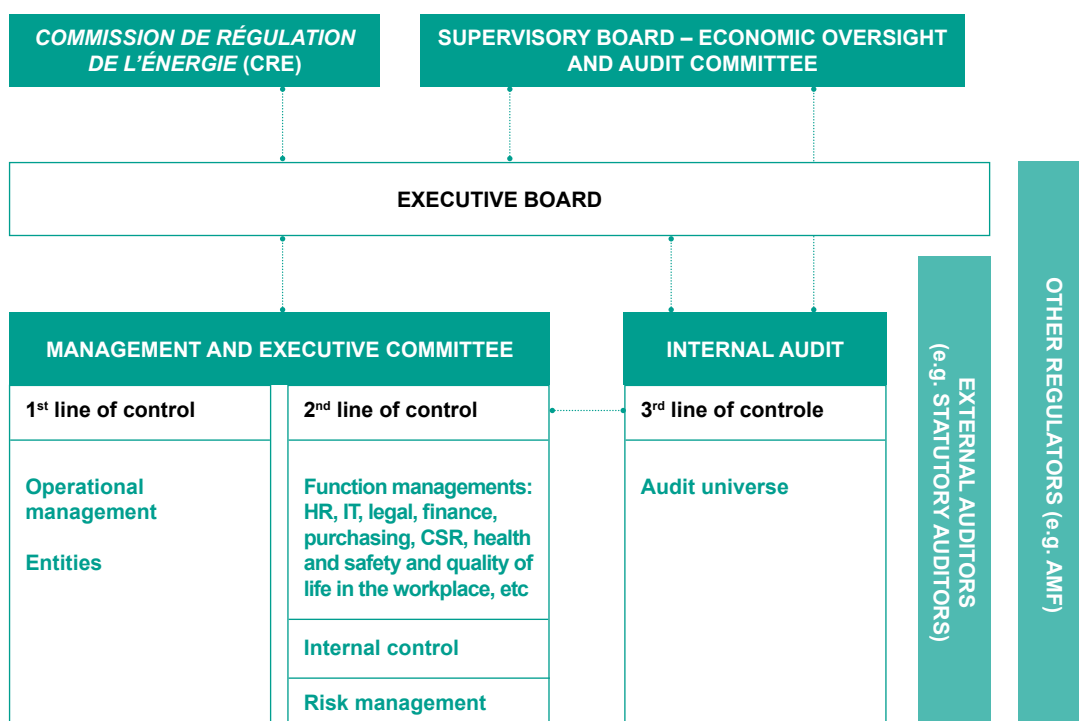
6.

Risks and the control framework



6.1 RTE'S GENERAL BUSINESS CONTROL PROCEDURES

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 company's objectives. They contribute to efficiency in operations, with the aim of using resources effectively. As shown in the diagram below, they consist of three lines of control, for protection against risks that could compromise achievement of objectives:



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. RTE's internal control guide, which is prepared together with the function managements, provides a frame of reference to help managers in their internal control work.

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 directives for each function;
- providing input, together with the functions, into the design of the most relevant controls, particularly second-line internal controls, complemented by local controls and 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 described in section 6.4.

6.2 RISK CONTROL

6.2.1 GENERAL RISK CONTROL PROCESS

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.

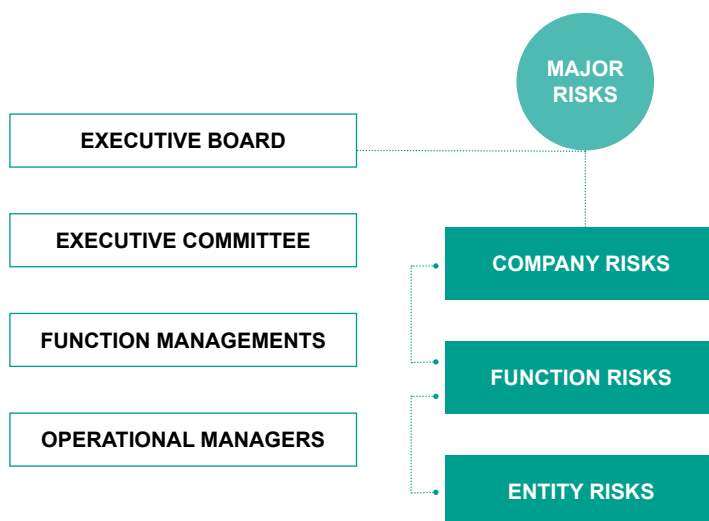
6.2.1.1 Context

The risk control process is coherent with the company's mission and objectives. RTE applies the risk

control principles of the French market regulator AMF's⁽¹⁾ 2010 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.

6.2.1.2 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.



1. 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 and have major, irreversible or irretrievable impacts in the medium term, causing damage or injury to people, the environment, finances, strategy or reputation, and potentially threatening the durability of the company's public service mission or corporate mission statement.
- Each major risk is addressed under the supervision of a member of the executive committee or Executive Board, and covered by a company action plan for control, which guarantees coher-

ence between the corporate mission statement priorities and practical control steps.

- Based on the 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, a list of risks to be monitored is drawn up. The list is validated by the executive committee and may be included in the register of risks.

2. Function risks:

- The directors of the functions (operations, maintenance, development and engineering, purchasing, human resources, finance, customers, information and telecommunication

(1) AMF – Autorité des marchés financiers.

system, etc.) are responsible for organising risk control for their own activities and making sure it is implemented and the procedures used are effective.

- These analyses incorporate the internal control results and audit recommendations.
- Specific risks relating to the environment 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 covering these risks, in line with RTE's ISO 14001 certification.

3. Entity risks:

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

Every year, the Supervisory Board's Economic oversight and Audit Committee reviews the results of the risk management, audit and internal control activities, the associated projected audit schedule, the follow-up of post-audit action plans, the changes made to RTE's major risk mapping, and the action plans to control those risks.

The audit and risk division is in charge of designing and leading the risk control process, supporting the other divisions. This division contributes to operational risk control implementation by coordinating the risk management and internal control officers located in each of the company's divisions and 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 local officers in their action, defining expectations in relation to the best standards.

The audit and risk division also carries out regular external diagnoses of its activities with bodies that are members of the Institute of Internal Auditors (IIA), to keep up to date with best practices and define action for improvement. A roadmap for adjusting the risk control process to meet the latest recommendations (COSO2 and ISO 31000-2018) was drawn up in 2020 and is now applied. The division's personnel receive training from the same bodies.

The audit and risk division comprises all support functions that contribute to business control: risk management, internal control, audit and insurance.

6.2.1.3 Methodology

— General methodology

Use of the procedures presented in the previous paragraph means that every level of the company shares the same methodology for assessing (identification, analysis, evaluation) and addressing 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 grids of criteria.

After analysis, the residual risk is evaluated and managed with action designed to limit the consequences if it materialises, reduce the likelihood of occurrence, or protect the company by transferring the risk through an insurance policy.

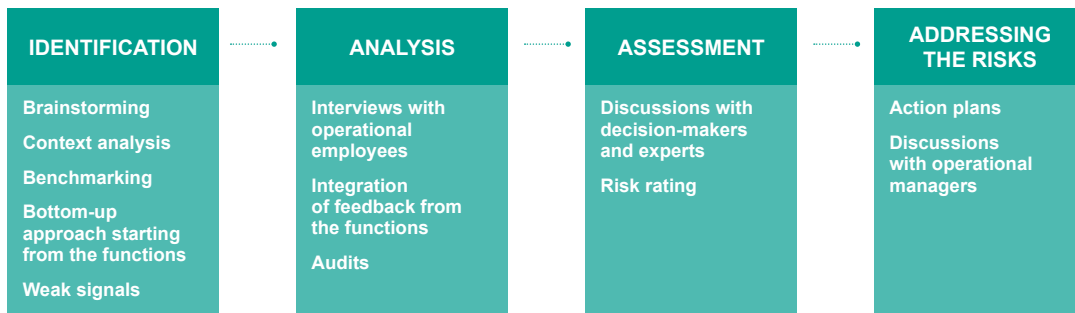
The diagram below illustrates the general risk control methodology:



— 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. A regularly 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 is to be included in the list of company risks, or whether more in-depth analysis is needed. The new risks are then assessed and addressed if relevant. These stages can be accelerated if the Executive Board considers that a risk needs to be addressed faster.

— Risk typologies

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

Section 6.2.2.2 describes each major risk and the principal related control measures.

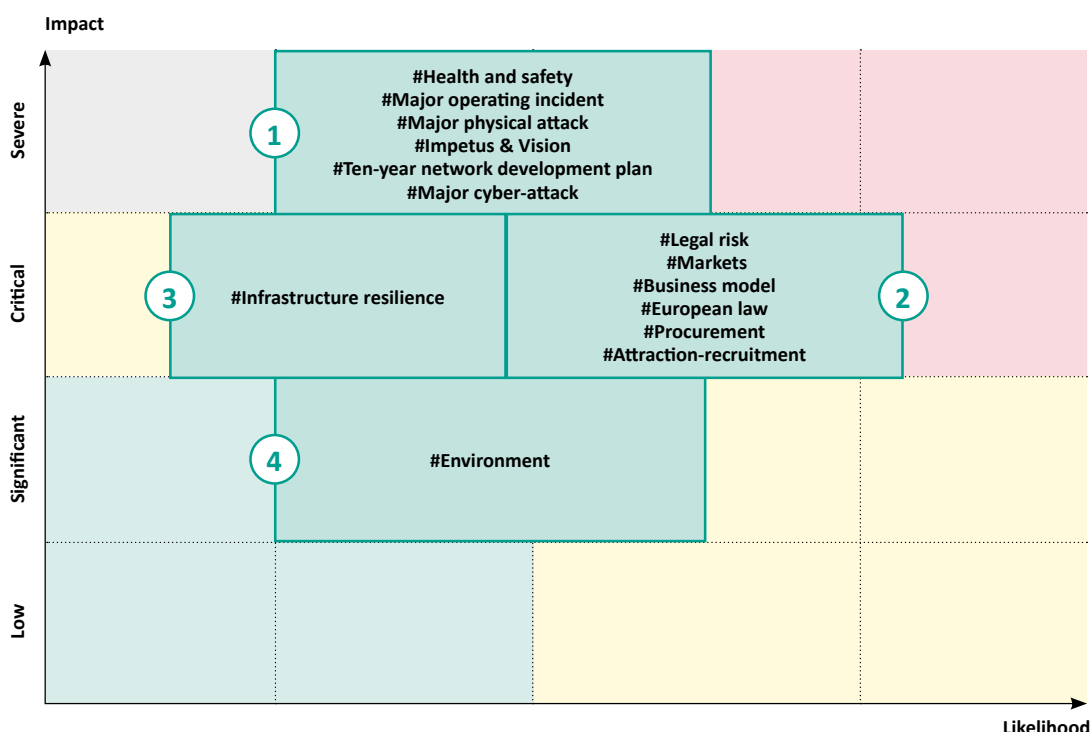
6.2.2 MAPPING OF RTE'S MAJOR RISKS

Risk mapping 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 coherence with the corporate mission statement. Risk control is thus a continuous, constantly-evolving process.

6.2.2.1 Ranking of major risks

Major risks are ranked by priority from 1 to 4 under an approach that combines consideration of their impact and 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 6.2.2.2).



The summary table in section 6.2.2.2 identifies the major risks and the principal resources for controlling them. The NFR (non-financial risk) column indicates whether a risk is identified as having crucial CSR impacts, based on the methodology presented in section 7. For non-financial risks, a table in section 7 gives details of the policies designed to control the risks concerned, the indicators used, and the associated results.

6.2.2.2 Summary of major risks and principal control measures

— Changes in major risks between 2021 and 2022

The list of major risks now contains fourteen risks, as opposed to thirteen previously.

Two risks were added to RTE's major risk mapping in 2022:

- the #Procurement risk concerns difficulties in procuring equipment and services, entailing a risk for cost control or delayed completion times for high-stakes RTE projects;

- the #Attraction-recruitment risk concerns an insufficient ability to attract the talents and skills needed to fulfil the company's public service mission, and successfully achieve the energy transition and transformation of the company.

Two risks have been merged into one: since their consequences are identical and the short, medium and long-term risk must all be considered, the

#Major infrastructure event risk and the #Climate risk are now combined as the #Infrastructure resilience risk. This strengthens consideration of the impact of climate change on RTE's infrastructures, in addition to other possible causes of major infrastructure events. The #Environment risk has also been extended to more clearly include RTE's impact on the climate.

— Summary of major risks

Priority	Name of risk	Description of the risk	Principal control measures	NFR ⁽¹⁾
1	#Health and safety Serious failings in safety for employees, contractors and third parties	Risks of accidents for RTE's employees or contractors in the course of their work	The Division in charge of health, safety and quality of life at work establishes the policy for health, safety and quality of life at work and implements the safety management system based on the MASE ⁽²⁾ principles. RTE's "Safety Impetus" programme defines the company's priority safety projects: the rules that save lives, safety leadership, technicians' safety skills, safety in design and scheduling, contractor safety, implementation of the 1992 Decree, low-voltage outages, thorough preparation of work, making use of weak signals. RTE has establishments across all of France, and undertakes national and local communication campaigns targeting the riskiest activities near power lines.	Yes
1	#Major operating incident Incident affecting the electricity network that could cause a blackout	Serious operating incidents that could result in power cuts for customers and potentially in partial or total collapse of the network	To limit the impacts of this risk, the Operating Division applies the European network codes and implements the network defence, protection and restoration plans. Crisis exercises are held regularly under RTE's crisis management procedure (ORTEC). A network safety report is drawn up annually and action for improvement is decided based on experience gained from events related to network safety. To ensure a secure power supply for the winter of 2022-2023, RTE started the PUSH ⁽³⁾ plan and introduced the EcoWatt scheme.	Yes
1	#Major physical attack Large-scale physical attack on RTE's vital infrastructures	RTE may be exposed to malicious, potentially terrorist acts against its infrastructure (theft, damage, sabotage, etc.), with significant operational impact and the potential to harm the company's image	The Division in charge of the safety and security of physical assets establishes the technical policies intended to maintain and develop secure access procedures for sensitive premises and facilities, and to protect physical assets. RTE carries out administrative background checks for external contractors and service providers, new recruits and employees occupying sensitive positions.	Yes
1	#Major cyber-attack Large-scale cyber-attack on RTE's information systems or vital infrastructures, with a major impact on continuity of critical activities	RTE may be exposed to cyber-attacks against its information system, resulting from a security flaw or deliberate intent to damage a vitally important infrastructure	The Division in charge of information systems and telecommunications establishes the Information System Security Policy, which responds to the requirements of France's military programme law, and follows the recommendations of the ANSSI ⁽⁴⁾ (French national authority for information systems security) through a partnership agreement. RTE is gradually introducing a 24-hour, 7/7 control centre for information systems and cyber-security, to be complete in 2023. The cybersecurity team for the digital networks and systems control centre began working on this in 2021.	Yes

Priority	Name of risk	Description of the risk	Principal control measures	NFR ⁽¹⁾
1	#Impetus & vision Inability (including for HR reasons) to achieve the industrial transformation set out in the “Impetus & Vision” corporate mission statement by 2025	RTE’s ability to achieve, by 2025, the necessary changes to support the evolutions triggered by the energy, technological and digital transition, and by new demands from customers and local areas	In 2020 RTE defined the target for industrial activity by 2025 in its “Impetus & Vision” corporate mission statement. Skill standards were constructed to provide clarity for employees, prepare career paths, and study the company’s resilience in all its dimensions (with reference to the Covid-19 crisis, major operating incidents, continuity of business, etc.). RTE is implementing its corporate mission statement through a project team that coordinates all the initiatives and involves regular progress reports to the executive committee, particularly concerning prerequisites and key milestones for change (new industrial facilities, training for the jobs of the future, real estate projects, and measures to support mobility in future organisations).	Yes
1	#Ten-year network development plan (SDDR) Inability to upgrade and adapt the ageing onshore network and develop the offshore network in line with the objectives set out in the SDDR, as the pace of decarbonisation of uses and reindustrialisation accelerates	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 national multi-year energy plan (PPE)	The CRE validated almost all the SDDR, and granted RTE funding that was coherent overall with the large-scale industrial programme. The business portfolio is aligned with the dimensions of the SDDR and national portfolio ranking based on strategic priorities, and RTE has introduced a strategic budget process to prioritise resources. In response to the acceleration and growth of interconnection and offshore network projects, while continuing to strengthen control of issues specific to these projects, RTE has set up an Engineering Division for Interconnections and Offshore Networks.	Yes
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	The division in charge of legal affairs heads the monitoring of laws and regulations concerning statutory obligations applicable to all companies of RTE’s size, and more specific obligations (e.g. under the French Energy Code). To reinforce its response to anti-fraud and anti-corruption obligations, the duty of vigilance, and management of personal data (France’s “Sapin 2” law, the duty of vigilance law, the GDPR – general data protection regulation), RTE set up its Ethics and compliance division.	Yes
2	# Markets Shortcomings in the design or implementation of market mechanisms	Difficulties with design or implementation of market mechanisms	RTE has set up a Markets division comprising the teams that work on design, consultation and implementation of market mechanisms.	No
2	#European law Changes in European laws that weaken RTE’s structure or missions	Changes in the legal framework could be a risk for RTE if they scale down or limit its missions and therefore its efficiency	The division in charge of European affairs coordinates adaptation of the “Clean energy for all Europeans” package. RTE positions itself 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. It undertakes continuous action in coordination with ENTSO-E, European institutions, electricity market actors and stakeholders. RTE promotes the “all-round” transmission system operator (TSO) model, which 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.	No

Priority	Name of risk	Description of the risk	Principal control measures	NFR ⁽¹⁾
2	#Procurement Difficulties in procuring equipment and services, entailing a risk for cost control or delayed completion times for high-stakes RTE projects	Difficulties in procuring equipment and services, entailing a risk for cost control or delayed completion times for high-stakes RTE projects	RTE's purchasing division systematically analyses the risk of default or shortages affecting procurement. The company makes more detailed, regular inspections of suppliers' production sites and a supplier relations unit exists to collect information on their potential capacities and offer them some visibility. To cover this risk better, RTE has diversified its supplier panel and introduced multi-lot contracts in strategic segments.	No
2	#Attraction-recruitment Insufficient ability to attract the talents and skills needed to fulfil the company's public service mission, and successfully achieve the energy transition and transformation of the company	Insufficient ability to attract the talents and skills needed to fulfil the company's public service mission, and successfully achieve the energy transition and transformation of the company	The human resources division oversees workforce numbers and recruitment at national level, in collaboration with the business functions, based on an annual recruitment plan. To reduce this risk, RTE has diversified and broadened its sourcing. It is developing relations with schools and simplifying the hiring process to improve response speeds. The company has also reinforced the levers of appeal to attract candidates, and its induction procedures to build loyalty in new recruits.	Yes
2	#Business model Business model: changes in the economic context, and the structure and level of future TURPE tariffs, affecting company debt in a time of large-scale investment	RTE must take care to maintain financial equilibrium and its ability to rise to the challenges of its public service mission	In its publicly released ten-year network development plan (SDDR), RTE explains the investment and maintenance needs for the electricity transmission network for the next 10 years. The company is in continuous discussions with the regulator on the desirable guiding principles for the TURPE network access tariff and the regulatory framework. RTE analyses the sustainability of its long-term debt and examines the best ways to finance its investments together with its shareholders, the State and the regulator. To improve project budget management, decision-making committees and processes have been reinforced.	No
3	#Infrastructure resilience Contingent event with a major impact on the network infrastructure, in a context of ageing infrastructure and faster climate change	Accidents, fires or unusual weather events leading to substantial material damage, with high media coverage	RTE defines and implements preventive action policies against risks associated network ageing, as included in RTE's ten-year network development plan (SDDR): replacement of instrument transformers, the metal-enclosed substation plan, the power 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. In its crisis management procedure, RTE has defined mobilisation practices for the operational teams (first-response teams) and equipment, drawing on the national equipment reserve and implementation of special resources (provisional links, mobile units, airborne fleet, etc.). RTE has started a "resilience project" for control of climate risks. This project will identify the long-term impacts of climate change (droughts, heatwaves, floods, etc.) and define the necessary infrastructure adjustments.	Yes
4	#Environment Environmental risks: climate, pollution, waste, biodiversity	Incidents may give rise to environmental emergencies that can affect the activity and employees of RTE, its customers and other third parties	The Executive Board has signed RTE's new environmental policy, which reflects the company's renewed commitment to protecting the environment. It covers 6 areas: fighting climate change, protecting biodiversity, sustainable management of resources, preventing pollution, maintaining good relations and safety for third parties, and improving efficiency in the environmental performance. A strategic environmental plan has been established, and RTE's ISO 14001 certification was renewed in 2022.	Yes

(1) NFR = a non-financial risk with a significant CSR dimension. The policies and KPIs associated with these risks are detailed in part 7.1.

(2) "Manuel d'amélioration sécurité entreprise", a guide to promote health and safety in the workplace.

(3) A joint action plan with the public authorities, to reduce the risk of a supply-demand imbalance during the winter.

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

6.3 INTERNAL CONTROL

RTE's internal control system is constantly adapting, in a dynamic approach applied by committed actors. It is built on:

- coordinated updates to the major/function risk mapping and the internal control standards;
- reviews of internal control systems, consolidated annually;
- the observations, recommendations and causal analyses resulting from audits.

Following on from previous years, RTE's internal control system is founded on the five components of the COSO (Committee Of Sponsoring Organizations of the Treadway Commission) framework, and the COSO principles have been integrated into the system:

- control environment: RTE has continued its policy for training and professionalisation in internal control, through external training in the fundamentals of the COSO framework, training for new arrivals and a new e-learning course for all employees, to raise awareness of controlling the business through risk management, internal control and audits. RTE's self-assessment questionnaire provides an overview of the existing internal control system and topics not covered by the second-line internal controls;
- risk assessment: all the second-line controls available have been related to RTE's major risks for four years now;
- control activities: second-line controls were stable in number in 2022 compared to 2021, but distributed differently across the functions. There were particular increases in controls concerning the topics of finance, and health, safety and quality of life at work. First-line business controls are carried out on a day-to-day basis to ensure that the most effective practices are used for risk management in each activity. A list of the local controls applied and their results is drawn up annually for the entity/division annual reviews;
- information and communication: the personal dedication of actors involved in the system has been consolidated by active leadership of the network of internal control officers consolidated;

- monitoring activities: in accordance with the AMF's recommendation, RTE assesses its internal control system in an annual report presented to the executive committee and the Economic oversight and Audit Committee. This document also identifies areas for improvement in the following year, and insights into control of the principal activities.

6.4 INTERNAL AUDIT

As the third line of control, the internal audit team is in charge of periodical controls 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 (IPPF). The objectives and methods were confirmed by the Chairman of the Executive Board through signature of an internal audit charter that was updated in 2021.

Audit scheduling is constructed under the "audit universe" methodology to cover all of RTE's activities. Every activity is thus audited every three to five years; the frequency depends on the risk level determined by risk control and audits.

The results of internal audits assess risk controls, the effectiveness of control measures, 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 oversight and Audit Committee. The audit and risk division is in charge of executing this programme.

6.5 FINANCIAL RISKS

6.5.1 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.

All these risks can affect RTE's ability to finance its investments.

— Interest rate risk

RTE is exposed to an interest rate risk on its current and future financial indebtedness. The company's present 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 current financial expenses on long-term debt (i.e. debt with residual maturity of over one year) since 98.10% of the long-term gross debt at 31 December 2022 bears interest at fixed rates.
- Sensitivity of financial indebtedness: a 1% change in interest rates would cause an opposite change of 0.7% or approximately €65 million in the discounted (marked-to-market) value of debt at 31 December 2022.

Average maturity for the Group's debt at 31 December 2022 was 9.77 years and the average interest rate was 1.40%.

On 10 May 2022, the credit rating agency S&P Global Ratings confirmed RTE's long-term rating of A, with a stable outlook.

— Liquidity risk

RTE must have available financial resources at all times to fund its growth and investments, cover its working capital requirements and cope with any exceptional event (e.g. tensions on the energy markets). The conditions negotiated for new financing or refinancing depend on a number of factors. One of them is the Group's credit rating, which is a vital piece of information: it ensures that RTE is able to obtain financing on the best possible terms, and gives the company practically permanent access to the bond markets even when those markets are tight.

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

To address liquidity risks, RTE actively manages and diversifies its sources of financing, and has:

- a short-term Negotiable European Commercial Paper programme for a maximum €1.5 billion, which it can use to meet its own liquidity needs. At 31 December 2022, the Negotiable European Commercial Paper issued amounted to €423 million;
- 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.

To renew its previous credit facility maturing in June 2023, in December 2022 RTE concluded a new syndicated credit line of €1.25 billion maturing in December 2027 (with two one-year extension options, subject to approval by the banks). At 31 December 2022, the liquidities available in the very short term from RTE's syndicated credit line amounted to €1.25 billion.

On 5 July 2022, RTE revised the AMF-approved documentation for its Euro Medium Term Note Programme. The ceiling for this EMTN programme is €12 billion.

A €850 million “green” bond was issued in January 2022, with 12-year maturity, a €0.75% interest rate and an annual yield of 0.848%, to diversify the investor base.

At 31 December 2022, 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 operations and market transactions if a counterparty defaulted and failed to perform its contractual obligations. The potential counterparty risks for RTE essentially 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.

The department in charge of cash and financing has a financial risk control section that regularly performs a second-level control of 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 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 on how the situation was handled, and where relevant, proposal of corrective action.

Following soaring prices on the electricity markets in 2021, the Customers and Services division, which is in charge of customer monitoring, continued in 2022 to intensify its monitoring and measurement procedures for the risk of non-payment by counterparties, particularly balance responsible entities.

6.5.2 ACTION AGAINST TAX AVOIDANCE

Article L. 225-102-1 of the French commercial code requires companies to report on the sensitivity of their position 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 location with favourable taxation.

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 (via investment funds) are made by financial establishments located in France.

6.5.3 PREPARATION AND PROCESSING OF FINANCIAL AND ACCOUNTING INFORMATION

6.5.3.1 Organisation and role of the finance division

The finance division contributes to RTE's business control, 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).
- Keeping an overview of 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 oversight 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.

6.5.3.2 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 component 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 the team in charge of RTE's general accounting.

For RTE's fully-owned subsidiaries, the financial statements are established by the team in charge of subsidiaries accounting. For other subsidiaries, accounting is handled by external service providers. The subsidiaries' accounts are regularly reviewed by RTE's accounting and tax department.

The consolidated financial statements are established by a special team from RTE's accounting and tax department.

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 oversight and Audit Committee, and by the Supervisory Board.

— Control of accounting information

The Head of accounting and tax is responsible for proper operation of internal procedures which ensure reliability in the Group's accounting and tax data. He/She reports to the Chief Financial Officer.

A tax and accounting internal control team (part of the accounting and tax 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 6.3 "Internal control".

The accounting and tax department conducts “soft closing” procedures to facilitate the closings 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.

6.5.3.3 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.

For example, a control system is used to make sure that no user has authorisations that are incompatible as regards segregation of duties; data analysis is applied 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.

6.6 INSURANCE

RTE covers its insurable risks by insurance programmes subscribed through the intermediary of consultant brokers. The insurers used have a financial rating at least equivalent to RTE’s own rating.

RTE’s insurance department, which is part of the audit and risk division, identifies the risks that may be insurable and works with its brokers to determine the limits, excesses and exclusions inherent to all insurance contracts.

The principal insurance policies subscribed on an annual basis cover the following risks:

- damage to property;
- civil liability;
- equipment storage and transit;
- environmental civil liability and damage to biodiversity;
- civil liability of management;
- aeronautical civil liability;
- damage to certain aircraft (the Airtelis and RTE-STH fleet);

- individual accidents and repatriation assistance for personnel on business assignments outside France.

These policies also cover RTE’s subsidiaries.

— Insurance of major projects

Dedicated insurance programmes may be used during the construction phase of major infrastructure projects, particularly connections for offshore wind farms and network interconnections. These dedicated programmes cover financing of repairs in the event of significant damage to facilities under construction, and the financial consequences of any civil and environmental liability claims against RTE and its contractors arising in connection with such work.

RTE prioritises insurance solutions which it subscribes on its own behalf and on behalf of all participants in the project.

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

6.7 ETHICS AND COMPLIANCE

Ever since it was first formed, RTE has stressed the ethical obligations inherent to performance of its public service missions as manager of a vital infrastructure open to third-party access. In 2012, the company instigated action for ethical purchasing and today, RTE is more generally subject to many compliance obligations.

RTE is particularly attentive to compliance with the legal framework applicable to the company. Its legal division regularly provides support for the national and regional entities, keeping them abreast of changes in the laws and regulations, and advising on their application.

The role of compliance obligations in corporate life has expanded in recent years, and companies now build on ethical values which they promote to their employees and to external stakeholders.

For a clearer overview and better coordination of compliance topics, in anticipation of the new requirements that will emerge and be applied at RTE, and to prepare better for the possibility of inspections by regulatory authorities, which are very rigorous, on 1 January 2022 RTE set up a new ethics and compliance division, which is part of the company's General Secretariat.

6.7.1 INDEPENDENCE AND NEUTRALITY

RTE was founded in 2000, in application of the first European energy package, on the principles applicable to an infrastructure operator: independence, non-discrimination, confidentiality and transparency. These principles formed the company's ethical basis. In 2005 (the second energy package) RTE developed a code of conduct constructed on the same principles, then in 2011 (the third energy package) it appointed a general compliance officer whose job is to ensure respect of RTE's independence and the code of conduct.

6.7.2 PURCHASING ETHICS

With its status as a public service company subject to public procurement rules, RTE must show exemplary behaviour. In 2012 it set up a code of ethical purchasing, notably intended to guarantee objectivity and independent judgement by all members of the company, and impartiality in relations with suppliers. This code of ethical purchasing practices is presented to every new arrival joining the purchasing division, so that it will be applied to all actors in the company's purchasing process. The post of purchasing ethics officer has existed since 2012.

Since 2018 the purchasing ethics officer has also exercised the role of mediator for RTE's suppliers. No direct request for mediation was received in 2022 but RTE's mediation service provided support for France's corporate mediation service, which was approached in 2022 by a professional body requesting mediation.

6.7.3 PROTECTION OF PERSONAL DATA

Right from the design stage of applications that use personal data, RTE processes such data in compliance with all the applicable regulations, particularly the principles of lawfulness, transparency and data

minimisation defined in article 5 of the general data protection regulation (GDPR). RTE also safeguards the security of personal data through appropriate technical and organisational measures.

In accordance with the GDPR, RTE documents all processing of personal data in a register that may be made available to France's data protection agency CNIL.

RTE mobilises its employees so that every individual is fully informed to apply this regulation, which is founded on respect of individual liberties. A data protection officer (DPO) was appointed in May 2018 to oversee implementation of the GDPR and raise awareness of the managers and teams who have to process personal data.

After a diagnosis phase in 2018, a GDPR compliance plan was begun in 2019, and six continuous improvement projects were launched: leadership of the GDPR liaison officer network, consolidation of the register of processes and related impact analyses, leading change with the support of the business divisions and support functions, improving the management of documentary assets, making subcontracting agreements secure, and ensuring secure GDPR procedures (such as managing any misuse of personal data).

RTE has made progress on various dimensions of these important projects, and continued to consolidate the dynamic launched when the GDPR took effect by prioritising actions recommended by the DPO in 2022, notably:

- adopting RTE's policy for protecting internal personal data and distributing it to all employees in April 2022;
- increasing the involvement of all the data processing managers, who have received delegations of power under French data protection laws from the Chairman of the Executive Board;
- aligning these delegations of power with RTE's new organisation, giving priority to the divisions that handle sensitive data such as health data, or very personal data such as financial data;
- promoting the consideration of personal data from the initial design phase, and as early as possible in purchase transactions, with systematic inclusion of a GDPR contractual appendix in every order placed;

- introducing a collaborative internal system of documentation on GDPR compliance;
- continuing to raise RTE employees' awareness of the GDPR, through measures that include e-learning modules, circulation of a newsletter, creation of a specific communication space on RTE's intranet and publicising internal policies and procedures.

6.7.4 ANTI-CORRUPTION COMPLIANCE

To comply with the eight requirements set out in article 17 of law n° 2016-1691 of 9 December 2016 on transparency, anti-corruption and modernisation of economic life, known as the "Sapin 2" law, an "anti-corruption code of conduct" and a procedure for collecting reports of concerns came into force in early 2019. These documents were added to RTE's internal regulations after approval by the employee representative bodies. Targeted awareness-raising campaigns were run for employees with the greatest exposure to risk, and an online course was set up. An anti-corruption compliance officer was appointed in November 2019.

RTE is continuing to consolidate and reinforce its anti-corruption compliance programme that was launched in late 2019 at the instigation of the company's Executive Board.

This drive for improvement was initially reflected in revision of the risk mapping for bribery and corruption risks affecting RTE and its subsidiaries, which was finalised in 2021. The mapping method and the risks identified were approved by the Executive Board, which oversees implementation of the associated action plan by the divisions concerned.

The anti-corruption compliance programme rollout also continued in 2022, in line with the updated risk mapping. This involved:

- illustration of the anti-corruption code of conduct through production of brief guides on "ethics in practice", beginning with a brief guide to gifts and entertaining which has been distributed internally with backing from the management;
- preparation of the updated whistleblowing procedure, to comply with the law of 21 March 2022 introducing greater protection for whistleblowers, and its application decree of 3 October 2022;
- optimisation and adjustment of procedures for assessing the integrity of third parties, and development of a general procedure to assess the integrity

of risky third parties, which was in the finalisation stage at the end of 2022;

- further incorporation of anti-corruption measures into the company's risk procedures and policies, by the anti-corruption compliance function's participation in cross-functional committees and work groups;
- launch of a new "anti-corruption" e-learning course in June 2022 to replace the previous "Sapin 2" e-learning course, using a more educational multimedia approach;
- raising the profile of the anti-corruption compliance programme both internally and on RTE's institutional website, and consolidation of its organisation through the network of anti-corruption compliance officers;
- supporting RTE's subsidiaries for the rollout of their own anti-corruption compliance programmes.

6.7.5 DUTY OF VIGILANCE

In compliance with article L. 225-102-3 of the French Commercial Code, introduced by the first article of law 2017-399 of 27 March 2017 on the duty of vigilance of parent companies and outsourcing entities, RTE establishes and applies its vigilance plan in this management report (see next section).

In 2022, RTE continued to work on improving co-ordination of matters relating to the "Sapin 2" and "duty of vigilance" laws. The aim is to benefit from synergies between the two, particularly as regards assessing third party integrity and receiving reports of concerns.

RTE's support to subsidiaries for the rollout of their own anti-corruption compliance programmes was combined with assessments of their situation in relation to the interests protected by the "duty of vigilance" law.

6.7.6 WHISTLEBLOWING PROCEDURE

The whistleblowing procedure exists not only for reporting of bribery and corruption, in application of article 17 of the "Sapin 2" law, but also for reporting matters set out in article 6 of that law (including major and minor crimes, threats or prejudice to the general interest, breaches or attempted cover-ups of breaches of an international commitment, or the law and regulations).

RTE places particular emphasis on prevention of discrimination, harassment and sexist behaviour, which are the subjects of three specific articles in the company's internal regulations. The whistleblowing procedure complements RTE's specific system for reporting psychosocial risks, which was set up as a preventive measure and involves a network of identified local officers.

RTE's whistleblowing procedure was incorporated into the company's internal regulations after approval by the employee representation bodies. It meets the requirements of decree 2017-564 of 19 April 2017 concerning procedures for reporting concerns in public-sector or private entities and government administrations.

The company's online whistleblowing platform has been operational since 2019, and since 2021 has also explicitly covered matters relating to the duty of vigilance (human rights and fundamental freedoms, health and safety, serious environmental harm). This platform can be used by non-RTE parties: it is mentioned on RTE's institutional website on the "responsible enterprise and duty of care" page⁽¹⁾.

The internal whistleblowing procedure was updated in 2022, notably in view of changes in the company's organisation. The procedure was given a higher profile, and a tutorial about the whistleblowing platform was put online to help employees use it.

Work on updating this procedure began in autumn 2022 after the publication of decree 2022-1284 of 3 October 2022 concerning procedures for collecting and addressing reports received from whistleblowers, which lists the external bodies that can be contacted as defined by French law 2022-401 of 21 March 2022 to improve protection of whistleblowers.

6.8 VIGILANCE PLAN

RTE's vigilance plan includes measures intended to identify risks of, and prevent, serious breaches of human rights and fundamental freedoms, or harm

to the health and safety of individuals or to the environment. It covers RTE's own activities, the activities of subsidiaries and companies under its control, and the activities of its contractors and suppliers.

As of 2022, RTE's vigilance plan is drawn up by the Ethics and compliance division, with input from its officers in the relevant divisions of the company⁽²⁾, and contributions from subsidiaries and companies controlled by RTE.

This vigilance plan is part of a broader set of commitments and processes that particularly concern corporate societal responsibility and responsible purchasing.

RTE refers to specific analyses conducted to identify and assess risks across the consolidated scope of RTE, its suppliers and its subsidiaries:

- the "duty of vigilance" risk mapping was revised in 2021;
- the risks presented by subsidiaries and controlled companies were analysed in 2022, using a detailed questionnaire;
- the purchasing function's risk analysis includes an appendix dedicated to the risks identified in the French "duty of vigilance" law.

The "duty of vigilance" law stipulates that the vigilance plan must be developed in association with the company's stakeholders. Accordingly, RTE has taken the following steps, among others:

- When CSR issues were assessed in the "materiality analysis", the level of expectations was evaluated at a meeting with a panel of external stakeholders. This enabled RTE to define its new CSR policy in late 2021, based on 13 key challenges, some of which relate to the duty of vigilance⁽³⁾.
- Concerning human rights and safety, during 2022, RTE had many discussions with professional bodies as part of its social dialogue, specifically on topics relating to the duty of vigilance⁽⁴⁾.
- Concerning the environment and the climate, RTE discusses matters with stakeholders in its System and network outlook commission (CPSR)⁽⁵⁾.

(1) <https://www.rte-france.com/en/rte-in-a-nutshell/our-commitments/responsible-enterprise-and-duty-care>.

(2) Particularly the Purchasing, Corporate Societal Responsibility, Audit and risk, Human resources, and Health, safety and quality of life at work divisions.

(3) For example: fighting climate change and protecting biodiversity and landscapes; diversity, equal opportunities and inclusion; health, safety and wellbeing of internal and external stakeholders.

(4) For example: disability, equality at work.

(5) Commission perspectives système et réseau. This commission was launched in 2011 at RTE's initiative. Its ambition is to be the primary body for consultation with all actors from the energy sector and civil society concerning long and medium-term questions for the electricity system. This is why it involves not only transmission network users but also energy sector actors, network operators, environmental associations in all their diversity, institutional actors, trade associations, unions and academic actors.

- A meeting took place in September 2022 with unions as part of the preparation of the 2022 vigilance plan.
- One of the pillars of RTE's CSR policy is devoted to transparency, dialogue and co-construction with stakeholders. Section 7.2.2.2 describes the dialogue and co-construction led by RTE with customers, local residents, public authorities and unions.

6.8.1 VIGILANCE MEASURES RELATING TO THE ACTIVITIES OF RTE

The vigilance measures implemented by RTE are described in section 7 on RTE's non-financial performance. That section is constructed according to the thirteen challenges of RTE's new CSR policy, some of which relate to the duty of vigilance:

- diversity, equal opportunities and inclusion (section 7.2.1.2);
- health, safety and wellbeing of internal and external stakeholders (section 7.2.1.3);
- adjusting to the consequences of climate disruption (section 7.2.3.3);
- adaptation and support for the energy transition (section 7.2.3.4);
- responsible purchasing and sustainable local action (section 7.2.3.5);
- fighting climate change and protecting biodiversity and landscapes (section 7.2.4.1);
- preserving resources, and the circular economy (section 7.2.4.2).

The key performance indicators, calculated at least annually, measure the effectiveness of the action taken.

6.8.2 VIGILANCE MEASURES RELATING TO THE ACTIVITIES OF RTE'S SUPPLIERS

In 2022, purchases by RTE (excluding subsidiaries, system services and purchases of electricity to cover network losses) reached €2,040 million and concerned around 9,700 suppliers.

The vigilance measures applied by RTE in respect of suppliers are part of its responsible purchasing commitments, which have received official recognition through the "Responsible supplier relations and purchasing" label awarded by the French corporate mediation service. RTE was awarded this label for the first time in 2019, and it was renewed in early 2022.

6.8.2.1 Risk mapping for the purchasing function

The purchasing function's risk analysis includes an appendix dedicated to the three risk areas identified in the French "duty of vigilance" law: health and safety, the environment, human rights and fundamental freedoms. The 2022 analysis shows that some of the most pressing risks relate to safety, particularly the electricity risk and the general safety risk (road risk, same-level fall risk, equipment handling risk, etc.). Concerning the environment, the most sensitive risk is damage to biodiversity, followed by climate risks and exhaustion of resources. Particular vigilance is exercised to detect any risk of supplier behaviour that does not respect human rights and fundamental freedoms. In 2022, of RTE's eighteen foreign contractors, fifteen are in the EU and the three others are in countries with no salient risks for respect of human rights or fundamental freedoms (Norway, the United Kingdom, the United States). 85% of RTE's purchases (in value) are from French suppliers. Of the 6% (€119 million) of purchases from non-French suppliers, 9% (€195 million) concern the European Union.

6.8.2.2 Risk mitigation action in 2022, indicators and results

Intersectional (concerning all 3 risk types – Health and Safety – Environment – Ethics, Human rights and fundamental freedoms)

Type of risk	Risk mitigation action	Indicators	Results at 31 October 2022
Intersectional	Work on the RTE supplier questionnaire to reinforce health and safety, environmental and human rights requirements for qualifying purchases.	Circulation of the new questionnaire	To be completed in the 1 st half of 2023
	On-site supplier audits to verify compliance with contractual commitments, particularly concerning health and safety and environmental matters	Annual number of audits performed and deficiencies observed	<ul style="list-style-type: none"> • 54 audits performed • 51 safety deficiencies observed (including 15 points of non-compliance) • 26 environmental deficiencies observed (including 8 points of non-compliance)
	Contracts are awarded on a best-bid basis, referring to health and safety and/or environmental criteria, selected and weighted according to the key features of the contract	Annual percentage of RTE contracts awarded on a best-bid basis	<ul style="list-style-type: none"> • 95% (40% for health and safety criteria and 45% for environmental criteria)
	Dynamic awarding of additional contract lots, on each contract anniversary date, to the firms that had the best assessment when executing the contract, particularly on safety and environmental themes	Annual percentage of additional contract lots awarded under the dynamic approach	<p>The master contract for underground power lines is shared between 12 contractors:</p> <ul style="list-style-type: none"> • Five were not awarded any additional contract lot • Seven were awarded additional contract lots equivalent to between 11.3% and 16.5% of their initial share of the master contract <p>The master contract for substations is shared between 8 contractors:</p> <ul style="list-style-type: none"> • Three were not awarded any additional contract lot • Five were awarded additional contract lots equivalent to between 5.1% and 26.6% of their initial share of the master contract

Health and safety

Type of risk	Risk mitigation action	Indicators	Results at 31 October 2022
Health and safety risk	Use of a “High-Voltage Pass” accreditation system for access to RTE’s installations, compulsory for all suppliers working on RTE’s worksites. This pass is issued after in-person training concerning specific site risks, validated by successful completion of a questionnaire.	Number of High-Voltage Passes currently valid, as per RTE’s database	17,572 High-Voltage Passes
	Organisation of safety-themed meetings between RTE’s management and its principal suppliers.	A “Supplier Safety Meeting” on 31 May 2022 was attended by around 100 participants. Among other things it covered themes including presentation of RTE’s new policy for health, safety and quality of life at work, discussions of work situation observations, and presentation of the health and safety dimension of RTE’s new purchase logistics policy.	
	Communication to suppliers about the way safety is taken into consideration in RTE’s purchases (a summary is put online to inform and educate).	Release of the summary on RTE’s institutional portal	In December 2022

Ethics, human rights and fundamental freedoms

Type of risk	Risk mitigation action	Indicators	Results at 31 October 2022
Ethics, human rights and fundamental freedoms	Application of a system to assess suppliers' ethical integrity (anti-corruption, duty of vigilance, other integrity-related matters)	Number of supplier integrity assessments conducted Number of risk situations identified during these assessments	Since the system was introduced in mid-2019, 531 assessments have been conducted (17 in 2019, 273 in 2020, 124 in 2021 and 117 in 2022) 3 risk situations were identified and addressed in 2022
	Preparation of a brief guide on "Ethics in practice: gifts and entertaining"	Release of the brief guide	On 9 December 2022

Environment

Type of risk	Risk mitigation action	Indicators	Results at 31 October 2022
Environmental	Construction of an environmental ambition shared by the purchasing directors of the 10 principal European TSOs	Signature of the 2 nd "The Greener Choice" open letter	In August 2022
	Establishment of eco-sites for projects with priority environmental challenges, to improve management and recycling of waste	Number of eco-sites	27 eco-sites in 2022
	Sharing biodiversity challenges with the principal siteworks suppliers and defining resources to protect biodiversity. Three themes require closer attention: 1) awareness-raising and training; 2) improving the Avoid-Mitigate-Offset sequence; 3) improving the communication of data on biodiversity protection to firms participating in the same project.	Number of workshops held with suppliers and distribution of deliverables	<ul style="list-style-type: none"> • 1 workshop • A "respecting diversity" guide for contractors' worksite managers, released in September 2022
	Rollout of carbon reporting by suppliers for certain types of service when their project is completed, to reduce their carbon footprint	Number of current contracts including carbon reporting requirements for worksites, among RTE's 3 main master contracts (1- Studies and Substation work, 2- Overhead power lines and 3-Underground power lines)	Two master contracts covered (Studies and Substation work, Overhead power lines)
	Use of a "Raw Materials Pass" accreditation system in certain materials procurement contracts: identification of the materials in the product, including the concept of recycled raw materials, with the aim of increasing the use of such materials	Annual number of current or forthcoming contracts involving a "Raw Materials Pass"	7 contracts

6.8.2.3 Evaluation of measures taken by suppliers

After completion of every order, suppliers engaged under RTE's principal master contracts are evaluated on the following four criteria: quality/timeliness, 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 awarding future contracts or contract lots.

6.8.2.4 RTE's whistleblowing procedure

The whistleblowing procedure is described in section 6.7.6. The secure whistleblowing platform was set up by an external contractor and has been operational since January 2019. It is accessible to all the company's employees, and also to third parties⁽¹⁾.

Thanks to training courses and awareness-raising campaigns, the employees of RTE and its subsidiaries are well aware of the platform's existence.

In matters of human rights, the whistleblowing procedure complements the system for reporting psychosocial risks specific to RTE, which was set up as a preventive measure and involves a network of identified local officers.

For RTE's suppliers, the company's standard contract template includes a clause stipulating that in application of the "duty of vigilance" law, RTE provides a secure whistleblowing section on its institutional website where any RTE or contractor employee can report and prevent serious failings affecting occupational health and safety, the environment, human rights or business ethics. RTE guarantees that all the information and discussions going through this site will remain confidential, and that whistleblowers will be protected in accordance with articles 9 and 10 of the "Sapin 2" law.

The template also states that contractors engaged by RTE must require any subcontractors to comply with the same contractual obligations, and this should make them aware of the existence of the whistleblowing platform.

6.8.3 VIGILANCE MEASURES FOR THE ACTIVITIES OF RTE'S SUBSIDIARIES AND CONTROLLED COMPANIES

RTE has control over four subsidiaries that are in charge of deriving income from its assets (Arteria, Cirtéus, Airtelis and RTE International) and account for around 1% of RTE's workforce and 1% of its sales revenue, and two joint ventures formed to construct interconnectors with neighbouring countries (Celtic Interconnector and Inelfe), which have no personnel of their own. Apart from two subsidiaries of RTE International that are non-significant in size, these companies have no foreign establishments outside France.

To complement the vigilance measures and actions introduced for its own activities, in 2022, RTE endeavoured to raise awareness in its subsidiaries and controlled companies, encouraging them to internalise the requirements of the duty of vigilance. A detailed questionnaire completed by these companies was used to identify their risks relating to the matters protected by the "duty of vigilance" law.

RTE provides support for these companies and makes sure that they introduce measures appropriate to their respective businesses. It is ready to assist if they encounter any difficulties in the operational translation of vigilance requirements.

The questionnaire responses and the specific risk mapping for RTE's subsidiaries indicate that some of them pay particular attention to personal health and safety (of employees, suppliers and subcontractors, and even business partners). This is reflected in their introduction of action to prevent electricity risks, for example, or risks inherent to foreign travel.

Certain subsidiaries have also shown real dedication to sustainable development, visible for example in their participation in awareness-raising events such as the "World Clean-up Day". They also report that they have, and apply, a CSR policy or charter that can lead to optimised waste management or usher in procedures aimed at reducing the impact of greenhouse gas emissions (particularly for the duration of certain worksites).

RTE will continue to support its subsidiaries in 2023, in coherence with its own expectations in matters of vigilance where relevant. Through this support it can ensure that progress is made on the measures introduced by the subsidiaries as their respective risks evolve.

(1) <https://www.rte-france.com/en/rte-in-a-nutshell/our-commitments/responsible-enterprise-and-duty-care>.



7.

RTE Group's non-financial performance



7.1 NON-FINANCIAL DIMENSION OF MAJOR RISKS, PRINCIPAL CONTROL MEASURES AND RESULTS ON KEY INDICATORS

RTE is exposed to risks of a social, societal and environmental nature, such as the following:

- a power cut on the high-voltage and very high-voltage electricity network could affect a fairly wide geographical area, for example a large conglomeration or even a county, with repercussions for the area and customers that could have a significant local social and environmental impact;
- achieving the energy and ecological transition requires timely, successful completion of network connection, upgrading and development projects. Environmental analyses and local consultation procedures are thus necessary, and must be undertaken promptly, thoroughly and swiftly;
- the control measures taken in respect of anticipated climate change aim to strengthen resilience in both the network and the company, in order to limit the social and environmental consequences of incidents that may affect the network. Action against climate change and to reduce emissions is taken into consideration in the associated risks.

RTE's financial and non-financial performance is directly linked to maintaining continuous service in the short and medium term, integrating the new energy mix that will support achievement of carbon neutrality in France by 2050, and adapting the network to ensure maximum resilience against unpredictable weather events.

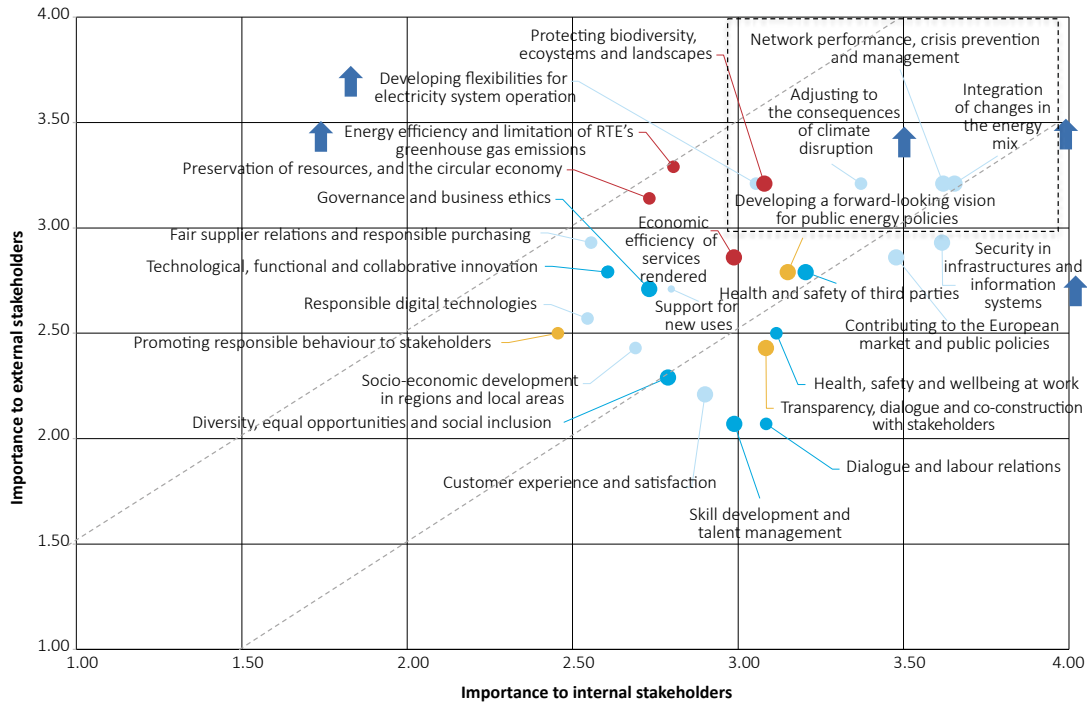
7.1.1 METHODOLOGY FOR IDENTIFYING NON-FINANCIAL RISKS

RTE updated its materiality analysis⁽¹⁾ in 2021.

The purpose of this exercise was to update and put into perspective the priorities of the CSR strategy, identifying the challenges considered most important for the medium term. This underpins dialogue with stakeholders, and enriches the analysis of risks and opportunities. Both internally and externally, the stakeholders consulted identified the challenges they believed would become more important over a 3-year horizon. The materiality matrix thus cross-combines internal and external perceptions, assessing the impact level of the challenges by adding the internal assessment of RTE's performance on those challenges:

(1) Materiality indicates the importance of sustainable development challenges, i.e. their positive or negative influence on a company's business activities (its ability to create, preserve and redistribute value) and the activities of its stakeholders.

General materiality matrix



- **INFORMING**
- **OPERATING**
- **OPTIMISING**
- **FUNDAMENTALS**
- ↑ **3-YEAR OUTLOOK**

- Performance level**
- **Low** $1 < x < 2$
 - **Medium** $2 < x < 2.5$
 - **High** $2.5 < x$

The consensus diagonal:
The zone that designates the challenges and issues that are equally important to internal and external stakeholders.

From this matrix, an inter-function steering committee at RTE selected 13 key challenges that structure RTE's CSR policy for 2022-2025.



Network performance, crisis prevention and management in France and Europe

Ensuring full access and constant reliability in the network, and maintaining security for infrastructures and information systems in the face of external threats.



Developing flexibilities for electricity system operation

Offering a flexible service for consumption and transit, controlling demand and adapting the network to changing lifestyles.



Adaptation and support for the energy transition

Integrating the changing energy mix into the network, particularly renewable energies and low-carbon energies, and supporting new uses and demands from customers and regions.



Adjusting to the consequences of climate disruption

Strengthening infrastructure resilience and making working practices and conditions safe and secure against the effects of climate disruption.



Responsible purchasing and sustainable local action

Contributing to socio-economic development in the areas where RTE operates, by maximising the social and environmental impacts of the company's purchases and building sustainable relations with suppliers in a partnership dynamic.



Transparency, dialogue and co-construction with stakeholders

Establishing policies and mechanisms that ensure a high level of transparency, dialogue, and consultation with stakeholders.



Developing a forward-looking vision for French and European public energy policies

Sharing RTE's expertise and knowledge to inform the electricity landscape, by making available data, studies and prospective planning documents.



Fighting climate change and protecting biodiversity and landscapes

Pursuing the company's strategic ambition while ensuring good environmental performance and integrating its structures into the landscape.



Preserving resources, and the circular economy

Optimising use of resources, developing ecodesign, the full life-cycle approach and biomimicry, in the design and management of structure.



Skill development and talent management

Anticipating transformation in the company's activities; supporting development of human capital and the competence and talents of employees, suppliers and partners.



Health, safety and wellbeing of internal and external stakeholders

Protecting health and safety and developing quality of life at work for the company's employees, suppliers, and all third parties.



Governance and business ethics

Introducing policies and mechanisms to promote ethical behaviour in business.



Diversity, equal opportunities and inclusion

Maintaining the right conditions to promote diversity, inclusion and equal opportunities both inside the company and in the choice of partners.

7.1.2 NON-FINANCIAL RISKS

The major risks were re-examined in the light of the CSR challenges relating to:

- stakeholder demands as identified in the materiality analysis;
- the United Nations' Sustainable Development Goals in which RTE considers it has a role to play (more details are given below);
- and social, environmental and societal matters mentioned in the French decree on disclosure of non-financial information in the management report (decree 2017-1265, article 2).

— Convergence between major risks and non-financial risks

The above analyses showed that the majority of RTE's major risks are considered to have crucial

non-financial impacts. The following table presents the risks concerned, their non-financial dimension, the related policies and the results on key indicators.

— Changes in non-financial risks since 2021

The changes are in line with the changes presented in 6.2.2 "Mapping of RTE's major risks".

As the new #Procurement risk is not classified as non-financial, it is not included in the table below.

The #Legal risk is no longer classified as a non-financial risk as of 2022, since its impacts are not of a social/societal/environmental nature.

Name of risk	Non-financial dimension	Related policies	Indicators ⁽¹⁾	2021	2022	Target for 2022
#Safety Serious failings in safety for 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.	Policy for health, safety and quality of life at work	LTIR ⁽²⁾ for employees (Number of accidents to employees) LTIR for contractors (Number of accidents to contractors)	2.6 10.3	3.02 ⁽³⁾ 7.87 ⁽⁴⁾	≤ 2.6 ≤ 9.3
# Major operating incident Incident affecting the electricity network that could cause a blackout	Many risk factors could cause extensive power outages in the electricity network (cascading blackout, collapse of the voltage plan, uncontrolled drop in frequency, loss of synchronism). Given the protective and defensive measures taken by RTE, the number of major incidents remains small and their impact limited.	Operating and Development rules and procedures Market rules/ Technical documentation Electricity quality policy	Number of Significant System Events	0	1 ⁽⁵⁾	1
# Major physical attack Large-scale physical attack on RTE's vital infrastructures	A deliberate physical attack on RTE's infrastructure can cause damage that could lead to a major operating incident on a small or large scale, with the economic, social and environmental consequences mentioned in the risk #Major operating incident. It could also involve risks for the safety of RTE personnel and third parties.	Security policy	Not disclosed – confidential information			
# Major cyber-attack Large-scale cyber-attack on RTE's information systems or vital infrastructures, with a major impact on continuity of critical activities	A cyber-attack could undermine the company's operations, or in the less likely scenario of an orchestrated attack on the operating information system, lead to a major operating incident on a small or large scale, with the economic, social and environmental consequences mentioned in the #Major operating incident risk.	Information System Security Policy	Not disclosed – confidential information			

Name of risk	Non-financial dimension	Related policies	Indicators ⁽¹⁾	2021	2022	Target for 2022
#Impetus & Vision Inability (including for HR reasons) to achieve the industrial transformation set out in the “Impetus & Vision” corporate mission statement by 2025	The ambition of the Impetus & Vision corporate mission statement is to conduct all the changes necessary at RTE by 2025 in order to support the conversions required by the energy, technological and digital transition, and by new demands from customers and local areas. RTE must successfully achieve industrial transformation while guaranteeing employability for its personnel and promoting a diversity of profiles at this time of considerable change in its functions. For greater effectiveness, it is planned to form new entities through mergers and groupings. This risk has a potentially substantial social impact, as it concerns the preservation and development of the skills of all the company's employees.	“Impetus & Vision” corporate mission statement Mobility and talent management policy Agreement on equality at work Agreement on social dialogue and employee representation	% of entities created in year N compared to the roadmap	Not disclosed	100% ⁽⁶⁾	100%
Ten-year network development plan (SDDR) Inability to upgrade and adapt the ageing onshore network and develop the offshore network in line with the time objectives set out in the SDDR, as the pace of decarbonisation of uses and reindustrialisation accelerates	To rise to the challenge of the energy and ecological transition, RTE must succeed in its five industrial dimensions: connections, upgrades, development and digitisation of the network, and reinforcement of interconnections. RTE's non-financial performance is linked to its ability to meet a large number of societal and environmental demands. Faster connection of renewable energies will meet the needs of the energy transition (towards carbon-free electricity). RTE develops and maintains its network infrastructure throughout France over time periods spanning several decades. Consultation with stakeholders makes it possible to take account of their expressed needs, minimises the risk of delays in administrative procedures, and preserves the economic balance of a project without harming the environment. The quality of dialogue with stakeholders is a crucial factor for the network extensions that will be necessary to connect new generation sites (particularly renewable energy plants), and for the economic development of new consumers.	Ten-year network development plan (SDDR) Network development, upgrading and adaptation policies	Renewable energy hosting capacity created Overhead lines Length of circuits upgraded	1,385 MW Not disclosed	758 MW ⁽⁷⁾ 828 km ⁽⁸⁾	1,241 MW 800 km

Name of risk	Non-financial dimension	Related policies	Indicators ⁽¹⁾	2021	2022	Target for 2022
#Infrastructure resilience Contingent event with a major impact on the network infrastructure, in a context of ageing infrastructure and faster climate change	An unusual weather event (gales, floods, etc.) or serious high-impact damage to the infrastructure can lead to a major operating incident on a small or large scale, with the economic, social and environmental consequences mentioned in the #Major operating incident risk. Well-prepared teams, maintenance and network upgrading provide protection and keep the duration of infrastructure problems down. Global warming is making it even more necessary to reinforce this resilience.	RTE's crisis management procedure Electricity Quality policy Stormproofing policy Resilience project ⁽⁹⁾	Equivalent outage time associated with unusual events (weather events only)	Not disclosed	22.2 s	N/A
#Attraction-recruitment Insufficient ability to attract the talents and skills needed to fulfil the company's public service mission, and successfully achieve the energy transition and transformation of the company	In the short term, RTE's low appeal could compromise its image as a responsible, exemplary employer certified by the labels and awards given to RTE (Great Place to Work, <i>Diversité</i>) and more generally affect RTE's image and legitimacy for fulfilling its missions. It could also oblige RTE to make more use of external skills, and that would increase the company's dependence on specialist service providers. In the medium and long term, low appeal and non-achievement of recruitment objectives could compromise successful performance of the company's missions, particularly when they require the most advanced technical skills.	RTE's strategic orientations Employment and career path action plan Annual recruitment plan Initial salary policies at RTE for the executive/supervisory and technical/operational employee categories Dynamic career policy	% recruitment target achieved	99.8%	99.8% ⁽¹⁰⁾	99%-100.5%

Name of risk	Non-financial dimension	Related policies	Indicators ⁽¹⁾	2021	2022	Target for 2022
#Environment Environmental risks: climate, pollution, waste, biodiversity	By nature, this risk encompasses direct environmental consequences, and control of this risk contributes to RTE's non-financial performance.	Environmental policy	CO ₂ emissions for scopes 1 and 2 ⁽¹¹⁾ Volume of SF ₆ leaks Area of biodiversity – friendly land Percentage of “zero-phyto” office sites and new substations	578.2 kt 4.6 t 1,439 ha 24.3%	487.3 kt ⁽¹²⁾ 3.82 t ⁽¹³⁾ 1,719 ha 27.6%	≤ 4.5 t 2,300 ha by end-2024

(1) Indicator definitions and calculation methods are provided in the Appendix at the end of the management report.

(2) Lost Time Incident Rate.

(3) Although the number of accidents entailing sick leave is lower than in 2021, LTIs (lost time incidents) increased from 36 in 2021 to 41 in 2022, with a constant number of hours. LTIs in May made a significant contribution to this increase (eight in 2022, compared to three in 2021).

(4) There was regrettably one death, in June.

(5) On 29 April, a fibre optic fault disabled the instruments RTE uses to manage the supply/demand balance, causing substandard operation for more than two hours. This event had no effect on the power supply to network customers.

(6) In 2022, three new Divisions were created in line with the Corporate Mission Statement: see section 5.4.

(7) The Toulouse centre's target of 653 MW was not reached. The centre's result was 173 MW, due to delays in commissioning of new facilities in 2022.

(8) The target of 800 km of upgraded overhead lines was exceeded. The volume of lines upgraded in 2022 was exceptionally high, due to major projects such as Haute Durance, Carrières-Valescourt, and Eguzon-Maureix.

(9) See section 7.2.3.3 “Adjusting to the consequences of climate disruption”.

(10) This target was met. The recruitment plan was implemented (493 people were hired, above the initial objective of 455). RTE successfully maintained its appeal and thus achieved its recruitment and workforce growth objectives.

(11) Emissions for scopes 1, 2 and 3 will be published during 2023 in the “BEGES” 4-year greenhouse gas emissions report.

(12) These emissions have fallen (-11%) thanks to good results on SF₆: leaks were down by 17% and the volume of network losses in TWh were down by 9.77%. NB: The figures for greenhouse gas emissions is probably underestimated, because at this stage it is calculated using the emission factor for the average French electricity mix of 2021. The emission factor for 2022 will be calculated by the ecological transition agency Ademe after this management report has been published, and is expected to be higher due to the unusual electricity mix in France in 2022.

(13) This volume of SF₆ leaks is the lowest observed in six years and was achieved thanks to RTE's replacement and plugging policies.

7.2 ANALYSIS BASED ON THE KEY CHALLENGES UNDERPINNING RTE'S CSR POLICY

In 2022, RTE's Executive Board validated the company's CSR policy which is applicable from 1 January for a period of four years.

This new policy is closely connected to RTE's *raison d'être*, expressed through to thirteen key challenges which are themselves organised into four homogeneous groups, corresponding to Fundamentals/Informing/Operating/Optimising.

This section (RTE's non-financial performance) now bases its structure on these thirteen challenges.

7.2.1 FUNDAMENTALS

7.2.1.1 Governance and business ethics

Introducing policies and mechanisms to promote ethical behaviour in business.

RTE has policies and mechanisms to promote ethical behaviour in business matters: an anti-corruption compliance programme (point 6.7.4) and a vigilance plan (point 6.8).

One of the tasks of the new ethics and compliance division, set up on 1 January 2022, is to coordinate these policies and reposition them in a more general process that makes them meaningful.

During the year, a process took place to organise RTE's response to demand from stakeholders (customers, suppliers, etc.) for ethics and compliance commitments by the company. A growing number of stakeholders are now asking RTE to complete questionnaires or sign written commitments, and RTE must of course respond if it is not to be considered as a "risky" company as regards integrity.

7.2.1.2 Diversity, equal opportunities and inclusion

Maintaining the right conditions to promote diversity, inclusion and equal opportunities both inside the company and in the choice of partners.

Details of RTE's workforce⁽¹⁾

Contract type	Operational staff	Supervisory and technical staff	Executives	Total
Permanent contracts (IEG and non-IEG status)	390	3,669	5,040	9,099
<i>on pre-retirement paid leave</i>		107	181	288
Temporary fixed-term contracts	197	273	17	487
<i>work-study contracts</i>	197	273		470
<i>other</i>			17	17
TOTAL WORKFORCE	587	3,942	5,057	9,586

Breakdown of the workforce by age group

Contract type	< 25	25-34	35-44	45-54	55-59	> 60	Total
Permanent contracts (IEG and non-IEG status)	338	2,406	2,591	2,370	1,061	333	9,099
Temporary fixed-term contracts	384	89	12	2			487
<i>work-study contracts</i>	382	74	12	2			
<i>other</i>	2	15					
TOTAL WORKFORCE IN AGE GROUP	722	2,495	2,603	2,372	1,061	333	9,586
PERCENTAGE OF WORKFORCE IN AGE GROUP	7.5%	26%	27.2%	24.7%	11.1%	3.5%	

(1) The scope of the workforce is defined in the Appendix at the end of this report.

A company ambition

Beyond its legal obligations to prevent discrimination and promote diversity, RTE, as a company with a public service mission, wants to uphold the values of a changing society, and take full Corporate Societal Responsibility (CSR).

RTE's Diversity policy is founded on respect for each employee, equal opportunities and inclusion: these are all levers for quality of life at work, the company's appeal as an employer, and a sustainable performance.

This ambition is pursued through action focusing on three dimensions: gender equality at work, disability, and more broadly an "intercultural" approach that covers other diversity and inclusion criteria.

— Continuing the ambitious policy for gender equality at work

Application of RTE's agreement on gender equality and the gender balance for the period 2020-2024 continued to advance in 2022. The "RTE Gender Mix network" was launched on 14 January 2022 to encourage more women into the "technical" activities and managerial functions. This network is sponsored by the Executive Board and has 275 members, 30% of them men (a remarkable proportion in this kind of network).

On 1 March 2022, RTE also published its gender balance "index" as required by French law. It reached the score of 93/100 (above the average index for companies with more than 1,000 employees, which was 89/100 in 2022).

The priority objective of proactively working to raise the proportion of women in the workforce achieved steady growth towards the agreed target of 23.5% by June 2024.

Percentage of women in RTE's workforce

2020	2021	2022
22.9%	23.3%	23.4%

Progress is slow, but continues every year despite structural and economic obstacles: low personnel turnover in a company that traditionally has a low proportion of women, under-representation of women in the education pathways that train people in the company's field of business, and a backdrop of job market pressures.

Another encouraging development is that the proportion of women in RTE's management committees is rising and is higher than the overall proportion of women in the company, even though it decreased slightly last year due to six of the 94 women concerned changing posts.

In the more administrative and clerical functions, the gender gap is smaller: 40.8% of personnel in RTE's central functions are women.

Percentage of women in the management committees

	2020	2021	2022
Percentage of women in management committees	23%	25.6%	24%

RTE's Executive Board, formed in 2020, currently has a majority of women for the first time (three women out of a total five members).

— Integration of disabled employees

RTE's 6th agreement for integration, retention and career development for disabled employees, covering the period 2021-2023, was signed on 4 March 2021 and approved by the regional department for the economy, work and solidarity on 17 June 2021.

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

Indicators	Annual target	Result 2021	Result 2022
Employees hired	10	9	9
Work-study contracts	10	4	7
Fixed-term contracts			2
Interns	20	47	46

Transactions with the protected and sheltered sectors

Purchases from the protected and sheltered sectors progressed substantially in 2022 to reach €3,289,191. The 2022 target was €2 million, with the ambition of reaching €3 million in 2023.

More qualitative action

In 2022, RTE renewed or intensified its awareness-raising and communication campaigns with an internal or external focus (such as publishing in-house newsletters).

— Action to promote diversity and inclusion

On 17 May 2022, RTE launched the “intercultural” dimension of its Diversity policy, with a focus on three themes: social and cultural diversity, cross-generational collaboration, and inclusion of diversities. The aim is to be a more welcoming and supportive company for all employees throughout their career, regardless of factors such as age, social and cultural background, sexual orientation, etc. Awareness-raising campaigns were conducted in 2022.

Once again in 2022, RTE actively honoured its commitments under the new work-study agreement for 2021-2025. This concerns 20 work-study students a year ranging from secondary school to postgraduate level, who are recruited in association with charities, “second chance schools” and other public organisations⁽¹⁾ that help young people into work.

Finally, the company’s anti-discrimination measures and related whistleblowing system were reinforced in 2022 by continuing the awareness-raising work begun in 2021 with managers and employees generally.

7.2.1.3 Health, safety and wellbeing of internal and external stakeholders

Protecting health and safety and developing quality of life at work for the company’s employees, suppliers, and all third parties.

2022 saw the application of the **new policy for health, safety and quality of life in the workplace** covering the period 2022-2024.

This policy was constructed together with representatives of all the company’s functions, and demonstrates RTE’s determination to promote

health in a broad sense, encompassing safety and workplace quality of life.

Its practical introduction came in 2022:

- 1) via the safety management programme, containing the following principal commitments:
 - to mobilise employees for a common culture of health, safety and quality of life in the workplace, based on a diagnosis leading to actions to be taken from 2023,
 - to map the most significant risks at RTE and share the risk mapping with the functions. These risks mainly concern: road risks, moving objects, manual load handling and falls on the same level,
 - to roll out the campaign to prevent addictions, involving modification of the company’s internal regulations,
 - to continue safety leadership work in the functions,
 - to implement safety reviews ahead of site work, to address risks in advance.
- 2) via development of the information system for health, safety and quality of life in the workplace, using an application named “OBSERV” to collect and process all information relating to the safety of employees of both RTE and its contractors;
- 3) via a large number of campaigns to raise awareness of psychosocial risks. RTE continued to provide support for individual or collective situations, particularly in response to matters reported to the company. Assessments of psychosocial risks as an occupational risk resumed at a good pace in various groups, as appropriate to the needs expressed in the post-Covid period.

Importantly, RTE’s healthcare personnel contributed to implementation of the corporate mission statement (on the questions of non-standard working hours, 24-hour control centres, respecting night-time rest periods), and negotiations concerning new ways of working.

— Health and safety action for contractors

Regrettably, one fatal accident and several serious accidents occurred in 2022. To share problems and good practices, a meeting was organised in May for contractors working on the networks, the development and engineering division, the purchasing division and the division in charge of health, safety and quality of life in the workplace. Participants appreciated the full and informative discussions that took place.

RTE also decided to promote the importance of site visits focusing on weaknesses highlighted by the

(1) Écoles de la 2^e chance and Missions locales pour l’emploi.

analysis of accident data. This was put into practice throughout the year.

— Accident data for RTE and contractor employees

Accidents occurring while at work that caused sick leave, for the principal risks: sudden illness, falls on the same level, road risks, electricity risks, falls from height, moving objects, machine tools, manual load handling.

	RTE			Contractors		
	2020	2021	2022	2020	2021	2022
Work-related accidents entailing sick leave	68	80	72	54	61	56
<i>Including: sudden illness at work followed by sick leave</i>	22	21	16	6	7	4
Work-related accidents not entailing sick leave	71	74	70	32	36	28
Total number of work-related accidents	139	154	142	86	97	84
Deaths	0	0	1	0	1	1
Work-related accidents entailing sick leave for the most serious risks ⁽¹⁾	43	55	53	47	53	49

(1) Electricity, falls from height, falls on the same level, road traffic, fall of a moving object, machine-tools, manual load handling.

For LTIR data, see the table of non-financial risks in section 7.1.2.

7.2.1.4 Skill development and talent management

Anticipating transformation in the company's activities; supporting development of human capital and the competence and talents of employees, suppliers and partners.

In the current context consisting of a fast-changing electricity market, the need to support the energy

transition, and growth in the business, RTE's areas of work are evolving fast.

Development and transformation of skills and jobs are thus crucially important, particularly in this tight, competitive market.

As it implements its mission statement (see section 5.4), RTE must support structure changes that have significant impacts for organising mobility, recruitment, professional development, HR and managerial support. All this guided the key actions taken in 2022.

— Skill development in figures

Training indicators	2020	2021	2022
Total hours of training (in thousands)	252	367	379
Average hours of training per employee	27	39	40
Training budget as % of total payroll	5.5%	6.3%	6.3%

— Developing a managerial culture and supporting change

- A Talents policy has been developed and applied to detect and develop talents in the company, targeting the areas of management, project management and expert assessment.
- Systems for advancement of the managerial culture have been restructured, with three pathways (junior managers, experienced managers, senior

executives and executive managers) and two sets of skill standards (managerial and behavioural).

- RTE's individual and collective support mechanisms are now complemented by the "Manager Development" programme started in 2022 with members of the Executive Board and the Executive Committee, to improve the everyday impact of managerial action for colleagues.

— Supporting internal mobility in a context of organisational adaptation

Around 1,000 jobs will be redeployed by 2026 under the corporate mission statement. RTE has set up a specific mobility support and management system to accompany this movement (which will involve closing and opening sites, discontinuing and creating jobs, lowering and raising skill requirements, mobility between geographical areas and functions, etc.).

The network of mobility support units has been extended to tighten up coordination between regions and functions, keep regional committees informed of forward planning orientations, enhance control over regulation of internal and external staff mobility, and prepare for any decisions required by the national mobility support unit.

Individual support measures for employees and managers have been reinforced by tools and methods made available on the new mobility portal.

Finally, internal communication campaigns were run to support implementation of these measures: a launch seminar was held, and followed up in the regions; intranet publications promoted the new jobs to be introduced under the corporate mission statement, with videos to explain the roles and duties of actors working on internal mobility; “CAP sur ton parcours” career-focused operations were held in several regional areas to boost employee mobility, especially transfers to the new jobs.

— Developing internal skills

RTE is adapting its industrial strategy and continuing the company's transformation in preparation for the challenges of the energy transition. The pace is being stepped up in order to honour the carbon neutrality commitments made by France and Europe.

In the present context, skill development is becoming a strategic issue for the company, in order to perform its new industrial activities, encourage employees to move into new jobs, and professionalise the employees joining RTE.

The main steps taken for professionalisation are the following:

Technical transformations at RTE

For real-time optimisation of network parameters (energy flows, telecontrol and telecommunication), the prefiguration of the new 24-hour control centres is progressing: a Cyber-Telecontrol-Tele-

communications centre has been in operation since late 2021, to be followed by the first new-generation flow control centre in 2023, and the first equipment monitoring centre in 2024.

The professionalisation courses for all these centres have either been finalised or are in the design phase, to make sure that the centres can be opened and operational on schedule.

A course for employees in charge of offshore equipment engineering was introduced in 2022. The resulting experience and feedback will be used to adjust the courses given in 2023, as this skill area is still new for RTE. A course for employees in charge of offshore equipment maintenance is currently the topic of strategic reflection.

Professionalisation requirements for employees in the network study entities are also being assessed so as to make additional professional development measures available in 2023.

Project management

In view of RTE's increasing number of projects in a range of fields (real estate, information systems, and infrastructures both organisational and corporate), at the end of 2022 a new training course was introduced for project managers. The course is for managers in all fields and will be complemented by function-specific modules.

Recruitment

Given RTE's growth and the very tight job market in France, professionalisation of recruitment actors will be reinforced by the addition of a new course in 2023. This will concern managers too, as they are also actors in recruitment.

Training and education

As skill development accelerates, professionalisation of trainers is also becoming a strategic concern. Their professional development course has been revised in order to better incorporate new digital education techniques (virtual classrooms, virtual 3D, video).

— Reinforcing the company's attraction

RTE vitally needs to increase its workforce substantially to expand its business activities, but technicians and engineers are in short supply. To adapt to this situation, the company has begun multidisciplinary work to significantly reinforce the company's appeal.

New measures have been adopted: the new policy for relations with schools (a national basis of practices and tools dedicated to raising RTE's profile among the target students), the company's reputation as an employer, and obtaining new labels (e.g. "Great place to work" and "Glassdoor"). This policy also aims to develop diversity in all its forms (for instance by bringing about change in managerial stances, adapting to the realities of the new academic environment, deciding to use an employee referral system, etc.).

Initial salary packages have also been reviewed and improved through the levers of working from home, employee autonomy and the related remuneration. Initial pay now better reflects the experience, training and retraining of employees joining RTE.

— Skill sponsorship to encourage voluntary work by RTE employees

RTE fosters engagement for the public good by its employees, who have volunteered with partner charities and organisations such as *Électriciens Sans Frontières* (Electricians without Borders) and the RTE Foundation for several years.

To go further down this road, in 2022, RTE launched a skill sponsorship experiment across certain parts of France: every employee may take a day of their working time to contribute to good causes.

This experiment was very popular (over 26% of the eligible RTE employees signed up, and the satisfaction rates were 4.7/5 for the participating employees and 4.97/5 for the benefiting charities). It will be extended to the whole of France in 2023.

7.2.2 INFORMING

7.2.2.1 Developing a forward-looking vision for French and European public energy policies

Sharing RTE's expertise and knowledge to inform the electricity landscape, by making available data, studies and prospective planning documents.

The crucial issue of informing public decision-making, which is central to RTE's corporate missions and expertise, is **discussed in more detail in section 5.1**.

The key steps in 2022 were the publication of the full results of the *Energy Pathways* report which provided scenarios that fuelled the energy debate and the national decarbonisation strategy (presented in February 2022 by the French President at Belfort in the east of France), and the subsequent mobilisation of several working parties in over 50 meetings. The research done has been widely used and is unanimously acknowledged in the energy sector as very valuable.

The orientations defined will be incorporated into France's five-year energy and climate programme law which is expected in 2023.

Far from undermining the conclusions of the reports, the energy crisis that arose in 2022 actually confirmed the urgent nature of the questions of European and national energy sovereignty.

7.2.2.2 Transparency, dialogue and co-construction with stakeholders

Establishing policies and mechanisms that ensure a high level of transparency, dialogue, and consultation with stakeholders.

As these missions are highly specific, RTE maintains well-informed relations with many stakeholders belonging to various categories.

Their multiplicity and diversity was taken into account in developing the materiality matrix.

RTE has very different kinds of relations with each stakeholder, depending on the challenges and contexts involved.

While not exhaustive, the list below presents the most salient aspects of 2022 for particularly symbolic stakeholders: customers/public authorities/"local residents"/unions.

— With customers

There are many customer-related challenges:

- 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);
- consolidating the company's economic roots in local areas, for future customers and employment catchment zones;
- maintaining high-quality customer relations on a daily basis, as well as quality contract writing, invoicing, energy measuring and metering, meter data validation, good knowledge of the financial regulations governing market mechanisms, and debt recovery;
- facilitating connection for actors of the energy transition, notably by supporting the decarbonisation of industry.

Electricity quality and customer satisfaction are discussed in **section 7.2.3.1**.

— With the public authorities

• Nationally

In accordance with article L. 121-46 of the French Energy Code, RTE and the French State signed a public service contract in 2022. This contract reaffirms both parties' commitment to working to maintain the existing national public electricity service model, with exemplary quality standards and balanced economic conditions, so as to give high satisfaction to customers, achieve satisfactory returns on assets, and have fully-engaged personnel. It is the second public service contract between the French State and RTE. Three-yearly reports on execution of the contract are issued as required by article L. 121-46 of the French Energy Code, and presented by the French government to parliament.

• Regionally

RTE's organisation structure gives the Regional Delegations a major role in the relations the company intends to maintain and develop with local and regional actors: local/regional authorities and institutions, businesses and economic decision-makers, and also ordinary citizens and associations.

In 2022, there were several discussions with these actors, relating to four major themes:

- **the Energy Pathways to 2050;**
- **support for major industrial development projects against the backdrop of France's decarbonisation and reindustrialisation.** The aim is to reconcile the concerns of both customers and RTE, particularly in terms of costs and timing, to reinforce existing infrastructures, and potentially to develop new ones. This support involved several information-sharing and coordination actions between RTE's national divisions and its regional entities;
- **creation of new infrastructures to connect new renewable energy plants,** particularly offshore plants. This required extremely active cooperation to determine and calibrate renewable energy hosting zones under the S3REnR plans for instance, and to decide on the routes for the necessary infrastructures. The economic benefits for local areas are often a topic of discussion, and in the case of the plan to connect the Dunkirk offshore wind farm, RTE signed an agreement with the Chamber of Commerce and Industry of the Hauts-de-France region: this agreement will help the local area to benefit economically from the project because RTE has undertaken to purchase supplies from local businesses and to put businesses in touch with each other, in compliance with the rules governing public procurement contracts;
- **raising awareness of the importance of the Supply-Demand balance** for electricity, notably through the **EcoWatt scheme**, considering the energy crisis associated with the war in Ukraine and the unavailability of certain nuclear reactors in France. This concern was also addressed by close collaboration with public administrative services and operators to prepare for situations in which load shedding could be necessary.

— With the unions: promoting social dialogue

RTE has always encouraged social dialogue to support organisational change.

Continued support for change under the corporate mission statement

Social dialogue relating to implementation of the corporate mission statements continued in 2022, and several significant advances were made.

Negotiation of new ways of working at RTE (a project covering three agreements) is an essential lever for change in the company. The purposes and contributions of the three agreements that resulted from the negotiations held in 2022 are described in the section on the Corporate Mission Statement (5.4).

To keep this dialogue active while the mission statement is in execution, regional committees (with equal numbers of members from each party) and a national committee have been set up to oversee progress.

Supporting employees' purchasing power against inflation
From the spring of 2022, RTE began to rally employers in the French Electricity and Gas sector to take action in response to general price rises.

Additionally, during the second half of the year, in-house negotiations concerning 2023 pay measures continued. The outcome was an agreement on 2023 pay measures, which was signed on 16 December by all the unions.

Collective agreements signed at RTE in 2022

- New ways of working: Agreement on working from home.
- New ways of working: Framework agreement for operational application.
- New ways of working: Amendment for revision no. 4 of the Working time arrangements agreement of 15 March 2007.
- Agreement for the sustainable mobility grant applicable in RTE.
- Agreement on the "PPV" value sharing bonus.
- Amendment no. 2 to RTE's 2021-2023 profit sharing agreement of 29 June 2021.
- Amendment no. 12 revising Appendix 1 of the Working time arrangements agreement for the Central Functions.
- Amendment no. 1 to RTE's 2021-2023 profit sharing agreement of 29 June 2021.
- Amendment no. 11 revising Appendix 1 of the Working time arrangements agreement for the Central Functions.
- Agreement on the "BDESE" economic, social and environmental database, and agreement on pay measures, signed by all relevant parties on 16 December 2022.

Measures that must be approved by the employee representative bodies were reviewed to reinforce shared action for employee support, and to incorporate aspects relating to quality of life at work for every change project.

7.2.3 OPERATING

7.2.3.1 Network performance, crisis prevention and management in France and Europe

Ensuring full access and constant reliability in the network, and maintaining security for infrastructures and information systems in the face of external threats.

— Maintaining high quality in electricity

France's electricity grid needs to adapt to changing customer uses, particularly to meet the objectives of cutting carbon emissions and incorporating more renewable energies, while at the same time modernising the network and replacing many of the oldest components.

Ensuring a secure power supply is essential for development of the economy, particularly to attract the kind of businesses for which electricity quality is a fundamental requirement.

Also, society is becoming increasingly sensitive to power cuts. Any break in power supply is considered very costly for the community, through economic losses caused by disruption to industrial and professional work, disturbance to transport services, etc.

RTE is taking action to address this issue, making three-year commitments concerning the quality of electricity for customers (consumers and distributors).

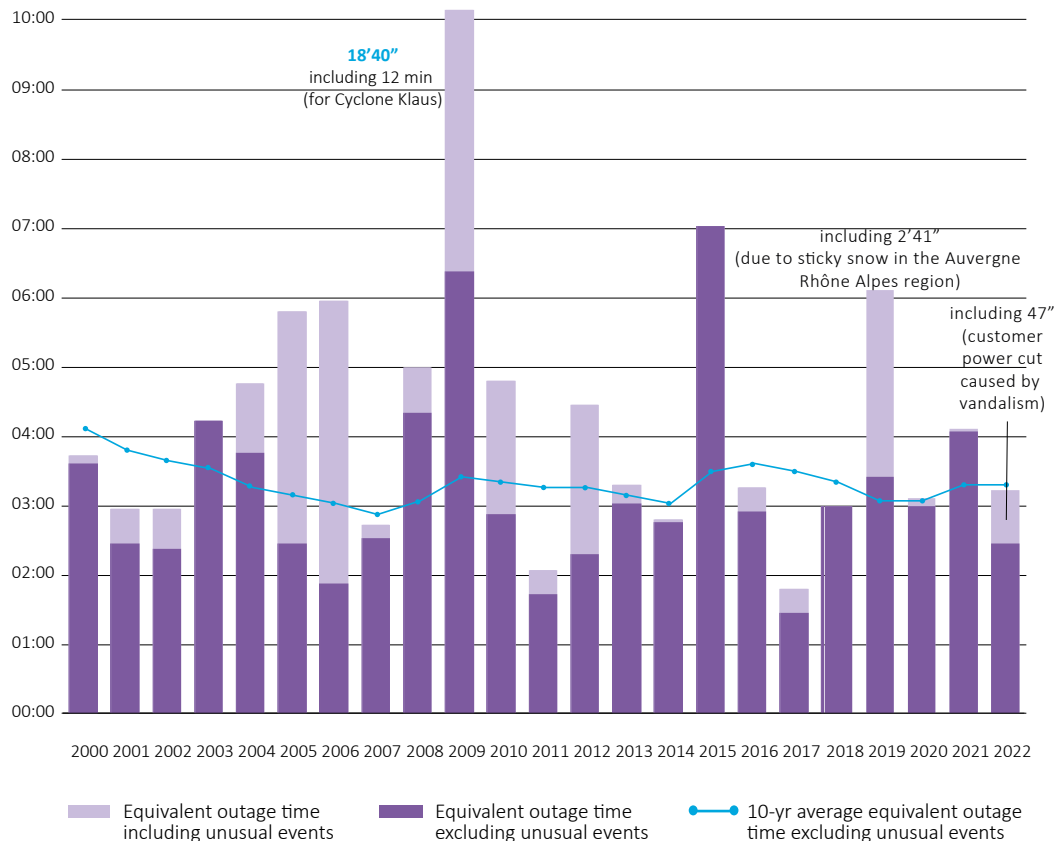
RTE uses several indicators to measure its performance on electricity quality:

- Equivalent outage time: the average duration of power cuts, calculated as the ratio of undistributed power to the average power distributed during a given year. In 2022, the equivalent outage time totalled 3 minutes and 14 seconds, or **2 minutes**

and 27 seconds⁽¹⁾ excluding unusual events. This corresponds to 2,318 MWh⁽¹⁾ of undistributed energy, or **1,753 MWh** excluding unusual events. The equivalent outage time for 2022 was slightly lower than the average for the ten previous years (3 minutes and 17 seconds). Three incidents in 2022 were classified as **unusual events**. The most significant in terms of undistributed power

(560 MWh or an equivalent outage time of around 47 seconds) was the power cut for the customers ST MicroElectronics and Enedis after two acts of vandalism on 4 and 5 April (fires were started deliberately at the Froges 225 kV substation and beneath the Brignoud bridge which carries RTE and Enedis power lines).

Equivalent outage time (in minutes)

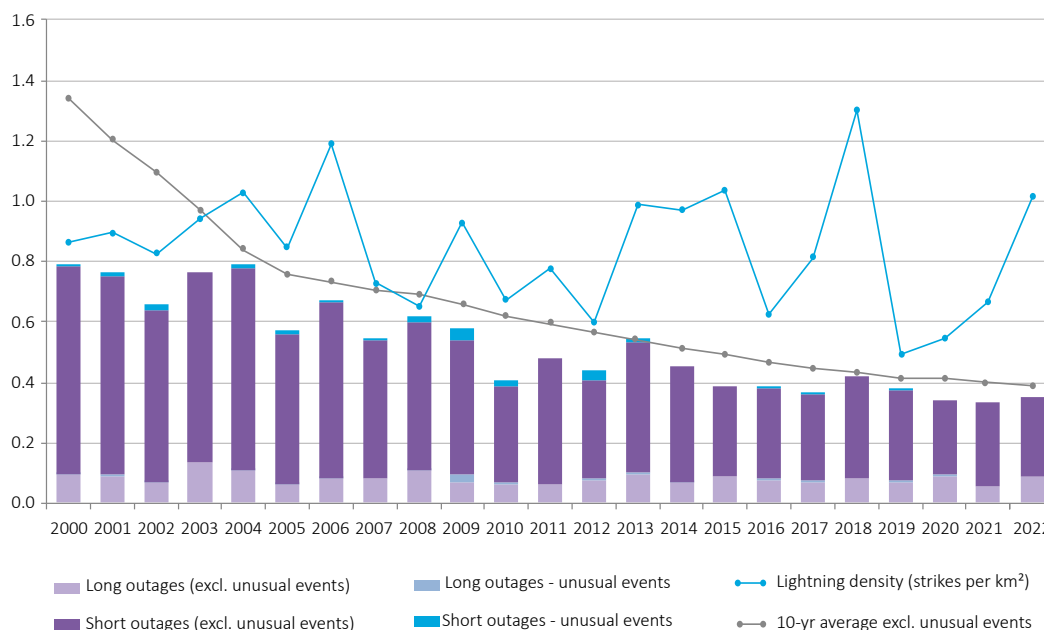


- Outage frequency is the average number of unplanned power outages per site during the year. It is broken down into long-outage frequency and short-outage frequency. The outage frequency for 2022 was **0.354*** (74% being of short duration⁽¹⁾), higher than in 2021.

(1) Power cuts lasting less than 3 minutes.

* These results are provisional, as it takes two months to validate the technical and contractual analyses of events.

Outage frequency



- RTE has made a commitment to each of its industrial customers and distributors to keep outages below a threshold that is defined and revised based on each site's track record. In 2022, the results on these thresholds remained good: the three-year **commitments were 95.92% respected for distributors and 95.25% for industrial customers** (for the second group, the three-year period began at 1 January 2022). RTE also made a commitment to industrial customers to keep the total duration of outages below a certain threshold for each three-year period. At 31 December 2022, these commitments were **98.25%** respected.

RTE is also committed to minimising the disturbance caused to customers by scheduled work that is essential to keep its 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 their specific needs can be appropriately 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 **84.57%** of cases at 31 December 2022. When RTE was obliged to exceed this threshold, the work was done with the customer's consent, gen-

erally during a break in their activity or when an alternative power supply was available, thus avoiding adverse effects for business as far as possible and minimising any surplus costs that would be eligible for compensation.

At the majority of power generation sites, the duration of maintenance outages is sufficient for network maintenance operations to be completed without affecting output. For other sites where this is not possible (e.g. renewable energy plants), interruptions are scheduled 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. This coordinated scheduling also minimises the limitations attributable to RTE's work: the power input by producers connected to the distribution network may be lowered from time to time, always within the committed limit of 360 hours over three years. If this limit is exceeded, compensation is paid for the undistributed energy.

RTE promises satisfaction and support for today's customers:

— Results of the 2022 customer satisfaction survey

The 2022 customer satisfaction survey was conducted by an independent firm, CSA, from 12 September to 14 October 2022. It measured the overall satisfaction of RTE's customers, their main expectations and their satisfaction with the company's services and customer relations.

901 people completed the survey, a response rate of 34% (the response rate rose to nearly 50% among customers on "CART⁽¹⁾" network access contracts). There was a marked increase in the number of respondents, which doubled compared to 2021.

The 2022 survey consisted of ten questions which were adapted to each customer segment: distributors (Enedis, a tier 1 DSO), consumers (industrial and rail operators), producers (EDF, renewable energy

producers, conventional energy producers), market actors (service providers, traders, a tier 2 DSO).

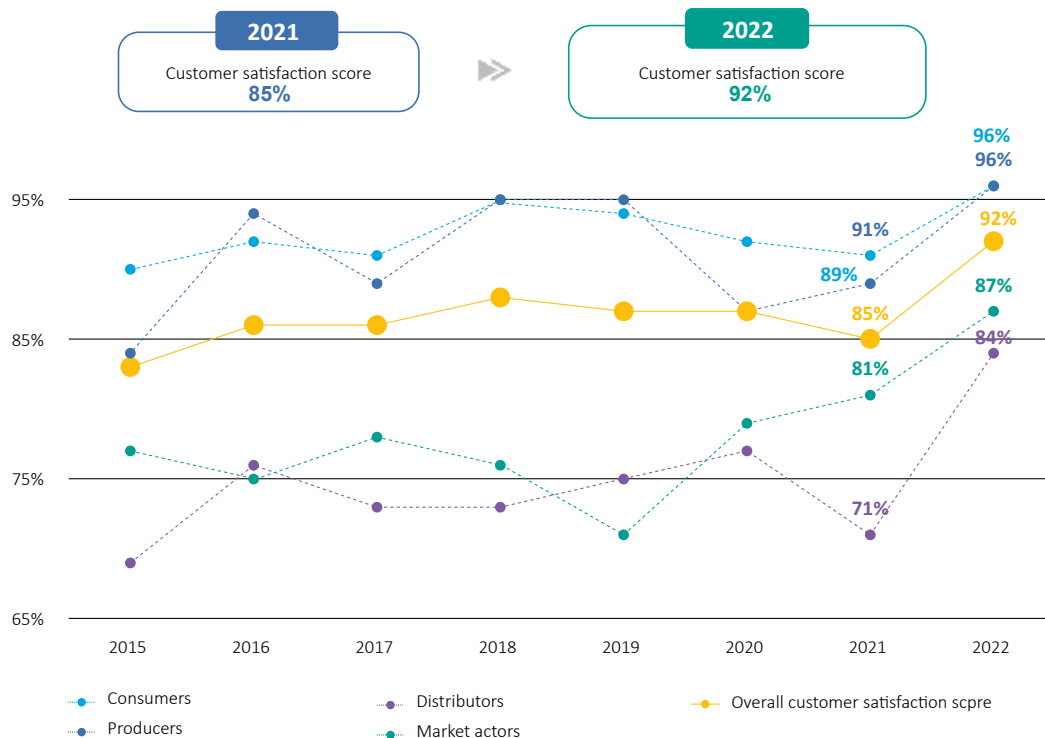
Survey participants were able to express their satisfaction level as one of four levels: "very satisfied/satisfied/not very satisfied/very dissatisfied" (previously, a 10-point scale was used). The satisfaction rate comprises both very satisfied and satisfied respondents.

The overall customer satisfaction score rose by 7 points in 2022 to 92% (from 85% in 2021 and 87% the two years before that). This is the highest score ever achieved in any customer segment, and the increase was observed in every segment.

A significant increase in satisfaction was recorded in the market actor segment, which reached a score of 87%.

The second noteworthy development concerned distributors, especially Enedis: the distributors' satisfaction score had fallen to 71% in 2021 (and only 58% for Enedis) but rose this year to 84% (78% for Enedis).

The proportion of customers declaring they were "very satisfied" was high (34% of respondents).



(1) Contrat d'accès au réseau public de transport d'électricité.

Satisfaction rates were up on every theme, but two items lagged behind in all customer segments:

- the portals for access to RTE's information systems: performance, complexity of access, availability;
- work scheduling: schedules, length of work periods, transparency.

The comments made by respondents who declared they were satisfied (92%) highlighted the following points:

- relations with the company: quality of relations, availability, attentiveness;
- follow-up and support: response to requests, quality follow-up, adaptation, regular contact;
- employee skills: reaction time, competence, professionalism.

Of the respondents who declared they were dissatisfied (8%), the comments concerned:

- follow-up and support: lack of coordination between their different contacts, poor quality follow-up, insufficient consideration of their needs and constraints;
- technical quality: poor quality digital tools, network disruption, voltage dips, power cuts;
- transparency in communication: work scheduling problems, slow response time.

— Maintaining infrastructure and information system security against external threats

Infrastructure security

In 2022, RTE updated its operator security plan to take account of the impacts of organisational changes and the creation of new entities in application of the corporate mission statement (particularly the 24-hour control centres) on the security of its physical infrastructures and information systems.

The company is also implementing a detailed plan to ensure a secure power supply for the 2024 Olympic Games sites in the Paris region and other areas of France, working in close collaboration with Enedis and the authorities organising the Games (Paris 2024).

Information System security

For RTE, in cyber-security terms 2022 was a year in which threats grew more and more significant. The

war in Ukraine and the crisis in the European energy sector added to the tension.

As well as work to reinforce infrastructures providing protection against the exterior, RTE is repeating a cycle of audits of its most critical systems, to make sure they are robust in terms of cyber-security. Network digitisation is also being supported by significant engineering work by the cyber teams. Reinsourcing of surveillance teams and incident response units is now complete, and this has strengthened RTE's control over cyber-security.

As the human factor plays an important role in a company's cyber-resilience, RTE is setting up a system with more frequent, more targeted phishing simulations, to give employees and contractors practice at dealing correctly with malicious emails. RTE has also developed a new training campaign that will begin in early 2023.

RTE is involved in security work for the major sports events that will take place in France in 2023 (the rugby world cup) and 2024 (the Olympic Games).

Finally, as electricity system security depends not only on RTE but on all actors, RTE has actively participated in French and European working groups preparing cyber-standards that they will all be required to apply.

7.2.3.2 Developing flexibilities for electricity system operation

Offering a flexible service for consumption and transit, controlling demand and adapting the network to changing lifestyles.

Flexibility services are presented and explained in sections 5.3.2.1 and 5.3.2.2, which respectively concern flexibilities for the electricity system and market mechanisms.

Preparatory measures for operation of the electricity system in the future are discussed in section 5.3.2.

Regarding market mechanisms (5.3.2.2), 2022 was marked by continuing cooperation at European level with all stakeholders concerned by the application of network codes and the Clean Energy Package.

7.2.3.3 Adjusting to the consequences of climate disruption

Strengthening infrastructure resilience and making working practices and conditions safe and secure against the effects of climate disruption.

Climate-related events are likely to become more and more serious, with consequences for the network infrastructure. RTE invests in installations that in some cases are intended to last for decades, and it is thus crucial to identify any weaknesses in the existing infrastructure, links and substations, particularly their sensitivity to temperatures and flooding.

To cope with heatwaves, a “hot weather plan” has been in place since the summer of 2020. This plan limits the transit through 1,200 overhead power lines classified as sensitive to high temperatures. The goal is to maintain the electricity supply for customers while limiting the risks of safety distance breaches by reducing the transit volumes. The summer of 2022 was particularly hot, and the plan had to be activated several times.

For its tertiary buildings, RTE distributed a guide to its employees and property project managers entitled “Greater comfort in our office buildings: good practices for a cool summer”. This guide was written in partnership with the think tank négaWatt, and sets out options for coping with high temperatures in the most energy-sufficient way possible: first by changing behaviour, then by using technical solutions.

RTE is striving to ensure that its technical recommendations are adequate for the future climate, in order to design future infrastructures that are robust to climate change from the outset. This has led the company to launch a **Resilience project** to objectify the weaknesses based on climate scenarios for 2050, developed with France’s national weather office Météo France from hypotheses established by the IPCC.

As of 2022, providing a description of the measures taken to address risks of heatwave and flooding is an obligation under the European Taxonomy regulation: see section 7.3.3 “Aligned Activities – analysis”.

7.2.3.4 Adaptation and support for the energy transition

Integrating the changing energy mix into the network, particularly renewable energies and low-carbon energies, and supporting new uses and demands from customers and regions.

The necessity of maintaining high **electricity quality** and **customer satisfaction** is discussed in section 7.2.3.1.

— Supporting RTE’s customers with their connection plans

To attain industry decarbonisation objectives, France’s national low-carbon strategy (SNBC) aims for 70% electrification of energy uses by the industrial sector.

To achieve this, and realise the country’s reindustrialisation ambition, the French government has launched a €100 billion business recovery plan that includes €8 billion specifically for decarbonisation. This plan aims to help industrial companies invest in lower carbon-emitting equipment, in two principal ways: investing in industrial processes that consume less energy, or produce lower greenhouse gas emissions. Examples are investing in development of green hydrogen, and decarbonising industrial heat.

This plan has direct consequences for RTE, as a growing number of industrial operators want very high voltage power connections. The actors concerned are currently concentrated in specific industrial zones (e.g. France’s officially designated Major Maritime Ports, industrial platforms).

Echoing RTE’s past process of forward planning and shared work to manage incorporation of renewable energies into the network, the situation has been carefully considered in order to organise connection of several consumers in a single zone. This resulted in a new connection service offering, designed to share the cost of connection to the public transmission network fairly between several consumers who want to be connected. The new offering facilitates development of certain projects, by sharing the costs between customers making a joint or simultaneous application for connection.

— Facilitating change for customers

In parallel to the above steps, 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 start a redesign of the services portal which passed the milestone of 20,000 customer accounts in early December (a total 20,647 accounts have been created on the Services Portal since it was opened in June 2017).

7.2.3.5 Responsible purchasing and sustainable local action

Contributing to socio-economic development in the areas where RTE operates, by maximising the social and environmental impacts of the company's purchases and building sustainable relations with suppliers in a partnership dynamic.

RTE's purchases form an essential lever for addressing societal and environmental issues. The company's responsible purchasing policy gained official recognition in 2019 when RTE obtained the "Responsible supplier relations and purchasing" label. This label is awarded by the French corporate mediation service and the National Purchasing Council, and was renewed for RTE in early 2022.

RTE's purchasing and logistics policy, signed by members of the Executive Board on 27 September 2022, reasserted RTE's commitment and the four key areas of the company's responsible purchasing charter. Each of these areas is illustrated below with an example of the related action taken by the company in 2022.

— Maintaining mature relations with suppliers, for mutual enhancement of practices

Supplier invoice payment times are a major preoccupation at RTE. A task force was set up in 2021 to examine the issue, and it reported its conclusions to the COMEX in July 2022. Following the work of the task force, measurement and alert systems were installed and information sharing between all the actors was improved. Certain actions will be pursued to continue to shorten payment times, and more generally improve RTE's control over the issue.

Paying attention to suppliers is essential, to benefit from feedback and adjust the company's practices

where relevant. With this in mind, in 2022 RTE launched its first very own **"supplier barometer"** survey. An action plan based on the feedback collected will be introduced in 2023.

Supplier evaluation is also fundamental for more mature supplier relations. Contractors working on RTE's principal master contracts are evaluated after completion of every order, on the following four criteria: quality/timeliness, safety, environment, and innovation. This evaluation is complemented by supplier audits, and the results are shared with suppliers each year and taken into consideration when selecting suppliers for future contracts or contract lots.

During 2022, RTE also launched its second **"Supplier Trophies"** awards. Suppliers were encouraged to propose solutions for challenges relating to industrial excellence, resilience, health and safety and responsible purchasing. The scheme, in which RTE engages with suppliers in a continuous improvement approach involving strong, serious collaboration, attracted 140 participants, and 17 awards were made.

— Promoting satisfactory working conditions for RTE and its suppliers as regards safety and the environment

In addition to the many actions for contractor health and safety taken through RTE's policy for health, safety and quality of life in the workplace, specific levers for purchasing and contractual relations are used to improve control of the risks and promote satisfactory working conditions for suppliers. The main measures introduced were published on RTE's website in December 2022.

Talking to suppliers is also necessary to make collective progress. On 31 May 2022, RTE held a meeting with around fifty of its principal suppliers to share ideas on health and safety. The meeting was an opportunity for RTE to present its new 2022-2024 policy for health, safety and quality of life in the workplace and inform suppliers of the work situations that lead to the most frequent and most serious accidents. To understand suppliers' difficulties and what they want from RTE, the meeting included workshops examining five themes: site visits, safety for temporary staff, safety and management of subcontractors, upstream consideration of safety before projects begin, and safety issues in a context of business growth.

— Reducing the environmental footprint of purchases

The “**greener choice**” campaign continued in 2022: a second open letter to suppliers was signed on 29 August by RTE and nine other European transmission system operators. They are calling for coordination and consolidation of methods for evaluating and quantifying more sustainable manufacturing processes, services and logistics by the operators’ principal suppliers.

2022 also saw the launch of the “**biodiversity ambition club**”, set up with thirty of the biggest suppliers, for better sharing of the necessary actions to protect biodiversity. The work done by RTE and its suppliers formed the basis for the biodiversity guide entitled “The ABC of worksites” which was issued in September 2022.

RTE is also working to develop the **circular economy** for the materials and equipment it uses, and to reduce the carbon footprint of its purchases. Steps have been taken such as the carbon reporting now required of suppliers, and introduction of the “raw materials pass” accreditation system.

In 2022, 45% of purchases included at least one environment-related factor and 27 projects were monitored as **eco-sites**.

— Continuing inclusive purchases (from the protected and sheltered sectors and entities helping unemployed people back into work) and contributing to local economic vitality (very small, small and medium-sized businesses)

RTE contributes to **local economic development**. Several levers to boost employment in the regions are activated, such as dividing contracts into lots, and holding regional meetings for businesses (with the support of local Chambers of Commerce and Industry) so that local entities can respond to consultations launched by RTE.

In 2022, the amount of RTE’s direct purchases from small and medium-sized businesses was €476 million. RTE’s objective is to make at least €440 million of purchases from small and medium-sized businesses in 2023.

Approximately 85% of RTE’s purchases are from suppliers located in France, corresponding to a total of €1,726 million. In 2022, of RTE’s 18 non-French contractors, 15 are in the EU (€314 million) and the other three are in countries with no salient risks for respect of human rights or fundamental freedoms (Norway, the United Kingdom, the United States).

As an active member since 2013 of the association **Pacte PME** which promotes trade with small and medium-sized businesses, RTE applies the good practices recommended by the association. It regularly publishes “calls for ideas” and “calls for solutions” and participates in the association’s own survey.

As well as this focus on small and medium-sized businesses, RTE’s actions also involve giving suppliers incentives to hire people who have lost touch with the job market, and signing contracts with local stakeholders to **help more people find work**. These actions led to over 30,600 hours of work for unemployed people during 2022.

Finally, RTE is continuing to increase its purchases from the protected and sheltered sector through its Disability agreement, with the support of France’s GESAT network, a national association of entities that aim to promote employment of the disabled. These purchases totalled €3.3 million in 2022 and an objective of €3 million has been set for 2023.

7.2.4 OPTIMISING

— RTE’s environmental commitments

RTE’s environmental action is founded on a general environmental policy (updated in 2022) that defines its ambitions, and an environmental management system that includes a programme for action at national and regional level, called the Environmental management programme.

— Environmental management system

RTE has held ISO 14001 certification for all of its activities since 2004, and has an audit performed by an AFAQ⁽¹⁾-accredited organisation every year. The most recent renewal audit by AFNOR⁽²⁾ Certification was in 2022. It found no points of non-compliance and upheld RTE’s certification, an official recognition of RTE’s continuous improvement policy for environmental action.

(1) Association française pour l’assurance de la qualité.

(2) Association française de normalisation.

7.2.4.1 Fighting climate change and protecting biodiversity and landscapes

Pursuing the company's strategic ambition while ensuring good environmental performance and integrating its structures into the landscape.

7.2.4.1.1 Reducing greenhouse gas (GHG) emissions

Fighting climate change is a priority for public and private actors worldwide. The Paris agreement has set ambitious targets to drive the ecological transition that is necessary to reach net-zero by 2050. In France, these targets are expressed in the national low-carbon strategy (SNBC). The European Union has taken its ambitions further with the Green Deal, which is currently being adapted into proposed directives for the "Fit for 55" package.

As network operator, RTE is also taking steps to improve its own industrial footprint. **In 2022 the company continued its endeavours to mitigate the impact of its emissions.**

In 2022, RTE's GHG indicator, which represents the CO₂ equivalent produced by scopes 1 and 2, was 487 ktCO₂eq.

For its GHG emissions reporting, RTE now goes further than the regulatory requirements. It publishes its scope 1 and scope 2 emissions in its management report every year, and every four years issues a specific full "BEGES⁽¹⁾" GHG emissions report including scope 3 emissions (this will be mandatory from 2023). The most recent 4-year report concerned the year 2018 and the next, to be published during 2023, will concern the year 2022. For this forthcoming 2022 GHG report, RTE is improving the scope for inclusion of emissions. The report will include emissions by the four fully-owned subsidiaries (only a small portion of these emissions were incorporated in the 2018 report). RTE also plans to enhance the calculation methods for scope 3 emissions.

• Energy efficiency action plans for electricity losses

Part 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 2022 these losses totalled 10,084 GWh⁽²⁾, or 2.302% of total injections (from production sites and imports). The significant decrease in losses compared to 2021 is notably explained by lower consumption (in addition to the heat sensitivity effect) in the last few months of the year, driven by a price effect on industrial operators' invoices, and an energy sufficiency effect, but also due to a substantial downturn in France's nuclear power output which significantly affected the level of France's net power export balance.

The GHG impact of these electricity losses (or network losses) results from the generation of extra electricity to compensate. The emissions related to these losses are therefore 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⁽³⁾ used in the ecological transition agency ADEME's *Base Carbone* database).

In 2022, electricity losses from the network thus led to emissions of 522 ktCO₂eq (383 ktCO₂eq in scope 1 and 139 ktCO₂eq in scope 3).

The factors determining the scale of electricity losses (consumption level and location, generation plans, international transit, etc.), are beyond RTE's control, and as a result RTE does not have sufficient levers to manage the rate of losses from the transmission network. Nevertheless, RTE always seeks to limit 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 greenhouse gas emissions. Adjusting operating plans to reduce these losses is a constant concern for RTE's operators, and their actions reduce the annual volume of losses by around 1.5%.

The greenhouse gas emissions generated by electricity losses are included in the scope of the European carbon market, and are consequently measured and valued in RTE's network studies (in the same way as redispatching and unevacuated energy) for an ambitious projection of the European emissions trading scheme (EU-ETS).

• Actions for energy efficiency in substations

As part of its energy efficiency action, RTE set up an oversight committee for consumption by substations. This committee has three main focuses:

(1) Bilan des émissions de gaz à effet de serre.

(2) Provisional figure.

(3) Emissions are calculated using the 2021 emission factor excluding network losses, which is the most recent emission factor available in the *Base Carbone* database.

identifying opportunities to reduce substation power consumption, examining their feasibility and cost-effectiveness, and finally implementing the resources to put them into practice.

• Energy efficiency in buildings

Following publication of the “tertiary decree” for energy savings in tertiary buildings in France, RTE constructed an action plan for the scope concerned by the decree. The decision has been made to meet the targets defined in this decree for sites where refurbishment or construction work will be done during the periods covered by the TURPE 6 tariff (2021-2024) and the TURPE 7 tariff (2025-2028).

• Digital responsibility

In 2022, RTE took part in the WeNR⁽¹⁾ campaign run by the digital responsibility association *Institut du Numérique Responsable*⁽²⁾, to measure the quantitative footprint of its information system and assess the maturity of its digital responsibility.

The company also elaborated a Digital Responsibility roadmap to accelerate and extend the relevant actions.

The renewal audit for RTE’s ISO 14001 certification commended RTE’s digital responsibility approach incorporating ecodesign for software (SonarQube measurement).

• SF₆ action plan

The direct emissions by RTE principally relate to leaks of SF₆, a powerful greenhouse gas with a global warming potential that is 23,500 times stronger than CO₂. This synthetic gas is used in the electricity industry as an insulator, especially for metal-enclosed substations because it is compatible with compact design, and in overhead circuit-breakers. SF₆ discharge may be caused by:

- accidental leaks from facilities (leaks due to damage);
- ageing facilities (leaks while in normal operation);
- maintenance operations or dismantling of equipment at the end of its life (leaks during special operations).

In 2022, for a total installed mass of 576 tonnes of SF₆, emissions amounted to 3.82 tonnes, or 89.8 ktCO₂eq.

As well as RTE’s ongoing efforts through the policy to cut air pollution and control SF₆ leaks, and the work done on metal-enclosed substations (under the €630 million plan to replace the substations generating the largest leaks over the period 2020-2035), significant developments in 2022 were:

- industrialisation of the process for plugging SF₆ leaks at metal-enclosed substations (the Colibri process), particularly its rollout to the metal-enclosed substations producing the most emissions,
- participation in the European LIFE project concerning 245 kV circuit-breakers using alternative gas, together with a constructor of this kind of equipment,
- scheduling of work to introduce alternative-gas 100 kV circuit-breakers (the three available technical solutions – fluoronitriles, O₂/CO₂ and vacuum – will start to be applied in the first quarter of 2023).

Finally, in late 2021 RTE decided to update the internal carbon price used to value SF₆ discharge under the trajectory derived from the 2019 Quinet report. That price is now €250/tCO₂eq in 2030.

RTE’s objective is to bring SF₆ discharge below 4.5 tonnes by 2025.

• Energy-sufficient employee travel

As the pandemic situation eased, it was possible to measure the effects of RTE’s policy for employees’ work-related travel, introduced in 2021. This policy encourages employees to evaluate the necessity of any trip before they travel, then to examine all possible alternatives such as use of remote communication tools. Finally, it promotes use of transport methods that have a low environmental impact.

For its fleet of light vehicles, RTE respects the rate set by the French law on mobilities and keeps at least 40% of low-emission vehicles (for vehicles replaced annually). In 2022 the rate was 45%⁽³⁾.

For journeys between home and work, RTE has made its annual Sustainable Travel allowance of €400 for each employee using alternative travel to a private car. In August 2022, RTE also introduced a new agreement on working from home, which had led to a decrease in commuter travel between 2019 and 2022.

(1) WeNR (institutnr.org).

(2) INR – Think Tank (institutnr.org).

(3) The rate for 2022 is calculated on the basis of vehicle orders, as the year was marked by tensions on the automobile markets and unprecedented delays in deliveries of new vehicle orders from all automakers.

• Raising employee awareness

By the end of 2022, over 1,500 employees had completed RTE's online course on the topic of climate change, designed to build employee awareness of the issues for RTE and the importance of their own individual actions. Climate Fresco workshops are also regularly held at the initiative of employees or managers.

7.2.4.1.2 Preserving Biodiversity

Actions for plant and animal life and the landscape

RTE is continuing to implement its **action plan for the period 2020-2024**. This action plan was also filed as part of the *Entreprises engagées pour la nature* (Companies committed to nature) – Act4 Nature France initiative and the Act4nature International alliance⁽¹⁾. This is a clear declaration of RTE's commitments in nine areas relating to vegetation management beneath power lines, reducing the use of chemical weedkillers, protecting birdlife, identifying the biodiversity impacts of the company's activities, and stakeholder relations.

• Protecting birdlife and installing power line markers

RTE installs special devices to limit the impact of its facilities on birds. Through its policy of using line markers to protect birds, the company has taken steps to eliminate the most sensitive points of bird collision risks. These markers are visual devices installed on conductors and earth wires to make them more visible, and therefore lower the risk of collision for birds.

Slightly more than 2,400 km of overhead lines carried markers to protect birds by the end of 2021.

RTE is a member of France's national birdlife committee (CNA⁽²⁾) which involves associations (LPO, FNE), 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 as is the case in the Auvergne-Rhône-Alpes region.

• Developing biodiversity below the lines

90% of RTE's power lines pass above natural or agricultural zones, and RTE promotes biodiversi-

ty-friendly vegetation management practices in the land beneath its lines.

These practices consist of restoring or creating natural open environments, maintained through grazing, late mowing or selective cutting. They are compatible with electricity grid safety. They improve the integration of facilities into the surrounding countryside, encourage biodiversity and good relations with third parties, while also reducing maintenance costs.

By the end of 2022, a total 1,719 hectares of land had been made biodiversity-friendly. RTE has made a commitment through the *Entreprises engagées pour la nature* (Companies committed to nature) – Act4 Nature France initiative to raise this to 2,300 hectares by the end of 2024.

Action to promote 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.

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 enhance relevant knowledge. It implements the avoid-mitigate-offset-monitor (ERC-S⁽³⁾) principle and supports 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 engaged in several research and development projects with scientific partners, to study and control the potential ecosystem impacts of underwater electricity cables. These projects are ongoing and pursue three principal aims:

- i. studying the potential effects of installation and operation of undersea electricity cables.
- ii. characterising the dynamics of the environments where offshore floating and fixed-foundation wind farms and their connection to the network will be located.
- iii. exploring innovative solutions, for example through the BIOMIM – *Lignes de vie marine* (marine lifelines) project, which concerns bio-inspired solutions for offshore wind farm con-

(1) The *Entreprises engagées pour la nature* – Act4 Nature initiative is a State-sponsored initiative linked to the French Biodiversity Office (Office français de la biodiversité – OFB) that has existed since 2018, partly thanks to RTE. It took over from the *Stratégie nationale biodiversité*, which had around thirty members but very few businesses, and then the Act4Nature initiative. RTE is also a member of the **Act4Nature International alliance** (which works to promote biodiversity).

(2) Comité national avifaune.

(3) Éviter, réduire, compenser, suivre.

nection. The objective is to combine a solution inspired by nature with a marine infrastructure that can sustain regeneration of ecosystems.

7.2.4.2 Preserving resources, and the circular economy

Optimising use of resources, developing ecodesign, the full life-cycle approach and biomimicry in the design and management of structures.

Given the scale of environmental challenges, RTE's environmental management system is preparing for an **ecodesign-based** circular economy, to give greater consideration to environmental factors right from the design stage of its projects, policies and purchases, taking a full life-cycle approach. The chief aims of this approach are to reduce greenhouse gas emissions, and influence consumption of extracted materials.

Actions for the circular economy and waste management

• The circular economy and waste management

This theme is now part of the obligations relating to the Taxonomy Regulation: see section 7.3.3.2 "Doing no significant harm to any other environmental objective" – Transition to a circular economy.

RTE encourages waste recycling, promoting subsequent reuse by any method, including for producing energy. For the 280 million tonnes of waste produced in 2022, the recycling rate at RTE was 92%.

This result is partly explained by the company's introduction of "eco-sites" for all operations involving significant environmental stakes. These sites achieve very high recycling rates (above 95%), actively stimulate reuse of building materials, and make it possible to avoid or mitigate other environmental impacts (concerning biodiversity or GHG emissions).

A total 27 eco-sites existed in 2022, and more are planned for the next few years.

2022 was also the year in which the French government's *trackdéchets* application for hazardous waste traceability was put into application. It is now interconnected with RTE's ADEN application. In the short term, the ADEN/*trackdéchets* interface will

improve the quality of tracking information received from freight carriers and waste processing centres.

RTE is examining the development of a circular economy action plan that will aim to structure its ambitions from 2023. This plan should better reflect the fact that raw materials are becoming increasingly scarce, to make supplies more secure, and to limit the environmental footprint of materials extraction operations.

Anti-pollution action

RTE takes a proactive approach to reducing its environmental impacts and preventing pollution of all kinds caused by its activities. This strategy includes preventive action, such as employee training or installation and compliance 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 watertight, 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.

The volume of oil leaks into the environment in 2022 was 92.1 m³, with a recovery rate of 51%.

This annual result reflects:

- a substantial volume of leaks from the "substations" category (72.4 m³), mainly due to a fire at a transformer at the Boutre site (Marseille), which accounted for 98% of substation oil leaks. About 1 m³ was actually discharged in liquid form and the rest went up in smoke. Practically all the liquid oil, mixed with firewater, was recovered and pumped into the remote (retention) tank. Several large oil leaks (>1,000 l) – located in other substations – were fully recovered in the remote (retention) tank);
- a volume of leaks from the "Links" category (19.7 m³), mainly due to an underground link in the area of Paris, following a damage at the end of 2021. Investigations were necessary (and have caused leaks) until 2022.

To bring down the volumes of oil leaked into the environment, RTE has introduced:

- replacement programmes for high-voltage equipment in the substations category that produces the most leaks or has the greatest fire risks (this limits oil leaks at source);
- a monitoring and compliance programme covering the retention facilities for high-voltage equipment (to capture oil in the event of a leak);
- a replacement programme for oil-filled underground links (to remove all risk of leaks by replacing the oil with a synthetic insulation liquid);
- dedicated processes to improve control over environmental emergencies (training employees in how to handle such incidents).

• Action against water and ground pollution by PCBs

RTE no longer purchases equipment containing PCBs (as explained in part 7.3.3 "Aligned activities: analysis", this is a technical criterion defined in the Taxonomy regulation).

Some of RTE's facilities may contain polychlorobiphenyls (PCBs), particularly transformers in substations installed before 1994. To honour its commitment to eliminate or decontaminate all its PCB-polluted equipment (>50 ppm) by 31 December 2025, RTE has a specific plan that was approved by a ministerial decision of April 2014. An initial amendment was made to this plan in 2019 to take account of releases of polluted oil, and a second amendment was made in 2022 to include a pool of capacitors.

By the end of 2022, RTE's pre-second amendment plan was 96% complete (193 of 200 facilities have been treated). Work is progressing on track to meet the 2025 deadline for treating all RTE equipment containing PCBs.

• The "zero-phyto" objective

In 2021, RTE adopted a new policy, "zero-phyto II", to end the use of phytosanitary products at substations. It will be applied progressively over time, in order of environmental priority. This new policy has been validated by the CRE and will receive specific infrastructure investments by RTE in the next few years.

The phytosanitary products RTE uses at its substations are essentially weedkillers with active ingredients that destroy vegetation. RTE made commitments in the 2010 "Ecophyto" plan to monitor and analyse the use of such products through an-

nual reporting, in order to confirm that the weeding work done complies with regulations.

To reduce its environmental impact, RTE has experimented with differentiated green space management and alternative weeding practices. The results of those experiments formed the basis of 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 2021, six of the seven regional substation maintenance contracts were renewed with inclusion of the obligation to use alternative weeding methods at sites of less than 5,000 m².

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

RTE currently maintains around 2,300 hectares in its electricity substations, including around 1,400 hectares where phytosanitary products are used, which will be progressively converted. The site conversion rate to the "zero-phyto" policy was 28% at the end of 2022. The employees working at electricity sites that already follow this approach emphasise the benefits in terms of quality of life at work.

Professional development for all employees

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

RTE's environmental professionalisation group maintains and develops skills in this field by offering employees 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 2022 for example, the Skill Development Plan was generally respected, and 41 in-person training courses were held. Two new e-learning courses (on Waste management and Polluted sites and land) were introduced.

To meet the traceability requirements for employees who have taken simple SUE tests, RTE has set up and tested an In-House Training Campaign SUEM in which the employees in the target groups can be registered and their tests monitored over three years. It will be generalised from 2023 onwards.

7.2.5 SUMMARY OF CSR CHALLENGES BY TYPE OF SUSTAINABILITY ISSUE

Challenges underpinning the CSR policy	Definition	Environment	Social (RTE employees)	Societal (external stakeholders)	Governance
FUNDAMENTALS					
Governance and business ethics	Introducing policies and mechanisms to promote ethical behaviour in business			X	X
Diversity, equal opportunities and inclusion	Maintaining the right conditions to promote diversity, inclusion and equal opportunities both inside the company and in the choice of partners		X	X (for partners)	
Health, safety and wellbeing of internal and external stakeholders	Protecting health and safety and developing quality of life at work for the company's employees, suppliers, and all third parties		X	X	
Skill development and talent management	Anticipating transformation in the company's activities; supporting development of human capital and the competence and talents of employees, suppliers and partners		X	X (for partners)	
INFORMING					
Developing a forward-looking vision for French and European public energy policies	Sharing RTE's expertise and knowledge to inform the electricity landscape, by making available data, studies and prospective planning documents	X		X	
Transparency, dialogue and co-construction with stakeholders	Establishing policies and mechanisms that ensure a high level of transparency, dialogue, and consultation with stakeholders	X	X	X	X
OPERATING					
Network performance, crisis prevention and management in France and Europe	Ensuring full access and constant reliability in the network, and maintaining security for infrastructures and information systems in the face of external threats			X	
Developing flexibilities for electricity system operation	Offering a flexible service for consumption and transit, controlling demand and adapting the network to changing lifestyles			X	
Adaptation and support for the energy transition	Integrating the changing energy mix into the network, particularly renewable energies and low-carbon energies, and supporting new uses and demands from customers and regions	X		X	

Challenges underpinning the CSR policy	Definition	Environment	Social (RTE employees)	Societal (external stakeholders)	Governance
Adjusting to the consequences of climate disruption	Strengthening infrastructure resilience and making working practices and conditions safe and secure against the effects of climate disruption	X	X (for working conditions)	X	
Responsible purchasing and sustainable local action	Contributing to socio-economic development in the areas where RTE operates, by maximising the social and environmental impacts of the company's purchases and building sustainable relations with suppliers in a partnership dynamic	x		X	x
Optimising					
Fighting climate change and protecting biodiversity and landscapes	Pursuing the company's strategic ambition while ensuring good environmental performance and integrating its structures into the landscape	X			
Preserving resources, and the circular economy	Optimising use of resources, developing ecodesign, the full life-cycle approach and biomimicry, in the design and management of structures	X			

7.3 GREEN TAXONOMY

7.3.1 KEY POINTS AND BACKGROUND

The **Taxonomy Regulation** was adopted in June 2020 by the European Parliament and Council.

It sets out common classification criteria for the whole of the European Union to define environmentally sustainable economic activities, establishing six environmental objectives.

Those six objectives are:

- climate change mitigation;
- climate change adaptation;
- the sustainable use and protection of water and marine resources;
- pollution prevention and control;
- the transition to a circular economy;
- the protection and restoration of biodiversity and ecosystems.

According to two delegated acts published in April 2021 providing further information on the two climate objectives, electricity transmission

makes a substantial contribution to climate change mitigation, particularly through development of interconnections between European countries and connection of renewable energies. It therefore supports the decarbonisation of energy sources.

Article 8 of the European Taxonomy Regulation, which was to be covered by a delegated act defining the terms of application, introduced **transparent reporting obligations**.

Accordingly, as of 2021:

- RTE publishes information about its eligible activities as defined by the European Union's green taxonomy⁽¹⁾, corresponding to the first two sustainable development objectives cited above:
 1. reducing CO₂ emissions,
 2. protecting the economy against the effects of climate change;
- RTE publishes three key performance indicators that reflect the annual contribution to activities that are eligible for the European Taxonomy:
 - sales (turnover),
 - operating expenditure,
 - capital expenditure.

⁽¹⁾ The Climate Delegated Act released on 21 April 2021 – the activities are listed in Annex I (climate change mitigation) and Annex II (climate change adaptation).

In 2022, RTE made adjustments to its Taxonomy reporting, based on the “alignment” of activities.

Under the Taxonomy regulation, an eligible activity is aligned, and therefore sustainable, if it meets all of the following three criteria:

1. It makes a substantial contribution to technical criteria as defined by the regulation⁽¹⁾ – see the technical analyses in 7.3.3.2 and 7.3.3.3.
2. It does no significant harm to any other environmental objective, also as defined by the regulation⁽³⁹⁾ – see the technical analyses in 7.3.3.2 and 7.3.3.3.
3. It complies with minimum safeguards in the following four fields: human rights, corruption, taxation, competition law – see 7.3.3.4 “Compliance with minimum safeguards”.

Starting from 2022, it is mandatory under the Taxonomy regulation to publish three key performance indicators (sales (turnover), capital expenditure (CapEx) and operating expenditure (OpEx)) for aligned and non-aligned activities. These indicators concern data for 2022 and there is no comparative information for 2021.

7.3.2 ELIGIBLE ACTIVITIES: ANALYSIS

Eligible activities are activities that contribute to the first two climate objectives cited above.

A list of these activities by sector is given in the delegated act⁽¹⁾.

In accordance with the Taxonomy Regulation, the RTE Group has identified the portion of its activities that are eligible as contributors to the climate change mitigation and adaptation objectives.

Electricity transmission is one of the taxonomy-eligible activities (paragraph 4.9, Transmission and Distribution of Electricity, of Annex II to the regulation). It is defined in the annex as “Construction and operation of transmission systems that transport the electricity on the extra high-voltage and high-voltage interconnected system”.

This is an “enabling activity”⁽²⁾ under the Taxonomy regulation.

Electricity transmission is the sole activity of RTE SA, and the principal activity of the RTE Group (see note 5 to the consolidated financial statements, “Segment reporting”). The Group considers that all transactions generated by RTE SA contribute to this eligible activity.

Analysis of the other Group entities’ eligibility continued in 2022. As they are non-significant, they were finally not considered eligible and are therefore included in “non-eligible activities” in the table of indicators in section 7.3.4.

7.3.3 ALIGNED ACTIVITIES: ANALYSIS

The requirement to report alignment criteria in 2022 concerns the first two climate objectives. The Delegated Acts for the other objectives have not yet been published.

7.3.3.1 Analysis of alignment: organisation and method

To assess the alignment of the electricity transmission activity by reference to the technical criteria set out in the regulations, RTE’s COMEX set up a working group comprising the company’s Finance Division (which headed the Group), Environment Division, CSR Division and Strategy Division.

The climate-related risks of climate change adaptation and climate change mitigation are among the company’s major risks (see section 6.2.2.2 “Summary of major risks and principal control measures” – respectively the “Infrastructure resilience” and “Environment” risks). Consequently, they are covered by the risk management processes presented in section 6.2 “Risk management”.

(1) Annex 1 and Annex 2 to the Delegated Act associated with the Green Taxonomy, respectively concerning climate change mitigation and climate change adaptation, June 2021.

(2) Enabling activities are defined in the taxonomy as activities that enable other activities to make a substantial contribution to one or more of the six environmental objectives, and thus qualify as contributing substantially to one or more of the environmental objectives.

7.3.3.2 Technical analysis of alignment with the “climate change mitigation” objective

— Substantial contribution to technical criteria

The activity of electricity transmission meets the technical criteria of alignment, since RTE builds infrastructures whose main purpose is to increase the capacity to use electricity produced from renewable sources (see 5.3 “RTE’s industrial strategy is confirmed” and the 10-year network development plan⁽¹⁾), not just in France but across the whole interconnected European network.

— Doing no significant harm to any other environmental objective⁽²⁾

Climate change adaptation

Physical climate risks that are important to the activity were identified by assessing climate-related risks and vulnerability. Climate projections and impact assessment are based on best practices and take account of state-of-the-art scientific techniques.

The principal climate risks (as defined in the Taxonomy regulation) identified by RTE with respect to its electricity transmission activity (transmission infrastructures) are the following:

• Changing temperature/heatwaves/heat stress

The rising temperature issue primarily concerns overhead power lines, and the company is currently taking action to address it (the hot weather plan, extension of studies to 2050).

It will have a very limited impact on underground power lines.

At electricity substations, the transformers are fitted with alarms to avoid any destructive overheating, and the equipment ageing projections to 2050 do not indicate any impact of climate change on the durability of equipment. Substation equipment that is currently in use (circuit breakers, disconnectors, combined instrument transformers) has some margin with regard to the temperature criterion.

• Cyclones, hurricanes, typhoons/storms/tornados

Following the weather events (strong gales) of December 1999, in 2002, RTE began a programme to make the power grid secure in winds of up to 150 km/h on flat land and 180 km/h near coastlines.

This programme covers around half the network of overhead lines.

The secure network covers (i) supply to all substations that consume power or are necessary for electricity system safety, and (ii) all significant crossing points (where power lines pass above housing, railway lines, motorways or other major roads).

• Water stress/drought

In very dry conditions underground lines are likely to be affected, because less of the heat they generate could be evacuated. Impact studies are currently being finalised.

• Sea level rise/floods

In 2021, RTE signed a partnership with the French public-sector reinsurer Caisse Centrale de Réassurance (CCR), which is modelling events for RTE: river flooding, runoff water flooding, and submersion by the sea for all substations and pylons. This modelling is also based on climate scenarios derived from current climate projections to 2050. The variables modelled are the flow rates for runoff hazards, and high-water levels for the hazards of river and coastal flooding, for different periods (within 20 years, 20 to 50 years, 50 to 100 years, 100 to 200 years).

Utilisation of the results of ongoing studies will continue in 2023. They will provide information to define the adjustments to be made to both existing and future installations, while seeking the optimum technical/economic balance.

Transition to a circular economy

The Taxonomy regulation states that **to respect this criterion, companies must have in place a waste management plan** that “ensures maximal reuse or recycling at end of life in accordance with the waste hierarchy, including through contractual agreements with waste management partners, reflection in financial projections or official project documentation”.

Although it has no formal waste management plan, RTE takes concrete action for management of waste that ensures maximal reuse or recycling at end of life, in accordance with the waste hierarchy (the relevant actions are described in section 7.2.4.2 “Preserving resources, and the circular economy”).

(1) Le schéma décennal de développement du réseau | RTE (rte-france.com).

(2) These objectives are listed in 7.3.1.

Pollution prevention and control

The IFC's Environmental, Health, and Safety Guidelines⁽¹⁾ for activities relevant to RTE are duly respected.

- **Worksite activities comply with the IFC's Environmental, Health, and Safety Guidelines:**

- Occupational health and safety – working at heights⁽²⁾: RTE has a fall protection plan in place: procedures overseen by the company's department of health, safety and quality of life in the workplace are introduced and applied by the Maintenance Division teams. Equivalent procedures exist for external contractors doing work at heights, in the form of the operational safety rules that are part of their contract with RTE. The Maintenance Division teams receive regular training from RTE, and external contractors must follow accredited training before they can work on RTE's sites.
- Environment⁽³⁾: cf. RTE's actions for the environment (management of waste and ground pollution) presented in section 7.2.4.1.2 "**Pre-servING biodiversity**" and 7.2.4.2 "Preserving resources, and the circular economy".

- **RTE's activities respect the applicable norms to limit the impact of electromagnetic radiation on human health.** The 1999 EU recommendation concerning electric networks (and consequently 50 Hz fields) was transposed into French law by article 12bis of the Technical decision of 17 May 2001. This is applicable to RTE's facilities, and they comply with its requirements. Compliance checks were officially reinforced by decree 2011-1697 which introduced technical facility inspections, and monitoring and control plans for electromagnetic fields.

- **RTE's activities do not use PCBs.** Since 4 February 1987 in the case of closed-system electric equipment (such as transformers), and since 18 June 1994 in the case of all other electric equipment listed in Decree 87-59 of 2 February 1987, RTE has complied with the regulations banning the acquisition, possession with a view to selling or transferring with or without consideration, leasing, or use of equipment containing PCBs. Some old equipment still contains PCBs and is being decontaminated as described in section 7.2.4.1 "Fighting climate change and protecting biodiversity and landscapes". The estimated share of sales and

OPEX generated by assets containing PCBs (2% of all assets) is presented as non-aligned, in part A.2 of the tables in section 7.3.4.

Protection and restoration of biodiversity and ecosystems

The Taxonomy regulation states that to respect this criterion, companies must:

- **complete an "Environmental Impact Assessment or screening in accordance with Directive 2011/92/EU";**
- **and implement the required mitigation and compensation measures when an Environmental Impact Assessment has been carried out.**

RTE meets this requirement, which has been transposed into France's Environment Code, and implements avoidance, mitigation and offsetting measures in every project with identified environmental impacts.

The need to assess a project's environmental impact is determined by reference to the list in the French Environment Code. The project manager, with relevant procedural support from his Division and the Legal Division, identifies the project's category and the procedures applicable.

Once it is determined that an assessment is required, the project may be:

- subjected to a systematic environmental impact assessment => in this case, RTE carries out an impact study and a public inquiry;
- subjected to a "case by case" type study, reported to the environmental authorities via an official French form. After examining the form, the authorities will decide whether or not an environmental impact assessment is required for the project;
- subjected to an environment impact assessment based on other criteria, such as application of the "concept of a project" as defined in the French Environment Code;
- or not subjected to an environmental impact assessment.

(1) Reference document: Environmental, Health, and Safety – General Guidelines dated 30 April 2007, issued by the International Finance Corporation.

(2) Point 4.2, page 92 of the IFC Environmental, Health, and Safety – General Guidelines dated 30 April 2007.

(3) Point 4.1, page 89 of the IFC Environmental, Health, and Safety – General Guidelines dated 30 April 2007.

Projects may also require certain authorisations or application for exemptions under other rules (the law on water, protected species, land clearance, impacts on Natura 2000 protected wildlife sites, etc.), and this too gives rise to definition of appropriate avoid-mitigate-offset measures. These measures may be determined in the impact study, and/or in the processes for external authorisations such as those mentioned above. A monitoring table for these measures is established and overseen by the project managers throughout the project duration, then handed over to the teams in charge of network infrastructure maintenance once the project is completed. This ensures that skills are transferred and these measures are monitored in the long term.

Every year, RTE's environmental management system undergoes an ISO 14001 certification audit (as mentioned in section 7.2.4.2 "Preserving resources, and the circular economy").

7.3.3.3 Technical analysis of alignment with the "climate change adaptation" objective

RTE carries out studies of the impacts of climate change on its network as part of its Resilience project, as mentioned in section 7.2.3.4 "Adaptation and support for the energy transition".

In the future, the conclusions of these studies will lead to changes in capital expenditure to adapt the network to climate change.

The technical criteria for assessing the substantial contribution of the company's activity to the "climate change adaptation" objective are fulfilled, since they are the same as those described in the previous section for "Doing no significant harm" as regards this objective.

The technical criteria for assessing the lack of significant harm to other environmental objectives are not considered here due to the non-significant level of RTE's capital expenditure for climate change adaptation in 2022.

7.3.3.4 Compliance with minimum safeguards

The Taxonomy regulation requires compliance with fundamental social criteria, which are based on:

- the OECD Guidelines for Multinational Enterprises;
- the United Nations Guiding Principles on Business and Human Rights;
- the ILO (International Labour Organisation) Declaration on Fundamental Principles and Rights at Work;
- the International Bill of Human Rights.

The table below summarises the areas concerned by these principles. The analysis performed indicates that RTE complies with the minimum safeguards.

Area concerned	Existence of processes	Absence of convictions
Human rights	See section 6.7 on the duty of vigilance	√
Corruption	See section 6.7.4 on anti-corruption compliance	√
Taxation	See section 6.5.2 on action against tax avoidance	√
Competition law	Not applicable (RTE's activity is regulated and not open to competition)	√

7.3.4 TAXONOMY REGULATION INDICATORS

The indicators presented here use the latest known definitions, drawing particularly on the European Commission's "Consolidated FAQs" of 6 October 2022.

Turnover (sales)

Economic activities	Total turnover (sales) (in thousands of euros)	Share of turnover (sales) (in %)	"Substantial contribution" criteria*		
			Climate change mitigation (in %)	Climate change adaptation (in %)	
A – Taxonomy-eligible activities					
A.1 Eligible and sustainable activity(ies) (aligned with the taxonomy)					
Electricity transmission	4,785,063	97%	86% ⁽¹⁾	Not available ⁽²⁾	
A.2 Eligible but non-sustainable activities (not aligned with the taxonomy)					
Electricity transmission	97,654 ⁽⁴⁾	2%			
B – Non-taxonomy-eligible activities					
Turnover (sales) from non-eligible activities⁽⁵⁾	42,802	1%			
TOTAL TURNOVER (SALES) (A+B)⁽⁶⁾	4,925,520	100%			

(1) In 2022, 86% of RTE's network contributed to climate change mitigation: this percentage is determined by reference to the contribution of carbon-free generation sources producing the power transmitted in 2022 (provisional data; the final data will be published in the 2022 Electricity report): nuclear power, hydropower, wind power, solar and renewable thermal power, and carbon-free electricity imports in 2022.

(2) In 2022, the amount of turnover (sales) from adaptation activities is unavailable, given the non-material level of investments made during the year for climate adaptation. See the part of section 7.3.3 on climate adaptation.

(3) Share of turnover (sales) (97%) * Share of RTE's activity that contributed to climate change mitigation (91%).

(4) As stated in section 7.2.4.2 "Preserving resources, and the circular economy", some of the company's old equipment (2% of all assets) contains PCBs.

(5) The activities of RTE's subsidiaries, which are non-significant.

(6) This corresponds to the Group's turnover (sales) under IFRS, as published in the notes to the consolidated financial statements.

	“Do no significant harm” (DNSH) criteria							
	Climate change mitigation (YES/NO)	Climate change adaptation (YES/NO)	Pollution prevention and control (YES/NO)	Water resources (YES/NO)	Protection and restoration of biodiversity and ecosystems (YES/NO)	Transition to a circular economy (YES/NO)	Compliance with minimum safeguards	Share of turnover (sales) aligned with the taxonomy
	YES	YES	YES	N/A	YES	YES	YES	84 ⁽³⁾ %
								0

Operating expenditure (OpEx)

Economic activities	Total OpEx (in thousands of euros)	Share of OpEx (in %)	“Substantial contribution” criteria*		
			Climate change mitigation (in %)	Climate change adaptation (in %)	
A – Taxonomy-eligible activities					
A.1 Eligible and sustainable activity(ies) (aligned with the taxonomy)					
Electricity transmission	595,498	97%	86% ⁽¹⁾	Not available ⁽²⁾	
A.2 Eligible but non-sustainable activities (not aligned with the taxonomy)					
Electricity transmission	12,156 ⁽⁴⁾	2%			
B – Non-taxonomy-eligible activities					
OpEx from non-eligible activities⁽⁵⁾	8,107	1%			
TOTAL OPEX (A+B)	615,923⁽⁶⁾	100%			

(1) In 2022, 86% of RTE's network contributed to climate change mitigation: this percentage is determined by reference to the contribution of carbon-free generation sources producing the power transmitted in 2022 (provisional data; the final data will be published in the 2022 Electricity report): nuclear power, hydropower, wind power, solar and renewable thermal power, and carbon-free electricity imports in 2022.

(2) In 2022, the amount of OpEx on adaptation activities is unavailable, given the non-material level of investments made during the year for climate adaptation. See the part of section 7.3.3 on climate adaptation.

(3) Share of OpEx (98%) * Share of RTE's activity that contributed to climate change mitigation (91%).

(4) As stated in section 7.2.4.2 “Preserving resources and the circular economy”, some of the company's old equipment (2% of all assets) contains PCBs.

(5) The activities of RTE's subsidiaries, which are non-significant.

(6) In line with Annex 1 to article 8 of the Taxonomy Regulation (1.1.3 “KPI related to operating expenditure”), this comprises expenses directly related to fixed assets: maintenance and repairs; expenditure for maintenance and research personnel). Maintenance and research expenses are part of the “external expenses” item in note 8 to the consolidated financial statements. Expenditure on maintenance personnel is equal to 34% of the personnel expenses presented in note 10 to the consolidated financial statements.

Capital expenditure (CapEx)

Economic activities	Total CapEx (in thousands of euros)	Share of CapEx (in %)	“Substantial contribution” criteria*		
			Climate change mitigation (in %)	Climate change adaptation (in %)	
A – Taxonomy-eligible activities					
A.1 Eligible and sustainable activity(ies) (aligned with the taxonomy)					
Electricity transmission	1,722,000 ⁽¹⁾	100%	86% ⁽²⁾	N.A. ⁽³⁾	
A.2 Eligible but non-sustainable activities (not aligned with the taxonomy)					
– ⁽⁴⁾	–	–			
B – Non-taxonomy-eligible activities					
CAPEX from non-eligible activities⁽⁵⁾	3,504	0%			
TOTAL CAPEX (A+B)⁽⁶⁾	1,735,504	100%			

(1) In line with Annex 1 to article 8 of the Taxonomy Regulation (1.1.2 “KPI related to capital expenditure”), this comprises additions to tangible and intangible assets during the financial year, before depreciation and amortisation, including costs included in application of IFRS 16.

(2) In 2022, 86% of RTE’s network contributed to climate change mitigation: this percentage is determined by reference to the contribution of carbon-free generation sources producing the power transmitted in 2022 (provisional data; the final data will be published in the 2022 Electricity report): nuclear power, hydropower, wind power, solar and renewable thermal power, and carbon-free electricity imports in 2022.

(3) In 2022, the amount of CapEx on adaptation activities is unavailable, given the non-material level of investments made during the year for climate adaptation. See the part of section 7.3.3 on climate adaptation.

(4) No investment was made during the year in facilities containing PCBs: See the part of section 7.3.3 on climate adaptation.

(5) The activities of RTE’s subsidiaries, which are non-significant.

(6) This corresponds to the amount of acquisitions during the year. See the consolidated cash flow statement in the notes to the consolidated financial statements.

	“Do no significant harm” (DNSH) criteria							
	Climate change mitigation (YES/NO)	Climate change adaptation (YES/NO)	Pollution prevention and control (YES/NO)	Water resources (YES/NO)	Protection and restoration of biodiversity and ecosystems (YES/NO)	Transition to a circular economy (YES/NO)	Compliance with minimum safeguards	Share of CapEx aligned with the taxonomy
	YES	YES	YES	N/A	YES	YES	YES	86%



Economic and financial performance

8.1 ECONOMIC ENVIRONMENT⁽¹⁾

2022 saw an unprecedented energy crisis in Europe. This crisis resulted from the war waged by Russia in Ukraine which caused tension in gas supplies and fuel prices, and also from pressures on electricity generation capacities in France due to detection of stress corrosion in the country's nuclear power plant fleet, and drought conditions affecting hydropower production. These events added to the pressures already existing since late 2021 after the post-Covid recovery, which caused tensions over natural gas supplies.

Adjusted electricity consumption⁽²⁾ in mainland France (and Corsica) totalled 459 TWh in 2022, down by 1.7% from the 2021 total of 467 TWh. The decrease was observed in all sectors (industrial, residential and tertiary users) and was particularly noticeable in the last four months of the year. It was driven by the tight situation in the energy sector and its effects on wholesale prices, and the public authorities' promotion of energy savings in response to the situation.

The highest peak in electricity consumption in 2022 was 87.3 GW, reached at 10.00 am on 27 January (compared to 90.2 GW at 12.30 pm on 12 January in 2021). This is in the average range for recent years and far below the record peak of 2012 (101.87 GW on 8 February). The year's lowest level of electricity consumption was 27.3 GW, on 21 August at 4.00 am, below the lowest level recorded in previous records of 2020 (29.1 GW). The 2022 low point occurred in August as in most previous years, whereas in 2020 it occurred in May as a result of the national lockdown.

Total electricity output in France was 444.7 TWh in 2022, down by -14.8% from 2021. Nuclear power generation decreased by 22.7% (-82 TWh) compared to 2021, accounting for 62.7% of total output. Fossil-fired power generation was up by 29.0% and provided 11.0% of total output. Renewable energy

generation made up nearly 25.3%⁽³⁾ of total output, and was down slightly (-5.7%) from 2021, largely as a result of substantially lower hydropower production (-20.2% or -12.5 TWh) which was only partly offset by an increase in wind power (+3.1% or +1.2 TWh) and solar power (+30.7% or +4.4 TWh).

The generation fleet capacity in mainland France saw a larger increase in 2022 (+3.5%, compared to +2.5% in 2021) and reached 144.3 GW. This increase resulted from expansion of 18.1% (+2.4 GW) in solar power capacity, and 12.4% (+2.3 GW) in wind power capacity, notably including the newly-commissioned Saint-Nazaire offshore wind farm (480 MW). There was also a more moderate rise in installed hydropower capacity (+0.2 GW) and renewable thermal/waste-based energy capacity (+0.1 GW), and a slight downturn in thermal power capacity (-0.2 GW).

The balance of cross-border power exchanges in 2022 was 16.5 TWh, making France a net power importer for the first time since 1980. Compared to 2021, France remained a net importer from the CWE zone (merged into Core from 9 June 2022), and remained a net exporter across the Italian and Swiss borders; however, it became a net importer from Spain and the UK. The only net export months were February, thanks to plentiful wind power output, and May. Over the summer France was a substantial importer due to the particularly low availability of its nuclear facilities (the months of July, August and September account for 60% of the annual net import balance). It occasionally registered a net export position in the two weeks at the end of October and start of November when temperatures were especially mild, and in the final week of the year. Regarding the interconnectors, the first half of the Savoy-Piedmont line between France and Italy was put into operation on 7 November 2022, with an initial capacity of 0.6 GW that will be raised to 1.2 GW during 2023. On the France-Belgium border, work to double up the Avelin-Avelgem line was completed in early December 2022.

(1) The figures for 2022 are not final at the publication date of this management report. The final figures for 2022 will be known during 2023 and published in RTE's Electricity report.

(2) Adjusted consumption is consumption corrected for weather effects, by reference to standard temperatures.

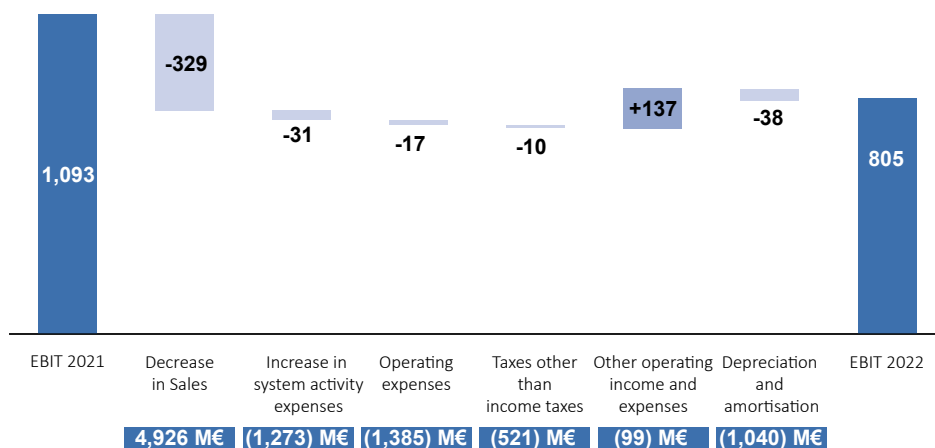
(3) For the purposes of this calculation, 70% of pumped-storage hydroelectricity output and 50% of energy produced from household waste are considered as renewable energy.

8.2 RESULTS, EBIT AND FINANCIAL STRUCTURE

These results are presented under IFRS.

8.2.1 BUSINESS AND RESULTS IN 2022

8.2.1.1 Change in EBIT: -€288 million



RTE's EBIT for 2022 was down by €288 million (-26%) from 2021, at €805 million.

This decrease is explained by the items detailed below.

RTE's sales for 2022 amounted to €4,926 million, compared to €5,245 million in 2021.

The **€329 million (-6%) decrease in sales in 2022** is due to combination of the following effects:

- Network access income (withdrawals and injections) was down by €2,149 million (-50%) to €2,188 million. This decrease is principally explained by:
 - recognition of the exceptional early transfer of some of RTE's CRCP⁽¹⁾ account balance, amounting to €1,940 million (excluding taxes). In the current energy crisis, price differentials on the wholesale electricity markets widened between France and its neighbouring European countries, and this led to a significant rise in the income from cross-border interconnections. Despite the additional costs borne by RTE as a result of rising electricity prices, its income exceeded the CRE's forecasts for 2022. In response to this situation,

the regulator issued a decision of 17 November 2022 ordering that the surplus should be redistributed to network clients (on "CART" network access contracts), in accordance with the French Energy Code. The related payment will be made before the end of the first quarter of 2023;

- the weather effect, which was unfavourable for RTE overall in 2022, causing a higher level of electricity withdrawals by distributors. A negative structural effect was also observed from September 2022, associated with the French government's energy sufficiency plan announced for the winter of 2022/2023.
- Income from interconnections increased by €1,817 million (+232%) to €2,601 million. This income includes:
 - capacity revenues from interconnections, which depend on price differentials between national electricity markets, and were €1,604 million higher in 2022 than 2021. This increase must be considered in conjunction with the exceptional early transfer of the CRCP surplus (see above);
 - the sale of interconnection capacity guarantees via the EPEX market, generating a net profit of €369 million, up by €214 million from 2021.

(1) Compte de régularisation des charges et des produits.

- Income from services increased by €3 million to €136 million. This slight rise is mainly explained by the fast-expanding activities of the subsidiary Airtelis, which was frequently engaged for fire-fighting work in the summer of 2022, and RTE International (given the impact in 2022 of new multi-year contracts that started in late 2021).

The total amount of electricity system operation purchases was **€1,273 million** in 2022, an increase of **€31 million** from 2021.

These purchases comprise:

- electricity purchases to compensate for network losses and network capacity guarantees (€464 million in 2022), which involve preliminary market consultations that attract responses from a large number of actors, and operations on the organised markets (EPEX Spot and EEX EPD). These purchases were lower than in 2021 (-€101 million), broadly reflecting RTE's coverage strategy despite the higher market prices;
- expenses relating to balancing reserves (voltage and frequency) which decreased by (€11 million);
- congestion costs (€186 million in 2022) i.e. the surplus costs generated by output adjustments in response to operating constraints on the internal network or interconnection lines, which were up by €126 million;
- payments due under interruptible load contracts (€63 million in 2022), for which an annual call for tenders is made;
- RTE's contribution to the compensation mechanism for international transit costs (ITC) between European network operators (-€9 million in 2022), and power exchange contracts between transmission network operators (€2 million);
- payments due under load-shedding contracts (€71 million) designed to temporarily reduce the level of power withdrawn by a consumption site: the charge borne by RTE has been compensated by the contribution to the public electricity service (CSPE) levy since 2018. These payments were up by €48 million from 2021, reflecting the rise in the value of the load-shedding tender in 2022.

Operating expenses rose by €17 million from 2021 to **€1,385 million** in 2022.

The main changes in these expenses concerned:

- **other purchases and services**⁽¹⁾ (€677 million in 2022), which were up by €49 million compared to 2021, principally due to the effect of reclassification of SaaS royalties (€25 million) as operating expenses from 1 January 2022 (they were previously included in Other operating income and expenses). Travel expenses increased by €6 million following the resumption of economic activity;
- **net personnel expenses**⁽²⁾ (€708 million in 2022) were down by €33 million. This decrease is principally explained by:
 - a decrease of -€44 million reflecting the higher share of labour costs capitalised (-€20 million) and the -€24 million change in provisions for employee benefit commitments (due to higher discount rates),
 - offset by an increase of +€11 million relating to the wage policy (pay rises were partly counterbalanced by a decrease in employer social security contributions, especially due to the lower social taxes rates applicable);
- **other operating income and expenses generated a net expense of €99 million** in 2022, compared to a net expense of €38 million in 2021. The principal factors in this **+€137 million** change are the higher penalties received for variances with the capacity mechanism, the positive change in the CSPE⁽³⁾ subsidy (with a neutral impact on the income statement) and reclassification of software royalties, which are included in other purchases in 2022;
- **taxes other than income taxes** totalled **€521 million**, an increase of **+€10 million** from 2021. This change is primarily explained by an unfavourable price effect of **+€9 million** relating to the pylon tax (fixed increase of +2.6% per pylon) and the tax on network companies (IFER) (fixed increase of +1.5% per transformer).

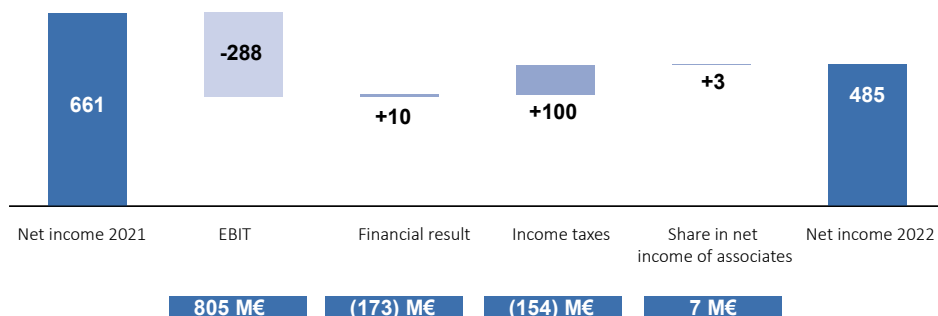
Depreciation and amortisation amounted to **€1,040 million**, up by €38 million from 2021.

(1) Reported net of the portion allocated to investments.

(2) The definition used also covers net increases to provisions concerning 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.

(3) In 2018, the cost of load-shedding contracts ceased to be financed by the variance adjustment account and began to be covered by the contribution to the public electricity service (CSPE) levy. This CSPE funding is classified as an operating subsidy and presented in other operating income and expenses. Consequently, the net impact on profit is neutral.

8.2.1.2 Change in net income: -€176 million



The 2022 **net income is down by €176 million** compared to 2021, to **€485 million**.

The **financial result** was a **net expense of -€173 million**: financial expenses were €10 million lower than in 2021, mainly due to lower interest on borrowings.

Income taxes totalled €154 million for 2022, compared to €254 million in 2021, a decrease of €100 million due notably to the lower pre-tax income (down by -€281 million from 2021) and the decrease in the effective tax rate, from 28.41% at 31 December 2021 to 25.83% at 31 December 2022 (in application of France's Finance Law for 2022).

RTE Group income statement under IFRS at 31 December 2022

(in millions of euros)	31/12/2022	31/12/2021	Change 2022-2021
Sales	4,926	5,254	(329)
Network access: withdrawals	2,086	4,214	(2,128)
Network access: injections	103	124	(21)
Network access: interconnections	2,601	784	1,817
Other services	136	133	3
System purchases	(1,273)	(1,242)	(31)
Operating expenses	(1,385)	(1,368)	(17)
Other net purchases	(677)	(627)	(49)
Net personnel expenses	(708)	(741)	33
Taxes other than income taxes	(521)	(511)	(10)
Other operating income and expenses	99	(38)	137
EBITDA	1,845	2,095	(249)
Net depreciation and amortisation	(1,040)	(1,002)	(38)
EBIT	805	1,093	(288)
Financial result	(173)	(183)	10
Consolidated profit before tax	633	911	(278)
Income tax	(154)	(254)	100
Share in net income of associates	7	4	3
CONSOLIDATED NET INCOME	485	661	(176)

Reconciliation between RTE's net income under IFRS and RTE SA's net income under French GAAP

(in millions of euros)	31/12/2022	31/12/2021
RTE net income under IFRS	485	661
Impact of subsidiaries, net of intragroup transactions	7	5
Impact of intragroup transactions via profit and loss ⁽¹⁾	(5)	(4)
Impact of differences in accounting treatment under French GAAP and IFRS	131	133
RTE SA net income under French GAAP	353	527

(1) Corresponding to elimination of internal dividends.

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

Key figures for RTE under French GAAP

(in millions of euros)	2022	2021
Income statement		
Sales	4,852	5,186
EBIT	678	984
Financial result	(201)	(201)
Net income	353	527
Balance sheet		
Economic assets at 1 January	17,194	16,895
Fixed assets at 31 December		
• gross	38,799	37,201
• depreciation and amortisation	18,932	18,090
• net	19,867	19,111
Equity at 31 December	7,851	7,793
Net indebtedness (gross indebtedness adjusted for cash)	7,992 ⁽¹⁾	9,664
ROCE	3.9%	5.8%

(1) NB: the 2022 financial statements include a transfer of €1,939 million of network access revenues to network users in a one-time early payment of surplus interconnection income (rather than a payment spread over several tariff periods).

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 3.9% for 2022, lower than in 2021.

This rate of 3.9% can be compared to the normative ROCE defined for the TURPE tariff (4.6%), from which 0.5% is deducted for all the reductions allowed for in the tariff decision, resulting in a rate of 4.1%. The ROCE is -0.2% below this, notably due to timing differences (-1.4% for clearing regulation accounts and +0.1% for smoothing network access income), and durable effects (+1.1%).

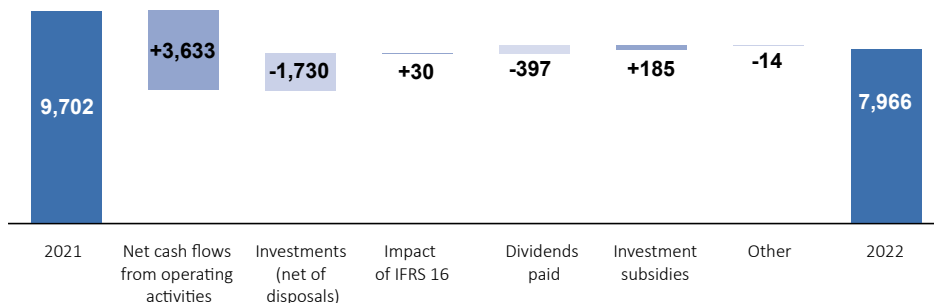
(1) This basis for calculation is used to ensure consistency with the terms of calculation for the TURPE tariffs, which are based solely on RTE's financial statements under French GAAP.

(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.

The **return on equity (ROE)**⁽¹⁾, calculated as the ratio of net income to equity, was 7.6% (compared to 11.3% in 2021).

8.2.2 FINANCING

Decrease in net indebtedness: -€1,736 million



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

- net cash flows from operating activities⁽²⁾, which generated income of €3,633 million;
- investments net of disposals, totalling €1,730 million. The amount of investment expenditure for

2022 concerning the scope of activities regulated by the CRE was €1,722 million (see table below);

- dividend payments out of 2021 profits, totalling €397 million;
- investment subsidies activated, amounting to €185 million.

Investment expenditure approved by the CRE

(in millions of euros)	2022	2021
Categories		
Network	1,463	1,369
Major transmissions and interconnections	199	314
Regional networks	1,264	965
Information systems	174	155
Logistics	85	53
TOTAL INVESTMENTS FOR THE SCOPE REGULATED BY THE CRE⁽¹⁾	1,722	1,578

(1) Excluding disposals.

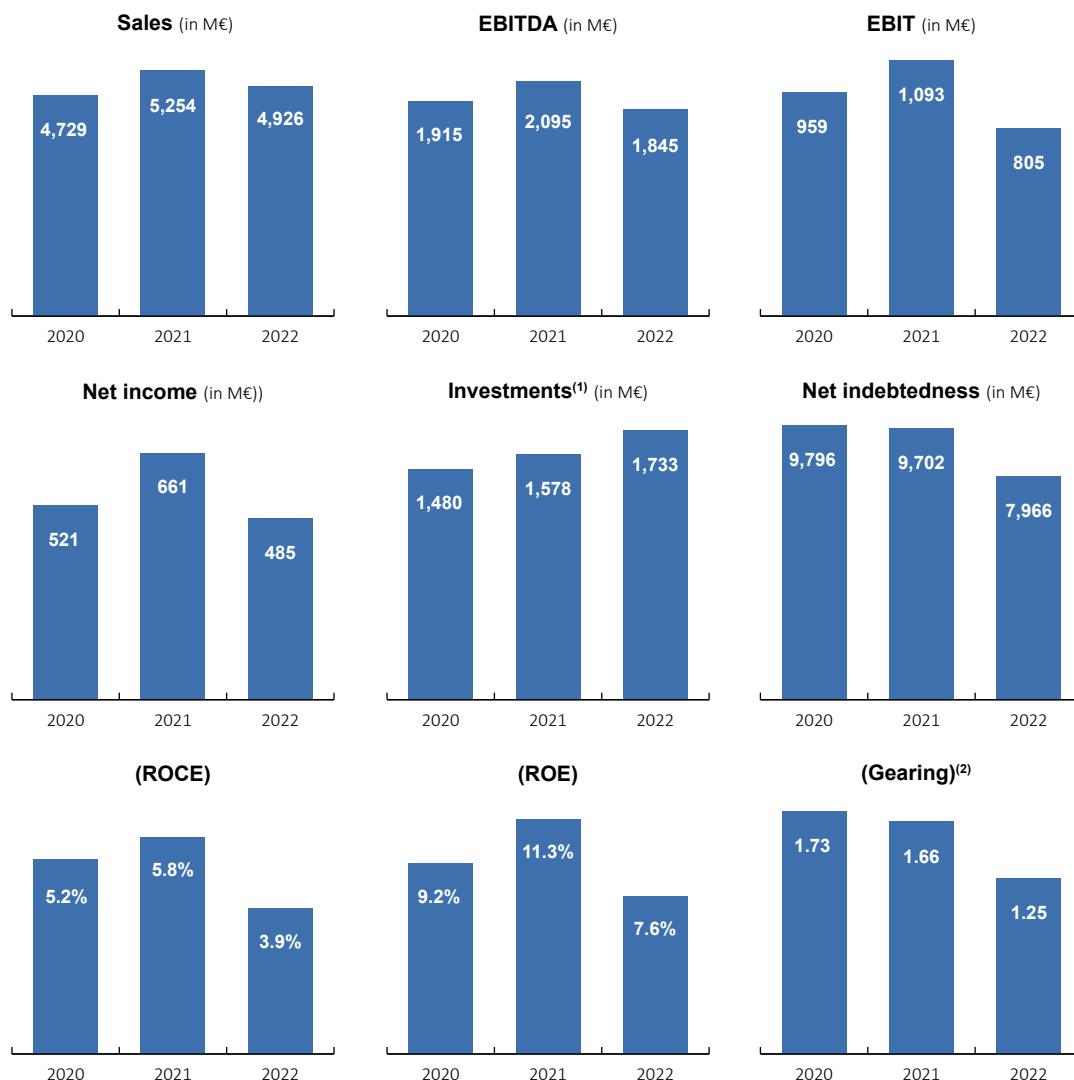
(1) Return on equity is calculated for the RTE Group based on financial statements under IFRS, using the equity value at 31 December.

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

8.2.3 FINANCIAL STRUCTURE

Equity amounted to €6.373 billion at 31 December 2022.

Net indebtedness stood at €7.966 billion at 31 December 2022: €11.187 billion of gross financial indebtedness, less cash and short-term financial assets amounting to €3.220 billion.



(1) Investments net of disposals for the Group at 31 December 2022. These comprise investments by RTE SA (€1,772 million) and its subsidiaries (€2 million), and a €6 million equity investment (in TEP Polynésie).

(2) The 2022 financial statements include recognition of a transfer of €1,939 million of network access revenues in an early one-time payment of surplus interconnection income to network users (rather than a payment spread over several tariff periods). This payment is excluded from the net debt/equity ratio (gearing) (if it is included, the ratio is 1.25) and net debt (which amounts to €7,966 million if it is included).

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.

The gearing (net financial indebtedness/equity) decreased, from 1.66 at the 2021 year-end to 1.25 at the 2022 year-end.

8.3 OUTLOOK FOR 2023

The TURPE 6 network access tariff is adjusted annually at the anniversary date: it was raised by +1.09% at 1 August 2021 when the tariff first took effect, then reduced by -0.01% at 1 August 2021, and further adjustments will follow on 1 August 2023 and 2024 based on forecast inflation, an annual factor of 0.49%, and a correcting factor to balance the income and expenses adjustment account (CRCP). The tariff change of 1 August 2023 will be determined by the CRE based on forecast inflation for 2023 and variances in 2021 and 2022 on items eligible for the CRCP. It should be noted that due to the expected payment for 2022 which will pass on the surplus interconnection income for 2021 and 2022 earlier than would normally be required, the 2022 CRCP balance will be small.

RTE's gross investment budget approved by the CRE for 2023 is €1,881 million. This is €159 million more than the actual investments made in 2022, which totalled €1,722 million.

The increase is particularly attributable to expenditure on connections, replacements and adaptations (especially the Datacentre connections, the plan concerning metal-enclosed substations, and the corrosion plan). Work on interconnection projects has also increased, particularly due to progress on the Celtic interconnector. There were fewer connection projects for offshore wind farms now that certain plants (Saint-Nazaire, Saint-Brieuc) have been commissioned, but the step-up in work on other projects is continuing (principally the Dieppe-Le Tréport and Noirmoutier projects). The 2023 investment budget also includes €177 million for information systems and €153 million for real estate and mobile assets, in line with the amounts used to set the TURPE 6 tariff decision. Both these amounts are regulated separately from the budgets for other types of investment.

In recent years, the French State has clarified its framework for achieving carbon neutrality by 2050 (the National Low Carbon Strategy) and raising the share of renewable energies in the country's electricity generation mix to 40% by 2030 (the multi-year energy plan). It is now accepted that the pathways to carbon neutrality will involve large-scale electrification of the economy in order to avoid use of fossil fuels, and that reliance on renewable-source

electricity will increase. The electricity networks are an essential factor in the feasibility of this transition.

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 renewable forms of energy generation, and digitised to integrate the flexibilities necessary for network operation; also, modernisation of the network must now be a priority.

Apart from these considerations, RTE's prospects remain subject to weather effects, electricity generation plans (which affect the volumes of electricity withdrawn, electricity losses from the network, congestion and damage), movements in electricity prices (which affect the expenses incurred to cover network losses, balancing reserves, and income from interconnections), long-term discount and inflation rates, capacity guarantee prices, and the general economic climate.

8.4 DETAILS OF SUBSIDIARIES

8.4.1 SUBSIDIARIES AND INVESTMENTS AT 31 DECEMBER 2022

Company (in thousands of euros)	Capital	Gross value	Impairment	% of capital owned by RTE	Loans and advances ⁽¹⁾	Sales	Equity	Net income	Dividends received in 2022
ARTERIA	650	650	-	100%	-	12,356	17,488	2,158	500
RTE International	2,000	2,000	-	100%	5,000	18,272	7,855	2,193	-
AIRTELIS	10,000	10,000	-	100%	8,000	22,874	18,986	1,720	-
RTE IMMO	763	6,865	-	100%	-	-	6,891	(16)	-
IFA 2	500	250	-	50%	-	3,419	512	7	-
CIRTEUS	2,575	2,575	-	100%	-	13,812	9,319	1,093	200
HGRT	52,119	20,854	-	34%	-	-	91,299	12,858	4,420
CORESO	1,000	159	-	16%	-	28,434	6,975	2,508	-
INELFE	2,000	1,000	-	50%	-	10,608	16,884	83	-
CELTIC INTERCONNECTOR	100	50	-	50%	370	53	118	9	-
JAO	NC	65	-	5%	-	NC	NC	NC	NC
DECLARANET	7,262	882	-	12%	132	NC	NC	NC	NC

(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 2.1, "History of RTE and Group Structure".

8.5 OTHER FINANCIAL INFORMATION

8.5.1 SUBSEQUENT EVENTS

None.

8.5.2 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 (including taxes) due 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)	Article D.441 I.- 1: Outstanding invoices received and due or overdue at the year-end date						Article D.441 I.- 2: Outstanding invoices issued and due or overdue at the year-end date					
	0 days	1 - 30 days	31 - 60 days	61 - 90 days	91 days and more	Total	0 days	1 - 30 days	31 - 60 days	61 - 90 days	91 days and more	Total
(A) Period overdue												
Number of invoices	226					2,826	143					1,029
Total amount of invoices (incl. VAT)		24,163	(840)	442	1,405			16,123	3,341	(517)	(18,554)	
% of the total amount of purchases of the year		1.16%	-0.04%	0.02%	0.07%							
% of the total amount of sales of the year (incl. VAT)								0.27%	0.06%	-0.01%	-0.31%	
(B) Invoices excluded from (A) relating to payables and receivables in dispute or unrecognised												
Number of invoices excluded						0						0
Total amount of invoices excluded						0						0
(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 fifteen countries on behalf of 27 electricity transmission system operators.

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 30 days can thus show a credit or a debit at the year-end, depending on fluctuations in exchanges via the interconnections.

8.5.4 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 €882,524 in 2022.

8.5.5 STATUTORY AUDITORS

As a result of the transposition of Directive 2009/72/EC 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 in article 20 of RTE's bylaws to have at least one audit firm that is independent of the Vertically Integrated Enterprise.

9.

Consolidated financial statements at 31 December 2022



CONSOLIDATED INCOME STATEMENT

(in thousands of euros)	Notes	2022	2021
Sales	6	4,925,520	5,254,036
Energy purchases	7	(490,444)	(549,943)
Other external expenses	8	(1,246,310)	(1,126,188)
Personnel expenses	10	(921,212)	(933,808)
Taxes other than income taxes	11	(520,922)	(510,826)
Other operating income and expenses	12	98,734	(38,404)
Operating profit before depreciation and amortisation		1,845,366	2,094,866
Net depreciation and amortisation		(1,040,039)	(1,001,548)
Other income and expenses			
Operating profit		805,328	1,093,317
Cost of gross financial indebtedness		(136,717)	(147,681)
Discount effect		(34,014)	(21,233)
Other financial income and expenses		(1,822)	(13,622)
Financial result	13	(172,552)	(182,536)
Consolidated profit before tax		632,775	910,781
Income taxes	14	(154,054)	(253,626)
Share in net income of associates	17	6,577	3,936
CONSOLIDATED NET INCOME		485,298	661,091
Net income attributable to non-controlling interests		6	(25)
RTE net income		485,304	661,066
Earnings per share (RTE share) in euros		2.28	3.10

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

(in thousands of euros)	2022	2021
Consolidated net income – RTE share	485,304	661,066
Net income attributable to non-controlling interests	6	(25)
Gross change in fair value of financial assets ⁽¹⁾	3,890	(932)
Related tax effect	(1,005)	210
<i>Change in fair value of financial assets</i>	<i>2,886</i>	<i>(722)</i>
Gross change in fair value of hedging instruments ⁽²⁾		
Related tax effect		
<i>Change in fair value of hedging instruments</i>	<i>0</i>	<i>0</i>
Gains and losses recorded directly in equity that will be reclassified subsequently to profit or loss	2,886	(722)
Gross change in actuarial gains and losses on post-employment benefits	580,932	(214,799)
Related tax effect	(150,026)	54,332
<i>Change in actuarial gains and losses on post-employment benefits</i>	<i>430,906</i>	<i>(160,467)</i>
Gains and losses recorded directly in equity that will not be reclassified subsequently to profit or loss	430,906	(160,467)
Total gains and losses recorded directly in equity	433,792	(161,188)
NET INCOME AND GAINS AND LOSSES RECORDED DIRECTLY IN EQUITY	919,102	499,902

(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.

CONSOLIDATED BALANCE SHEET

Assets (in thousands of euros)	Notes	2022	2021
Intangible assets	15	558,437	490,855
Property, plant and equipment	16	19,592,531	18,926,174
Investments in associates	17	39,704	32,044
Non-current financial assets	18	23,050	15,217
Deferred tax assets	14	269,825	401,583
Non-current assets		20,483,548	19,865,873
Inventories	19	167,733	133,529
Trade and similar receivables	20	2,063,462	1,703,833
Current financial assets	18	2,443,436	1,192,187
Current tax assets		79	293
Other receivables	21	711,293	312,597
Cash and cash equivalents	22	777,572	215,930
Current assets		6,163,575	3,558,369
TOTAL ASSETS		26,647,122	23,424,242

Equity and liabilities (in thousands of euros)	Notes	2022	2021
Share capital	23	2,132,286	2,132,286
RTE net income and consolidated reserves		4,240,191	3,717,874
Equity – RTE share		6,372,476	5,850,160
Equity – non-controlling interests		50	57
Total equity		6,372,527	5,850,217
Non-current provisions	24	1,903,290	2,421,795
Non-current financial liabilities	25	10,192,456	9,822,056
Non-current liabilities		12,095,746	12,243,851
Current provisions	24	91,716	110,340
Trade and similar payables	28	2,033,459	1,552,869
Current financial liabilities	25	994,685	1,288,050
Current tax liabilities		857	606
Other liabilities	28	5,058,132	2,378,308
Current liabilities		8,178,849	5,330,174
TOTAL EQUITY AND LIABILITIES		26,647,122	23,424,242

CONSOLIDATED CASH FLOW STATEMENT

(in thousands of euros)	2022	2021
Operating activities		
Consolidated profit before tax of consolidated companies	632,775	910,781
Depreciation and amortisation, provisions and changes in fair value	1,040,235	996,645
Dividends received from entities accounted for by the equity method	4,420	3,820
Financial income and expenses	138,763	161,383
Gains and losses on disposal of assets	25,693	51,293
Change in working capital	2,171,049	116,574
Net cash flow from operations	4,012,935	2,240,496
Net financial expenses disbursed	(173,718)	(203,506)
Income taxes paid	(205,606)	(266,505)
Net cash flow from operating activities	3,633,611	1,770,485
Investing activities		
Acquisitions of property, plant and equipment and intangibles	(1,725,504)	(1,579,591)
Disposals of property, plant and equipment and intangibles	3,057	3,047
Changes in financial assets	(1,249,565)	769,994
Financing operations	(5,613)	0
Net cash flow used in investing activities	(2,977,625)	(806,549)
Financing activities		
Issuance of borrowings	3,764,891	2,994,998
Repayment of borrowings	(3,647,793)	(3,780,971)
Dividends paid	(396,654)	(312,703)
Investment subsidies	185,213	166,663
Net cash flow from financing activities	(94,344)	(932,012)
Financial income on cash and cash equivalents	0	(9,264)
Net increase (decrease) in cash and cash equivalents	561,643	22,661
Cash and cash equivalents – opening balance	215,930	193,269
CASH AND CASH EQUIVALENTS – CLOSING BALANCE	777,572	215,930

The change in working capital in 2022 includes recognition at 31 December of a future payment corresponding to the exceptional early transfer of part of the balance of RTE's income and expenses adjustment account (CRCP⁽¹⁾). See note 3.1.3.

(1) *Compte de régularisation des charges et des produits.*

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 2020	2,132,286	3,520,370	2,482	5,655,137	0	5,655,137
Total gains and losses recorded directly in equity ⁽¹⁾	0	(160,467)	(722)	(161,188)	0	(161,188)
2021 net income	0	661,066	0	661,066	25	661,091
Net income and gains and losses recorded directly in equity	0	500,599	(722)	499,877	25	499,902
Dividends paid	0	(312,703)	0	(312,703)	0	(312,703)
Other changes	0	7,849		7,832	32	7,864
Equity at 31 December 2021	2,132,286	3,716,115	1,760	5,850,160	57	5,850,217
Total gains and losses recorded directly in equity ⁽¹⁾		430,906	2,886	433,792	0	433,792
2022 net income		485,304	0	485,304	(6)	485,298
Net income and gains and losses recorded directly in equity	0	916,210	2,886	919,096	(6)	6,769,308
Dividends paid		(396,654)	0	(396,654)	0	(396,654)
Other changes		(127)	0	(126)	(1)	(127)
EQUITY AT 31 DECEMBER 2022	2,132,286	4,235,544	4,646	6,372,476	50	6,372,527

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

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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 six companies controlled exclusively by RTE which are fully consolidated, the accounts of two jointly-controlled companies consolidated as joint operations, and the accounts of three 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 six 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 fibre optics;
- 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;
- Cirteus, 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;

- RTE I Netherlands, 90%-owned by RTE International. This is RTE International's Dutch subsidiary, a specialist in the maintenance of high-voltage power lines and electricity substations.

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 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⁽¹⁾) 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;
- TEP Tahiti, a mixed-economy local company⁽²⁾ whose majority shareholder is Collectivité de Polynésie française. TEP is the concession-holder for the public high-voltage electricity transmission service on the island of Tahiti. RTE joined this partnership through a cash acquisition of 25% of TEP shares in 2022.

The Group's financial statements at 31 December 2022 were prepared under the responsibility of its Executive Board, which approved them on 30 January 2023.

(1) Simplified joint stock company (SAS: *société par actions simplifiée*).

(2) Société d'économie mixte locale (SEML).

Note 1 Group accounting policies

1.1 DECLARATION OF CONFORMITY AND GROUP ACCOUNTING POLICIES

Pursuant to European regulation 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 2022 are prepared under the international accounting standards published by the IASB and approved by the European Union for application at 31 December 2022. 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 2022.

1.2 CHANGES IN ACCOUNTING POLICIES AT 31 DECEMBER 2022

Apart from the changes presented below, the accounting and valuation methods applied by the Group in the consolidated financial statements for the year ended 31 December 2022 are identical to those used in the consolidated financial statements for the year ended 31 December 2021.

1.2.1 STANDARDS AND AMENDMENTS ADOPTED BY THE EUROPEAN UNION AND MANDATORY FOR 2022

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 2022:

- amendments to IAS 37, Onerous contracts: Cost of fulfilling a contract. These amendments have no material impact for the Group.
- amendments to IAS 16, Property, plant and equipment: Proceeds before intended use. The analysis conducted by the Group concluded that these amendments have no significant impact.
- amendments to IFRS 3, Business combinations: Reference to the conceptual framework. These

amendments have no impact on the accounting treatment of business combinations.

- annual improvements to IFRSs – 2018-2020 cycle, concerning the following standards:
 - IAS 41: treatment of taxation in fair value measurement of a biological asset;
 - IFRS 1: clarification of measurement of cumulative translation differences for first-time adopting subsidiaries;
 - IFRS 9: clarification of the fees to be included in the 10% tests for derecognition of financial liabilities;
 - IFRS 16: lease incentives.

These modifications have no impact for the Group.

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

The standards and amendments that have already been adopted by the European Union and can be applied early are listed below.

- amendments to IAS 1: Disclosure of Accounting Policies;
- amendments to Practice Statement 2, Making materiality judgements;
- amendments to IAS 8: Definition of accounting estimates;
- IFRS 17, Insurance contracts;
- amendment to IFRS 17: Initial application of IFRS 17 and IFRS 9: Comparative information;
- amendments to IAS 12: Deferred tax related to assets and liabilities arising from a single transaction.

The Group has not identified any material impact expected to result from the above.

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:

- amendments to IFRS 16: Lease Liability in a Sale and Leaseback.

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.

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 2022 are presented in note 24.2. These assumptions are updated annually. The Group considers the actuarial assumptions used at 31 December 2022 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 euros, 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

RTE's sales consist of three types of revenue, each corresponding to a different nature of income and customer:

- income generated by access to the public electricity transmission network: the network access tariff is regulated and the customers are distributors (such as Enedis), consumers (such as French railway company SNCF or an industry) and producers (which inject power into the network, such as EDF);
- income from interconnections between France and its neighbouring countries, which depend on the capacities available on each line and price differentials between the countries, with specific invoicing methods for each international border;
- income from other services provided by RTE (miscellaneous types of work, personnel secondment, etc.) or its subsidiaries (helicopter leases, consulting services, etc.).

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 was therefore 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).

2.8 CAPACITY MECHANISM

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

French law 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. The resulting revenue is included in income from interconnections.
- 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.

2.9 OTHER EXTERNAL EXPENSES

As the “Rolling out market mechanisms” section of the management report explains, RTE develops and introduces market mechanisms to balance supply and demand in real time, and ensure that production capacities are coherent with needs in the long term.

The consequences of these mechanisms are generally reflected in transactions related to RTE’s responsibility for balancing electricity generation and consumption and are reported under “Other external expenses”.

The income and expenses relating to the current or previous years are included in the current year’s income statement regardless of the date of payment or receipt, based on the most recent available information at the closing date.

Due to unpredictable factors affecting the general conditions governing the operation of these mech-

anisms, RTE may invoice (or receive) adjustment payments later than the date on which the triggering event arose. The financial terms laid out in the mechanism regulations (validated by the French energy regulator CRE) generally include rules for such eventualities.

2.10 INCOME TAX

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.

RTE SA became part of the CTE Group’s tax group on 1 January 2018. 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.

2.11 EARNINGS PER SHARE

Earnings per share is 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.

2.12 BUSINESS COMBINATION

In application of IFRS 3, Business combinations, goodwill is calculated as the difference between:

- the sum of the following items:
 - the fair value at the acquisition date of the price paid to acquire control,
 - the value of non-controlling interests in the entity acquired, and
 - for acquisitions achieved in stages, the fair value at the acquisition date of the Group's previous share in the acquired entity before it acquired control;
- and the net value of the assets acquired and liabilities assumed, measured at fair value at the acquisition date.

Goodwill is not amortised, but impairment tests of goodwill are carried out at least annually and as soon as there is an indication of possible loss of value.

When the impairment test shows a negative difference, this is immediately charged to profit and loss.

Goodwill on acquisition of associates and joint ventures (accounted for under the equity method) is included in the value of the investment presented in the assets in the balance sheet. Any impairment on this goodwill is reported in the Group's income statement via the "share in income of associates". When there is negative goodwill, it is recorded in income, with a corresponding adjustment to the value of the investment.

2.13 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.

2.14 PROPERTY, PLANT AND EQUIPMENT

2.14.1 INITIAL MEASUREMENT

Property, plant and equipment is 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.

2.14.2 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.

2.14.3 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.

2.14.4 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.

2.14.5 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”.

2.15 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 introduced significant changes to the accounting treatment of leases by the lessee. It eliminated 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 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 leases concerned 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 12 months or less and leases of assets with individual value when new of less than USD 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 that reflects 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.

2.16 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.

2.17 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.

2.17.1 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 Solely Payment of Principal and Interest (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 12-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. It applies the simplified method allowed by IFRS 9, which consists of establishing provisions to cover expected credit losses over the receivables' residual term.

2.17.2 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.

2.17.3 DERIVATIVES

2.17.3.1 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.

2.17.3.2 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.

2.17.3.3 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 instru-

ment 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.

2.17.4 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.

2.18 INVENTORIES

Inventories include:

- Operating materials and equipment such as spare parts supplied under a maintenance programme. Inventories are recognised at the lower of historical cost and net realisable value. The cost of inventories is determined under the weighted average unit cost method, and includes all direct and indirect purchase acquisition costs.
- Certificates issued under capacity obligation mechanisms (capacity guarantees in France), see note 2.8.

Impairment of inventories depends on the turnover of materials, their estimated useful lives and the degree of technical obsolescence.

2.19 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). Provisions are 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.

2.20 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".

2.21 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.

2.22 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.

2.23 EMPLOYEE BENEFITS

The Group grants its employees post-employment benefits (pension plans, retirement gratuities, 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.

2.23.1 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 electricity and gas 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 whose duration is coherent with 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.

2.23.2 POST-EMPLOYMENT BENEFIT OBLIGATIONS

When they retire, Group employees covered by the electricity and gas (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 CNIIEG (*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 CNIIEG 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 18 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 10 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.

2.23.3 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.

2.24 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, investment subsidies associated with connection contracts have been reclassified as sales revenues and are recognised progressively over the useful life of the corresponding asset (see note 2.7 "Sales").

2.25 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.

Note 3. Significant events and transactions of 2022 and 2021**3.1 SIGNIFICANT EVENTS AND TRANSACTIONS OF 2022****3.1.1 INVESTMENT PROGRAMME FOR 2022**

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 in 2022 by RTE SA's regulated scope amounted to €1,721.9 million, which was 92.7% of the amount authorised by the French energy regulator CRE (*Commission de régulation de l'énergie*).

The principal expenditure in 2022 concerned major projects for connection of the Saint-Brieuc, Calvados, Fécamp and Noirmoutier offshore wind farms, reinforcement of the France-Belgium interconnector, and continued work on the Savoy-Piedmont link with Italy. Investments were also made for network adaptation, for example the South Aveyron and Ar-gia-Cantegrit projects, and network upgrades such as undergrounding of the Plessis Gassot – Seine power lines.

3.1.2 TURPE 6 NETWORK ACCESS TARIFF

The TURPE 6 transmission network access tariff came into force on 1 August 2021 for a 4-year period, with revisions on 1 August every year to reflect inflation and the gradual balancing of the income and expenses adjustment account (CRCP⁽¹⁾).

On 1 August 2022, the tariff for the high-voltage network was reduced by 0.01%, in compliance with the CRE's decision of 9 June 2022.

3.1.3 EXCEPTIONAL EARLY PAYMENT OF PART OF RTE'S CRCP ACCOUNT BALANCE

In the current energy crisis, price differentials on the wholesale electricity markets widened between France and its neighbouring European countries, and this led to a significant rise in the income from cross-border interconnections. Despite the additional costs borne by RTE as a result of rising electricity prices, its income exceeded the CRE's forecasts for 2022. In response to this situation, the regulator issued a decision of 17 November 2022⁽²⁾ ordering that the surplus should be redistributed to network clients (on "CART" network access contracts), in accordance with the French Energy Code. The related payment will be made before the end of the first quarter of 2023.

In practice, the CRE considers that this payment as an exceptional advance payment of the 2022 CRCP (to be invoiced and paid during the first half of 2023). The practicalities defined by the CRE are set out in a statement of 17 November 2022, including description of the legal framework and the calculation and payment methods.

Based on the above, at 31 December 2022 RTE recognised a provision relating to its income from "CART" network access contracts (reducing "CART" revenues), amounting to €1,940 million (excluding taxes).

3.1.4 FINANCING TRANSACTIONS OF THE YEAR

In January 2022, RTE issued a €850 million green bond with a 0.750% coupon and 12-year maturity. The funds raised are dedicated to eligible financing and refinancing that will generate an environmental benefit: offshore wind farm connection projects and electricity interconnection projects between France and neighbouring European countries to optimise the energy mix.

(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.

(2) CRE decision of 17 November 2022 concerning proposals for implementation of an exceptional early payment of part of RTE's CRCP account balance.

In June 2022, RTE redeemed a €750 million bond line that reached maturity (12-year bond with a 3.875% coupon).

The average interest rate on debt was 1.40% at 31 December 2022, compared to 1.60% at 31 December 2021. The average maturity was 9.77 years at the end of 2022, down from 9.92 years at the end of 2021.

On 16 December 2022, RTE also set up a new syndicated credit line of €1,250 million, for a term of five years (plus two optional one-year extensions). This facility replaces the credit facility signed in 2016, which was due to mature on 21 June 2023.

3.1.5 RUSSIAN INVASION OF UKRAINE AND THE MACRO-ECONOMIC ENVIRONMENT

RTE's European business (electricity exchanges at European level) has low exposure to the countries at war. The direct impact of the Ukraine conflict on the audited financial statements at 31 December 2022 remains very limited.

The macro-economic situation deteriorated significantly in France and other countries in 2022. Inflation accelerated, particularly affecting energy prices, and causing procurement issues with an impact on both operating expenses and the cost of completing investment programmes.

To date, the direct consequences of this macro-economic situation have not significantly impacted RTE's financial statements.

3.1.6 NEW PARTNERSHIP BETWEEN RTE I AND SOCIÉTÉ DE TRANSPORT D'ÉNERGIE ÉLECTRIQUE EN POLYNÉSIE (TEP)

RTE International acquired a 25% investment in TEP, the operator of Tahiti's electricity transmission network, for €5.6 million. The shares were purchased in two steps during 2022.

Based on analysis of TEP's governance, this partnership entity is considered as an associate. Consequently, RTE International's investment is accounted

for under the equity method in the Group's financial statements from November 2022.

3.1.7 DIVIDENDS

On 1 June 2022, the Supervisory Board approved the proposal put forward by the shareholders at their General Meeting held the same day to pay a dividend of €397 million or approximately €1.86 per share.

3.2 SIGNIFICANT EVENTS AND TRANSACTIONS OF 2021

3.2.1 INVESTMENT PROGRAMME FOR 2021

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 2021 amounted to €1,578 million, which was 92% of the amount authorised by the French energy regulator CRE (*Commission de régulation de l'énergie*).

The principal expenditure in 2021 concerned major projects for connection of the Fécamp, Saint-Nazaire, Saint-Brieuc and Calvados offshore wind farms, and transmission projects associated with developments such as the Avelin-Gavrelle line and interconnectors such as IFA2 and Savoy-Piedmont.

3.2.2 TURPE 6 NETWORK ACCESS TARIFF

The TURPE 6 transmission network access tariff came into force on 1 August 2021 for a 4-year period, with revisions on 1 August every year to reflect inflation and the gradual balancing of the income and expenses adjustment account (CRCP⁽¹⁾).

The average adjustment on 1 August 2021 of the "TURPE 6 HTB" tariff for the high voltage network across all consumer categories was an increase of +1.09%.

(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.

3.2.3 FINANCING TRANSACTIONS OF THE YEAR

RTE redeemed two bonds for the total amount of €750 million in February 2021 (at the interest rate of 4.13%) and repaid a €100 million EIB loan in September 2021 (at the interest rate of 0.163%). The net indebtedness decreased from €9.8 billion in December 2020 to €9.7 billion at 31 December 2021.

3.2.4 TAX INSPECTIONS

Following the tax inspection concerning the years 2017 and 2018, RTE SA was notified of a rectification procedure in which the tax authorities challenged certain accounting and tax treatments. A provision of €8 million was therefore recognised in the 2021 financial statements to cover this risk.

3.2.5 DIVIDENDS

On 8 June 2021, the Supervisory Board approved the proposal put forward by the shareholders at

their General Meeting held the same day to pay a dividend of €313 million or approximately €1.47 per share.

3.2.6 MONITORING OF TRADE RECEIVABLES

In view of the soaring prices on the electricity markets, reflected in the average spot price of €109/MWh in 2021 (compared to €32/MWh in 2020) with peaks of over €200/MWh on certain days in the final quarter of 2021, and the fact that one supplier was placed in court-ordered liquidation on 2 December 2021, RTE intensified its procedure for monitoring and measuring the risk of default by counterparties, particularly the balance-responsible entities.

This risk gave rise to the recognition of a €30 million provision for impairment of trade receivables with two balance-responsible entities. This was the best estimate of the risk at the date of recognition.

Note 4. Changes in the scope of consolidation

TEP Tahiti is included in the scope of consolidation under the equity method from 1 November 2022. It is 25% owned by RTE International. This entity is the

concession-holder for the public high-voltage electricity transmission service on the island of Tahiti.

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 comprise:

(in thousands of euros)	2022	2021
Transmission network access – distributors	1,935,534	3,852,302
Transmission network access – other users	253,192	485,232
Interconnections	2,601,067	783,707
Other services	135,727	132,795
Sales	4,925,520	5,254,036

The decrease in sales of transmission network access is mainly explained by the provision booked for the exceptional early payment of part of RTE's CRCP account balance. See note 3.1.3.

Sales income from interconnections was boosted by widening electricity price differentials between France and its neighbouring countries.

Note 7. Energy purchases

(in thousands of euros)	2022	2021
Energy purchases	(490,444)	(549,943)

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)	2022	2021
External services	(644,242)	(613,241)
Electricity system operation purchases (excluding energy purchases)	(782,630)	(691,761)
Other purchases	(72,205)	(84,713)
Change in inventories and capitalised production	252,767	263,527
Other external expenses	(1,246,310)	(1,126,188)

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 2022, these commitments mature as follows:

Commitments given (in thousands of euros)	31.12.2022	Maturities			31.12.2021
		< 1 year	1-5 years	> 5 years	
Operating contract performance commitments given	233,730	169	233,561	0	0
Commitments related to orders for operating items	2,290,289	1,669,930	574,808	45,551	1,029,533
Other operating commitments	0	0	0	0	0
Total operating commitments given	2,524,019	1,670,098	808,369	45,551	1,029,533
Financing commitments given	0	0	0	0	0
Investing commitments given	1,959,788	1,014,685	944,765	339	1,260,211
Total commitments given	4,483,807	2,684,783	1,753,134	45,890	2,289,744

Commitments received (in thousands of euros)	31.12.2022	Maturities			31.12.2021
		< 1 year	1-5 years	> 5 years	
Operating commitments received	2,251,521	2,000,857	243,896	6,768	841,050
Financing commitments received	1,250,000	0	1,250,000	0	1,500,905
Investing commitments received	1,242,026	129,014	703,728	409,284	794,489
Total commitments received	4,743,547	2,129,870	2,197,624	416,052	3,136,445

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 the 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. The change in their value between 2021 and 2022 results from the surge in purchase prices for electricity in 2022.

On 16 December 2022, RTE set up a new syndicated credit line of €1,250 million, with a term of five years (plus two optional one-year extensions). This facility replaces the credit facility signed in 2016, which was due to mature on 21 June 2023.

RTE has granted a parent company guarantee totalling €451 million for the purposes of the business of its subsidiary CIDAC (owned 50% and not consolidated at 31 December 2022). This guarantee covers CIDAC's payment obligations to its suppliers. The orders covered by this guarantee (which are not yet completed) are included in "Investing commitments given".

Note 10. Personnel expenses**10.1 PERSONNEL EXPENSES**

Personnel expenses comprise:

(in thousands of euros)	2022	2021
Wages and salaries	(593,907)	(570,434)
Social contributions	(289,495)	(304,050)
Employee profit sharing including employer contribution	(39,700)	(37,461)
Other expenses linked to short-term benefits	4,475	4,362
Short-term benefits	(918,626)	(907,582)
Benefits paid	72,302	68,311
Current year service cost	(97,809)	(93,787)
Plan amendment	-	-
Post-employment benefits	(25,507)	(25,476)
Benefits paid	12,610	10,770
Current year service cost	(13,257)	(14,611)
Actuarial gains and losses	23,569	3,091
Other long-term benefits	22,921	(750)
PERSONNEL EXPENSES	(921,212)	(933,808)

10.2 WORKFORCE

RTE's year-end workforce numbers were as follows:

	31.12.2022	31.12.2021
Executives	4,967	4,781
Supervisory and technical	3,661	3,704
Operational staff	382	378
Workforce with IEG status	9,010	8,863
Non IEG status	576	575
TOTAL WORKFORCE	9,586	9,438

RTE's subsidiaries⁽¹⁾ have a total of 125 employees.

(1) Subsidiaries owned 100% by RTE.

Note 11. Taxes other than income taxes

Taxes other than income taxes comprise:

(in thousands of euros)	2022	2021
Tax on pylons	(299,106)	(291,427)
Tax on network companies (IFER)	(105,141)	(103,709)
Local economic contribution (CET)	(50,021)	(50,390)
Land tax	(26,295)	(22,502)
Other taxes	(40,360)	(42,799)
Taxes other than income taxes	(520,922)	(510,826)

Note 12. Other operating income and expenses

Other operating income and expenses comprise:

(in thousands of euros)	2022	2021
Gains (losses) on disposal of fixed assets	(34,171)	(26,069)
Net variation in provisions on current assets	(7,783)	(33,979)
Net variation in provisions for operating contingencies and losses	(6,098)	(8,304)
Other income and expenses	146,787	29,948
Other operating income and expenses	98,734	(38,404)

“Other income and expenses” mainly include the €71 million load-shedding subsidy (up by €48 million from 2021), reflecting the increase in the tender price between 2021 and 2022, and

penalties received or receivable in connection with system service (frequency and voltage), amounting to €45 million (€12 million in 2021) due to a price effect on their value.

Note 13. Financial result

13.1 COST OF GROSS FINANCIAL INDEBTEDNESS

(in thousands of euros)	2022	2021
Cost of gross financial indebtedness	(136,717)	(147,681)

The cost of gross financial indebtedness mainly comprises:

- interest expenses on bonds, totalling €162 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 2022 was a positive €30.5 million (compared to €27.2 million in 2021).

- Interest on the IFRS 16 lease liability, amounting to €3 million.

13.2 DISCOUNT EFFECT

(in thousands of euros)	2022	2021
Discount effect	(34,014)	(21,233)

The discount effect essentially concerns provisions for post-employment and long-term employee benefits.

13.3 OTHER FINANCIAL INCOME AND EXPENSES

Other financial income and expenses comprise:

(in thousands of euros)	2022	2021
Income (expenses) on cash, cash equivalents and available-for-sale financial assets	2,416	(1,621)
Gains (losses) on other financial assets	(13,224)	(14,555)
Other financial income (expenses)	7,924	1,819
Return on fund assets	1,062	735
Other financial income and expenses	(1,822)	(13,622)

Note 14. Income taxes

14.1 BREAKDOWN OF INCOME TAX

Details are as follows:

(in thousands of euros)	2022	2021
Current tax expense	(173,326)	(272,693)
Deferred taxes	19,272	19,067
TOTAL	(154,054)	(253,626)

14.2 RECONCILIATION OF THE THEORETICAL AND EFFECTIVE TAX EXPENSE

(in thousands of euros)	2022	2021
Consolidated profit before tax of consolidated companies	(632,775)	(910,781)
Tax rate applicable	25.83%	28.41%
Theoretical tax expense	(164,713)	(258,664)
Differences in tax rate	78	(1,083)
Permanent differences	3,076	1,496
Taxes without basis ⁽¹⁾	5,019	3,228
Other	2,486	1,398
ACTUAL TAX EXPENSE	(154,054)	(253,626)
Effective tax rate	24.35%	27.85%

(1) Tax credits reclassified as operating items.

14.3 BREAKDOWN OF DEFERRED TAXES BY NATURE

(in thousands of euros)	2022	2021
Differences between depreciation recorded for accounting and tax purposes	18,221	16,844
Financial instruments	8	8
Provisions for employee benefits	462,587	599,206
Investment subsidies	242,524	226,142
Other deductible temporary differences	5,574	6,917
Total deferred tax assets	728,913	849,117
Differences between depreciation recorded for accounting and tax purposes	(385,863)	(381,988)
Other taxable temporary differences	(73,225)	(65,546)
Total deferred tax liabilities	(459,088)	(447,534)
NET DEFERRED TAXES	269,825	401,583

Note 15. Intangible assets

Intangible assets essentially comprise purchased or internally designed and developed software. RTE recognised no impairment on intangible assets at 31 December 2022 or 2021.

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.

Increases in gross value include acquisitions of assets and reclassifications. Decreases in gross value

15.1 AT 31 DECEMBER 2022

(in thousands of euros)	31.12.2021	Increases	Decreases	31.12.2022
Intangible assets in progress	244,195	139,743	(64,851)	319,087
Other intangible assets	1,110,536	81,456	(10,238)	1,181,753
Intangible assets, gross	1,354,731	221,199	(75,090)	1,500,840
Amortisation	(863,876)	(78,527)	1	(942,403)
Intangible assets, net	490,855	142,671	(75,089)	558,437

15.2 AT 31 DECEMBER 2021

(in thousands of euros)	31.12.2020	Increases	Decreases	31.12.2021
Intangible assets in progress	207,935	119,080	(82,820)	244,195
Other intangible assets	1,014,217	89,871	6,449	1,110,536
Intangible assets, gross	1,222,151	208,951	(76,371)	1,354,731
Amortisation	(791,914)	(72,099)	137	(863,876)
Intangible assets, net	430,238	136,851	(76,234)	490,855

Note 16. Property, plant and equipment

The Group recognised no impairment on property, plant and equipment at 31 December 2022 or 2021.

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 2022

(in thousands of euros)	31.12.2021	Increases	Decreases	31.12.2022
Land	193,187	17,231	(355)	210,063
Buildings (including IFRS 16 right-of-use assets) ⁽¹⁾	3,329,907	154,406	(15,435)	3,468,878
Networks	28,337,735	1,237,895	(154,177)	29,421,453
Other installations, machinery and equipment	1,371,565	101,378	(13,508)	1,459,435
Other property, plant and equipment	522,700	19,097	(6,082)	535,714
Property, plant and equipment in progress	2,458,891	1,679,771	(1,561,659)	2,577,004
Property, plant and equipment, gross	36,213,985	3,209,777	(1,751,216)	37,672,546
Land improvements	(71,697)	(3,267)	90	(74,873)
Buildings (including IFRS 16 right-of-use assets) ⁽¹⁾	(1,580,340)	(107,817)	10,220	(1,677,937)
Networks	(14,329,288)	(738,670)	141,318	(14,926,640)
Other installations, machinery and equipment	(952,479)	(78,444)	12,788	(1,018,135)
Other property, plant and equipment	(354,008)	(34,708)	6,285	(382,431)
Depreciation	(17,287,811)	(962,906)	170,702	(18,080,015)
Property, plant and equipment, net	18,926,174	2,246,871	(1,580,514)	19,592,531

(1) Details of IFRS 16 right-of-use assets.

At 31 December 2022, the Group has not recognised any impairment on its right-of-use assets.

(in thousands of euros)	01.01.2022	Increases	Decreases	31.12.2022
Commercial leases	237,489	181	(2,329)	235,341
Vehicle leases	4,722	-	(4,722)	-
Gross value	242,212	181	(7,052)	235,341
Commercial leases	(14,297)	(27,445)	2,295	(39,446)
Vehicle leases	(4,687)	(35)	4,722	-
Depreciation	(18,984)	(27,480)	7,018	(39,446)
Net value	223,228	(27,299)	(34)	195,895

16.2 AT 31 DECEMBER 2021

(in thousands of euros)	31.12.2020	Increases	Decreases	31.12.2021
Land	184,792	9,741	(1,346)	193,187
Buildings (including IFRS 16 right-of-use assets) ⁽¹⁾	3,201,710	150,064	(21,867)	3,329,907
Networks	27,165,666	1,305,734	(133,664)	28,337,735
Other installations, machinery and equipment	1,250,835	127,927	(7,196)	1,371,565
Other property, plant and equipment	497,017	31,611	(5,928)	522,700
Property, plant and equipment in progress	2,608,256	1,485,671	(1,635,036)	2,458,891
Property, plant and equipment, gross	34,908,276	3,110,748	(1,805,038)	36,213,986
Land improvements	(69,405)	(3,079)	788	(71,697)
Buildings (including IFRS 16 right-of-use assets) ⁽¹⁾	(1,490,706)	(90,453)	819	(1,580,340)
Networks	(13,737,448)	(713,184)	121,344	(14,329,288)
Other installations, machinery and equipment	(888,741)	(70,292)	6,553	(952,479)
Other property, plant and equipment	(323,080)	(36,739)	5,811	(354,008)
Depreciation	(16,509,379)	(913,747)	135,314	(17,287,812)
Property, plant and equipment, net	18,398,896	2,197,001	(1,669,723)	18,926,174

(1) Details of IFRS 16 right-of-use assets.

At 31 December 2021, the Group did not recognise any impairment on its right-of-use assets.

(in thousands of euros)	01.01.2021	Increases	Decreases	31.12.2021
Commercial leases	243,636	13,097	(19,244)	237,489
Vehicle leases	4,722	-	-	4,722
Gross value	248,359	13,097	(19,244)	242,212
Commercial leases	(2,319)	(27,702)	15,725	(14,297)
Vehicle leases	(3,125)	(1,562)	-	(4,687)
Depreciation	(5,449)	(29,265)	15,725	(18,989)
Net value	242,910	(16,168)	(3,519)	223,223

Note 17. Investments in associates

Details of investments in associates are as follows:

(in thousands of euros)	31.12.2022			31.12.2021		
	% capital held	Share of equity	Share of net income	% capital held	Share of equity	Share of net income
HGRT	34%	31,042	4,372	34%	31,214	3,698
CORESO	16%	1,105	397	16%	830	237
TEP (Tahiti)	25%	7,433	1,808			
TOTAL		39,580	6,577		32,044	3,936

RTE International acquired a 25% investment in TEP, the operator of Tahiti's electricity transmission network. The shares were purchased in two steps during 2022.

Based on analysis of TEP's governance, this partnership entity is considered as an associate. Consequently, RTE International's investment is accounted

for under the equity method in the Group's financial statements from November 2022.

The value of the shares includes the purchase cost paid by RTE International, and negative goodwill representing the financial terms of RTE I's entry into this partnership.

Note 18. Financial assets**18.1 BREAKDOWN BETWEEN CURRENT AND NON-CURRENT FINANCIAL ASSETS**

Current and non-current financial assets break down as follows:

(in thousands of euros)	31.12.2022			31.12.2021		
	Current	Non-current	Total	Current	Non-current	Total
Financial assets	2,327,678	6,711	2,334,389	1,088,912	4,626	1,093,538
Loans and financial receivables ⁽¹⁾	115,758	16,339	132,097	103,275	10,591	113,866
Financial assets	2,443,436	23,050	2,466,486	1,192,187	15,217	1,207,404

(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 2022

(in thousands of euros)	31.12.2021	Increases	Decreases	Changes in fair value	Impairment	31.12.2022
Financial assets	1,093,538	9,045,385	(7,816,654)	12,552	(432)	2,334,389
Loans and financial receivables	113,867	431,193	(412,962)		(0)	132,098
Financial assets	1,207,405	9,476,578	(8,229,615)	12,552	(432)	2,466,487

18.2.2 AT 31 DECEMBER 2021

(in thousands of euros)	31.12.2020	Increases	Decreases	Changes in fair value	Impairment	31.12.2021
Financial assets	1,956,945	3,503,111	(4,367,057)	540		1,093,538
Loans and financial receivables	19,914	154,311	(60,347)		(11)	113,867
Financial assets	1,976,858	3,657,422	(4,427,404)	540	(11)	1,207,405

18.3 BREAKDOWN OF FINANCIAL ASSETS

(in thousands of euros)	31.12.2022			31.12.2021		
	Equities	Debt securities/ investment funds	Total	Equities	Debt securities/ investment funds	Total
Liquid assets		2,327,678	2,327,678		1,088,912	1,088,912
Other securities	6,711		6,711	4,626		4,626
Financial assets	6,711	2,327,678	2,334,389	4,626	1,088,912	1,093,538

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 2.17. In view of the characteristics of the investment funds, the fair value at 31 December 2022 was higher than their acquisition cost.

Note 19. Inventories

Inventories mostly consist of technical equipment for internal use.

(in thousands of euros)	31.12.2022	31.12.2021
Inventories, gross value	193,756	152,587
Impairment	(26,023)	(19,058)
Inventories, net value	167,733	133,529

“Inventories, gross value” includes €69 million of capacity guarantee certificates. No impairment is recognised in connection with capacity guarantees.

Note 20. Trade and similar receivables

(in thousands of euros)	31.12.2022	31.12.2021
Trade and similar receivables, gross value	2,101,373	1,740,800
Provisions	(37,911)	(36,966)
Trade and similar receivables, net value	2,063,462	1,703,833

All trade receivables mature within one year.

The credit risk on trade and similar receivables is shown below:

(in thousands of euros)	31.12.2022			31.12.2021		
	Gross values	Provisions	Net values	Gross values	Provisions	Net values
Trade receivables	2,101,373	(37,911)	2,063,462	1,740,800	(36,966)	1,703,833
overdue by less than 6 months	(9,854)	(300)	(10,155)	1,988	(624)	1,363
overdue by 6-12 months	50,786	(30,530)	20,256	7,798	(3,497)	4,301
overdue by more than 12 months	9,591	(6,421)	3,170	6,131	(2,894)	3,237
Total trade receivables overdue	50,522	(37,251)	13,271	15,917	(7,016)	8,901
Trade receivables not yet due	2,050,851	(660)	2,050,191	1,724,882	(29,950)	1,694,932

Most trade receivables not yet due concern invoices not yet issued.

Note 21. Other receivables

(in thousands of euros)	31.12.2022	31.12.2021
Payments in advance	115,966	88,608
Other receivables	578,858	214,288
Prepaid expenses	18,198	11,557
Other receivables, gross value	713,023	314,454
Provisions	(1,730)	(1,856)
Other receivables, net value	711,293	312,597

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)	31.12.2021	Increases	Decreases	31.12.2022
Provisions on other receivables	(1,856)	-	126	(1,730)

Note 22. Cash and cash equivalents

Cash and cash equivalents as stated in the cash flow statement include the following amounts recorded in the balance sheet:

(in thousands of euros)	31.12.2022	31.12.2021
Cash	579,494	215,930
Cash equivalents	198,078	0
Cash and cash equivalents	777,572	215,930

Cash equivalents comprise:

- daily margin calls on forward energy purchase contracts, amounting to €163 million. At 31 December 2021, the credit balance of margin calls (€109 million) is presented in financial liabilities;
- short-term investments (other than equity investments) initially maturing within three months, that are readily convertible into cash and have a negligible risk of fluctuation in value, amounting to €35 million.

Note 23. Equity**23.1 SHARE CAPITAL**

At 31 December 2022, 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 1 June 2022, the Supervisory Board approved the proposal put forward by the shareholders at their General Meeting held the same day to pay a dividend of €397 million or approximately €1.86 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:

(in thousands of euros)	31.12.2022			31.12.2022		
	Current	Non-current	Total	Current	Non-current	Total
Provisions for employee benefits	67,199	1,860,872	1,928,071	87,126	2,386,339	2,473,465
Other provisions	24,517	42,418	66,935	23,214	35,456	58,670
Provisions	91,716	1,903,290	1,995,006	110,340	2,421,795	2,532,135

24.2 EMPLOYEE BENEFITS**24.2.1 BREAKDOWN OF CHANGES IN PROVISIONS FOR EMPLOYEE BENEFITS**

(in thousands of euros)	Obligations	Fund assets	Provisions in the balance sheet
Balance at 31.12.2021	2,555,160	(81,695)	2,473,465
Net expense for 2022	145,080	(1,062)	144,018
Actuarial gains and losses	(629,840)	25,340	(604,500)
long-term benefits	(23,569)	-	(23,569)
post-employment benefits	(606,272)	25,340	(580,932)
Contributions to funds	-	-	-
Benefits paid	(89,442)	4,530	(84,912)
Balance at 31.12.2022	1,980,958	(52,887)	1,928,071

The change in provisions since 31 December 2021 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)	31.12.2022	31.12.2021
Current service cost	111,066	108,398
Actuarial gains and losses – long-term benefits	(23,569)	(3,091)
Plan curtailments or settlements	-	-
Net expenses included in operating profit	87,497	105,307
Interest expense (discount effect)	34,014	21,233
Return on fund assets	(1,062)	(735)
Net expenses included in financial result	32,952	20,498
Employee benefit expense recorded in the income statement	120,449	125,805
Actuarial gains and losses – post-employment benefits	(606,272)	218,479
Actuarial gains and losses – fund assets	25,340	(3,681)
Actuarial gains and losses	(580,932)	214,799
Gains and losses on employee benefits recorded directly in equity	(580,932)	214,799

Actuarial gains and losses on post-employment benefits break down as follows:

(in thousands of euros)	Long-term benefits	Post-employment benefits	31.12.2022
Experience adjustments	10,232	350,904	361,136
Changes in demographic assumptions	1,274	(5,756)	(4,482)
Changes in financial assumptions ⁽¹⁾	(35,075)	(951,419)	(986,495)
Actuarial gains and losses on obligations	(23,569)	(606,272)	(629,840)

(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 2022	1,840,888	(52,887)	1,788,001
including:			
Pensions	533,362		533,362
Benefits in kind (energy)	1,126,232		1,126,232
Retirement gratuities	70,609	(52,887)	17,722
Bereavement benefit	73,910		73,910
Other post-employment benefits	36,775		36,775
Provisions for long-term benefits at 31 December 2022	140,070		140,070
including:			
Annuities following invalidity, industrial accident or work-related illness	74,642		74,642
Long-service awards	16,541		16,541
Other long-term benefits	48,887		48,887
Provisions for employee benefits at 31 December 2022	1,980,958	(52,887)	1,928,071

Fund assets amounted to €53 million at 31 December 2022 (€82 million at 31 December 2021).

They cover retirement gratuities and take the form of insurance contracts comprising 30.76% equities and 69.24% bonds at 31 December 2022 (respectively 33.16% and 66.84% at 31 December 2021).

24.2.4 FUTURE CASH FLOWS

Cash flows related to future employee benefits are as follows:

(in thousands of euros)	31.12.2022	
	Cash flow under year-end economic conditions	Amount covered by provision (present value)
Less than one year	76,379	74,932
One to five years	288,963	257,718
Five to ten years	349,588	262,553
More than ten years	4,727,123	1,385,755
Cash flows related to employee benefits	5,442,053	1,980,958

24.2.5 ACTUARIAL ASSUMPTIONS

The main actuarial assumptions used in calculating employee benefit obligations are summarised below:

(%)	2022	2021
Discount rate/Return on fund assets	3.90%	1.30%
Inflation rate	2.30%	1.70%

24.2.6 SENSITIVITY ANALYSIS

(%)	2022	2021
Impact of a 25 bp increase or decrease in the discount rate		
• on the amount of the obligation	-4.9%/+3.1%	-6.1%/+6.7%
• on the net expense for the following year	-2.3%/+1.5%	-3.4%/+3.7%
Impact of a 25 bp increase or decrease in the inflation rate		
• on the amount of the obligation	+5.2%/-4.8%	+6.4%/-5.8%
• on the net expense for the following year	+6.0%/-5.5%	+8%/-7.2%

24.3 OTHER PROVISIONS

Details of changes in other provisions are as follows:

(in thousands of euros)	31.12.2021	Increases	Decreases ⁽¹⁾		Other movements	31.12.2022
			Utilisations	Reversals		
Employer contribution to profit sharing	15,911	16,987	(15,911)			16,987
Other provisions	42,759	12,923	(6,651)		917	49,948
Other provisions	58,670	29,910	(22,562)	0	917	66,935

(1) Only provisions utilised.

“Other provisions” notably include provisions relating to a litigation with social security bodies and the provision for tax risks.

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)	31.12.2022			31.12.2021		
	Current	Non-current	Total	Current	Non-current	Total
Bonds	8,783,447	547,870	9,331,317	8,436,454	806,681	9,243,135
Other financial liabilities (including the IFRS 16 lease liability) ⁽¹⁾	1,409,009	446,815	1,855,824	1,385,602	481,369	1,866,971
Financial liabilities	10,192,456	994,685	11,187,141	9,822,056	1,288,050	11,110,106

(1) The IFRS 16 lease liability amounts to €224,218,000 at 31 December 2022.

“Other financial liabilities” essentially include RTE’s borrowings from the European Investment Bank, amounting to €1,150 million at 31 December 2022 (€1,150 million at 31 December 2021), and the IFRS 16 lease liability amounting to €224 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 2020	9,924,995	1,938,890	88,547	11,952,433
Increases	1,736	3,006,359	1,011,912	4,020,007
Decreases	(743,928)	(3,078,291)	(1,040,114)	(4,862,333)
Balance at 31 December 2021	9,182,803	1,866,958	60,346	11,110,106
Increases	848,626	3,025,097	965,390	4,839,113
Decreases	(751,737)	(3,037,071)	(973,270)	(4,762,078)
BALANCE AT 31 DECEMBER 2022	9,279,692	1,854,983	52,466	11,187,141

(1) Including IFRS 16 lease liabilities and commercial paper (TCN).

(1) Breakdown of the change in the IFRS 16 lease liability

(in thousands of euros)	IFRS 16 lease liability
Balance at 1 January 2022	254,401
Increases	181
Decreases	(30,365)
BALANCE AT 31 DECEMBER 2022	224,218

All debts are in euros.

In January 2022, RTE issued a €850 million green bond with a 0.750% coupon and 12-year maturity.

In June 2022, the company redeemed a €750 million bond line that reached maturity (12-year bond with a 3.875% coupon).

The nominal values of the Group's principal borrowings at 31 December 2022 are as follows:

(in thousands of euros)	Issue date	Maturity	Issue amount	Currency	Rate
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%
Bond	2022	2024	(850,000)	EUR	0.750%

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	808,263	481,369	1,289,632
One to five years	1,991,820	163,156	2,154,976
More than five years	6,443,052	1,222,447	7,665,498
Total loans and other financial liabilities at 31 December 2021	9,243,135	1,866,971	11,110,106
Less than one year	549,451	445,918	995,369
One to five years	2,232,433	668,186	2,900,618
More than five years	6,549,434	741,720	7,291,154
TOTAL LOANS AND OTHER FINANCIAL LIABILITIES AT 31 DECEMBER 2022	9,331,317	1,855,824	11,187,141

(1) Maturity of the IFRS 16 lease liability

(in thousands of euros)	IFRS 16 lease liability
Less than one year	30,009
From one to five years	152,489
More than five years	41,720
IFRS 16 LEASE LIABILITY AT 31 DECEMBER 2022	224,218

25.2.3 CREDIT LINE

(in thousands of euros)	Total	Maturity		
		< 1 year	1-5 years	> 5 years
Confirmed credit line	1,250,000		1,250,000	

On 16 December 2022, RTE set up a new syndicated credit line of €1,250 million, for a term of five years (plus two optional one-year extensions). This facility replaces the credit facility signed in 2016, which was due to mature on 21 June 2023.

25.2.4 FAIR VALUE OF LOANS AND OTHER FINANCIAL LIABILITIES

(in thousands of euros)	31.12.2022		31.12.2021	
	Fair value	Net book value	Fair value	Net book value
Bonds	8,778,816	9,331,317	10,390,685	9,243,135
Loan from EIB	955,278	1,150,840	1,130,938	1,150,000
TOTAL	9,734,095	10,482,158	11,521,623	10,393,135

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)	31.12.2022	31.12.2021
Loans and other financial liabilities	11,187,141	11,110,106
Cash and cash equivalents	(777,572)	(215,930)
Current financial assets	(2,443,436)	(1,192,187)
Net indebtedness	7,966,133	9,701,990

25.4 CHANGE IN NET INDEBTEDNESS

(in thousands of euros)	2022	2021
Operating profit before depreciation and amortisation (EBITDA)	1,845,366	2,094,866
Cancellation of non-monetary items included in EBITDA	(3,594)	29,057
Change in working capital	2,171,049	116,574
Other	0	0
Net cash flow from operations	4,012,820	2,240,496
Acquisitions of property, plant and equipment and intangibles	(1,725,504)	(1,579,591)
Disposals of property, plant and equipment and intangibles	3,057	3,047
Impact of changes in scope of consolidation on cash	(5,613)	
Net financial expenses disbursed	(173,718)	(203,506)
Income tax paid	(205,606)	(266,505)
Free cash flow	1,905,437	193,942
Repayment of the lease liability	30,183	20,153
Adjusted free cash flow	1,935,620	214,094
Investments net of disposals	(1,851)	(1,077)
Dividends paid	(396,654)	(312,703)
Investment subsidies	185,213	166,663
Other changes	(8,707)	(10,168)
(Increase)/Decrease in net indebtedness, excluding the impact of changes in scope of consolidation and exchange rates	1,713,621	56,810
Effect of other non-monetary changes	22,235	37,295
(Increase)/Decrease in net indebtedness	1,735,856	94,105
Net indebtedness at beginning of period	(9,701,990)	(9,796,094)
NET INDEBTEDNESS AT END OF PERIOD	(7,966,133)	(9,701,990)

The change in working capital in 2022 includes recognition at 31 December of a provision (for credit notes for customers on "CART" network access contracts), corresponding to the exceptional early payment of part of RTE's CRCP account balance. See note 3.1.3.

Note 26. Management of financial risks

See section 6.5 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 2022:

(in thousands of euros)	31.12.2022				Fair value at 31.12.2021	Fair value	
	< 1 year	1-5 years	> 5 years	Total	Total	31.12.2022	31.12.2021
Fixed rate payer/floating rate receiver	-	-	-	-	-	-	-
Floating rate payer/fixed rate receiver	-	-	-	-	-	-	-
Derivatives	-	-	-	-	-	-	-

The amount hedged at 31 December 2022 is nil. RTE no longer has any hedging instruments in its portfolio.

Note 28. Trade and other payables

Details of trade and other payables are as follows:

(in thousands of euros)	31.12.2022	31.12.2021
Advance payments received	695,296	382,756
Trade payables	2,039,169	1,552,869
Tax and social charges	490,665	656,048
Deferred income	1,517,197	1,328,908
Other	2,349,265	10,596
Trade and other payables	7,091,592	3,931,178

The "Other" item includes the future credit notes recognised at 31 December 2022, corresponding to the exceptional early payment of part of RTE's CRCP account balance. See note 3.1.3.

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)	31.12.2022	31.12.2021
Financial assets		
Investments		
Other assets		
Trade and similar receivables	1,213,648	1,225,506
Other receivables		
Advances and progress payments on orders		
Financial liabilities		
Other liabilities		
Advances and progress payments on orders	2,290,319	87,446
Trade and similar payables	393,716	382,193
Other liabilities		
Operating income and expenses		
Sales	1,966,182	3,872,384
Purchases for operation of the electricity system	1,291,669	717,667

“Trade and similar receivables” and “Sales” essentially correspond to invoicing for access to the electricity transmission network.

“Other liabilities” include the provision recognised at 31 December 2022 (for credit notes for customers on “CART” network access contracts), corresponding to the exceptional early payment of part of RTE’s CRCP account balance. See note 3.1.3. This provision comprises:

- €2,017 million for ENEDIS;
- €21 million for Électricité de Strasbourg;
- €17 million for EDF.

All transactions with related parties take place under normal market conditions and in principle 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 direct or indirect 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 price (for regulated access to historical nuclear electricity) under the “NOME” law for modernisation of the electricity market, and determining the level of the contribution to the Public Electricity Service charges.

The Group carries out transactions with certain public-sector entities, essentially for invoicing of access to the electricity transmission network.

29.3 BOARD COMPENSATION

The Group's key management personnel are the members of the Executive Board and the Supervisory Board.

(in euros)	2022	2021
Compensation of Executive Board members	1,559,989	1,285,205
Compensation of Supervisory Board members ⁽¹⁾	375,816	366,415
TOTAL	1,935,805	1,651,620

(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 2022 financial year:

(in thousands of euros)	KPMG	Mazars
Statutory audit of RTE's individual and consolidated financial statements	397	399
Review of the individual financial statements of fully-consolidated entities	19	43
Non-audit services	91	56
TOTAL	508	497

Note 31. Environment

Expenses for the protection of the environment are described in chapter 7 of the Group's 2022 management report.

Note 32. Subsequent events

None.

Note 33. Scope of consolidation

The scope of consolidation at 31 December 2022 is as follows:

Company	Head Office	% Ownership	% Voting Rights	Consolidation Method	Business Sector
RTE – Réseau de transport d'électricité	Immeuble Window 7C, place du Dôme 92073 Paris-La Défense			Parent company	T
ARTERIA		100%	100%	FC	S
RTE INTERNATIONAL		100%	100%	FC	S
RTE IMMO		100%	100%	FC	S
AIRTELIS		100%	100%	FC	S
CIRTEUS		100%	100%	FC	S
IFA 2		50%	50%	JO	S
HGRT		34%	34%	EM	S
RTE I Netherlands	Spakenburgkade 51 3826CN Amersfoort Pays-Bas	90%	90%	FC	S
INELFE	Tour Cœur Défense B 100, esplanade du Général de Gaulle 92932 Paris-La Défense cedex	50%	50%	JO	S
CORESIO	71, avenue de Cortenbergh 1000 Bruxelles	16%	16%	EM	S
TEP (Tahiti)	Quai de l'Uranie – Immeuble Bougainville – BP4606 – 98713 Papeete	25%	25%	EM	T

Consolidation methods: FC = full consolidation, JO = joint operation, EM = accounted for under the equity method.

Business segments: T = Transmission, S = Services.

RTE SA's investment in CIDAC (Celtic Interconnector Designated Activity Company) is not consolidated at 31 December 2022 as it is considered non-significant. RTE SA owns 50% of the shares of CIDAC.

RTE plans to develop a 700 MW interconnector between France and Ireland in collaboration with

Eirgrid, the Irish transmission network operator. The project was in the detailed design stage until 2022 and will move into the construction phase during 2023. The project company has share capital of €100,000 and made a profit of €9,000 for its first financial year of operation (ending 30 September 2022).

RTE S.A.

Immeuble Window
7C, Place du Dôme
92073 La Défense

Mazars

Tour Exaltis
61, rue Henri Regnault
92075 Paris-la-Défense Cedex

KPMG Audit

Tour Egho
2, avenue Gambetta
CS 60055
92066 Paris-la Défense Cedex

STATUTORY AUDITORS' REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS

*This is a translation into English of the statutory auditors' report on the financial statements of the Company issued in French and it is provided solely for the convenience of English speaking users.
This statutory auditors' report includes information required by European regulation and French law, such as information about the appointment of the statutory auditors or verification of the management report and other documents provided to shareholders.
This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.*

For the year ended December 31, 2022

To the annual general meeting of RTE S.A.,

OPINION

In compliance with the engagement entrusted to us by your annual general meeting, we have audited the accompanying consolidated financial statements of RTE S.A. for the year December 31st 2022.

In our opinion, the consolidated financial statements give a true and fair view of the assets and liabilities and of the financial position of the Group as at December 31st 2022 and of the results of its operations for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union.

The audit opinion expressed above is consistent with our report to the Audit Committee (*Comité de Supervision Economique et d'Audit*).

BASIS FOR OPINION

Audit Framework

We conducted our audit in accordance with professional standards applicable in France. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Our responsibilities under those standards are further described in the Statutory Auditors' Responsibilities for the Audit of the Consolidated Financial Statements section of our report.

Independence

We conducted our audit engagement in compliance with independence requirements of the French Commercial Code (code de commerce) and the French Code of Ethics (code de déontologie) for statutory auditors for the period from January 1st 2021 to the date of our report and specifically we did not provide any prohibited non-audit services referred to in Article 5(1) of Regulation (EU) No 537/2014.

JUSTIFICATION OF ASSESSMENTS – KEY AUDIT MATTERS

In accordance with the requirements of Articles L.823-9 and R.823-7 of the French Commercial Code (code de commerce) relating to the justification of our assessments, we inform you of the key audit matters relating to risks of material misstatement that, in our professional judgment, were of most significance in our audit of the consolidated financial statements of the current period, as well as how we addressed those risks.

These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on specific items of the consolidated financial statements.

REGULATED ENVIRONMENT

Notes 2. 7 “Sales”, 2. 14 “Property, plant and equipment”, 3.1.2 “TURPE 6 network access tariff”, 3.1.3 “Exceptional early payment of part of RTE’s CRCP account balance” et 7 “Energy purchases”

Description of risk	How our audit addressed this risk
<p>RTE is overseen by the French Energy Regulatory Commission (CRE). The tariff mechanism is set to cover all of RTE’s costs, insofar as they reflect the cost of an efficient system operator and makes it possible to smooth and rectify the effects of certain climatic events or economic risk which can impact the electricity transmission in France.</p> <p>The tariff authorized by the CRE sets the targets of significant investments planned, operational costs and interconnections revenues over periods of four years. The TURPE (<i>Tarif d’Utilisation des Réseaux Public d’Électricité</i>) 6, is effective from August 1st 2021 to July 31st 2025.</p> <p>The CRCP (<i>Compte de Régulation des Charges et des Produits</i>) account for each period records the differences between forecasts established by the CRE and actual results. These differences are then passed on to network users within a tariff period or through future tariff adjustments.</p> <p>This mechanism has been adjusted through the year ended December 31, 2022, by a deliberation issued by the CRE as of November 17, 2022, setting a framework to the exceptional early payment of part of RTE’s CRCP account balance at year end.</p> <p>In addition to the tariff, the CRE also sets out a regulatory framework to encourage RTE to improve its performance by setting up incentive mechanisms. These financial mechanisms result in bonuses or penalties, depending on whether the TURPE 6 objectives are met.</p> <p>Compliance with defined forecasts and incentive mechanisms both are essential for the accounting of RTE’s business, specifically on sales, energy purchases and opex or capex classification.</p> <p>Given its impacts on the sales, on energy purchases, on opex or capex classification and on the accounting treatment of regulatory mechanisms, we deemed the regulatory environment to be a key audit matter.</p>	<p>Our work notably included:</p> <ul style="list-style-type: none"> • having a good understanding of the regulatory mechanisms (in particular the TURPE) and of controls set by the Group for accounting sales, operating expenses and investments, • analyzing main financial aggregates above, and significant variations compared to the previous year to drive our work, • ensuring that TURPE 6 new tariff conditions have been updated in the information systems, • checking reciprocal positions declared by Enedis facing RTE, • reconciling, on a sample basis, data from the Joint Allocation Office (joint auction office with several European network operators) with the interconnections revenues, • testing, on a sample basis, sales booked as revenue and assess the accounting classification used, • testing, on a sample basis, operating expenses booked in the income statement to assess the accounting classification used, • analyzing main projects of the period, in order to test their commissioning dates, and check the new investment subsidies, • testing, on a sample basis, expenditures booked as assets in the balance sheet to ensure they meet the accounting rules and principles described in note 1.7, • analyzing effects of regulatory mechanisms, in particular on energy purchases, • appreciate the estimation done at year end of the Exceptional early payment of part of RTE’s CRCP account balance for the year ended December 31 2022 and the correct booking, • appreciate the information provided in the appendix.

SPECIFIC VERIFICATIONS

We have also performed, in accordance with professional standards applicable in France, the specific verifications required by laws and regulations of the Group's information given in the management report of the Executive Board.

We have no matters to report as to its fair presentation and its consistency with the consolidated financial statements.

We attest that the consolidated non-financial statement required by Article L.225-102-1 of the French Commercial Code (*Code de commerce*), is included in the Group's management report, it being specified that, in accordance with the provisions of Article L. 823-10 of this Code, we have verified neither the fair presentation nor the consistency with the consolidated financial statements of the information contained therein and this information must be reported by an independent third party.

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

Appointment of the Statutory Auditors

We were appointed as statutory auditors of RTE S.A. by the annual general meeting held on May 30th 2017 for KPMG and on June 19th 2009 for Mazars.

As at December 31st 2022, KPMG and Mazars were in the 6th year and 14th year of total uninterrupted engagement.

Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with International Financial Reporting Standards as adopted by the European Union and for such internal control as management determines is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting

unless it is expected to liquidate the Company or to cease operations.

The Audit Committee is responsible for monitoring the financial reporting process and the effectiveness of internal control and risks management systems and where applicable, its internal audit, regarding the accounting and financial reporting procedures.

The consolidated financial statements were approved by the Management Board.

STATUTORY AUDITORS' RESPONSIBILITIES FOR THE AUDIT OF THE CONSOLIDATED FINANCIAL STATEMENTS

Objectives and audit approach

Our role is to issue a report on the consolidated financial statements. Our objective is to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with professional standards will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As specified in Article L.823-10-1 of the French Commercial Code (*code de commerce*), our statutory audit does not include assurance on the viability of the Company or the quality of management of the affairs of the Company.

As part of an audit conducted in accordance with professional standards applicable in France, the statutory auditor exercises professional judgment throughout the audit and furthermore:

- Identifies and assesses the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, designs and performs audit procedures responsive to those risks, and obtains audit evidence considered to be sufficient and appropriate to provide a basis for his opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.

- Obtains an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the internal control.
- Evaluates the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management in the consolidated financial statements.
- Assesses the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. This assessment is based on the audit evidence obtained up to the date of his audit report. However, future events or conditions may cause the Company to cease to continue as a going concern. If the statutory auditor concludes that a material uncertainty exists, there is a requirement to draw attention in the audit report to the related disclosures in the consolidated financial statements or, if such disclosures are not provided or inadequate, to modify the opinion expressed therein.
- Evaluates the overall presentation of the consolidated financial statements and assesses whether these statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtains sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. The statutory auditor is responsible for the direc-

tion, supervision and performance of the audit of the consolidated financial statements and for the opinion expressed on these consolidated financial statements.

Report to the Audit Committee

We submit to the Audit Committee a report which includes in particular a description of the scope of the audit and the audit program implemented, as well as the results of our audit. We also report, if any, significant deficiencies in internal control regarding the accounting and financial reporting procedures that we have identified.

Our report to the Audit Committee includes the risks of material misstatement that, in our professional judgment, were of most significance in the audit of the consolidated financial statements of the current period and which are therefore the key audit matters, that we are required to describe in this audit report.

We also provide the Audit Committee with the declaration provided for in Article 6 of Regulation (EU) N° 537/2014, confirming our independence within the meaning of the rules applicable in France such as they are set in particular by Articles L.822-10 to L.822-14 of the French Commercial Code (*code de commerce*) and in the French Code of Ethics (*code de déontologie*) for statutory auditors. Where appropriate, we discuss with the Audit Committee the risks that may reasonably be thought to bear on our independence, and the related safeguards.

Paris La Défense, on February 15, 2023

The statutory auditors,
French original signed by:

Mazars

Mathieu Mougard
Partner

KPMG S.A.

Jacques-François Lethu
Partner

STATUTORY AUDITOR'S REPORT ON REGULATED AGREEMENTS AND COMMITMENTS

*This is a translation into English of the statutory auditors' report on the financial statements of the Company issued in French and it is provided solely for the convenience of English speaking users.
This statutory auditors' report includes information required by European regulation and French law, such as information about the appointment of the statutory auditors or verification of the management report and other documents provided to shareholders.
This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.*

Shareholders' Meeting for the approval of the financial statements for the year ended December 31st, 2022

To the Shareholders,

In our capacity as your company's statutory auditors, we hereby report to you on regulated agreements and commitments.

It is our responsibility to report to shareholders, based on the information provided to us, on the main terms, conditions and reasons underlying company's interest of agreements and commitments that have been disclosed to us or that we may have identified as part of our engagement, without commenting on their relevance or substance or identifying any undisclosed agreements or commitments. Under the provisions of article R.225-58 of the French commercial code, it is the responsibility of the shareholders to determine whether the agreements and commitments are appropriate and should be approved.

Where applicable, it is also our responsibility to provide shareholders with the information required by article R.225-58 of the French commercial code in relation to the implementation during the year of agreements and commitments already approved by the Shareholders' Meeting.

We performed the procedures that we deemed necessary in accordance with the guidance issued by the French Institute of statutory auditors (*Compagnie nationale des commissaires aux comptes*) for this type of engagement. The procedures performed consisted of verifying the agreement of the data communicated to us with the source documentation.

AGREEMENTS AND COMMITMENTS SUBMITTED TO THE APPROVAL OF THE SHAREHOLDERS' MEETING

Agreements and commitments authorized during the year ended

In accordance with article L. 225-86 of the French commercial code, we inform you that we have not been advised of any agreements or commitments authorized or entered into during the year ended to be submitted to the approval of the shareholders' meeting.

CONTINUING AGREEMENTS AND COMMITMENTS PREVIOUSLY APPROVED BY THE GENERAL SHAREHOLDERS' MEETING

Agreements and commitments approved in prior years and which remained current during the year ended

In accordance with article R. 225-57 of the French commercial code, we have been informed of the following agreements or commitments approved by the shareholders' meeting in prior years and which remained current during the year ended.

Agreement between RTE and ENEDIS (formerly ERDF) dated December 22, 2011 extending the provisions adopted on the occasion of the partial transfer of assets by EDF.

In application of Law No. 2004-803 of August 9, 2004 and Decree No. 2005-172 of February 22, 2005 defining the consistency of the public electricity transmission network and laying down the procedures for classifying works in public electricity transmission and distribution networks. "Electricité de France" (Réseau de distribution and EDF-GDF Services) and RTE had drawn up, on April 4, 2005, a list of the 2,131 source items into 3 groups and 8 categories determined in accordance with the aforementioned texts, specifying, depending on the category of the position, the owner of the property.

On December 22, 2011, an agreement was signed with ENEDIS (formerly ERDF), a public electricity distribution subsidiary of Electricité de France, to specify the procedures for implementing the sales of technical and real estate assets between your Company and ENEDIS (formerly ERDF).

During the 2022 financial year, the implementation of this agreement resulted in disposals of fixed assets to ENEDIS (formerly ERDF) amounting to 1,566 thousand Euros (excluding taxes) and acquisitions of fixed assets from ENEDIS (formerly ERDF) in the amount of 2,504 thousand Euros (excluding taxes).

Members of the Supervisory Board concerned:

Mr Xavier Girre, Mr Christophe Carval, Mr Sébastien Justum, also members of the Supervisory Board of ENEDIS (formerly ERDF).

Paris La Défense, February 15th 2023

The Statutory Auditors

Mazars

Mathieu Mougard
Partner

KPMG S.A.

Jacques-François Lethu
Partner



Appendix

DETAILS OF METHODOLOGY FOR THE DECLARATION OF NON-FINANCIAL PERFORMANCE

To prepare the non-financial performance declaration in the 2022 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 (*Coentreprise de transport d'électricité*).

These non-financial indicators derive from analysis of the risks presented in section 7 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: RTE SA. Some RTE sites are installations classified for environmental protection purposes (ICPE⁽¹⁾), 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 7.2.1.2).

Fully-owned subsidiaries under exclusive control (Arteria, Cirtéus, RTE Immo, Airtelis, RTE International) account for approximately 1% of the workforce.

COLLECTION, CONSOLIDATION, AND CONTROL OF DATA

— Reporting system

Each business function has its own specific computer systems for recording and consolidating the data used to form indicators.

RTE has an HR information 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⁽²⁾.

For environmental information, the department in charge of environmental coordination uses a balanced scorecard to collect all the information required from 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 employment 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 national level three times a year for the purposes of the environmental management system. Other data are reported at variable frequencies.

(1) IPCE: Installation classée pour la protection de l'environnement.

(2) Caisses d'assurance retraite et de la santé au travail, a pension and workplace health body.

— Internal control procedures

Internal control procedures are rolled out through a network of local, regional and national officers.

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. In the rare event of a different time scope, a note is added in the indicator comments.

— Definitions of specific indicators

Indicators are presented in three categories: social, environmental and societal. The table below summarises the indicators and the associated risks, giving the reference to the relevant section on RTE's commitments (section 7).

Social indicators

Social	Total workforce	7.2.1.2 "Diversity, equal opportunities and inclusion"
	LTIR (employees and contractors)	7.2.1.3 "Health, safety and wellbeing of internal and external stakeholders"
	Percentage of women on management committees	7.2.1.2 "Diversity, equal opportunities and inclusion"

• Workforce:

- The social indicators presented concern the entire workforce (IEG and non-IEG status, fixed-term and permanent contracts) whose employment contract is in force at 31 December of the year.
- RTE SA employees seconded to Group subsidiaries are therefore included in the workforce.
- Employees on secondment to subsidiaries owned less than 100% and absent employees whose contracts are suspended (unpaid leave) are not included.
- Employees on pre-retirement paid leave and leave associated with training for promotion are included in the physical workforce, as their employment contracts are still in force.
- 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.

• **LTIR (Lost Time Incident Rate) (employees and contractors):** the figures for work-related accidents comprise all accidents occurring during work (accidents while commuting are excluded) de-

clared by RTE and its contractors for the scope of Maintenance and Projects (the Development and Engineering entity) between 1 January and 31 December 2022. These accidents caused at least one day of sick leave. Accidents that happened at contractors' premises outside this scope are monitored by RTE but not included in calculation of the LTIR for contractors, since the total contractors' hours worked is not available. 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 those decisions can be issued up to two months after the first registration of the accident. An accident is considered work-related if the employee is acting on the instruction of the employer at the time it occurs, or if it occurs as a result of dangerous conditions (goods, equipment or third parties) within the scope of the employer's responsibility.

• **Overall LTIR (Lost Time Incident Rate):** to calculate the overall LTIR, the ratio of "accidents at work included in the LTIR/hours worked" is used for both RTE employees and contractors' employees.

(1) Caisse primaire d'assurance maladie.

The number of accidents at work included in the LTIR includes the LTIR for RTE employees and the LTIR for contractors' employees registered in the course of operations undertaken by the two main entities (Maintenance, and Development and 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 connection with contracts for transmission network infrastructures, painting and pruning issued by the two main RTE entities working with contractors (Maintenance, and Development and 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.

Environmental indicators

Environmental	Waste recycling rate	7.2.4.2 "Preserving resources, and the circular economy"
	Area of biodiversity-friendly land	7.2.4.2.2 "Preserving biodiversity" and 7.1.2 "Non-financial risks"
	Percentage of "zero-phyto" sites	7.2.4.2 "Preserving resources, and the circular economy"
	Renewable energy hosting capacity created	7.1.2 "Non-financial risks"
	Equivalent outage time for the year	7.2.3.1 "Network performance"
	Equivalent outage time associated with unusual events (weather events only)	7.1.2 "Non-financial risks"
	Volume of SF ₆ leaks	7.2.4.1.1 "Reducing greenhouse gas (GHG) emissions" and 7.1.2 "Non-financial risks"
	Volume of oil leaks	7.2.4.2 "Preserving resources, and the circular economy"
	CO ₂ emissions from electricity losses and SF ₆ discharge	7.2.4.1.1 "Reducing greenhouse gas (GHG) emissions" and 7.1.2 "Non-financial risks"

- The **"Waste recycling rate"** indicator is the percentage of waste that serves a useful purpose after work is completed, in replacement of other substances, materials and products.
- The **"Area of biodiversity-friendly land"** indicator is the area of land around network installations that has been made biodiversity-friendly, expressed in hectares.
- Percentage of **"Zero-phyto"** sites (new substations and existing substations): the percentage of electricity sites maintained by RTE under a "zero-phyto" policy, calculated based on the maintenance instructions given to contractors.
- **Renewable energy hosting capacity created:** this is the hosting capacity added to the public transmission network in execution of the S3REnR regional renewable energy connection plans, corresponding to the reserved capacity made available thanks to commissioning of new facilities.
- **Equivalent outage time for the year:** this indicator, defined in minutes, measures the quality of the electricity delivered to customers. The equivalent

outage time provides an index reflecting the scale of power outages, considering the undistributed volume of energy as a percentage of the average annual power supply during one year.

- **Equivalent outage time caused by unusual events** (weather events only): this indicator is used to monitor the percentage of equivalent outage time affecting customers that is attributable to weather conditions. It only reflects the share of outages with consequences for customers that originally result from weather conditions.
- **Volume of SF₆ leaks:** this indicates volumes of leaks of SF₆ based on the volumes contained in 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 approximately, 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.

- **CO₂ emissions from electricity losses and SF₆ discharge:** this indicator reports the CO₂ equivalent of electricity losses and SF₆ 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 CO₂ equivalent emission factor per kWh of electricity (average mix) excluding network losses, and multiplying the volume of SF₆ discharge by the CO₂ equivalent emission factor for SF₆.

Societal indicators

Societal	Customer satisfaction score	7.2.3.1: "Network performance, crisis prevention and management in France and Europe"
	Number of Significant System Events	7.1.2: "Non-financial risks"
	Percentage of purchases from small and medium-sized businesses	7.2.3.5: "Responsible purchasing and sustainable local action"

- **Customer satisfaction score:** this is calculated annually by an external firm.
- **Number of Significant System Events:** the number of Significant System Events (SSE) of level "C" or higher severity (regardless of responsibilities). Events affecting the electricity system are classified by a 7-level scale of increasing severity: 0 (zero), A, B, C, D, E, and F, using the categories of Generation, Distribution, Operating equipment, Operation and Grid. The number of C and higher-level SSEs is a relevant indicator of safety levels, since those severity levels relate to event types representative of large-scale events signifying a deterioration in operating conditions. The information is taken from an internal data collection application by the entity in charge of network operation. The severity of SSEs and the principal criterion of each SSE are

determined and validated by the entity in charge of the operation which registered the data, based on the classification grid in force.

- **Percentage of purchases from small and medium-sized businesses** (as percentage of total purchases). 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 2022 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

Elements of the Declaration of non-Financial Performance	Links to the relevant sections of the report
Business model	2.3: "Business model"
Analysis and presentation methodology for major non-financial risks	6: "Risks and the control framework" 6.2: "Risk control" 7.1: "Non-financial dimension of major risks, principal control measures and results on key indicators"
Presentation of policies and procedures for major non-financial risks	6.2: "Risk control" 7.2: "Analysis based on the key challenges underpinning RTE's CSR policy" 6.7.4: "Anti-corruption compliance"
Key performance indicators	7.1.2: "Non-financial risks"

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 sections of the report
Social consequences of the company's activity	7.2: "Analysis based on the key challenges underpinning RTE's CSR policy", and summary tables in 7.2.5 6.8: "Vigilance plan"
Environmental consequences of the company's activity	7.2: "Analysis based on the key challenges underpinning RTE's CSR policy", and summary tables in 7.2.5 6.8: "Vigilance plan" 7.2.4.1: "Fighting climate change and protecting biodiversity and landscapes" 6.8: "Vigilance plan" 7.2.3.3: "Adjusting to the consequences of climate disruption"
Respect of human rights	6.2.2.2: "#Legal risk" 6.8: "Vigilance plan"
Anti-corruption measures	6.2.2.2: "#Legal risk" 6.7.4: "Anti-corruption compliance"
Anti-tax avoidance measures	6.5.2: "Action against tax avoidance"
The climate change impact of the company's activity and use of the goods and services it produces	7.2.3.3: "Adjusting to the consequences of climate disruption" 7.2.4.1: "Fighting climate change and protecting biodiversity and landscapes"
Societal commitments to promote the circular economy	7.2.4.1: "Fighting climate change and protecting biodiversity and landscapes" 7.2.4.2: "Preserving resources, and the circular economy"
Collective agreements signed in the company and their impacts on its economic performance and employees' working conditions	7.2.2.2: "Transparency, dialogue and co-construction with stakeholders"
Action against discrimination and to promote diversity	7.2.1.2: "Diversity, equal opportunities and inclusion"
Societal commitments to reduce food waste	Theme not relevant to RTE due to the nature of its activities
Measures in favour of people with disabilities	7.2.1.2: "Diversity, equal opportunities and inclusion"
Societal commitments to reduce food insecurity	Theme not relevant to RTE due to the nature of its activities
Societal commitments to promote animal welfare	Theme not relevant to RTE due to the nature of its activities
Societal commitments to promote responsible, fair, sustainable food	Theme not relevant to RTE due to the nature of its activities
Action to promote physical exercise and sport	Theme not relevant to RTE due to the nature of its activities
Societal commitments to promote sustainable development	7.2.4.2: "Preserving resources, and the circular economy"

RTE – Réseau de Transport d'Electricité

Limited Company with a capital of 2,132,285,690 €
 Head office: 7C, Place du Dôme, 92800 Puteaux
 RCS 444 619 258

Mazars

Tour Exaltis
 61, rue Henri Regnault
 92400 Courbevoie

REPORT OF THE INDEPENDENT THIRD-PARTY ON THE VERIFICATION OF THE CONSOLIDATED NON-FINANCIAL PERFORMANCE STATEMENT INCLUDED IN THE MANAGEMENT REPORT

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.

Year ended December 31, 2022

To the stakeholders,

In our capacity as an Independent Third Party, member of Mazars Group, statutory auditors of RTE and accredited by COFRAC Inspection under number 3-1058 (scope of accreditation available on www.cofrac.fr), we present our report on the consolidated extra-financial performance statement, for the financial year ended December 31, 2022 (hereinafter respectively the "Declaration" and the "Statement"), presented in the management report, in application of the provisions of Articles L. 225-102-1, R. 225-105 and R. 225-105-1 of the Commercial Code.

THE ENTITY'S RESPONSIBILITY

The Management Board is responsible for preparing the Statement with reference to legal and regulatory requirements, 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 by applying the Company's guidelines (hereinafter the "Guidelines"), the significant elements of which are presented in the Declaration and available upon request from the Company's 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 the professional doctrine of the French National Association of Statutory Auditors.

RESPONSIBILITY OF THE INDEPENDENT THIRD PARTY

Based on 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 Information (observed or extrapolated) 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").

This is not our responsibility to express an opinion on the entity's compliance with other applicable legal and regulatory requirements (in particular with regard to the Information required by Article 8 of Regulation (EU) 2020/852 (green taxonomy), the due diligence plan and the fight against corruption and tax evasion); the truthfulness of the Information provided for in Article 8 of Regulation (EU) 2020/852 (EU Taxonomy); the compliance of products and services with applicable regulations.

NATURE AND SCOPE OF OUR WORK

The work described below was performed with reference to 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, when appropriate ;
- We verified that the Statement includes each category of social and environmental information set out in article L. 225 102 1 III as well as information 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 the entity's activity all the consolidated entities' activities, including when 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. For certain risks (security, major operational incident, major cyber-attack, impulse and vision, major infrastructure event, climate), 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⁽²⁾;
- 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 implemented by the entity 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, 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⁽²⁾ and covers between 27 and 100 % of the consolidated data selected for these tests ;
- We assessed the overall consistency of the Statement based on our knowledge of all the consolidated entities.

The procedures performed for a limited assurance engagement are less extensive than those required for a reasonable assurance engagement performed in accordance with the professional doctrine of the French Institute of Statutory Auditors ("CNCC"). A higher level of assurance would have required more extensive verification work.

(1) ISAE 3000 - Assurance engagements other than audits or reviews of historical financial information.

(2) See appendix 1.

MEANS AND RESOURCES

Our work was carried out by a team of 5 people between November 2022 and January 2023 and for 6 weeks.

We conducted about 20 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 we performed, as described in the “Nature and scope of our work” and the evidence we collected, nothing has come

to our attention that causes us to believe that the consolidated 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

COMMENTS

Without questioning the conclusion expressed above and with reference to the provisions of Article A. 225-3 of the French Commercial Code, we make the following comment:

- The risks of “major physical attack” and “major cyber attack”, which have been identified as main risks, are not covered by a key performance indicator due to the confidential nature of this information.

The independent third-party organization,

Paris La Défense, 15 February 2023,

Mazars SAS

Mathieu Mougard
Partner

Souad El Ouazzani
CSR and Sustainable Development Partner

APPENDIX 1: INFORMATION CONSIDERED THE MOST IMPORTANT

Quantitative indicators including key performance indicators

Indicators	Entity
Accident frequency rate - employees	Group
Accident frequency rate - contractors	Group
Cut-off times associated with exceptional events (climatic only)	Group
Hectares of landscaped areas favorable to biodiversity	CM Lyon and CM Marseille
Percentage of "zero-phyto" sites (new/existing workstations)	Group
NRE new capacity created	Group
SF ₆ leakage volume	CM Lyon and CM Marseille
Percentage of entities created in year N compared with roadmap	Group
Significant system event category "C" criterion with a threshold of 1 event	Group
LA Length of circuits processed	Group
Actual headcount / target headcount	Group

Glossary



ACER	European Union Agency for the cooperation of energy regulators
ADEME (<i>Agence de l'environnement et de maîtrise de l'énergie/Agence de la transition écologique</i>)	French agency for the environment and energy control/Agency for the ecological transition
AFNOR (<i>Association française de normalisation</i>)	The French national organisation for standardisation
ANSSI (<i>Agence nationale de la sécurité des systèmes d'information</i>)	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 (<i>Association nationale pour le développement de la mobilité électrique</i>)	A French association promoting development of electric mobility
CRE (<i>Commission de régulation de l'énergie</i>)	France's independent energy market regulator set up by law 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 anti-competitive practice
EirGrid	The Irish TSO
ENTSO-E (European Network of Transmission System Operators for Electricity)	European 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
OIV (<i>Opérateur d'importance vitale</i>)	Operator of vital importance
ORTEC (<i>Organisation de RTE en cas de crise</i>)	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 steps can be taken to reduce them
Multi-year energy plan – PPE (<i>Programmation pluriannuelle de l'énergie</i>)	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
TURPE (<i>Tarif d'utilisation des réseaux publics d'électricité</i>)	Tariff for use of the public electricity networks
SDDR (<i>Schéma décennal de développement du réseau</i>)	RTE's Ten-year network development plan
SF₆	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 (<i>Stratégie nationale bas carbone</i>)	France's national low-carbon strategy
SRADDET (<i>Schémas régionaux d'aménagement, de développement durable et d'égalité des territoires</i>)	Regional plans for reorganisation, sustainable development, and regional equality
S3REN (<i>Schémas régionaux de raccordement au réseau des énergies renouvelables</i>)	Regional renewable energy connection plans
UFE (<i>Union française de l'électricité</i>)	Association of employers in the French electricity sector

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