



**ACTIVITY  
REPORT**

## CONTENTS

- 4 Message from the Chairwoman
- 8 Message from the Board
- 10 Message from the Chairman of CoRDIS
- 12 3 minutes for understanding the CRE
- 14 Overview of energy in France
- 18 Overview of the electricity mix  
in France's neighboring countries

### 20 CHAPTER 1

The CRE, an independent institution committed to the French and European energy systems

### 40 CHAPTER 2

The CRE, a watchdog for energy security and consumer protection in a context of acute crisis

### 62 CHAPTER 3

The CRE, a stakeholder in the transformation of the energy system to accelerate the ecological transition

### 84 APPENDIX

# Message from the Chairwoman



**Emmanuelle Wargon**

**Chairwoman of the French Energy  
Regulatory Commission**

**2022,  
a historic year combining  
responsiveness  
and adaptation**

In the energy sector, 2022 broke a number of records that we would have preferred to avoid. We have witnessed the return of war to European soil, with far-reaching consequences for energy supplies, leading to unprecedented electricity and gas prices on wholesale markets. In France, in addition to this context of low nuclear and hydroelectric production, which means that France became a net importer of electricity for the first time since 1980.

**In this turbulent environment, the Commission de Régulation de l'Énergie (CRE), which I have had the honor of chairing since August 16, 2022, has never ceased to be a driving force never ceases to work rigorously, competently and in the general interest, on behalf of consumers and all stakeholders in the sector.** I would like to take this opportunity to pay tribute to the work of my predecessor, Jean-François Carencu, who chaired this institution for six years, and who did not hesitate to propose that the CRE implement consumer protection measures. Indeed, the consequences of the energy crisis have led the Government to introduce mechanisms to freeze or limit the rise in electricity and gas prices for households, businesses and local authorities. The CRE participated in their preparation and carried out a considerable amount of work to examine the compensation mechanisms that ensure that these measures are actually applied to bills.

**A collective  
awakening to  
energy sobriety**

## **Consumer protection and information**

**Protecting and informing consumers was at the heart of CRE's activities in 2022.** With this in mind, the institution has sometimes decided to go beyond the missions set out in the Energy Code to contribute to the smooth running of the energy system. At the end of the year, the CRE published a reference price so that SMEs and local authorities could compare the different offers available with a compass price when renewing or choosing a new electricity supply contract. It has also strengthened its oversight of the wholesale and retail markets and, in liaison with the Government and Parliament, its capacity to intervene to ensure that regulated access to historical nuclear electricity (ARENH) volumes are not misappropriated.

**In addition to prices, the CRE's actions have been developed to help strengthen the security of electricity and gas supplies during the winter of 2022-2023, but also by foresight, of the coming years.** As a regulator, CRE has adapted the rules to facilitate imports of liquefied natural gas via France's four LNG terminals, encourage the filling of gas storage facilities and determining the operating conditions for the next floating LNG terminal, which will be located in Le Havre and on which work has already begun. It has also participated in the modification of the specifications for public support mechanisms for renewable energies in order to unblock projects that had been at a standstill due to unfavorable economic conditions.

# The paramount importance of European solidarity

**These various measures have only made sense by participating in the integrated European energy system. I would also like to emphasize the essential role played by European solidarity in recent months.** It is certain that, without the interconnections (which were strengthened during the crisis) with Spain, Belgium, Germany, the UK and Italy, and which will continue to develop between France and its neighbors, France would have resorted to the eco-watt red signal and even to load shedding last winter.

**In addition, the European Union has listened to requests by many member states to revise the operation of the electricity market.** While the European market has undeniable qualities for ensuring supply-demand balance in the short term, it has a number of shortcomings that have come to light in recent months, notably its inability to protect consumers from volatile wholesale prices. The CRE, which is very active at the European level within the European Agency of Energy Regulators (ACER) and the Council of European Energy Regulators (CEER), has chosen to enlighten the debate by bringing together eminent international economists to exchange views and then publish a white paper on the subject. The CRE itself responded to the European Commission's consultation in early March 2023, and it is now up to the European institutions to find a positive outcome to this revision.

**Lastly, while 2022 proved to be a difficult year, it was also one of real awareness. The first was a collective awakening in favor of sobriety, reflected in a remarkable mobilization.** Difficulties linked to security of supply, the perception or anticipation of price signals, but also the strong involvement of the authorities have resulted in a 9% drop in gas consumption over 2022, and in electricity consumption over the last quarter of 2022. Beyond this crisis, sobriety is a necessary condition for achieving carbon neutrality by 2050. Winter 2022-2023 allowed the first step in this direction to be taken. The CRE will pursue its commitment to promoting energy efficiency and the overall reduction in energy consumption through its market and network regulation mechanisms, as well as in its communication with the general public.

## Strengthening sovereignty and accelerating growth of the ecological transition

# Independence, transparency and impartiality

**The second was to align the objectives of strengthening sovereignty and accelerating the ecological transition.** These two objectives, which were not systematically considered together, are now inseparable and must be achieved by decarbonizing our society, our economy and therefore our energy mix. The CRE is fully involved in this transition by encouraging the determined acceleration of the deployment of all decarbonized energies, both mature and innovative, while ensuring the economic efficiency of support systems and the adaptation of electricity and gas networks, both in terms of connections and the management of flows and data, which is evolving with digitization.

**The CRE is particularly active in non-interconnected zones (ZNI), which have set themselves highly ambitious decarbonization and sovereignty targets** while at the same time facing specific challenges.

**In conclusion, 2022 has been a historic year: a year of short timeframes, requiring high reactivity and adaptation; and a year of long timeframes, as it has highlighted the steps that still need to be taken to meet the challenges of decarbonization and sovereignty.** The CRE's departments and its college are fully committed to ensuring that these steps are not taken one by one, but rather in giant strides.

**Committed to its three cardinal values of independence, transparency and impartiality, CRE will continue, as in 2022, to act in the public interest to ensure the smooth operation of our energy system, strengthen consumer protection and promote the development of the energy industry while accelerating the ecological transition.** To this end, at the beginning of 2023, it adopted a two-year strategic roadmap detailing its objectives, giving visibility to the sector's stakeholders and setting a course for its actions.



# The message from the Board



The year 2022 was for Europe, and in particular for its energy sector, a year of profound paradoxes. While the global health crisis and confinements had triggered a tremendous drop in energy prices, the no less brutal rebound in activity followed by the Russian invasion of Ukraine pushed energy prices to unprecedented lows. In France, the crisis was exacerbated by a drop in electricity production due to unfavorable weather conditions for the hydroelectric fleet, and above all to very low nuclear output as a result of defects observed on certain reactor welds.

The combination of these difficulties has put a considerable strain on our energy system, despite high levels of gas storage paradoxically, for the first time in 42 years, France has become a net exporter of gas to Germany and a net importer of electricity in 2022.

Governments intervened on a massive scale to protect consumers, both private and professional, in the short term from volatility and price levels that were difficult for many to bear. At the same time, a longer-term reflection was launched on the current design of the European electricity market, which has been hardest hit by the crisis in gas as a primary energy source, as well as by the crisis in hydroelectric and nuclear power production in France.

Changing the rules of the game to make our system more resilient to shocks was the demand from all sectors, as well as from the European Commission. The confusion in the debates matched the shock; much was said, suggested and evoked. The questioning of past decisions or directions has taken place in a climate of passion that does not help to build a new sustainable market framework for our energy system.

In these turbulent times, CRE's college's decisions are based on its three founding principles:

**1. Independence:** in the context of increased public intervention, which places the CRE at the center of support mechanisms or supplier compensation for price freezes and shock absorbers, it is essential to preserve this principle. If 2022 was marked by a strong demand for CRE's expertise in designing the systems, 2023 will be marked by a need for application and determination of the amounts and financial sums to be mobilized.

**2. Transparency:** building on its reputation, in 2022 the CRE brought together a number of leading figures from the national and international academic world for a symposium on the structure and possible reforms of the energy market design. After publishing the proceedings of the symposium and drawing on its expertise, the CRE was able to state its position and play an active part in the European Commission's call for proposals on market design reform.

**3. Impartiality:** this is undoubtedly the most difficult, but also the most necessary requirement, especially in a context of heated and sometimes passionate debate between market stakeholders. In 2022, despite a host of criticism, the CRE listened, took into account the arguments of all parties, and rationally weighed up the positions of each party to arbitrate in the general interest, so that its decisions remained free from partisanship.

After cyclical responses, it's time for structural reforms. In the years to come, the question of long timeframes and their manifestation in market tools will undoubtedly become the key challenge of future reforms. While short-term balancing and optimization functions are now provided by an open, fluid electricity and gas

market, the sharp rise in prices on the retail market in the event of a crisis has become a shortcoming that needs to be addressed for end consumers. In addition, we need to remedy the lack of visibility on medium- and long-term wholesale prices, which penalizes investors in decarbonized production units whose costs are often fixed by nature. Three elements are at stake, and are often unevenly understood in the debate:

- ▶ the issue of coexistence and fungibility on the wholesale market of long-term contracts and tools;
- ▶ the ability to provide end consumers with long-term products that protect them - at least in part - from volatility and ensuring access to the average costs of the most carbon-free European energy mixes;
- ▶ how the whole system "loops" between these two markets, as efficiently, simply and seamlessly as possible.

Lastly, the CRE will continue to ensure that issues that are sometimes somewhat overshadowed by current debates, which are sometimes highly fickle, are not forgotten: first and foremost, the question of networks, their transformation and the link between the dynamics of the electricity network, the gas network and even other networks; and market surveillance, which is a long-term task, but for which the 2022 crisis provides us with a wealth of lessons to analyze and avenues to explore, such as the obligation to cover suppliers.

All this work must serve the general interest and the imperative of ecological transition. This requires us to think about the transformation of our energy systems not only in terms of decarbonization, but also in terms of their broader impact on the environment; to create a sustainable and flexible energy infrastructure for grids, generation and flexibility and independent of fossil fuels, which the climate challenge demands.

# The message from the Chairman of CoRDIS



**Thierry Tuot**

**Chairman, CoRDIS**

## **Instructing, deciding, guiding**

After the upheavals linked to the Covid-19 crisis, 2022 was a period of transition, at the end of which the Dispute Resolution and Sanctions Committee (CoRDIS) is now at full strength, mobilizing both its full-time and alternate members, enabling us to ensure continuity of service. The CRE's services are remarkable and constitute a resource on which we rely heavily: the reality of our work is shared and collective with all the agents at our disposal!

## **Conciliation : a permanent objective of CoRDIS**

CoRDIS respects procedural requirements and ensures equality of defence between the parties, it is not a court of law that makes the final decision on a dispute. Recourse to CoRDIS remains an option that offers a solution to a concrete problem. After diligent investigation, the parties are summoned to a public meeting during which conciliation is encouraged. Measured exchanges in good faith between the parties, under the supervision of CoRDIS, are the best way to settle a dispute. If the parties reach an agreement, the committee provides guidance on the next steps to be taken by recording the withdrawal. Withdrawal is preferred because it restores the balance of rights and restarts the market. It is essential to ensure that the CoRDIS decision is as educational as possible. During the course of this year, CoRDIS issued seven dispute resolution decisions.

## **A quick decision to build confidence for stakeholders**

Time taken to settle disputes has fallen from an average of two years, a few years ago, to an average of 90 days. CoRDIS is pleased with the work carried out to comply with the procedural deadlines set by European Union law, which is two months, or even four in the event of the plaintiff's initial agreement.

This procedure is not intended to slow the operation of the market or delay the recognition of rights, but to enable disputes to be resolved quickly. CoRDIS is capable of integrating into the critical path of the economic performance by positioning itself not as a structure that delays, but as a structure that encourages.

## **Decisions concerning in the framework of REMIT**

CoRDIS has issued three sanction decisions under the REMIT regulation. The energy market is characterized by a high degree of information asymmetry, with certain operators holding information that is crucial to the profitability of their activities.

The REMIT regulation imposes obligations to publish inside information to ensure greater transparency and reduce the risk of price and market manipulation.

Through its decisions, CoRDIS has sought to clarify the nature of insider information and define the notion of breach, taking into account operational error, the quality of procedures and the accidental or intentional nature of the error. Penalties imposed in 2022 were intended to be pedagogical in nature, recognizing failings while remaining proportionate to the scale of the operators sanctioned.

## **"We have a historic responsibility"**

The CRE is seen as the driving force behind implementation of the REMIT regulation in Europe, and must be given sufficient resources to investigate energy markets. The main obstacle to the rapid and general exercise of sanctioning power is the limited investigative capacity of the regulator who's up to the challenge, requiring a significant margin for progress that can only be achieved by the authorities.

## **Conveying a message of confidence to consumers**

We maintain an excellent, independent relationship with the CRE - we are not the regulator, but one of the tools that guarantee effective regulation - we keep abreast of its actions on an ongoing basis, in particular in terms of remedying the misconduct of certain stakeholders with regard to consumers. CoRDIS takes consumer protection into account in its decisions, especially in the area of network access. Although our powers are limited in the event of a crisis, we are ready to respond to CRE referrals and take swift decisions that respect the law and are effective for the market.

## **Outlook: improving, increasing and accelerating**

For us, a fair market is essential to encourage the confidence of honest operators while keeping out those who do not comply with the rules and obligations. Hence, we want to continue our work on compliance with REMIT regulations. Together with CRE, we are looking for ways to improve CoRDIS's agility, while at the same time making it more flexible while respecting the main principles of in-depth investigation; and we wish to propose changes to the authorities. We are aware that slowness is detrimental to consumers, but speed must respect the rights to defense.



# 3 minutes to understand CRE

## PRINCIPLES

- INDEPENDENCE**  
with regard to the government for implementing the missions defined by law.
- TRANSPARENCY**  
work and procedures for preparing decisions and opinions.
- IMPARTIALITY**  
to guarantee the neutrality, fairness and objectivity of decisions and opinions.

## MISSIONS

- COMPETE**  
for smooth operation of the electricity and gas markets for the benefit of all consumers.
- PARTICIPATE**  
the construction of Europe's internal energy market.
- IMPLEMENT**  
certain renewable energy support schemes by issuing calls for tenders bids.

## OBJECTIVES

- GUARANTEE**  
the independence of network managers.
- ESTABLISH**  
harmonized network and market operating rules for the free circulation of energy between the countries of the European Union.
- INSURE**  
competition between energy suppliers for the benefit of consumers.
- WATCH**  
to ensure that consumers get the best service and pay the right price.
- DEVELOP**  
decarbonized energies to accelerate the energy transition

## STATUS

**INDEPENDENT ADMINISTRATIVE AUTHORITY**



Consult the CRE's general presentation

## WORKFORCE

**165 agents**

(excluding the Board)  
on December 31, 2022

**362**

deliberations of the CRE

**10**

CoRDIS decisions

**19**

CoRDIS referrals

**19**

auditions of the Chairman, the Chief Executive Officer and the CRE departments before Parliament

**51**

market stakeholders interviewed by the Board

**14**

public consultations

**58**

sessions of the commission

**25 millions euros**

BUDGET

The funds required to operate the CRE are proposed each year in the Finance Act. Allocated funds are included in the Government's general budget. The CRE is subject to audit by the National Court of Auditors.

## The Board

Five members, including Chairman, the gap between the number of women and of men cannot be greater than one. They are nominated for their legal, economic and technical qualifications, they define the major orientations and adopt decisions and opinions, drawing on the expertise of the departments reporting to the Chairman and the General Manager.

## Le CoRDIS

The Dispute Resolution and Sanctions Committee is made up of four full members and four alternates, with as many Government Councillors as there are members advisors to the Court of Appeals. They are responsible for settling disputes concerning access to public electricity and gas networks and their use between managers and users, and in particular to sanction breaches of the energy code and REMIT regulations.

KEY FIGURES

2 INDEPENDENT ENTITIES





# Overview of energy

## in France

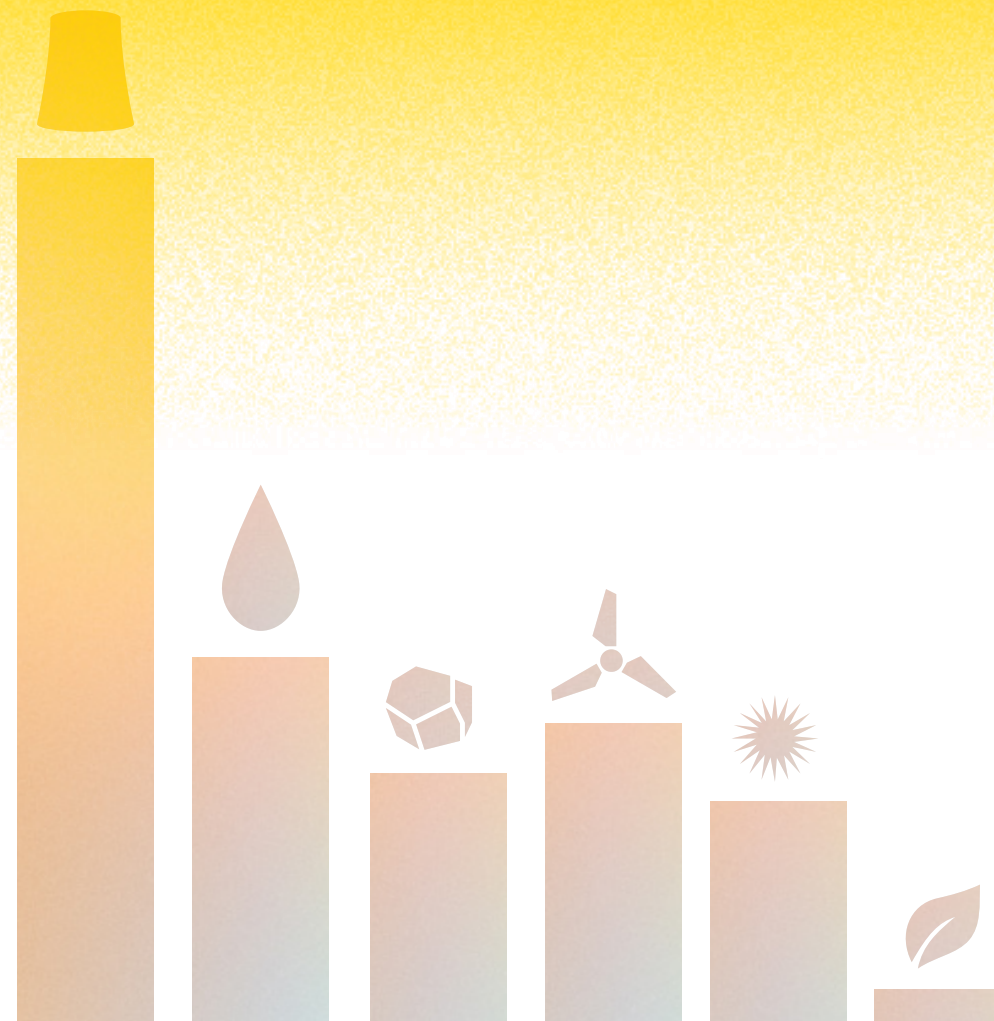


### Electrical energy mix

Electricity generation in 2022

Nuclear	63 %	279 TWh
Hydro-Electric	11 %	49,6 TWh
Thermal Fossil	11 %	49,3 TWh
Wind	9 %	38,7 TWh
Solar	4 %	18,6 TWh
Bioenergy	2 %	10,6 TWh

Total production 445,7 TWh



### Fleet Capacity of power generation

Total installed generating capacity in 2022

Nuclear	61,4 GW
Hydro-Electric	25,9 GW
Thermal Fossil	17,7 GW
Wind	21,2 GW
Solar	15,7 GW
Bioenergy	2,3 GW

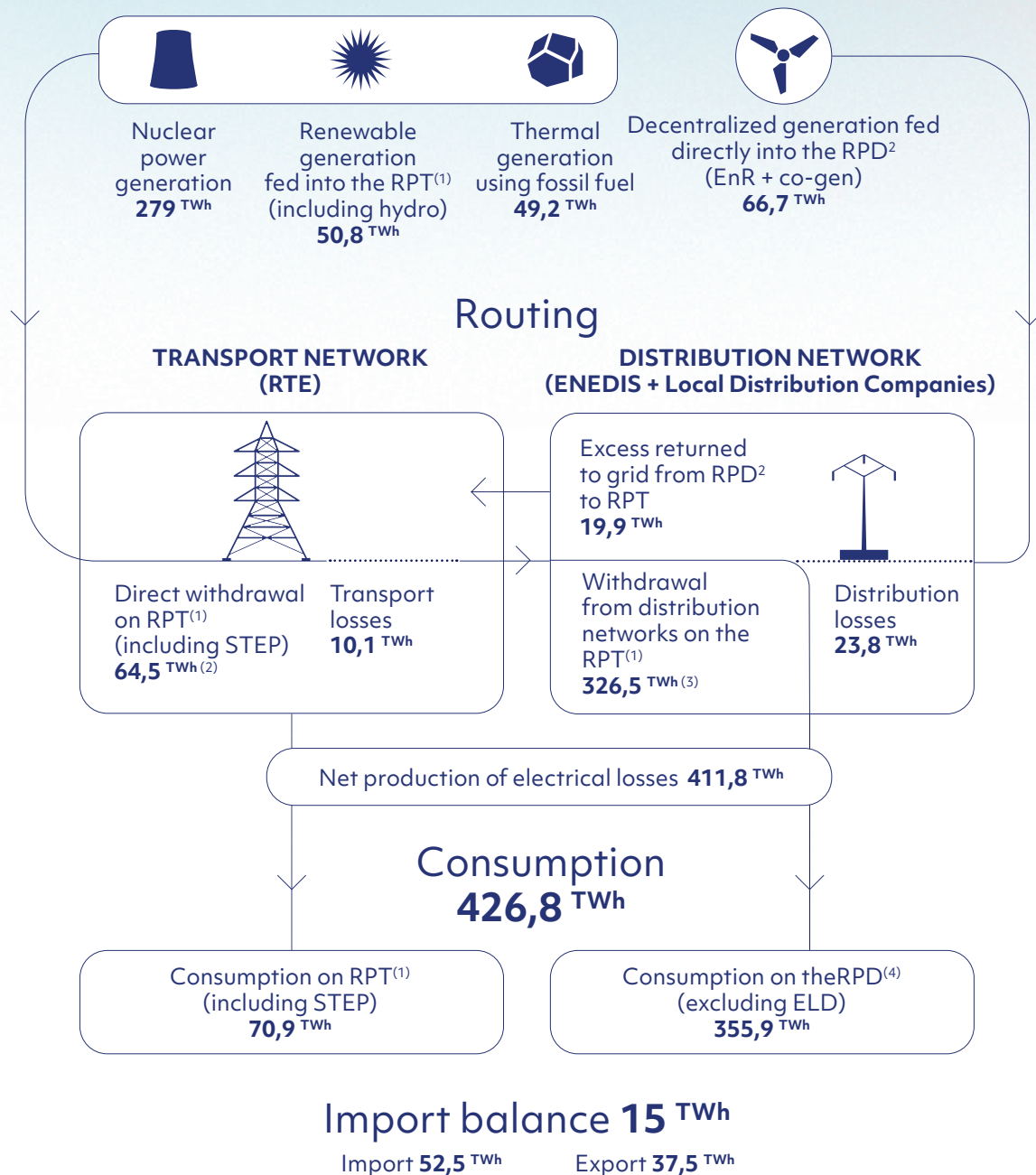
Total production capacity 144,2 GW





# Electricity

Production **445,7 TWh**

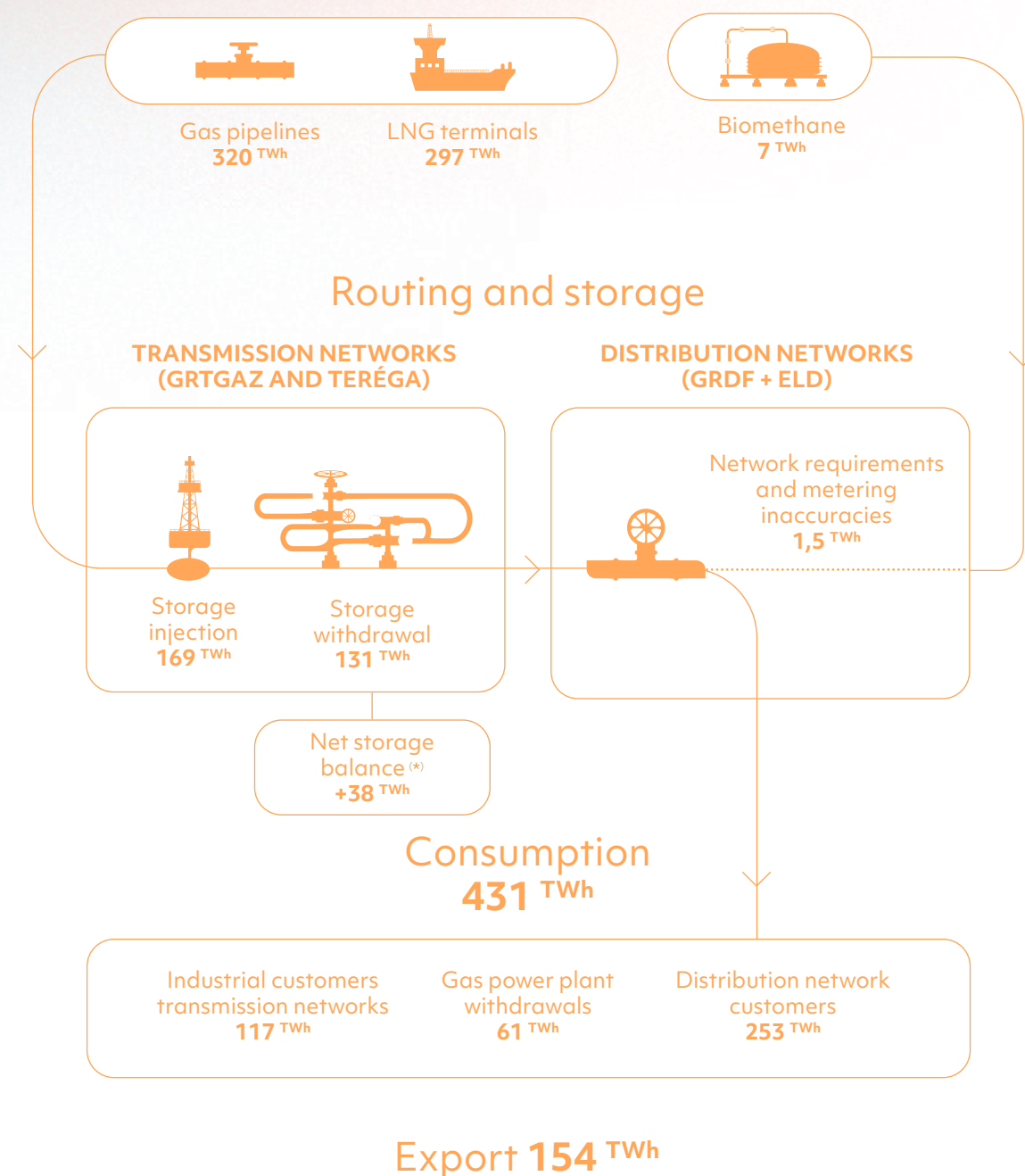


Sources: RTE and Enedis (1) Metropolitan France, including Corsica. (2) Excluding industrial self-consumption (3) Excluding self-consumption and generation consumed on the RPD (4) Excluding local distribution companies (around 5% of mainland France). RPT: réseau public de transport (public transmission network.). RPD: réseau public de distribution (public distribution network.). EnR: Énergie Renouvelable. ENEDIS: Electricity Distribution Grid manager. Local Distribution Companies: ELD - Entreprise Locale de Distribution



# Gas

Imports and production **624 TWh**



Sources: GRTgaz and Teréga (\*) Imports and production are equal to the sum of net storage, system requirements, consumption and exports

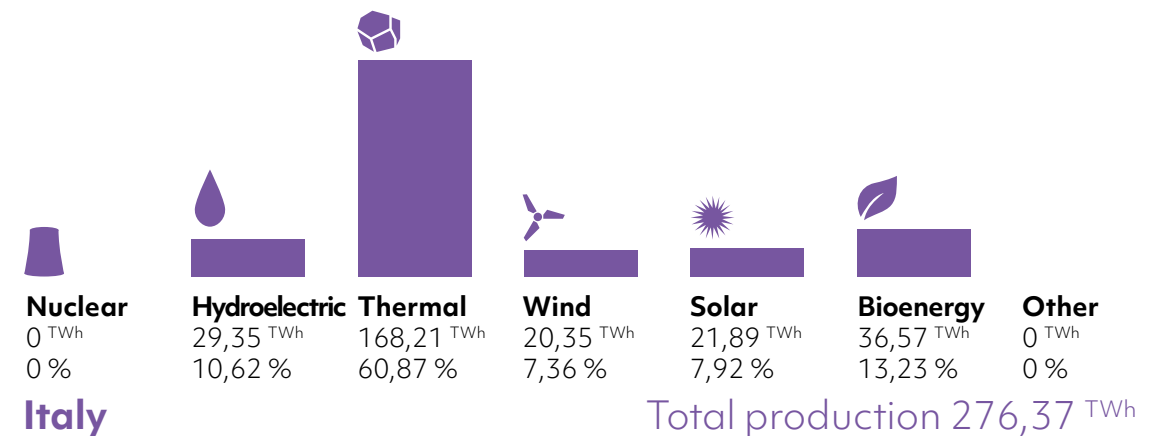
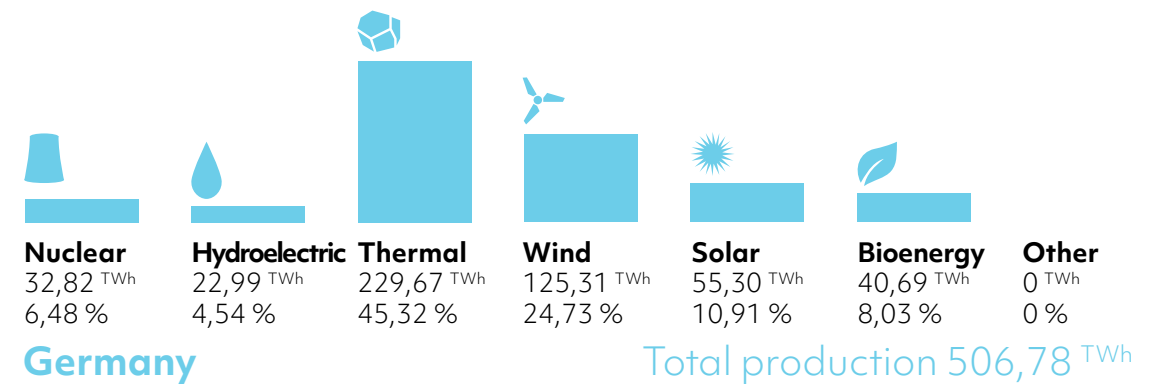
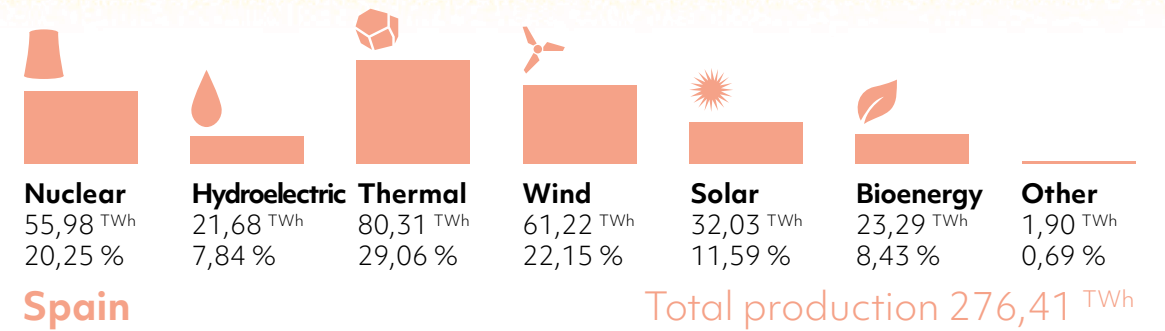
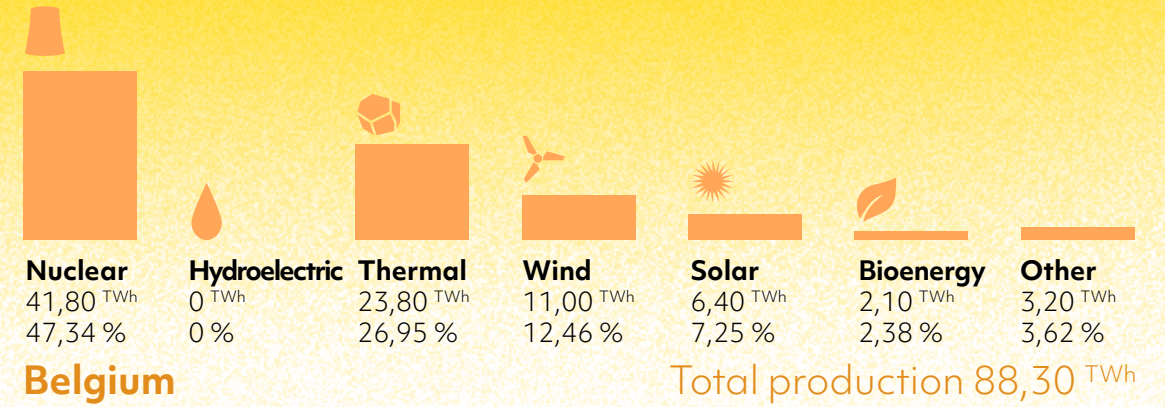
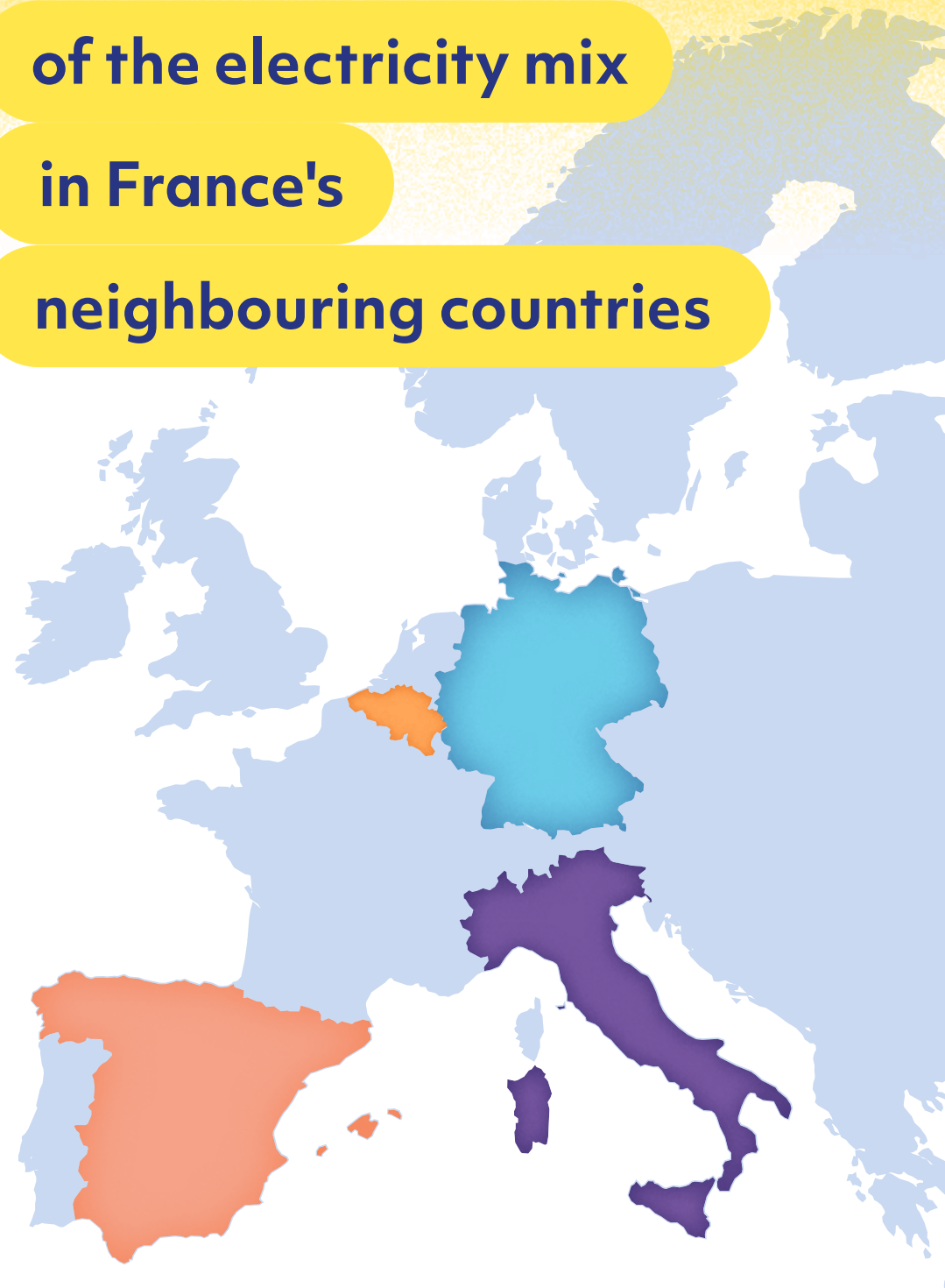


# Overview

## of the electricity mix

## in France's

## neighbouring countries





# CRE, an independent institution committed to the French and European energy systems

The CRE is fully committed to respond to the energy supply crisis that has shaken the whole of Europe. In this context, it has continued to carry out its role as energy market regulator within an independent and transparent framework.

The CRE has established itself as an institution open to the outside world, by consolidating its relations with its major partners both nationally and internationally.

Independent and value-driven, the CRE has risen to the many challenges of an exceptional crisis, while remaining a key player in the energy market.



# The Management Committee



FROM LEFT TO RIGHT

**Front row seated**  
Alexandra Bonhomme  
Alexis Vialle  
Emeline Spire

**Second row**  
Kseniya Khromova  
Olivia Fritzingler  
Emmanuelle Wargon

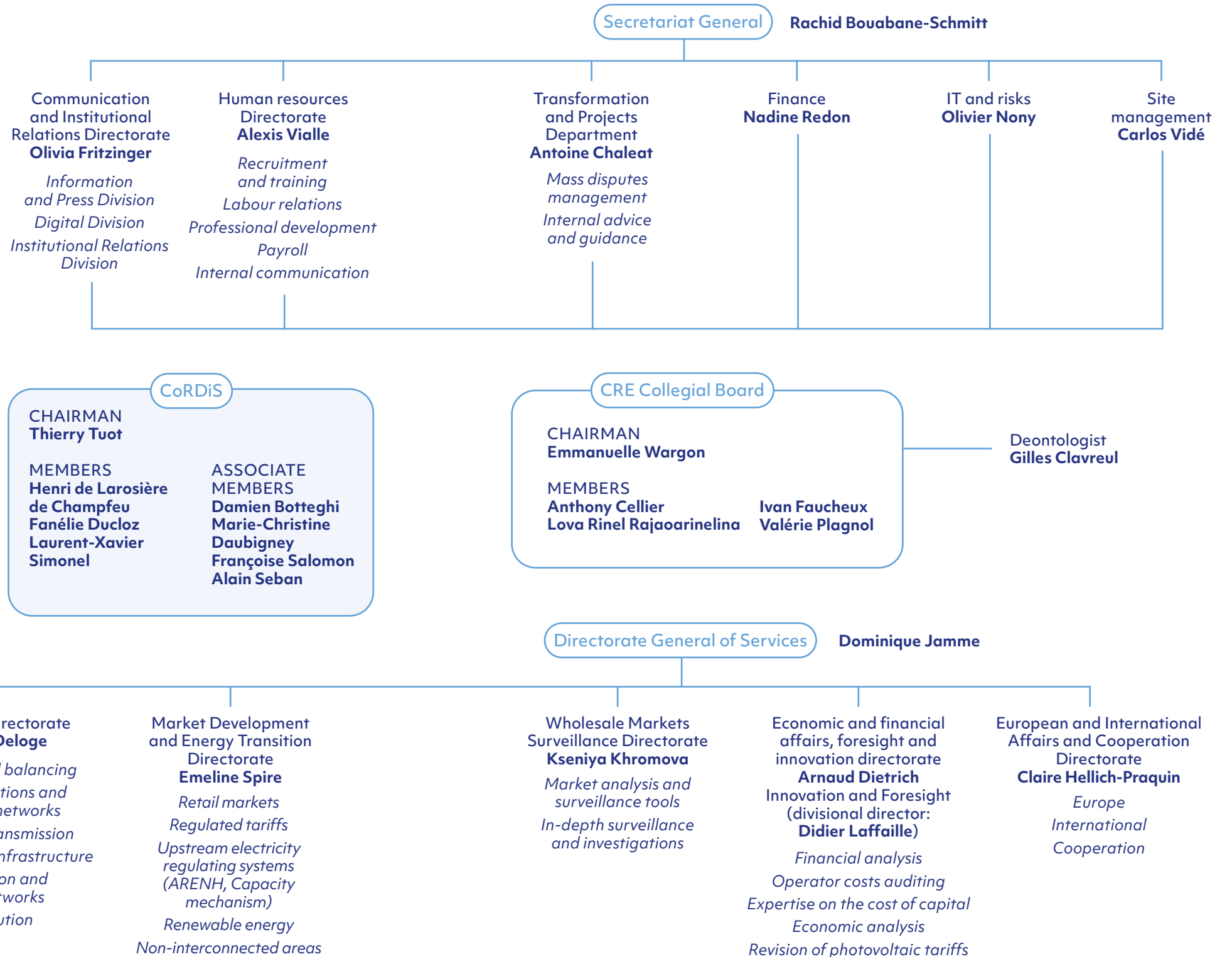
**Last row**  
Arnaud Dietrich  
Dominique Jamme  
Nicolas Deloge  
Rachid Bouabane-Schmitt  
Claire Hellich-Praquin



# The Board and CRE departments

Since it was created on 24 March 2000, the CRE ensures electricity and gas markets in France operate smoothly for the benefit of all end consumers, in coherence with energy policy objectives.

Its Collegial Board, that comprises five members, including the Chairman, makes its decisions based on the expertise CRE departments. The Collegial Board members are appointed on the basis of their specific skills related to the energy sector for a non-renewable, six-year term.



# A CRE *open* about its economic, political and social environment in France

**T**he CRE is budgeted under program 217 "Conducting and steering ecology sustainable development and mobility policies" of the Government budget.

The Ministry of Ecological Transition is leading this program, taking into account the specific nature of CRE's missions and its independence.

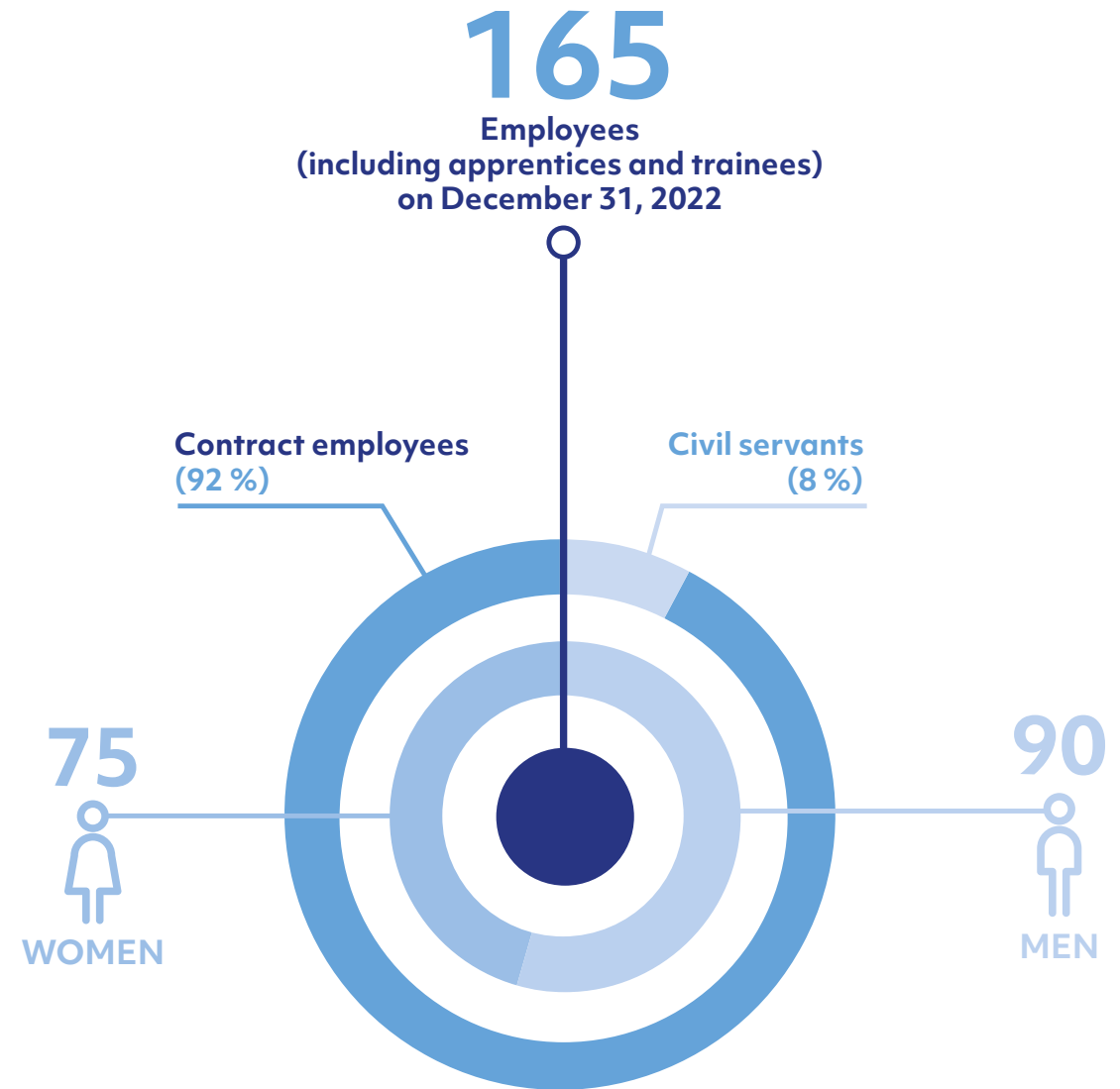
In 2022, the employment ceiling has been set at 155 Full-Time Equivalent (FTE) employees, including board members. In addition, the CRE has 12 FTEs "above the ceiling" to carry out temporary tasks entrusted to it by law, such as reviewing contracts for the photovoltaic "bubble" and processing claims for reimbursement of the contribution to the public electricity service (CSPE).

On December 31, 2022, the CRE had 165 employees, including 75 women and 90 men - including apprentices and trainees.

To cope with the expansion of its remit and the strengthening of its expertise, the CRE has pursued its efforts to recruit the best talent in the energy

sector. CRE's employees, mainly public-sector contract staff (92% of the workforce), engineers, economists, or lawyers, are mostly recruited in companies, consulting firms or following their academic training. Their average age is 34.9, with 61% of the workforce aged between 20 and 35.

Throughout 2022, the CRE's Human Resources Department (DRH) was committed to meeting the dual challenge of making the CRE's professions more attractive and building staff loyalty. With this in mind, the HR Department has drawn up Human Resources Management Guidelines (HRMG), which focus in particular on the implementation of motivating internal career paths with an enlarged and ambitious training program, while rethinking the system for rewarding agents' salaries or improving the work environment in which they perform their missions.



**34.9**  
Average age  
of agents

**61%**  
of employees aged  
between 20 and 35

**155**  
Full-time equivalents  
(FTE)

## Regulatory missions: CRE deliberations and CoRDIS decisions

As an independent administrative authority, the CRE is supported by two distinct bodies: the Board and the Committee for the settlement of disputes and sanctions (CoRDIS).

It ensures that the electricity and gas market benefits all electricity and gas consumers, and that all users have efficient, non-discriminatory access to the networks.

### In 2022, the focus was on security of supply and market surveillance...

In 2022, the energy price crisis has led the CRE to step up its monitoring of both the wholesale and retail markets. Moreover, the legislature has entrusted the CRE with new missions to meet these challenges.

Law no. 2022-1158 of August 16, 2022 extended the CRE's powers in the area of supply chain security. The CRE is responsible for monitoring gas storage filling targets and the methods used to build up these stocks, while defining the rules for allocating the capacity of a floating terminal (FSRU) benefiting from the derogation provided for in article L. 111-109 of the French Energy Code.

These new missions are part of a set of measures applicable in the event of a threat to the security of the natural gas or electricity supply.

In addition, as part of its regulatory and market monitoring role, decree no. 2022-1379 of October 29, 2022 stipulates that the CRE can check the quantity of Nuclear Power produced electricity (ARENH) requested by suppliers, and can correct this request if necessary. The CRE made use of this new skill as of the November 2022 purchasing window. Since then, the Council of State's judge in chambers dismissed three appeals against CRE decisions on the grounds that there was no serious doubt as to their legality.

### ... and a CoRDIS activity marked by the surveillance of wholesale markets and network access issues.

In 2022, CoRDIS recorded 19 referrals, handed down 10 decisions and acknowledged 7 withdrawals. Three decisions concerned the sanctioning of breaches of REMIT, the European regulation on the integrity and transparency of wholesale energy markets (Regulation (EU) no.1227/2011 of October 25, 2011). These rulings provide clarification on the characterization of violations, particularly with regard to non-publication of insider information and insider trading.

With regard to dispute resolution decisions, they continue to deal with the conditions of connection to the public electricity distribution network. Following on from 2021, the Committee's activity was marked by a stable number of withdrawals in dispute resolution, doubtless resulting from the deterrent effect of referral to CoRDIS. The committee has also continued to reduce the time taken to process dispute resolution requests, which averaged three months in 2022.

#### Deliberations

**362**  
board deliberations

#### Litigation

**16** appeals to the Council of State  
**7** referrals (including 4 on ARENH)

#### Decisions

**7** decisions in favor of the CRE  
**1** decision to cancel a deliberation for a procedural defect (E-Pango)

#### CoRDIS

**22** work sessions  
**10** public sessions  
**91** days on average for a dispute settlement investigation  
**19** referrals  
**10** decisions  
**7** withdrawals

## The CRE's roadmap for 2023 and 2024

The energy crisis we have been experiencing since the second half of 2021 is set to cause lasting disruption to our way of doing business: the crisis is not confined to the electricity and gas sector, but is having a major economic, political and social impact. This context raises questions about the regulator's missions and priorities. Since its creation, the CRE has always encouraged consultation and dialogue with stakeholders in the sector. A roadmap was drawn up following this same approach, during several workshops with CRE staff and the Board, then by calling on stakeholders in the sector. This roadmap, published on February 10, 2023, now represents a compass, a guide for the years 2023 and 2024, regardless of the crisis.

The CRE's roadmap highlights certain values professionals who incarnate the diversity of our missions is also part of our DNA.

It details, in three major objectives, the actions around which the CRE will act:

- ▶ to carry out grid regulation and energy system transformation to accelerate the ecological transition;
- ▶ to continuously ensure the proper functioning of wholesale and retail markets and contribute to their structural reforms;
- ▶ to promote its values and expertise for supporting a national, European and international regulatory model.

Lastly, this roadmap provides an opportunity to set out and discuss with the entire energy industry, the conditions, prerequisites and procedures required to achieve these objectives.

Find the roadmap at 2023-2024 on [www.ra2022.cre.fr](http://www.ra2022.cre.fr)



### Working with other independent authorities

As provided for in the 2017 law on the status of independent administrative authorities (IAA) and independent public authorities (API), the CRE regularly collaborates with its counterparts. Several annual exchanges are held to discuss issues common to both authorities: regulatory framework, legal developments, human resources.

As part of its role in overseeing wholesale markets, the CRE works closely with the Financial Markets Authority [Autorité des marchés financiers (AMF)]. Indeed, in accordance with the REMIT regulation on the integrity and transparency of the wholesale energy market, the national regulatory authorities and the financial authorities of the Member States "shall cooperate to ensure a coordinated approach"

To ensure the smooth operation of the electricity and gas markets and to monitor the practices of suppliers regular exchanges are held with the French Competition Authority [Autorité de la Concurrence (ADLC)]. In addition to these institutions, the CRE has established several partnerships with private industry organizations.

These links enable us to share with the French Institute for International Relations [Institut français des Relations internationales (Ifri)], the latest developments in the energy sector and its geopolitics. They also enable the CRE to support the French non-governmental organization [Electriciens sans frontières] that combat inequalities for access to electricity worldwide which provides emergency assistance in the most difficult situations, such as in Ukraine.



## Relations with Parliament



As an independent administrative authority, the CRE is required to report annually on its activities to the French National Assembly and Senate. Over and above this legal obligation, the regulator is regularly called upon and questioned by the elected representatives to contribute to the drafting of legislation and to keep them informed of developments in the sector.

The CRE attaches particular importance to this dialogue with Parliament, which it considers fundamental to the proper functioning of the institutions.

In 2022, in a very difficult context for

the energy sector and despite a year of renewal for the French National Assembly, Parliament fully grasped the energy challenges, notably by debating and voting on strong consumer protection measures. These measures included limiting price rises, reinforcing security of supply, controlling consumption and accelerating the energy transition. Numerous reports, fact-finding missions and hearings were carried out on the subject to inform parliamentarians and to contribute to their evaluation and control missions. In this context, the CRE was heard nineteen times in 2022 by the members

of the National Assembly and the Senate. At the same time, it responded to contributions and questions on twenty-three occasions.

The CRE's hearings in 2022 focused mainly on rising energy prices, consumer protection mechanisms and security of supply.

For example, the regulator appeared before each chamber's "Energy" study group, the Senate Economic Affairs Committee's information mission on France's economic sovereignty, the National Assembly Economic Affairs Committee's inflation monitoring group, and presented its technical opinion on the emergency consumer protection measures voted through during the summer.

As in every year, the CRE was asked by several commissions to contribute its expertise to the review of the 2023 Finance Act, which includes provisions for gas and electricity tariff shields, the electricity shock absorber and taxation of electricity producers' sub-marginal income. Within this context, the CRE was also asked about its budget, missions, support for renewable energies and energy public service charges directly attached to the Government budget.

Parliament's work also focused on European issues. The CRE was interviewed by the Senate's European Affairs Committee on the legislative package "Adjustment to Objective 55", which aims to reduce the European Union's CO2 emissions by 55% in 2030 compared to 1990 levels.

It was also invited to share its views on the reform of the European electricity market on several occasions, including at a roundtable discussion on the subject at the French Senate in early December.

The CRE took part in the discussions in Parliament on the medium- and long-term future of our energy system, by contributing to a report drawn up as part of the Finance Act for 2023 on developments in public electricity distribution and transmission grids. In addition, parliamentarians were particularly interested in the challenges of decarbonized power generation.

As part of the review of the law to accelerate the production of renewable energies, the CRE was heard by the relevant commissions. It also contributed to the work of the National Assembly and the Senate on Agrivoltaics, and to that of the Senate Economic Affairs Committee's fact-finding mission on nuclear energy and hydroelectricity. Lastly, the regulator's expertise was called upon to monitor the application of the law on combating climate change and building resilience with regard to its effects.

In addition to its participation in parliamentary proceedings, the CRE responded to throughout 2022 to requests from members of parliament and senators concerning specific situations in their constituencies. It provided technical assistance and precise, rigorous information.



### Information and education: the CRE in the media

Understanding the energy sector is often reserved for experts, due to its technical complexity. Consequently, the CRE, as the institution responsible for guaranteeing the smooth operation of the electricity and natural gas markets, is mandated by law to regularly inform consumers and the various stakeholders involved in the energy sector. In this context, it regularly publishes information on the electricity and gas retail markets, regulated sales tariffs, and legal developments in the energy sector. Furthermore, the CRE considers that explaining the workings of the electricity and gas markets to the general public is an essential mission, and one that it actively pursues on a daily basis.

Throughout the year, it distributed external newsletters entitled "Parlons énergie" (Let's talk about energy), with the aim of communicating in an educational, comprehensive and accessible manner on its activities and developments in the sector. These newsletters give personalities the opportunity to express their views on various energy-related topics.

To broaden its audience, the CRE has also reinforced its presence on social networks such as Twitter and LinkedIn. The CRE made more than 30 appearances in the general public media, including the press, radio and television, to explain its decisions and opinions in an unprecedented context of crisis in energy prices.

🌐 Find all the CRE news at [www.cre.fr](http://www.cre.fr)

## An active regulator on the European and international scene for forecasting the future







## Europe: the work carried out by CEER and ACER, particularly during the French Presidency of the EU

Since its creation, the CRE has been actively involved in collaborations with other European energy regulators, participating in technical work and exchanging ideas within various cooperation bodies. The CRE participates in the Council of European Energy Regulators (CEER) and is involved in the work of the Agency for the Cooperation of Energy Regulators (ACER), created in 2011.

During the French Presidency of the European Union in the first half of 2022, the CRE organized meetings of the CEER General Assembly and the ACER Council of Regulators at its Paris premises on April 5 and 6. The energy regulators, most of whom were represented by their chairmen, discussed the price crisis and security of supply.

The CRE and its counterparts have studied the measures to be taken to tackle the energy crisis, while taking into account long-term issues such as the need to decarbonize Europe's energy mix. They have also discussed the ACER report analyzing the functioning of the European wholesale electricity market - submitted to the European Commission on April 29. All regulators were then received at the Quai d'Orsay by Clément Beaune, the French Secretary of State for European Affairs, who, in this time of crisis, has called for European unity, both in terms of solidarity and also for means of response

Responding to the energy supply crisis requires strong action on the part of the European Union's international partners. A delegation of European regulators travelled to Washington on October 13 and 14 to take part in the 15th EU-US Energy Regulators Summit. Co-organized since 2000 by U.S. regulators (under the aegis of NARUC - National Association of Regulatory Utility Commissioners) and CEER, this informal dialogue provides an opportunity to present the latest regulatory developments on both sides of the Atlantic and to exchange views on the functioning of the electricity and gas markets. For this edition, the crisis was at the heart of the debates. Emmanuelle Wargon took part in these discussions on behalf of the CRE, in the presence of ACER and the US federal regulator FERC.

Finally, on October 25, 2022, Claire Hellich-Praquin, CRE's Director of European and International Affairs and Cooperation, was elected Chair of CEER's international working group. More than ever, the Group will have a role to play in disseminating the expertise of European regulators beyond our borders, and in helping to achieve decarbonization objectives worldwide.

 Find out more about the work of CEER and ACER at [www.ceer.eu](http://www.ceer.eu) and [www.acer.europa.eu](http://www.acer.europa.eu)



## Contribution to reform: work on European electricity market reform

The energy price crisis that began in 2021 worsened with Russia's outbreak of war in Ukraine on February 24, 2022. The ensuing surge in wholesale prices and the risks to supply led to State members, European institutions and energy regulators to question the functioning of the European market. The European Commission commissioned ACER to analyze the functioning of the European wholesale electricity market.

At the start of 2022, the CRE contributed to the debate by proposing ideas for improvements to the wholesale and retail markets.

These proposals included measures such as better anticipation for the sale of interconnection capacity and the introduction of prudential regulations for electricity suppliers.

On April 29, 2022, ACER published a report in which it considers that the current organization of the short- and medium-term market is worth retaining, but that the long-term wholesale market requires improvement.

The need to reform the functioning of the European electricity market has thus emerged at the instigation of the European Council, which has asked the European Commission to work on a rapid reform of the functioning of the electricity market, with priority given to security of supply, the energy transition and consumer protection.

The European Commission's reform proposal was published on March 14, 2023, following a public consultation in which the CRE took part by publishing a contribution on February 14, 2023.



To make the best possible contribution to the reform project, the CRE has brought together an international panel of economists specializing in the sector. On December 15, 2022, it organized a symposium to exchange views on the following topics long-term challenges linked to the reform of the functioning of the European electricity market. A number of French, American, English and Italian academics were present under the coordination of Frédéric Gonand, Professor of Economics at Université Paris Dauphine-PSL: Pr. David Newbery (University of Cambridge); Pr. William Hogan (Harvard University); Pr. Anna Creti (Université Paris Dauphine-PSL); Pr. Jean-Michel Glachant (Florence School of Regulation, President-elect of the International Association of Energy Economists (IAEE)); Pr Natalia Fabra (Universidad Carlos III, Madrid);

Pr. Christian Gollier (Toulouse School of Economics); Pr. Peter Hartley (Rice University, Houston - IAEE President); Pr. Andreas Löschel (Ruhr- Universität Bochum); Pr. Jacques Percebois (University of Montpellier); Pr. Lucia Visconti (University of Milan- Bicocca).

The event, introduced by Agnès Pannier Runacher, French Minister for Energy Transition, was well attended by French and European energy stakeholders. In March 2023, at the CRE's request, the same group of academics produced an academic contribution to the European and French debates on the challenges of reforming the European electricity market.

🌐 Read the report of the international academic group to the CRE "Beyond the crisis: rethinking the European electricity market" [www.cre.fr](http://www.cre.fr)

## CRE's international cooperation missions

The CRE takes part in international initiatives, notably within MedReg, the association of Mediterranean energy regulators, where it is represented by Valérie Plagnol, CRE Commissioner. The company is also involved in RegulaE.fr, the association of French-speaking energy regulators, for which it provides the secretariat.

For several years now, these multilateral sharing activities have been complemented by bilateral cooperation initiatives with regulators who request them, notably within the framework of initiatives financed by international donors such as the French Development Agency.

In 2022, the CRE was involved in a technical assistance project for the Autorité de Régulation du Secteur de l'Énergie (ARSE), the regulator in Niger. This partnership, which will end in 2023, aims to support the regulator in improving the legal and institutional framework of Niger's electricity sector, and to strengthen its capacity to monitor regulated companies.

🌐 Find all RegulaE network news on [www.regulae.fr](http://www.regulae.fr)





# The CRE, a watchdog for energy security and consumer protection in a global context of acute crisis

The supply crisis pushed up wholesale prices to unprecedented levels. In Europe, and particularly in France, the authorities have taken measures to protect consumers from these increases, while encouraging lower consumption.

Thanks to its investigative, monitoring and surveillance activities, which give it in-depth knowledge of the sector, the CRE has mobilized to ensure that concrete, effective measures are adopted.

In view of the current tensions on the wholesale electricity and gas markets, as well as on France's nuclear power plants, the CRE is helping to ensure that stakeholders have confidence in the proper operation of the energy system and in price formation.

# Wholesale markets

## *hit by the crisis*



### Strengthening the CRE's oversight of wholesale markets

2022 was marked by unprecedented price levels and volatility on the gas and oil markets Electricity. Wholesale prices reflect the low availability of gas and electricity and the risk of supply disruptions in winter: lower

Russian gas supplies and, in France, reduced availability of nuclear power plants. In this context favorable to market manipulation and insider trading, the CRE has stepped up its surveillance of wholesale markets.

### The CRE report on forward electricity prices

In the wake of the spectacular rise in French forward electricity prices for winter 2022-2023 and year 2023 observed in the summer of 2022, the CRE announced on July 26th 2022, its preliminary analysis of their very high levels, and questioned all stakeholders on their trading strategies.

The December 13, 2022 analysis report explained the formation of forward prices in the context of the year 2022, and pointed out that they reflected a forecast of extreme tension in the electricity supply-demand balance in the winter 2022-2023.

The risk premium on the French market was very high, due to uncertainty over the availability of nuclear power over the winter.

On the basis of the information available at that stage, the CRE was not aware of any behavior likely to be qualified as market abuse under REMIT and is continuing its reinforced surveillance.

### The low availability of nuclear power

Following the discovery of corrosion on safety-critical piping in nuclear power plants at the end of 2021, France's nuclear fleet experienced an unprecedented industrial crisis in 2022.

This crisis came on top of an already busy maintenance schedule due to the health crisis and containment measures.

A vast inspection and repair campaign launched at the beginning of 2022 has progressively rendered many nuclear reactors unavailable.

These scheduled outages have led to a 23% drop in nuclear power generation, from 361 TWh in 2021 to 278.3 TWh in 2022, its lowest level since 1989.

While availability remained very low throughout the summer and until mid-November (around 30 GW), a large part of the nuclear fleet was able to return to service at the beginning of December to meet the needs of winter 2022-2023. This situation has led to increased vigilance by the CRE over wholesale market transactions.



## ✓ The activities of the CRE's in the framework of REMIT

The CRE's mission is to monitor the wholesale markets to ensure that prices are set correctly, to reflect the scarcity or abundance of energy. Stakeholders participating in these markets must comply with the stringent integrity and transparency obligations laid down by REMIT, the European regulation on the integrity and transparency of wholesale energy markets.



### Investigations conducted by the CRE

Since 2014, the CRE has opened 17 REMIT investigations, 13 of which relate to the wholesale electricity market and 4 to the natural gas market. In 2022, two investigations led to three sanction decisions issued by CoRDIS, for a total of 630,000 euros. To date, six cases are still under investigation.

On April 25, 2022, CoRDIS issued two sanction decisions following an investigation opened on December 1, 2016. In the first decision, it concluded that Electricité de France S.A. had failed to comply with its obligations to publish privileged information and had engaged in insider trading in breach of articles 3 and 4 of REMIT.

It was fined 500,000 euros. In the second decision, CoRDIS found that EDF Trading Limited had manipulated the electricity market in breach of article 5 of REMIT, and imposed a fine of 50,000 euros.

On May 19, 2022, CoRDIS issued a sanction decision following an investigation opened on October 28, 2019.

This decision found that ENGIE S.A. had violated article 3 of REMIT by engaging in insider trading. It was fined 80,000 euros.

## 🇪🇺 A contribution to the European emergency texts adopted during the crisis

Faced with the disruption of the global energy market caused by Russia's war in Ukraine and its major impact on the EU, action at the European level has proved necessary to ensure security of supply and to limit the rise in energy prices.

To meet these objectives, emergency regulations - of temporary application - were adopted at an unprecedented pace in the context of fast-track procedures. These provisions strengthen European coordination and solidarity during the crisis. On the subjects that concern it, the CRE has helped to prepare the position of the French authorities in the negotiations on these emergency measures.

The gas storage regulation of June 29, 2022 was the first of these measures. Following the example of the French model, it has imposed targets of gas storage facilities for Member States.

By coordinating a common position among European regulators, the CRE has ensured that the newly set targets do not jeopardize the filling of storage facilities for the current year, while remaining compatible and consistent with the capacities of each Member State:

- ▶ filling of underground gas storage facilities on the territory of the Member States to at least 80% of their capacity before November 1, 2022, then at 90% for subsequent years;
- ▶ limitation of this obligation to a volume of 35% of the average annual gas consumption of member states over the last five years;
- ▶ Member States with no storage facilities on their territory must store 15% of their annual national gas consumption in storage facilities located in other Member States.

Other emergency measures have been put in place in the form of Council Regulations, adopted under Article 122 of the Treaty on the Functioning of the European Union (TFEU), enabling this mechanism to be used in the event of serious difficulties in the supply of certain products, notably energy.

The majority of these texts were drawn up with the contribution of the CRE:

- ▶ The August 5, 2022 regulation on coordinated demand reduction measures of gas, which provides for member states to voluntarily reduce their natural gas demand by 15% between August 1, 2022 and March 31, 2023, compared with their average consumption over the last five years.
- ▶ The October 6, 2022 regulation aims to address high electricity prices by providing for coordinated reduction in electricity demand and taxation of infra-marginal rents of electricity producers.
- ▶ The December 19, 2022 regulation aims to strengthen European solidarity by improving coordination of gas purchases, by setting reliable reference prices, and by promoting cross-border gas exchanges. Measures include the possibility of grouped purchases of gas at the EU level, the publication by ACER's of an LNG index, and the optimization of gas transport capacity.
- ▶ The December 22, 2022 regulation establishing a market correction mechanism introduces the possibility of activating a dynamic price cap (LNG reference price on world markets + €35/MWh) on transactions involving TTF futures contracts if the price of TTF contracts with a monthly maturity exceeds €180/MWh for 3 days and deviates by at least €35/MWh from the LNG reference price on world markets (published by ACER).
- ▶ The December 22, 2022 regulation aims to accelerate the development of renewable energies. To achieve this, it establishes a presumption of overriding public interest for renewable energy installations and their connection, and sets shorter deadlines permitting periods granting permits for certain projects, such as solar systems, retrofits and heat pumps.



## Revision of the automatic wholesale electricity price cap mechanism: the CRE makes a commitment and achieves



On April 4, 2022, France experienced an unprecedented price peak on the wholesale electricity market, triggering an automatic increase in the European maximum price on the daily market.

The CRE was the first regulator to warn of the risk of maintaining such a mechanism during an energy price crisis. On July 8, 2022, it published its analysis of the April 4 incident and officially called for the mechanism to be suspended until it could be revised and adapted to the new context.

This temporary suspension of the mechanism was decided on September 13, when a similar incident occurred in the Baltic States. ACER has asked for an in-depth reflection to be undertaken in parallel to urgently revise the methodology. The CRE has played a leading role within the community of regulators in proposing concrete improvements. On January 6, 2023, the ACER Board of Regulators finally approved a revised methodology that is more robust in the face of price volatility such as we experienced in 2022.



## The *reinforcement missions* of the CRE on retail markets

### Electricity and gas wholesale market monitoring report

In June 2022, the CRE published its annual wholesale market surveillance report for 2021.

The report looks back at the origins of the energy crisis that has hit Europe, with a rapid rise in wholesale electricity and gas prices as of the second half of 2021. It provides the data and analyses needed to understand the functioning of the wholesale electricity and gas markets in 2021.

The CRE kept a close watch on transactions during periods when the sensitivity of gas prices to European supply announcements was the highest. With regard to the electricity market, particular attention has been paid to the quality of publications concerning the state of the electricity generating fleet; in-depth analyses have been carried out in this respect.



### Regulated Access to Historical Nuclear Electricity

Introduced in 2011, ARENH is a mechanism enabling all French consumers - industry, businesses, communities and households - to benefit from the nuclear income from depreciated nuclear power plants. In concrete terms, EDF must sell a total of 100 TWh of its nuclear output at €42/MWh, divided pro rata among alternative suppliers who have applied for the contract.

In 2022, to reinforce the protection of all consumers, the government has decided to raise the ARENH ceiling to 120 TWh. The CRE deliberation no. 2022-98 of March 31, 2022 sets out the terms and conditions for passing on additional ARENH volumes ("ARENH+") in supply offers. This decision sets out the principles that suppliers must comply with when passing on the value of ARENH+

in consumers' bills, as well as the information to be provided to the CRE to ensure this pass-through is monitored. This deliberation defines, among other things, the central passing on principle that all customers who have suffered from high electricity prices in 2022 should at the very least benefit from a full passing on of the value of the additional ARENH volumes their profile generates, whatever the form of their supply contract. In addition, payments to consumers must be limited to a reasonable bill threshold, to avoid a windfall effect for consumers already protected by their contract.

The CRE published a decision on July 27, 2022 to supplement its decision of March 31, 2022 on the terms and conditions for passing on additional ARENH volumes in supply offers.

The purpose of this new decision is to clarify certain principles mentioned above, in particular by specifying the categories of additional costs that can be covered by the residual ARENH+ amount. It provides for a minimum rate of "over-passing on" for consumers most affected by high prices.

The CRE has set additional deadlines for suppliers to monitor the passing-on of ARENH+ on November 1, 2022 and January 31, 2023, in order to verify payments to consumers on the basis of independent third-party certification.

The information provided by suppliers shows that the vast majority of consumers have been effectively protected thanks to the combination of existing fixed-price contracts, the tariff shield and ARENH+.



### ARENH 2023 purchasing window: the CRE's new missions

87 suppliers have formulated an overall demand of 148.87 TWh - excluding the supply of losses by grid operators and EDF subsidiaries - for the year 2023, which represents a decrease of 7% compared to 2022. Decree no. 2022-1380 of October 29, 2022 granted the CRE to have ex ante control powers over ARENH applications, as well as the power to correct them if necessary.

Pursuant to this text, suppliers were invited during the purchasing window to justify their request for ARENH if it exceeded predefined alert thresholds defined by the CRE. The CRE reduced ARENH requests of 14 suppliers, for a volume of 0.56 TWh.

This monitoring enabled the CRE to correct ARENH requests that were clearly overestimated, to the benefit of all consumers. After the CRE corrections, total ARENH demand for 2023 amounted to 148.30 TWh, representing an allocation rate of 67.43%.



### The CRE steps up monitoring of ARENH abuse: three investigations opened and six questionnaires sent

Since its creation, the CRE has worked to ensure that retail markets operate smoothly for the benefit of electricity and natural gas consumers, by monitoring supplier practices and promoting competition.

In addition to the systematic monitoring and regular publication of its observatories, article 134-18 of the Energy Code enables the CRE to gather "all necessary information" from stakeholders in the energy sector. As a result, it regularly requests information from suppliers to examine their commercial practices and the economic balance of their offers.

When the CRE suspects practices that do not comply with the regulatory or legislative framework, it may refer the matter to the competent authorities: the French Competition Authority (l'Autorité de la Concurrence) or the General Directorate for Consumption, Competition and Fraud Control (Direction générale de la consommation, de la concurrence et de la répression des fraudes). The CRE can also initiate investigations, as was the case in 2022.

Wholesale markets have been in crisis since 2021, with major repercussions for suppliers and consumers alike. This situation has led to an unprecedented increase in prices for certain consumers, as well as the bankruptcy or closure of certain suppliers.

Against this backdrop, the CRE has identified practices on the part of certain suppliers that it wishes to analyze in depth.

Pursuant to the provisions of article L. 135-3 of the Energy Code, the Chairman of the CRE launched three inquiries, two in 2022 and one at the beginning of 2023, each aiming to establish whether or not a supplier has engaged, since January 1, 2020, in practices likely to constitute an abuse of the ARENH right or an obstacle to the exercise of this right as referred to in article L. 134-26 of the Energy Code, or an infringement likely to seriously undermine the functioning of the energy market as referred to in article L. 134-25 paragraph 3 of the Energy Code.

These investigations may lead to the drafting of reports, which are forwarded to CoRDIS, which may decide to impose sanctions in the event of proven grievances.

In addition, as part of CRE's ARENH remit, Decree no. 2022-1380 of October 29, 2022 and Law no. 2022-1726 of December 30, 2022 empowered the CRE to exercise ex ante control over the level of requests made by suppliers, and to exercise ex post control by urgently submitting a request to CoRDIS, asking it to order the interruption of all or part of the delivery of ARENH volumes to a supplier, for a period limited to that of the current delivery period.

## Adoption of consumer protection measures

In response to the sharp rise in wholesale prices, the Government and Parliament have introduced a number of consumer protection mechanisms, including tariff shields, subsidies for multi-family housing from the French Ministry of the Economy, Finance for certain companies, as well as increases in the energy voucher.

Tariff shields aiming to protect residential natural gas and electricity consumers as well as residential and small-scale electricity professionals are based on two complementary measures.

### Extension of the tariff shield for regulated natural gas sales tariffs

The regulated natural gas sales tariffs (Tarifs Réglementés de Vente du Gaz naturel - TRVG) have been frozen as of November 1, 2021 and for the whole of 2022 at their October 2021 level, all taxes included. In 2022, the TRVG have not increased.

This freeze protects all TRVG consumers as well as those on TRVG-indexed offers from wholesale price rises. At that time, the vast majority of consumers other than the above had fixed-price offers that guaranteed their protection for the duration of the contract.

On the one hand, regulated tariffs are frozen for these consumers; on the other, suppliers, whether they offer regulated sales tariffs or market offers, are compensated by the Government for their revenue losses.

The CRE played a central role in these complex arrangements to contribute to their design, rapid, efficient implementation and with suppliers and thus ensure concrete protection for eligible consumers.

On November 30, 2022, 2.5 million residential consumers were on the TRVG tariff, and 2.4 million on TRVG indexed offers, i.e. 47% of residential consumers.

During this period, the CRE maintained the monthly publication of the unfrozen rates that would have applied in the absence of a freeze. This measure was taken to maintain a reference for contracts indexed to the TRVG, and to communicate the reference used in the supplier compensation calculations provided for in the Finance Act.

## Limiting the rise in regulated electricity sales tariffs

For regulated electricity sales tariffs (Tarifs Réglementés de Vente d'Électricité - TRVE), the increase was limited to 4% for 2022. The crisis in wholesale electricity prices has also led the government to introduce a series of measures designed to limit the rise in electricity bills for consumers.

Pursuant to the provisions of the Finance Act for 2022, the Government has:

- ▶ lowered the Internal tax on Final Electricity Consumption (Taxe Intérieure sur la Consommation Finale d'Électricité - TICFE) to its minimum rate;
- ▶ set, by decree, a TRVE scale corresponding to an average increase of 4% including tax.

In addition, an additional 20 TWh of ARENH has been made available to suppliers between April 1 and December 31, 2022, to limit bill increases for all consumers, especially medium-sized and large companies and local authorities not eligible for TRVE.

As a result, for 2022, all residential and small business consumers with TRVE tariffs, or with offers indexed to TRVE tariffs, have seen the increase in their bills limited to 4% including tax.

The Finance Act for the year 2022 introduced mechanisms to compensate suppliers for revenue losses resulting from TRVE freezes, implemented by the CRE, which provide for advance payments to take account of the cash flow needs of smaller suppliers.

These compensations are included in the (Public Service Energy Charges (Charges de Service Public de l'Énergie - CSPE), the amount of which is assessed each year by the CRE before July 15.

Over the course of 2022, several supplier declaration purchasing windows have enabled the CRE to estimate forecast shield charges and associated advance payments. All these measures have been extended for the year 2023 by the Finance Act for 2023; in particular the gas and electricity shields and additional measures including a new electricity buffer system for SMEs and VSEs not eligible for TRVE. The CRE's role for ensuring that the protection measures are properly applied, supporting suppliers in their efforts and ensuring that the amounts paid to consumers are properly passed on, will continue in 2023.

Residential and small business consumers in non-interconnected zones (zones non interconnectées - ZNI) have access to the same tariffs as those in force in mainland France, enabling them to benefit from the tariff shield.

Similarly, business consumers in the ZNI have been protected by the Tariff Shield, which limits bill increases to +15% inc. tax by 2023 for each territory and each tariff colour. This has ensured maximum uniformity of bill evolutions across all ZNIs.



## Weekly reference rates for small and medium-sized businesses and local authorities

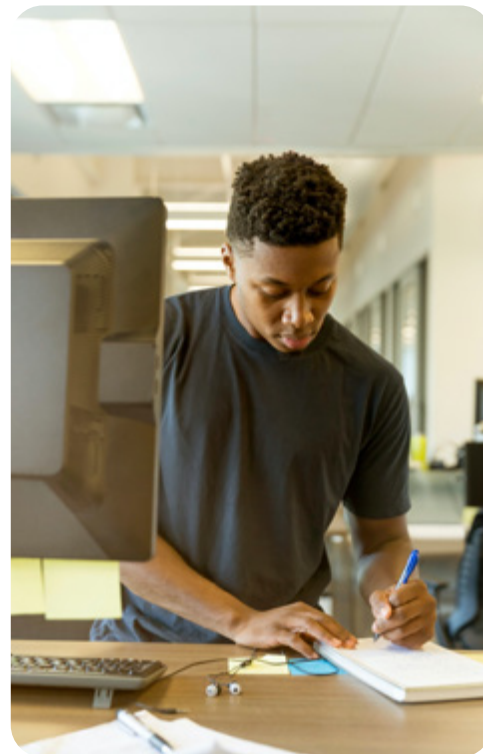
Between October and December 2022, the CRE published indicative electricity price benchmarks for 2023 for small and medium-sized enterprises (SMEs), local authorities, and buyers subject to the French public procurement code.

These benchmarks, updated weekly, were intended to provide consumers with the benchmarks they needed to ensure that their suppliers' offers were competitive and reflected the reality of current supply costs. In particular, it was essential for these stakeholders to have an adequate level of information, so that they could contract a supply offer for 2023 upstream of the ARENH purchasing window, guaranteeing them access to ARENH.

In order to take into account the diversity of SMEs and local authorities in terms of electricity consumption, the CRE has published several price

benchmarks based on profiles corresponding to the colors of the former regulated tariffs (Blue, Yellow, Green) and, within a profile, on one or two typical consumers: an average consumer and a consumer adapted to seasonal changes, consuming more in winter and during peak hours.

Anthony Cellier, a member of the CRE board since October 24, 2022, and advisor for local authorities, set out to promote and explain this benchmark tariff.



## Public consultation on the methodology for regulated electricity sales tariffs

With electricity wholesale prices soaring and volatile, it was imperative to review the method used to construct the TRVEs established in 2016, in order to better take into account the costs of supplying an efficient supplier, help manage winter consumption peaks and encourage consumers to adjust their consumption to the needs of the electricity supply.

Between September 22 and October 17, 2022, the CRE organized a public consultation to update the TRVE calculation method as of 2023. The CRE received 43 contributions and conducted several hearings. In its deliberation of January 12, 2023, the CRE presented the changes it was making to the TRVE construction method, as well as a summary of the responses received during the public consultation.

The CRE has endeavored to combine the stability of TRVEs, a strong demand from consumer associations in the face of volatile wholesale prices, with the need to reflect electricity supply costs.

The main changes to the TRVE construction method compared to the current method are as follows:

- ▶ Concerning the calculation of the energy supply supplement: the CRE maintains two-year smoothing of ribbon supply. It reduces to one year, starting in tariff year 2023, the duration of the smoothing of the shape of the energy supply complement.
- ▶ The CRE specifies the methods for taking into account the cost of deviations from the balance perimeter as well as the cost of supply in the EEC maintaining that of EDF as the benchmark while enhancing its transparency.
- ▶ The CRE is changing the method for setting the normal remuneration component, by separately identifying a trading margin and risk coverage.
- ▶ The CRE specifies the changes in TRVE structure required to mobilize consumer flexibility during winter peaks.

These methodological adjustments have been taken into account in the TRVE levels calculated by the CRE in January 2023. The government has decided to limit the average increase in TRVE prices to 15% including tax.

# Adapting grids and infrastructures to the energy crisis



## Mechanisms to guarantee security of gas and electricity supply

The gas crisis following Russia's invasion of Ukraine has fundamentally altered gas flows in Europe, notably due to the sharp drop in Russian exports. This decline has given rise to concerns about the possibility of filling underground gas reserves, raising fears about restrictions on the quantities of gas available for winter.

In order to avoid as far as possible the risk of resorting to exceptional grid management measures that could even involve load shedding for large consumers, the CRE, the Government, the European Commission and infrastructure operators have been working together since the spring of 2022. This concerted action has led to the implementation of a number of preventive measures and gas shortage management tools.

Firstly, the CRE has worked to simplify and make the marketing of storage capacity more flexible. As of the summer of 2022, the CRE has adapted the conditions under which storage facilities are marketed in order to encourage subscriptions and ensure France's security of supply.

This desire to encourage the filling of storage facilities was also put into practice at the European level with the adoption of a text in June, which sets out obligations for filling of European natural gas storage facilities. In France, the aim was to fill storage facilities to 90% by November<sup>1</sup>; all targets were met, with subscriptions and filling close to 100%.

For the winter of 2023-2024, the CRE has also issued a favorable opinion on the request for exemption for the floating LNG terminal at Le Havre. TotalEnergies has planned to set up a floating terminal for the storage and regasification of liquefied natural gas, in collaboration with the public authorities, to improve the security of gas supply for France and Europe over the coming winter.

As part of the reciprocal solidarity agreement between France and Germany, the CRE has contributed to European solidarity by authorizing the delivery of gas to Germany via the interconnector at Obergailbach (Moselle). In exchange for this authorization, Germany is committed to optimizing electricity export capacity to France.

During the winter, the situation was generally under control thanks to full storage, massive LNG arrivals and a significant drop in consumption (due to weather conditions and energy sobriety). However, the reorganization of gas flows has created a deficit in northern France and a surplus in the south, which is well supplied with LNG from LNG terminals and Spain.

Unfortunately, the existing capacities of the French gas grid are not sufficient to transfer the entire gas surplus from the South to the North, forcing the CRE to adopt temporary measures to adapt the functioning of the network, taking into account the technical characteristics and unloading schedules of the LNG terminals.



### Interruptibility to ensure gas balance

The energy crisis that Europe has been experiencing since the second half of 2021 has raised the risk of an imbalance between gas supply and demand in France during certain days of the winter. To face up to this, the Government has revised the so-called "guaranteed interruptibility" clause that appears in the Energy Code but that has never been implemented.

The aim of interruptibility is to respond rapidly to a risk of tension on gas grids by temporarily reducing and remunerating lower demand from certain voluntary gas consumers selected by tender.

The decrees for which the Government requested the CRE's opinion have modified the initial system to make it more effective and operational. In particular, the system has been extended to gas distribution grids, and the remuneration of voluntary consumers has been increased, mainly as a function of the interrupted volume activated.

In November 2022, the CRE issued a favorable opinion on the new draft mechanism, considering that its overall effectiveness had been reinforced, and that it protected consumers from the implementation of last-resort mechanisms such as load shedding.



### Interruption of the call for tenders for secondary reserve capacity in electricity

To ensure the supply-demand balance on the power grid at all times, the French electricity transmission system operator (Réseaux de Transport d'Electricité - RTE) has reserves to compensate for any shortfall in production or consumption, or to deal with grid congestion called "bottlenecks". The secondary reserve is automatically activated up or down to help restore balance on the network. Producers who contract with the RTE must keep part of their available power in reserve.

Concerned by malfunctions leading to particularly high daily contract prices, the CRE asked the RTE in November 2021 for the temporary suspension

of the call for tenders for secondary reserve capacity to return to the prescription regime. After conducting an in-depth analysis confirming that the conditions necessary for the operation of the secondary reserve market had not been met, the CRE granted the RTE a derogation in June 2022 for a maximum period of 3 years, in compliance with European rules.

This decision protected consumers from a significant increase in the costs they would have had to bear through TURPE. Since then, the CRE has been working with all stakeholders to develop a permanent reopening of the tender.



### Redistribution to consumers of exceptional income from electricity transmission grids

Rising and volatile wholesale electricity prices have boosted revenues RTE's interconnection charges, which are proportional to price differentials between neighboring countries. These revenues are normally deducted from RTE's authorized income covered by the network usage tariff (Tarif d'Utilisation du Réseau Pour Electricité- TURPE). However, given the amount at stake, the rules in force

would have resulted in a reduction in TURPE spread over several years. The CRE has decided to return this surplus in a single advance payment. At the beginning of 2023, the CRE set the amount to be returned by RTE to its network users at €1,939 million, including €177 million for directly connected large customers and €1,763 million for distribution system operators. The RTE payments were made in February 2023.



**Reinforcing electrical interconnections**

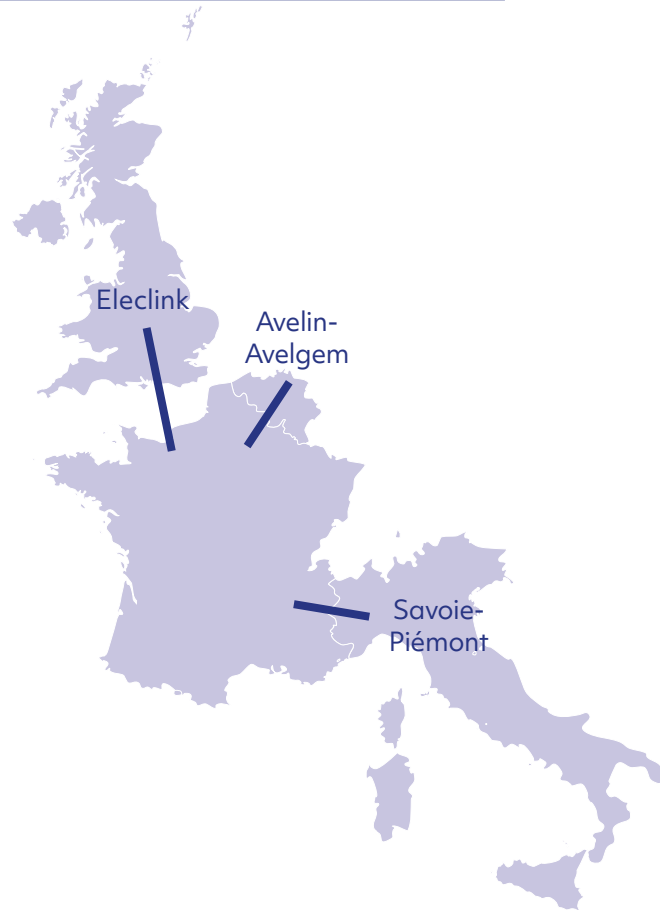
The supply crisis in France's electricity supply in 2022 has highlighted the key role played by interconnections in French and European supply security. In 2022, France was a net importer of 16.5 TWh, whereas it had been a major exporter for decades.

The year 2022 was marked by a significant strengthening of interconnections between France and its neighboring countries. In May 2022, the Eleclink interconnector linking France and Great Britain via the Channel Tunnel is now in service. Its 1 GW capacity brings the exchange capacity between France and Great Britain to 4 GW.

Exchange capacity with Belgium has been increased by doubling the transit capacity of the Avelin-Avelgem interconnector, from 3 to 6 GW.

On the France-Italy border, the first of the two links of the Savoy-Piedmont interconnection was commissioned in November 2022. This project, with a total capacity of 1.2 GW, will bring the maximum exchange capacity of 4.5 GW.

**Projects commissioned in 2022**



**The Celtic project**

*In addition, the CRE and its Irish counterpart, the Commission for Regulation of Utilities (CRU), adopted a joint decision allowing the Celtic project to go ahead. The 700 MW interconnection between France and Ireland is scheduled for commissioning in 2027. The decision to go ahead with the project was motivated by its economic and environmental benefits, which will enable the complementary nature of the French and Irish generation facilities to be exploited, promote the integration of renewable energies and reducing CO<sub>2</sub>. This project also contributes to European solidarity in terms of energy.*



**Security of gas supply: Franco-German solidarity agreement**

Reduced Russian gas deliveries to Europe following Russia's invasion of Ukraine pose a major risk to security of supply for the European Union. The French and German authorities announced on September 5, 2022 the conclusion of a reciprocal solidarity agreement between France and Germany, aimed at reinforcing security of energy supply for both countries. France is thus committed to reinforcing its gas interconnection with Germany to deliver gas for the winter of 2022-2023.

The interconnection point between France and Germany, located at Obergailbach in Moselle, has been designed to operate only in the direction from Germany to France. To enable a two-way exchange France-Germany, GRTgaz has made rapid technical modifications and an interconnection tariff has been set by

the CRE. In October 2022, GRTgaz set up an exit capacity of 100 GWh/day from the French gas transmission system to Germany, marketed as a daily product, reservable from one day to the next.

The CRE praised the technical efforts made by GRTgaz and the progress of joint work between GRTgaz and its German counterparts, which enabled the rapid implementation of a gas flow to Germany.

For its part, Germany committed to freeing up the maximum amount of electricity export capacity to France during the winter of 2022-2023 and this commitment has been kept. Germany's extension of three nuclear power plants until April 1, 2023 significantly reinforced the security of electricity supply in Germany and France.

# The CRE, a key stakeholder in the transformation of the energy system to accelerate the ecological transition

The energy system faces major challenges in ensuring an environmentally-friendly future.

The CRE is committed to meeting the challenges of the energy transition by contributing to the development of renewable energies and efforts to reduce energy consumption.

Always looking to the future, the CRE is preparing the energy networks of the future to face the decarbonization imperatives.



# Developing *renewable energies* (RE) and tools for flexibility and sobriety



## Adapted specifications to accelerate the deployment of renewable energies

**T**he global economic recovery following the Covid-19 crisis, the tensions over raw materials and logistics and Russia's war with Ukraine have changed the trend in renewable energy costs, after a long period of downward pressure.

Against a backdrop of cost inflation and rising interest rates, the CRE published on August 30, 2022, and again on February 7, 2023, at the request of the French government, a set of adapted versions of specifications for past calls for tenders for renewable generation facilities – wind, photovoltaic and small hydroelectricity – in mainland France and in non-interconnected areas: Corsica, Guadeloupe, French Guiana, Réunion, Martinique, Mayotte, etc. These measures are designed to unblock projects and accelerate their development, despite rising costs. The changes introduced should enable award-winning producers to cushion part of the increase in costs and rates:

- ▶ In mainland France, through an eighteen-month increase in plant completion deadlines and the possibility for award winners to sell their electricity production on the market before the start of the support contract signed for twenty years.

- ▶ In non-interconnected areas: in the absence of wholesale markets, via retroactive indexation of purchasing tariffs, of which benefiting the winners of past invitations to tender.

Winning bidders will also be able to modify the capacity of their plants, up to a maximum of 140% of the initial capacity selected in the call for tenders.

The CRE has welcomed the introduction of these measures. Indeed, the accelerated deployment of

In addition to being useful in the long term for achieving energy transition objectives, RE contributes in the short term to enhancing security of supply, easing wholesale prices and reducing gas consumption by limiting the use of gas-fired power plants. Initial feedback from the field suggests that these measures have been effective for some projects, but that other projects remain in a delicate situation, particularly for the wind energy sector. In the coming months, CRE considers it essential to take stock of these projects and to determine new, appropriate measures.





## Energy-saving tools to control consumption: Linky and Gazpar



Launched at the end of 2015 and mid-2017 respectively, the rollouts by Enedis and GRDF of the advanced Linky and Gazpar meters are nearing completion, with Linky at 94% and Gazpar at 91%.

At a time when energy sobriety is becoming a major challenge for our society, these systems are there to encourage citizens to adopt eco-actions through concrete and accessible monitoring and control tools. For example, by making fine-grained consumption data available on a daily basis - up to hourly intervals for Gazpar and up to 30-minute intervals for Linky - on a display platform provided by the network operator, supplier or third party, consumers can see the short-term impact of their eco-actions on their consumption and bill. Through various incentive regulation mechanisms, the CRE ensures that network operators deliver a high level of performance, particularly in terms of data availability and quality.



## The positive contribution of renewable energies to the Government budget via public energy service

Since the end of 2021, the rise in wholesale prices has profoundly altered the traditional pattern of financial streams linked to support for renewable energies.

The government guarantees a certain level of electricity purchase prices to renewable energy producers benefiting from a support contract - obligation to purchase or remuneration supplement. Thus, when wholesale prices fall below the guaranteed price level, the Government compensates the operators managing these contracts, as has been the case for many years. However, if wholesale price levels exceed the guaranteed price, which was the case for most sectors in 2022, operators must pay the surplus back to the Government.

Each year, operators declare to CRE their actual expenses for the previous year and their forecast expenses for the current and following years. These costs are then checked by the CRE, which calculates the total amount they represent for the Government.

The CRE carried out its annual assessment of the amount of charges to be compensated in 2023 in its annual deliberation of July 13 2022: this is based on the calculation of actual expenses for 2021, forecast expenses for 2022 and 2023, and associated adjustments to previously retained amounts.

For the first time, these expenses have turned out to be negative, totaling -€11.1 billion for 2023. This amount also includes freeze measures of the electricity and gas TRVs, whose estimated cost in 2022 is lower than the forecast contribution of renewable energies. The sharp drop in expenses in 2023 is mainly due to expenses linked to support for renewable energies in mainland France. In fact, the forecast revenue from renewable electrical energy alone amounted to €8.6 billion in 2022 and 2023, highlighting the contribution of renewable energies to public finances at a time of energy crisis.



The continuing rise in wholesale prices over the summer and autumn of 2022 led the CRE to publish on November 3, 2022 its reassessment of the charges to compensate in 2023, notably updating the market price references used to establish its forecasts. Revaluation has accentuated the phenomenon of negative expenses: total expenses to be compensated in 2023 was -€32.7 billion. Thus the CRE estimated that all renewable energy sources in mainland France would contribute to the Government budget, representing €30.9 billion for 2022 and 2023, i.e. a major contribution to public finances.

During the latter part of 2022, wholesale prices fell, reducing the actual contribution of renewable energies compared with CRE's assessment for 2022 and 2023. The CRE recommended that the public authorities introduce ad hoc management measures for the operators concerned. In this context, the reassessment of expenses to be compensated in 2023, which the CRE will exceptionally carry out in July 2023, will entail a change in monthly payments - as permitted by the Finance Act for 2023.



### Power Purchase Agreements

The CRE takes an interest in French and European market development of Power Purchase Agreements (PPA). These are long-term power purchase contracts between a buyer and a power producer. These contracts do not require public support, and are a fully-fledged lever for the development of renewable energies. In 2022, the CRE published the results of a study carried out by the E-Cube consultancy firm on the development dynamics of these contracts in Europe. The study focuses particularly on the interaction between their development and public policies to support renewable energies.

The crisis in wholesale energy prices has greatly increased the attractiveness of PPAs, both for large consumers and for suppliers, who can benefit from greater visibility and stability on their energy supply costs. For producers, PPAs represent a complementary outlet to existing support schemes.

To support this dynamic, the CRE has proposed the implementation of "mixed" invitations to tender, particularly for offshore wind energy, which would offer greater flexibility to applicants wishing to sell all or part of their production through PPAs rather than support schemes. This possibility was opened up by the law of March 10 2023 relative to the acceleration of the production renewable energies, which also entrusts the CRE with the task of providing information on these contracts when they concern facilities that have won a "mixed" call for tenders.





## Offshore wind power tenders



2022 was a pivotal year for offshore wind power.

The first commercial wind farm, with a capacity of 480 MW, was commissioned at Saint-Nazaire. The AO4 competitive bidding process for a 1 GW wind farm off the Normandy coast began at the end of 2022, and the winner was chosen on March 24, 2023. The competitive dialogue of the "AO5" procedure, for a floating wind farm in southern Brittany (0.25 GW), was also completed in early 2022.

As a reminder, once the specifications for the competitive procedure have been drawn up by the Minister responsible for energy, after consultation with the CRE, it is then up to the Minister to decide on the procedure, it is then up to the CRE to examine the applications from the various candidates and to propose a ranking to the Minister.

The pace of competitive procedures for awarding new parks is accelerating. Indeed, three new competitive dialogue procedures were launched for two floating parks in the Mediterranean Sea ("AO6"): 2 x 0.25 GW), a wind farm off the coast of Oléron ("AO7": 1 GW) and a park in Normandy ("AO8": 1.5 GW, extension of the "AO4" park).

The rapid commissioning of these various wind farms is a major challenge, both in terms of meeting France's offshore wind power targets and ensuring the security of the country's energy supply and the electrification of industry and transport. The CRE therefore recommends that all measures be taken to accelerate the commissioning of these wind farms by shortening the duration of future competitive bidding processes, in particular by standardizing and consolidating procedures.



## The Continuous Foresight Committee preparing the future of the energy sector

After a year of energy crisis, during which the CRE was fully committed to responding to the crisis, notably by working on various fronts to guarantee energy supply while promoting the energy transition to a low-carbon system and consumer protection, the three working groups of the fourth season of the Foresight Committee have delivered their conclusions, accompanied by Ivan Faucheux, the CRE commissioner. They had divided up the following topics: "Biomass and carbon neutrality", "Electrification of uses" and "Consumer confidence in new energy services". In these medium- and long-term studies preparing for the future

of the energy sector, each group worked on the concrete consequences of the transformations involved in the transition.

The reports were made public at an event organized in March 2023, bringing together stakeholders in the sector around round tables covering the reports' themes: "What biomass for energy production?" "What are the energy requirements for the electrification of applications?" "How the energy crisis has profoundly shaken consumer confidence?"

🌐 They are also available on the Foresight committee website [www.eclairerlavenir.fr](http://www.eclairerlavenir.fr).



# Preparing *energy grids* of the future



## Accelerating connection of renewable energies and low-carbon gases

### Offshore wind

Beyond the production aspect, the deployment of renewable energies represents a major challenge for grids. In the case of offshore wind power, to find the best location for optimizing production, preserving the environment and biodiversity and maritime activities, and facilitating their acceptability, future offshore wind farms will be installed at a certain distance from the coasts. For example, for the AO4 project, the winner of which was announced in early 2023, the wind farm will be located 32 km from the coast.

RTE, the French transmission system operator, is directly involved in the subsea connection of these facilities.

The CRE has the task of validating RTE's investments in this area to ensure the technical and economic relevance of investments.

In addition, while the farms from the first offshore tenders are now being connected, the CRE welcomes the standardization of connection provisions in the latest specifications, which should lead to better system foresight, optimized lead times and greater cooperation between RTE and producers.

### Industrial decarbonization zones

In line with the national low-carbon strategy, France is moving towards a sharp rise in electricity consumption by industry. In the priority electrification zones identified, RTE has received significant requests for connections, both in number and volume, by 2030.

With a view to promoting the latter and anticipating the implementation of the law on renewable energies, the CRE has approved a new consumer connection procedure to anticipate and pool connections in four industrial decarbonization zones.

### Shorter connection times

In the coming years, accelerating the deployment of renewable energies, particularly onshore, will be a prerequisite for achieving carbon neutrality and reinforcing energy sovereignty.

As a result, all the steps that enable a plant to produce must be optimized. After the administrative procedures and the possibility of obtaining a public support contract following examination of the file by the CRE in the context of calls for tender, the connection of the installations is one of the last stages before production.

The regulator ensures with network operators, especially distribution network operators, that the necessary efforts are being made to reduce connection times.

As of 2021, the CRE has therefore introduced incentive regulation of average connection times for Enedis and EDF SEI, with the aim of reducing installation times to at least the levels seen between 2015 and 2018. To achieve this, Enedis has put in place a plan to simplify procedures for producers and better anticipate work.

### Biomethane

In recent years, we have witnessed the rapid development of biomethane, a gas produced from the fermentation of organic matter, which, once purified, acquires properties similar to those of natural gas and can therefore be injected into the natural gas distribution and transmission networks. To accommodate this new gas, networks have to be adapted and sometimes reinforced.

In this context, the law entrusts the CRE with the implementation of the connection zoning system, i.e. the validation of the most appropriate connection scheme biomethane production facilities and the conditions governing their injection.

The first zoning plans drawn up by the gas network operators were submitted in the spring of 2020 for approval by the CRE, which has since deliberated on 13 occasions to approve around 320 zoning plans, where two-thirds of the biomethane potential is concentrated, covering around 62% of mainland France.

In the medium term, almost 1,200 projects could be developed in these areas, representing an annual production of around 25 TWh and requiring network investments of just over one billion euros.

## Smart grids and feedback from smart grid demonstrators

The CRE supports the evolution of electricity and gas networks towards smart networks. Also known as smart grids, they are designed to accelerate the energy transition while controlling costs for consumers.

After analyzing feedback from 36 demonstrators, the CRE published a report sharing its conclusions and recommendations in May 2022: the CRE insists on the need to rapidly industrialize relevant solutions. Flexibility and consumption optimization are becoming major challenges in a low-carbon electricity system.

The CRE stresses the importance of reinforcing the economic signals that will make it possible to mobilize diffuse flexibilities. In addition, the widespread use of smart connection offers will be an essential lever for speeding up the connection of storage facilities and electric vehicle charging stations and to reduce their cost.

More information on the website [www.smartgrids-cre.fr](http://www.smartgrids-cre.fr)



## Statutory sandbox and maintaining a second purchasing window

Article 61 of the Energy-Climate law introduces a regulatory experimentation mechanism that authorizes the CRE and the administrative authority to grant exemptions for the conditions of use and access to the electricity and gas networks for innovative projects.

The CRE conducted a second purchasing window, during which it granted exemptions to 14 projects, following on from the first round in 2021, when 13 projects were granted exemptions. Some requests fall within the remit of the General Directorate for Energy and Climate. These projects involve experiments on optimizing the connection of renewable energies and storage facilities, consumption flexibility and the injection of synthetic methane into networks.

In November 2022, the CRE published the first annual report on the progress, of the projects, analyzing whether or not it would be appropriate to change the current framework. The CRE has announced that it will henceforth process requests for derogations as and when they are received.

The application form is available on the CRE website and questions can be sent to [bacasable@cre.fr](mailto:bacasable@cre.fr).



## Tariffs for public gas and electricity networks

One of the CRE's main missions is to regulate gas and electricity transmission and distribution networks, to provide access to these networks, to establish tariff methodology and to propose tariff changes.

In 2022, the CRE began to reflect on the next tariffs for gas and electricity infrastructures, notably by anticipating work on structural changes to take account of the development of new network uses. In its reflections on the changes to the regulatory framework required to achieve carbon neutrality, the CRE is also drawing heavily on the lessons learned from the study it carried out in 2022 on the future of gas infrastructures for 2030 and 2050.

Pricing work will continue intensively in 2023. The first half of the year will be devoted to a wide-ranging consultation of the various stakeholders, which the CRE has wished to adapt with respect to previous tariff studies, so as to adopt a more participative approach. Several thematic workshops bringing together the stakeholders are planned (structure of distribution tariffs; upstream tariffs; new gases; adapting regulation to the place of gas; service quality and metering).

In the second half of the year, the CRE will report on these discussions and present its orientations in several public consultations. Tariff decisions for the new gas infrastructure tariffs are scheduled for the end of 2023, for a staggered entry into force in early 2024.

The new electricity infrastructure tariffs will come into force on August 1, 2025.

This year, the tariffs for access to the natural gas networks of local distribution companies (Entreprises Locales de Distribution - ELD) came into force on July 1, 2022 for a period of four years, and address the main issues identified for the coming years.

The CRE has set up a regulatory framework to encourage ELDs to take the necessary steps to develop competition on their territories, by encouraging the harmonization of information systems between ELDs.

In addition, to take account of declining gas consumption in certain areas, the CRE has introduced an experimental system for one ELD to control capital expenditure, as the first step in a longer-term reflection on the future of gas distribution tariffs in a context of the energy transition.

# Accelerating *the energy transition* in non-interconnected areas





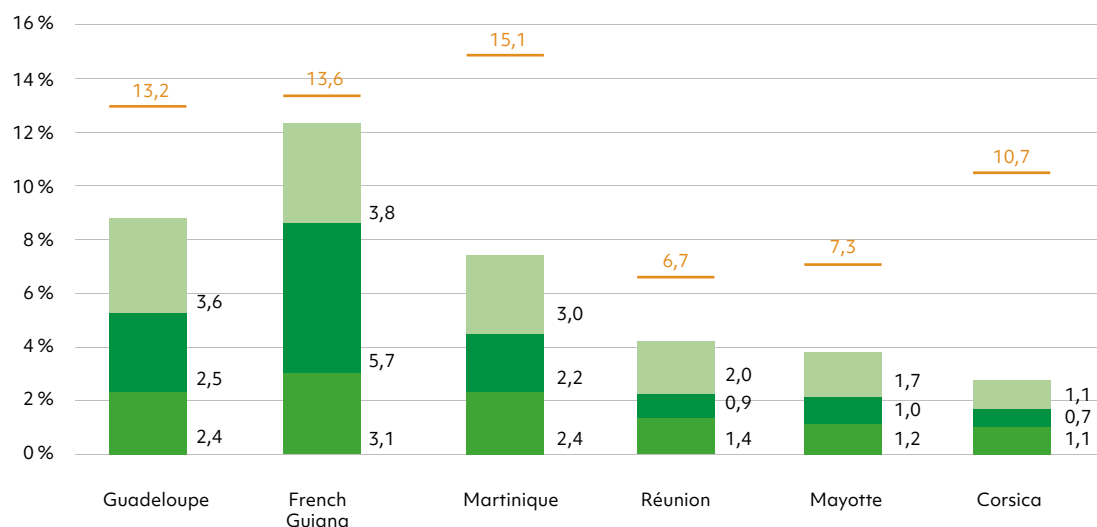
## Assessment of energy demand management<sup>(\*)</sup> initiatives in the Frenchoverseas territories

In the ZNI, actions aimed at controlling consumption of electricity by suppliers or, where applicable, local authorities and public operators, can be compensated by public service energy charges.

In 2019, the CRE approved a €530 million plan for investment incentives over 5 years to promote MDE in the overseas departments (Départements et Régions d’Outre-Mer - DROMs) and Corsica, including over 35% for low-income customers. Each year, it reports on its deployment in each of the six territories.

In 2021, there was a sharp rise in investments after the contraction observed in 2020 due to the health crisis.

A total of €111 million in bonuses was paid out across all six territories (+26% compared with 2020), 70% of which (€79 million) will be borne by SPE expenses, with the remainder mainly related to the valuation of Energy Savings Certificates (Certificat d’Economies d’Energie - CEE) generated. The systems deployed by 2021 will save 219 GWh of energy each year and reduce greenhouse gas emissions by around 150,000 tonnes of CO<sub>2</sub>, resulting in savings of € 514 million in SPE costs over their lifespan of up to 30 years.



Cumulative annual energy savings as % of 2019 annual consumption

2019 2020 2021 Annual savings from initial framework



## Major production projects in French Guiana

As part of its goal to achieve decarbonized electricity production by 2030 (around 70% to date), French Guiana is supporting the development of numerous production projects.

The CRE is responsible for assessing the level of public support for new facilities.

The year 2022 was marked by several deliberations on electricity generation projects in French Guiana. Two projects in Maripasoula will bring renewable energy to this isolated community, accessible only by river or air. The two projects are complementary, and will reduce the need for conventional generation to keep pace with growing consumption.

Voltalia’s hydroelectric project (2.65 MW) will reach peak production during the rainy season, while EDF Renouvelables’ photovoltaic project (1.2 MWp) will benefit from more favorable sunshine in the dry season.

On the coast, the CRE has also deliberated on two renewable electricity generation projects. Voltalia’s project (10.6 MW) located near the Petit-Saut dam involves producing and using biomass from wood submerged in the lake.

Finally, the Gov’Biogaz’ company’s electricity production project aims to use the biogas generated by the fermentation of waste stored at the Maringouins non-hazardous waste storage facility (Installation de Stockage de Déchets Non Dangereux - ISDND) in Cayenne.



### ⚡ Relaunch of electricity storage purchasing windows in ZNIs

The ambitious energy transition objectives set out in the French law on the energy transition for the French Green Growth Act (La Transition Énergétique pour la Croissance Verte - LTECV), which aims to achieve energy self-sufficiency for the French regions by 2030, requires the development of tools for integrating intermittent renewable energies into the electricity grid.

The CRE is therefore mobilized to support the development of storage facilities managed by the grid operator to accompany the development of renewable energies. These installations contribute to securing the power system, while generating operating savings by optimizing the use of production resources.

Based on feedback from previous purchasing windows, the CRE has changed its methodology for examining storage projects following a public consultation in 2022. The next referral purchasing window will concern Martinique and Réunion, with bids due in the last quarter of 2023 and publication of results in the first quarter of 2024. Subsequent purchasing windows, spaced out at intervals of around six months, will cover the other territories.



### The Territorial Collectivity of Martinique agreement

Emmanuelle Wargon, Chairman of the CRE, and Catherine Edwige, member of the Board in charge of the ZNI, visited Martinique in November 2022. On this occasion, a partnership was signed between the CRE and the Territorial Collectivity of Martinique (Collectivité Territoriale de Martinique - CTM).

In the context of the current revision of the Multi-annual Energy Program, it aims to enable the region to benefit from the CRE's support and expertise.

The mission enabled the delegation to exchange views with the Prefect of Martinique and the Director of ADEME, to visit the energy transition showroom on the Bellefontaine site, the Grand Port Maritime de la Martinique and EDF PEI's Bellefontaine power plants, as well as Albioma's Galion 2.



The CRE's activity report is a document in which staff from all CRE departments participated.

The Management Committee and the CRE Board would like to thank all our staff for their contribution to this energy sector communication tool.



# The reports from the CRE



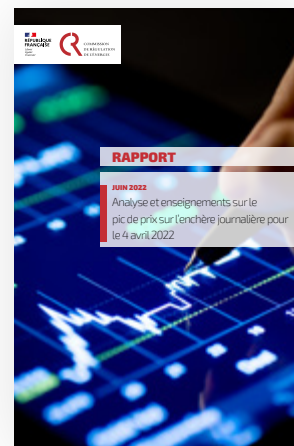
Roadmap 2023-2024



Activity report 2021



Monitoring report on wholesale markets for electricity and natural gas in 2021



Analysis and lessons learned from the daily auction price peak for April 4, 2022



Annual report to the European Commission



Forward electricity prices for winter 2022-2023 and the year 2023 (July 2022)



Implementation of the minimum 70% interconnection capacity threshold for exchanges at French borders: review of 2021 and highlights



Forward electricity prices for winter 2022-2023 and the year 2023 (December 2022)




Feedback from smart grid demonstrators

The sole purpose of this document is to inform the public about the CRE's activities. Only the deliberations of the CRE are authentic.

This document can be downloaded from the CRE website: [cre.fr](https://www.cre.fr)

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 Commission de régulation de l'énergie

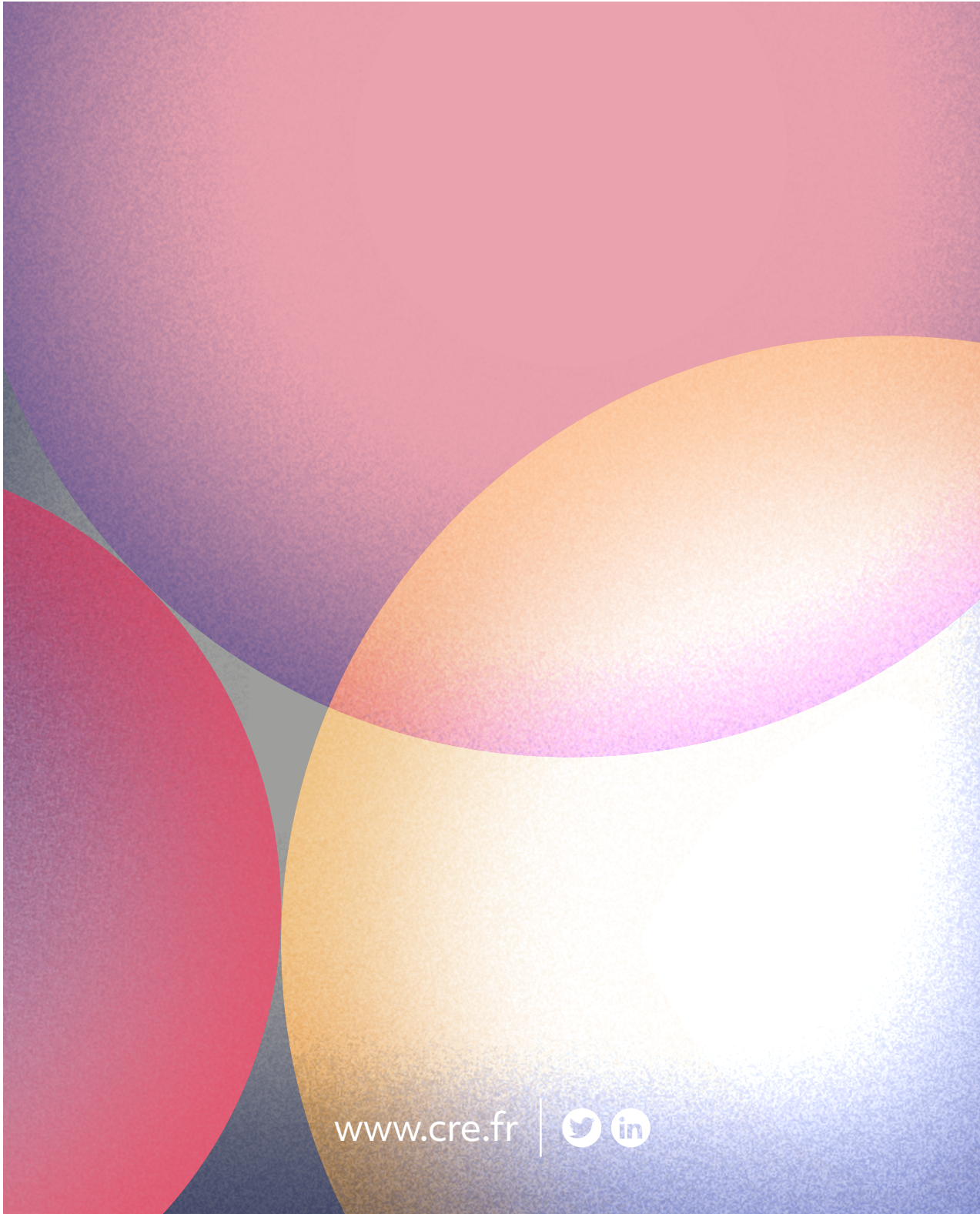
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