RÉPUBLIQUE FRANÇAISE
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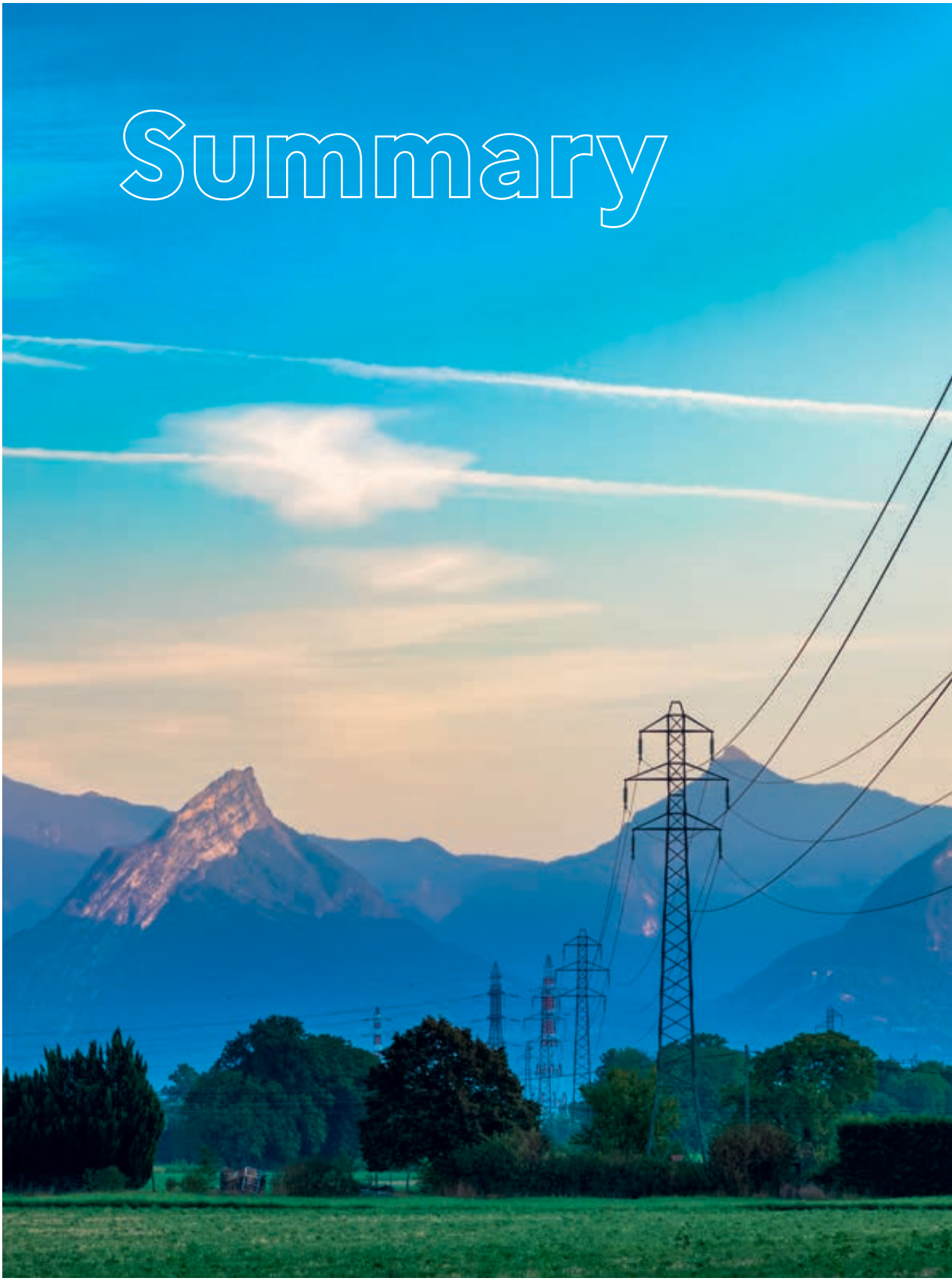
CRE COMMISSION DE RÉGULATION DE L'ÉNERGIE

2024 Activity Report

Summary



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An agile regulator that has adapted to the post-crisis environment

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An authority that looks ahead to build tomorrow's energy markets, and address the issues faced by consumers

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CRE: a key contributor to the success of the energy transition, both in mainland France and in non-interconnected areas

MESSAGE FROM THE CHAIRWOMAN

Emmanuelle WARGON
Chairwoman of CRE (French Energy Regulation Commission)

> It is essential to continue to support renewable energies as accurately as possible, and to scale the grids accordingly.

What were some of CRE's most noteworthy achievements in 2024?

2024 was a very intense year for CRE, with the adoption of 237 deliberations and the publication of 20 official reports, covering all its areas of responsibilities. Its teams were once again mobilised in a very intense way, and I would like to thank them for the remarkable quality of their work.

In particular, the preparation of the 2025-2028 tariffs for the use of public electricity networks (TURPE 7) kept us busy throughout the year. Grid tariffs are a central link in our energy system: they give grid operators the means to maintain, repair and renew the grids, as well as to adapt them to climate change, but also to plan ahead for their future extension and the many new connections involved. These are essential in order to guarantee the electrification of energy use, which is vital if we are to achieve our decarbonisation targets.

These tariffs, included in users' bills, must strike the right balance between networks' requirements, quality of service and an acceptable cost to the consumer. This is an important responsibility, since these tariffs provide a framework for the grid operators' annual investment expenditure, which by 2028 will amount to €6.2 billion for RTE and €7 billion for Enedis.

2024 was a busy year for CRE in terms of consultations. How are dialogue and openness a hallmark of CRE's operations?

In 2024, CRE conducted no fewer than 17 public consultations, i.e. more than one per month, and interviewed 46 market players. That's quite a lot!

This is a testimony to our strongly held values of openness and dialogue, which are the hallmark of our institution. In addition to regulatory consultations, CRE is characterised by its responsive approach to its stakeholders, taking their opinions into account and trying to strike a fair balance between them.

Being an independent administrative authority does not mean making decisions in isolation, or relying solely on certainties. It means consulting, listening, arguing and learning from all stakeholders, in order to make impartial decisions that benefit the energy system and all the players involved, especially consumers.

In the same spirit of openness, CRE is also committed to maintaining a frequent and fruitful dialogue with its European and international contacts, both to draw upon their insights and the best practices they have implemented, and to share its own expertise in return.

What are your expectations for 2025?

2025 will be a pivotal year for the sector and all its industries, as we should see the publication and implementation of the new multiannual energy programme (PPE). This is essential if we are to accelerate the move away from fossil fuels, and enable industries to plan ahead for their future investments.
In this context, it is essential to continue to support renewable energies as accurately as possible, and to scale the grids accordingly.

On CRE side, we are going to continue the work initiated with energy suppliers last year, and make the measures announced in 2024 fully operational (guidelines, consistency of offers).
Our aim is for consumers to start reaping tangible benefits from these measures.
At the same time, we will be looking more closely at the issue of prudential rules.
In addition, the Regulatory Access to Historical Nuclear Electricity (ARENH) will come to an end in 2025, and CRE teams have been fully mobilised to anticipate and prepare for the mechanism that will replace it: the universal nuclear payment (VNU).

Last but not least, CRE will be 25 years old in 2025. At this pivotal moment, when the energy sector is undergoing major change, CRE will unveil its strategic guidelines for the next five years, which will form the basis of its action between now and 2030.

MESSAGES FROM THE BOARD

In 2024, CRE approved more than 3.67 GW of wind power and 3.77 GWp of ground-mounted and building-mounted photovoltaic power, representing 794 applications examined and approved. These invitations to tender, which are provided for in the Multiannual Energy Programme, are necessary in order to ensure the successful completion of France's energy trajectory.

Some are now pointing to falling consumption and a sharp rise in electricity production, with almost 90 TWh being exported. In some cases, this is seen as a pretext for rethinking our energy trajectory.

However, while these developments are indeed accurate, they come as the result of a specific set of circumstances. They must not cause us to deviate from our economic and climatic course: securing France's energy independence and ensuring that our industrial future no longer depends on imported fossil fuels.

Energy is a long-term issue, not a reactionary one. Electrifying our use of energy, producing more electricity by mobilising all decarbonised energies (nuclear and renewable), and relying on an adapted grid network are the keys to making this energy transition a success, which is essential to our sovereignty and the country's future.

Anthony Cellier

In 2024, the initiatives taken by CRE to restore consumer confidence in suppliers were one of the major challenges addressed, and focused on three key areas:

- Introducing prudential rules to strengthen consumer protection, in particular by ensuring that supply from electricity providers matches the price commitments in their supply contracts
- Monitoring and analysing the consistency of offers from suppliers
- Improving consumer information, by defining a clear and legible typology of the various offers available, and by regulating the conditions under which offers can be taken out and renewed.

Though not legally required to do so, the vast majority of suppliers have agreed to commit to this approach alongside CRE.

These actions are part of CRE's role as a trusted third party, which it has acquired over time through its values of openness, impartiality and transparency. This role will become all the more important in the future, as trust is acquired over time but can be lost in an instant.

Ivan Faucheux

The year 2024 saw the new gas transmission tariff periods come into effect, along with the preparation of new tariffs for the use of public electricity network. CRE teams spent several months working on these topics.
The key aim of this regulation is to give grid operators the resources they need to fulfil their responsibilities, while at the same time remaining vigilant with regard to cost efficiency, which has an impact on consumer bills.

Gas network operators face a major challenge: they will have to continue to invest in order to maintain their infrastructure, but above all to adapt to the transport of biomethane, and potentially hydrogen and carbon in the future, as fossil gas consumption continues to fall.

Electricity grid operators will have to increase their investment in order to maintain their assets, and make them more resilient to climate risks. They will also have to anticipate the increase in consumption linked to the electrification of energy use, which is essential to the success of o ur decarbonisation objectives and the connection of renewable energies.

Valérie Plagnol

The passage of cyclone Chido over Mayotte last December revealed how vulnerable non-interconnected zones (ZNI) are to climatic hazards.
Throughout the ordeal, the people of Mayotte have been able to count on the responsiveness and dedication of the Enedis and EDF SEI teams, who have worked tirelessly to restore electricity. This episode should not be seen as a dramatic exception.

As a result of climate change, the southern hemisphere will increasingly be confronted with cyclonic phenomena of greater and greater intensity. We therefore need to start thinking today about resilience for tomorrow, particularly in terms of networks.

Each region therefore requires a specific strategy, within a universal context of decarbonising production. That's what the discussions between CRE, the French government and local elected representatives are all about: building systems that are suitable, robust and sustainable, without ever abandoning the solidarity guaranteed by tariff equalisation, which is the cornerstone of our energy model and whose effectiveness was once again demonstrated in 2024.

Lova Rinel Rajaoarinelina

CRE explained in 3 minutes

Since its creation on 24 March 2000, the Commission de Régulation de l'Energie (CRE) has been France's independent administrative authority for regulating the energy sector.

Missions

In an integrated European system, CRE has four main roles:

TO REGULATE electricity and gas networks and infrastructures

TO ENSURE that the electricity and gas markets work properly

TO OPERATE the main support mechanisms for renewable energy

TO ENLIGHTEN the public debate on major energy challenges

Values

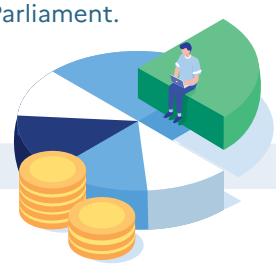
OPENNESS to all stakeholders in France, Europe and internationally

IMPARTIALITY in order to ensure the neutrality, fairness and objectivity of all decisions made

TRANSPARENCY of work and decision-making procedures

Budget

24 million euros
The operational funds needed by CRE to operate are proposed each year in the French Finance Act. The allocated funds are recorded in the national general budget. CRE is subject to oversight by the Court of Auditors (Cour des Comptes) and Parliament.



155
staff
(excluding the Board) as of 31/12/2024

2 independent bodies

THE BOARD

The Board has Five members, including the Chairwoman, with the ratio of men to women fixed at 2:3 or vice versa. Members are appointed for a six-year term on the basis of their legal, economic and technical qualifications. They define the broad guidelines and adopt decisions and opinions, drawing on the expertise of the departments reporting to the Chairwoman and the Managing Director.

80 board meetings

237 resolutions

46 market stakeholders interviewed

17 public consultations

THE DISPUTE RESOLUTION AND SANCTIONS COMMITTEE (CORDIS)

The CORDIS is made up of four full members and four alternates, with an equal number of members of the Conseil d'État and members of the Cour de cassation (the highest French courts).
They are responsible for settling disputes between operators and users regarding access to and use of the public electricity and gas networks, and for penalising breaches of the Energy Code and European rules.

42 referrals

33 decisions

The Board

From left to right:
Lova RINEL RAJAOARINELINA
Ivan FAUCHEUX
Emmanuelle WARGON
Anthony CELLIER
Valérie PLAGNOL

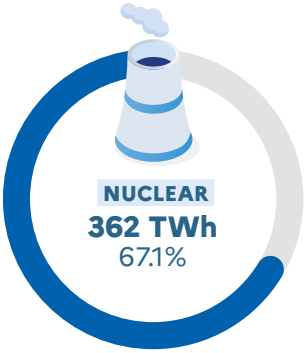
The Management Committee

From left to right:
Front row:
Anne-Sophie DESSILLONS, Director of Market Development and Energy Transition
Nicolas DELOGE, Networks Director
Emmanuelle WARGON, Chairwoman
Arnaud DIETRICH, Director of Economic and Financial Affairs, Forward Planning and Innovation
Kseniya KHROMOVA, Director of Wholesale Markets

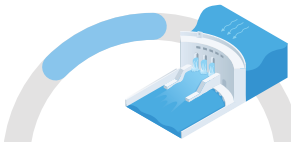
Second row:
Lydie CIEUTAT, Director of Communications and Institutional Relations
Claire HELLICH-PRAQUIN, Director of European and International Affairs and Cooperation
Dominique JAMME, Managing Director
Rachid BOUABANE-SCHMITT, General Secretary
Alexandra BONHOMME, Director of Legal Affairs
Alexis VIALLE, Director of Human Resources

Electrical mix

Electricity generation in 2024

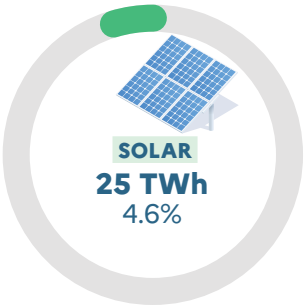


NUCLEAR
362 TWh
67.1%

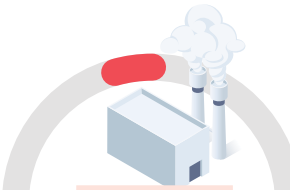


HYDROPOWER
75 TWh
13.9%

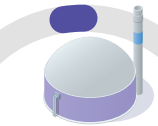
WIND POWER
(ONSHORE AND OFFSHORE)
47 TWh
8.7%



SOLAR
25 TWh
4.6%



FOSSIL-FIRED
(GAS, COAL AND FUEL OIL)
20 TWh
3.7%



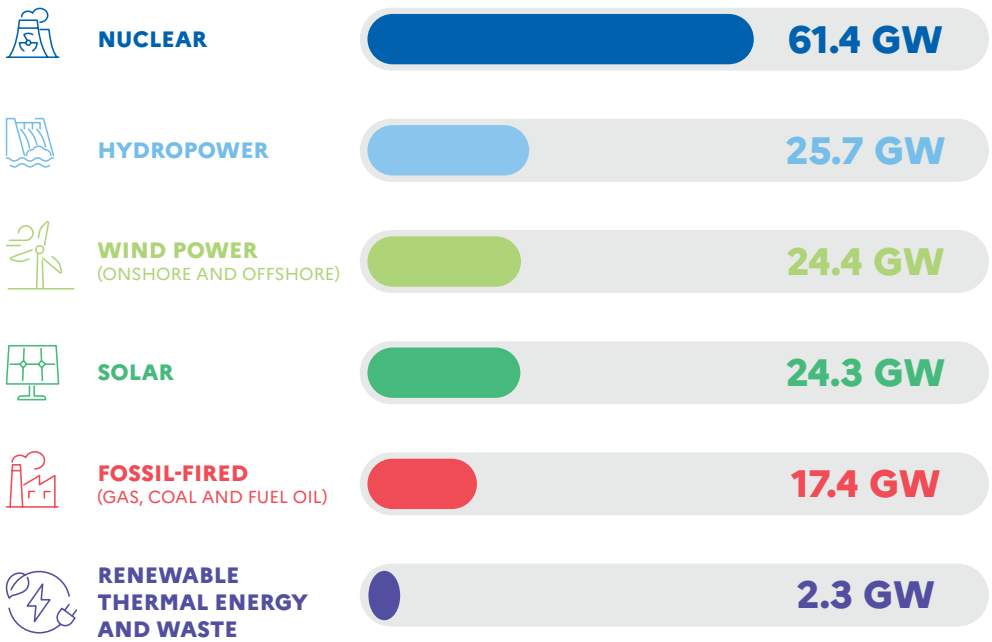
RENEWABLE THERMAL ENERGY AND WASTE
10 TWh
1.8%

Total production
539 TWh

Source: RTE 2024 electricity balance

Electricity generation capacity

Total installed generating capacity at the end of 2024



Installed capacity
155.5 GW

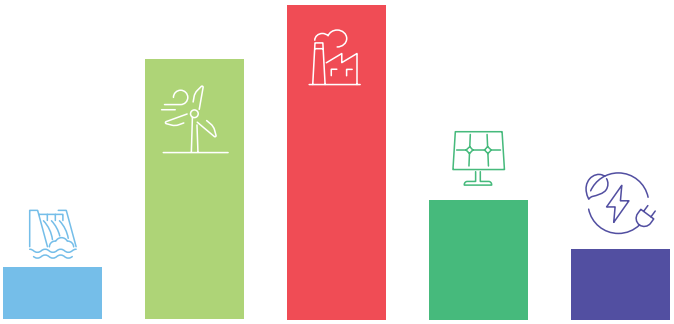
Source: RTE 2024 electricity balance

ELECTRICITY

Overview of the electricity mix

Germany

Total output: 431 TWh



Hydropower 27 TWh

Wind power 138 TWh

Fossil-fired 166 TWh

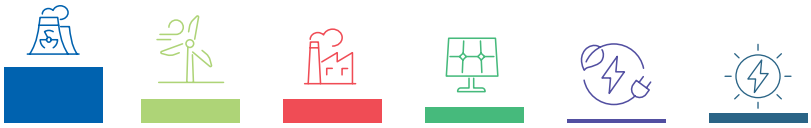
Solar 63 TWh

Renewable heat and waste 37 TWh

Source : BnetzA

Belgium

Total output: 70 TWh



Nuclear 30 TWh

Wind power 13 TWh

Fossil-fired 12 TWh

Solar 8 TWh

Renewable heat and waste 2 TWh

Other 5 TWh

Source : ELIA

Spain

Total output: 262 TWh

Nuclear 52 TWh

Hydropower 35 TWh

Wind power 61 TWh

Fossil-fired 60 TWh

Solar 44 TWh

Renewable heat and waste 9 TWh

Other 1 TWh

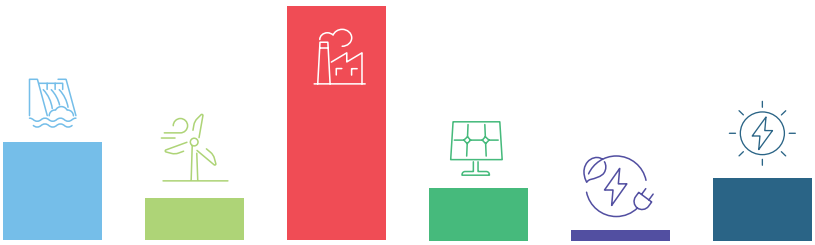
Source : REE

ELECTRICITY

in France's neighbouring countries

Italy

Total output: 264 TWh



Hydropower
52 TWh

Wind power
22 TWh

Fossil-fired
124 TWh

Solar
28 TWh

Renewable heat and waste
5 TWh

Other
33 TWh

Source : TERNA

United Kingdom

Total output: 284 TWh

Nuclear
41 TWh

Hydropower
6 TWh

Wind power
84 TWh

Fossil-fired
88 TWh

Solar
15 TWh

Renewable heat and waste
40 TWh

Other
10 TWh

Source : National Energy System Operator (NESO)

Switzerland

Total output: 78 TWh

Nuclear
23 TWh

Hydropower
49 TWh

Solar
6 TWh

Source : Swiss Energy Charts

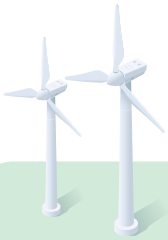
Electricity

Generation: 539 TWh

Nuclear generation
362 TWh

Renewable generation injected into the RPT[1] (including hydro, wind, solar and bioenergy)
79 TWh

Fossil-fired thermal power generation
20 TWh



Renewable generation injected into the RPD[2] (RE +CHP) and self-generation
78 TWh

Transport

Transmission Network (RTE)
Transmission losses
12 TWh

Net extractions
RPT[1] → RPD[2]
284 TWh

Distribution Network (ENEDIS + ELD)
Distribution losses
25 TWh

Net generation after electricity losses: 502 TWh

CVS[3]
449.2 TWh

Net consumption
after losses
413 TWh

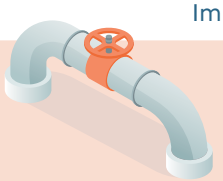
Export balance
89 TWh
(exports 101 TWh - imports 12 TWh)

Source: RTE - mainland France, including Corsica. [1] RPT: public transmission network [2] RPD: public distribution network [3] Adjusted for seasonal variations (CVS) losses included: the seasonal adjustment of the gross figures is used to account for temperature anomalies and calendar effects (leap years), in order to ensure consistent comparisons between years, and therefore differs from the sum of the previous figures.

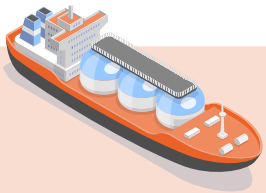
Gas

Imports and production: 455 TWh

Imports

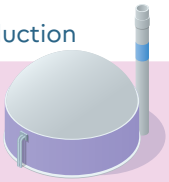


Gas pipelines
172 TWh



LNG terminals
271 TWh

Production



Biomethane
12 TWh

Net transport and storage

Transmission networks (NaTran (formerly GRTgaz) and Téréga)

Storage injection
101 TWh

Storage withdrawal
133 TWh

Distribution networks (GRDF and ELD)

Network requirements and metering inaccuracies
2 TWh

Total available: 486 TWh

Consumption
361 TWh

Distribution network customers
(public distribution)
235 TWh

Industrial customers on transmission networks
(excluding centralised power generation)
109 TWh

Gas plant extractions
16 TWh

Exports
125 TWh

Source: NaTran (formerly GRTgaz) Annual Report 2024

An agile regulator that has adapted to the post-crisis environment

Key challenges in 2024

2024: a year of singular institutional circumstances

The year 2024 was defined by an unusual political context: France saw four successive governments, the dissolution of the National Assembly and the arrival of new deputies.
At the European level, the Parliament was also largely overhauled following the June elections, as were the Commissioners who gradually took up their duties in the autumn.
The year also saw the new European Regulation on Wholesale Energy Market Integrity and Transparency (REMIT II - more information on page 61) come into force, along with the EMD (electricity market design) directive and regulation.

CRE's priority projects for 2024

Within CRE, 2024 was largely devoted to several major priority projects, including: the application of new tariffs for the use of public gas networks, setting tariffs for the use of electricity networks, strengthening oversight of the retail market and consumer protection, and work pertaining to the implementation of the new REMIT regulation, as well as monitoring support mechanisms for renewable energies.

CRE also produced a number of reports and notes, notably on interconnections, the results of calls for tenders for renewable energies under the Multiannual Energy Programme (PPE2), smart grid demonstrators and biomethane injection facilities.

At the same time, it has continued its coordination at European level and cooperation work at international levels, organising the RegulaE.Fr workshops, for example.

Optimised resources to fulfil our missions

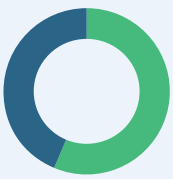
As part of an overall effort to streamline the resources allocated to administrative institutions, and in solidarity with the effort to reduce public spending, CRE has continued to optimise all its resources, in particular through extremely detailed and careful management of the payroll it was allocated by the public authorities.
The allocation of human resources and recruitment management were established in the light of the priorities set for the year, in a context that saw the Authority's responsibilities increase.

At the same time, CRE is committed to preserving the quality of the working environment it offers its employees, particularly in terms of its training policy, the development of internal career paths and the prevention of psychosocial risks.

HR KEY FIGURES

155 **staff** (excluding Board)

68 **women** (43.9 %)



87 **men** (56.1 %)

Equal representation in the management committee

1,589 **applications received** for positions advertised on CRE website

Average age **35**

Average length of service **5.5** **years**

9 internal **transfers**

This has enabled CRE to maintain a high level of attractiveness, and to recruit the most suitable candidates for the challenges and requirements it faces. It has also strengthened its internal mobility policy, increasing the average length of service while reducing the vacancy rate by almost 20%.

The optimisation of the authority's resources has not only resulted in lower reliance on external audits, but also in the formal and secure provision of artificial intelligence for agents, in order to facilitate the management of routine tasks with low added value.

The challenge of securing our information systems

Securing IT systems is a fundamental challenge. To improve this, CRE has been working hard throughout the year to anticipate the application of the European NIS2 directive, and to ensure the highest level of security for digital platforms. In 2025, CRE will become the first French regulator to receive the NIS 2 accreditation. It will share its experience in implementing these requirements with any other independent administrative authority that wishes to do the same.

A new visual identity and a completely redesigned website

2024 was a pivotal year for CRE in terms of its image and communications, with two major changes: the presentation of its new visual identity and the redesign of its website.

On the eve of its 25th anniversary, and following a crisis that has profoundly changed the way the general public looks at energy issues, CRE decided to give itself a facelift. The energy price crisis of 2022-2023 brought energy issues to the forefront of national news and the concerns of French citizens.

In this context, CRE has strengthened its presence in the media and institutional landscape, becoming a recognisable stakeholder to the general public (having previously been familiar mainly to other operators within the sector).
It was therefore essential that its visual identity reflected this new situation, and that its website was brought closer to its various target audiences, in particular to the rising numbers of consumers visiting the site.

A new visual identity

While it has kept the "Marianne", symbolising its affiliation with French public authorities, CRE has radically changed its logo, both in terms of its colours (previously predominantly red, now blue) and its shape.
The three letters of its acronym are now clearly visible, making it easier to identify. More modern and easier to read, the new logo forms part of a new graphic charter that applies to all the Authority's media.

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CRE COMMISSION DE RÉGULATION DE L'ÉNERGIE

A website to reach all audiences

CRE's website is the primary vehicle for its communications: it is the gateway to all the Authority's decisions. It aims to present CRE and its missions, provide information on the energy sector, and make all documents produced by the Authority (deliberations, opinions, reports) available to the public.

It also hosts CRE's public consultation platform, a key element in the Authority's dialogue with its stakeholders.
It is a central resource both for the energy industry (whose stakeholders can access information in order to operate), and for consumers, who can stay informed through dedicated content.

Given the essential role it plays on a day-to-day basis, it was vital that the site be overhauled, not only graphically to match the new visual identity, but also in terms of the content offered to meet the public's evolving expectations. Browsing is made easier, whether on a computer or mobile device, considerably improving the user experience.
The presentation of information is more fluid and accessible, all within a secure environment.

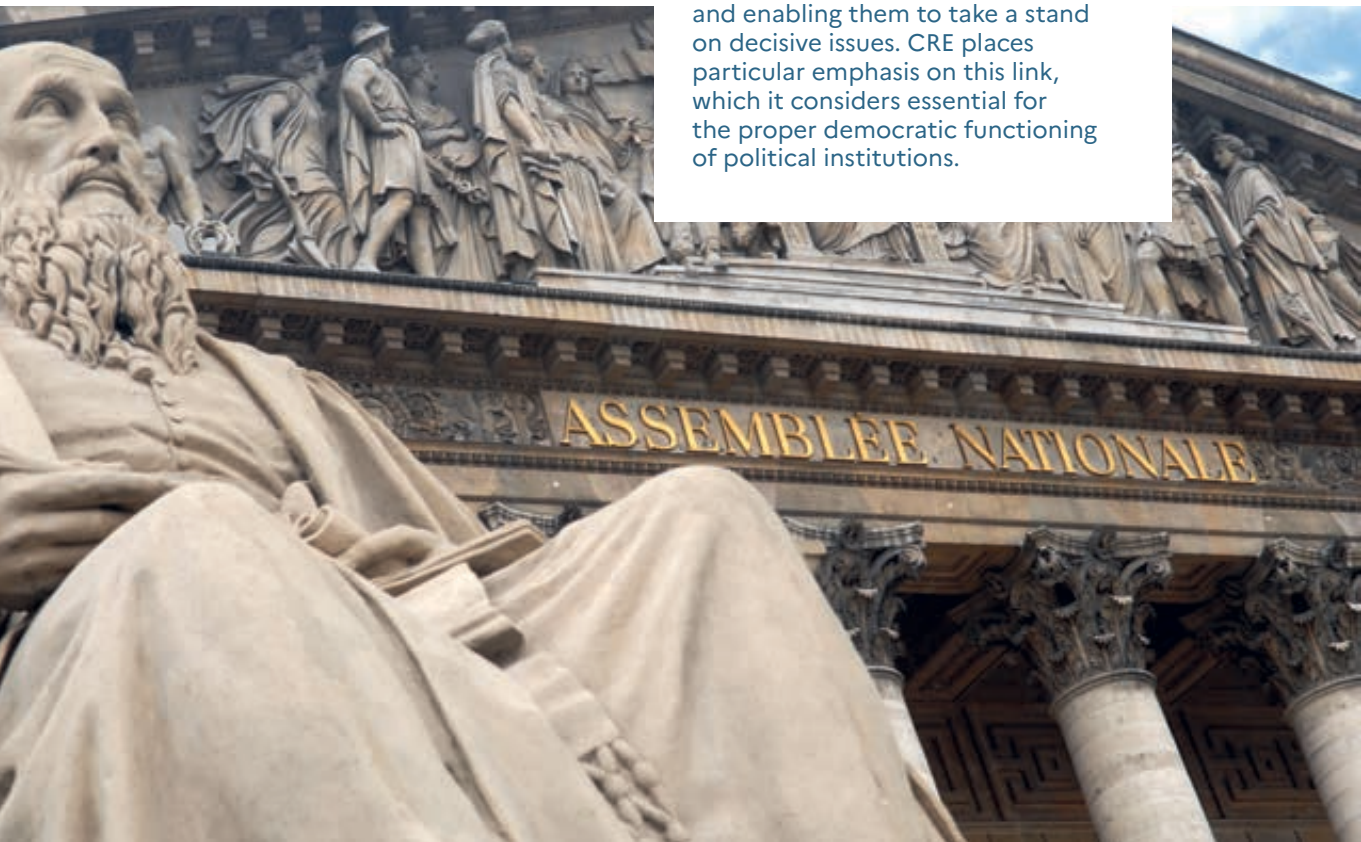
CRE's website is the primary vehicle for its communications: it is the gateway to all the Authority's decisions.

A special year for institutional relations in 2024

2024 was an unusual year for the French Parliament. Firstly, because the National Assembly was dissolved for the first time since 1997, bringing parliamentary work to a standstill from June to October. Secondly, as of 31 December, the Finance Bill for 2025 had still not been definitively adopted by the National Assembly and the Senate.

In these unprecedented circumstances, Parliament continued its work on a wide range of energy issues. However, few have completed the legislative process due to the wider political context.

Over these 12 months, CRE, as an independent administrative authority, maintained its links with Parliament and continued its discussions and work with its members. The regulatory institution continued to play its role as a resource, informing the nation's elected representatives objectively, and enabling them to take a stand on decisive issues. CRE places particular emphasis on this link, which it considers essential for the proper democratic functioning of political institutions.



20 hearings in both chambers

In 2024, CRE took part in 20 hearings with the two chambers and responded in writing to eighteen questionnaires.

The texts proposed by the Members of Parliament focused primarily on the strategic direction of France's energy planning. Since the next multi-annual energy programme should provide visibility for all sectors over the next ten years, on several occasions the elected representatives invited CRE to present its analyses on this subject.

CRE has summarised its vision of the key success factors for transforming the energy system, in a contribution submitted in early 2025. The institution has also been heard by fact-finding missions on geothermal energy, biomass, agrivoltaic installations and hydrogen.

The second major issue on which CRE worked with Parliament was strengthening consumer information and protection. In recent years, marked by an energy crisis on an unprecedented scale, consumer confidence in the proper functioning of the energy system has been gradually eroded. In this context, CRE has cooperated fully with all stakeholders to establish best practices and prudential rules, and to monitor the consistency of supply offers.

8 hearings with the Court of Auditors

Members of parliament have expressed their desire to see these measures transposed into law, while also simplifying CRE's investigation and sanction procedures.
The year also saw the launch of two committees of inquiry on energy (see next page).

CRE was interviewed by several committees of the National Assembly and the Senate as part of the examination of the Finance Bill for 2025, in relation to its budget and expertise.

Lastly, CRE responded to the Court of Auditors' public policy audit studies. In 2024, it completed eleven questionnaires on a variety of topics and took part in eight hearings.

CRE places particular emphasis on this link, which it considers essential for the proper democratic functioning of political institutions.

Side notes

In addition to drafting the law, Members of Parliament have exercised their supervisory powers over a wide range of energy issues. Why was 2024 a landmark year for Parliament?
This was the first time that two commissions of inquiry have dealt with energy issues in the same parliamentary session. In the upper house, senators held lengthy hearings on the strategy of the TotalEnergies group and on the production, consumption and price of electricity by 2035 and 2050.

How has CRE contributed to the work of the various commissions of inquiry?
CRE always responds with the utmost precision to requests from Members of Parliament sitting on commissions of inquiry, and is in constant contact with the Administrators. In 2024, CRE was interviewed five times and responded to six written questionnaires, some of which were several dozen pages long. All CRE departments contributed to this work.

What are your expectations from Parliament in 2025?
CRE hopes that the work carried out in 2024 can be put into practice, and that a number of measures concerning the strengthening of consumer protection and information, hydrogen and carbon infrastructures, more effective sanction procedures and the smooth operation of wholesale markets will attract the attention of members of parliament, enabling them to be transposed into law.

Aodren Munoz, Institutional Relations Manager, Communications and Institutional Relations Department

> In 2024, CRE was interviewed five times and responded to six written questionnaires.

Scan this QR code to see the video

New strategic guidelines for CRE for 2030

In early 2023, CRE drew up a roadmap for the years 2023-2024.

This document comes to an end just as CRE will be celebrating 25 years of existence in 2025, at a time when the effects of the energy crisis are behind us and when energy policy ambitions are being clarified at both European and national level.

In this context, the Chairwoman wished to provide CRE with strategic guidelines for the 2025-2030 period. Launched in 2024, the first stage of the work consisted of interviewing the main stakeholders, gathering the expectations of all CRE's commissioners and staff, and organising internal working groups. They will be presented in the first half of 2025.

Another year of intense legal activity in 2024

The Board: a body at the heart of CRE's legal action

The core of CRE's legal action is based on the decisions and opinions of its Board. In 2024, the Board had a heavy workload once again. The Board held 80 committee meetings, dealing with a wide range of subjects: from drafting the next tariff for the use of the public electricity networks to adopting the paper on negative prices, validating the instructions for calls for tender for renewable energies, and hearing testimonies from 46 stakeholders from the sector throughout the course of the year.

A total of 237 resolutions were adopted by the CRE Board, which can be publicly accessed via the website.

A greater role for CoRDiS in 2024

CRE's Dispute Settlement and Sanctions Committee (CoRDiS) maintained a high level of activity in 2024, issuing 12 dispute settlement decisions, one sanction decision and two decisions to suspend the ARENH.

In addition to settling disputes pertaining to the terms and conditions for connecting consumer facilities to the electricity distribution networks, the committee issued rulings on the terms and conditions for connecting a pipeline to the public natural gas transmission network, on whether an electricity transformer belongs to the public distribution network, on the quality of the electricity supply to a consumer facility, and on bringing an electricity riser into compliance with regulations.

In terms of sanctions, the Committee handed down a major decision on abuse of the right to historical nuclear electricity (ARENH), fining Ohm Energie €6 million.

In addition, since 2023, CRE has been able to correct requests for ARENH before the start of the delivery period if they are clearly overestimated, or to interrupt ARENH deliveries to suppliers during the year, if the volumes of electricity delivered by suppliers are significantly lower than the estimated consumption levels communicated. CoRDiS issued decisions to suspend the delivery of ARENH to two suppliers in 2024.

In 2024, the Board had a heavy workload once again. It held 80 committee meetings, covering a wide range of subjects.

Find out more about CoRDiS

On 27 March 2024, the first edition of the "CoRDiS compendium" was published

This new publication brings together and classifies all the landmark decisions handed down by CoRDiS, together with the decisions of the supervisory courts, since 2002, both in terms of dispute settlement and in terms of penalties and interruptions to the delivery of ARENH volumes.

This compendium already contains almost 1,000 references, and lists more than 400 decisions handed down by the committee. It is intended to be regularly updated with the addition of new summaries of the decisions issued, and aims in particular to make the Committee's decision-making practice accessible to a wide audience.

To mark the publication of this compendium, CRE and CoRDiS, in partnership with the Centre de Recherche Droit Dauphine (CR2D) at the University of Paris-Dauphine, organised a conference entitled "*Settling disputes, regulating differently*", which retraced 20 years of CoRDiS decision-making practices and gave the speakers the opportunity to discuss administrative composition and "negotiated sanctions", a new regulatory instrument[4].

[4] The video recording of this conference is available online: https://www.youtube.com/watch?v=vPAA0RdzULQQ

Main disputes in 2024

In 2024, CRE's supervisory courts handed down a number of rulings that will have a major impact on its activities.

In addition to two orders noting that appeals had been withdrawn and four decisions refusing to admit appeals, the Conseil d'État handed down ten decisions on the merits of appeals against decisions of the CRE Board, nine of which resulted in the appeals being dismissed. In addition, it confirmed the legality of two ministerial decrees adopted at CRE's suggestion[5].

With regard to CRE's deliberations, the Conseil d'État confirmed the legality of several sets of rules proposed by the French TSO (RTE) pertaining to the operation of the electricity transmission system, which it is CRE's responsibility to approve. These are the "system services" rules for secondary reserves[6] and the "NEBEF" rules for the curtailment of electricity consumption[7].

On 13 February 2024, it rejected the appeal lodged by several associations and users of the electricity distribution network against the deliberation of 17 March 2022, in which CRE introduced, among other items, an additional metering component to be billed to users not equipped with a "Smart meter[8]".

The Conseil d'État also rejected an appeal by Eleclink against the model contract for access to the public electricity transmission network for new exempted interconnections (known as "CART-NID[9]").

An appeal by Ekwateur, relating to the reassessment of public service energy charges carried out by CRE in November 2022, also enabled the judge to confirm the validity of the methodology used in January 2022 by CRE to draw up its proposals for regulated tariffs for the supply of electricity[10].

Lastly, the Conseil d'État partially annulled CRE's decision of 20 April 2023, that had approved Enedis's pricing scale for charging users for connection to public electricity distribution networks. This scale sets the prices charged for the service entitled "study of the impact of a project on the network "[11].

[5] Conseil d'Etat, 8 November 2024, Association française des opérateurs de recharge pour véhicules électriques, no. 475080. [6] Conseil d'Etat, 26 November 2024, Société EDF, no. 470863. [7] Conseil d'Etat, 29 March 2024, Société Voltalis, no. 469230 and no. 472693. [8] Conseil d'Etat, 13 February 2024, Association Zones Blanches et autres, no. 467054. [9] Conseil d'Etat, 19 July 2024, Société Eleclink, no. 467621. [10] Conseil d'Etat, 30 July 2024, Société Ekwateur, no. 470263. [11] Conseil d'Etat, 25 June 2024, Société Le Caloch Consultant, no. 488881.

Ongoing collaboration with AAIs and APIs

Collaboration with independent administrative authorities (AAI) and independent public authorities (API) has been a priority for CRE for many years. This takes the form of regular thematic workshops, as well as more ad hoc work with all the AAIs and APIs.

In 2024, CRE continued its exchanges with the French Competition Authority (ADLC), particularly in the context of the two bodies' respective work on the regulated tariff for the supply of electricity. It also continued its collaboration with the Financial Markets Authority (AMF), as provided for in the memorandum of understanding between the two authorities.

These exchanges are a lever for innovation, and enable CRE to examine its methods for monitoring and investigating wholesale markets. This year, one of the subjects of dialogue between the two authorities was the testing of artificial intelligence tools for ongoing market surveillance.

The development of AI also led CRE to meet with 13 AAIs and APIs, in order to discuss their experiences and exchange feedback on its use in regulation. These interviews enabled the various institutions to take a focused look at change management, sharing training materials and charters for the use of AI.

CRE's Legal Affairs Department also regularly takes part in inter-AAI workshops and meetings. They provide an opportunity to share best practices and the latest case law pertaining to regulatory activities, particularly with regard to dispute resolution procedures and the management of requests for access to administrative documents.

More generally, CRE regularly exchanges information with its counterparts with a view to sharing best practices and continuous improvement.

These exchanges are a lever for innovation, and enable CRE to examine its methods for monitoring and investigating wholesale markets.

Focus on

The work of CRE's Foresight Department

Report on CO_2 capture and value chain

CRE's Foresight Department carries out industry monitoring and enables insight into the key energy issues of the future. It is supported by a Scientific Advisory Board, made up of experts from a wide range of backgrounds.

In September 2024, it published a report on CO_2 capture and its value chain.

Carbon dioxide capture, transport, utilisation and storage (CCUS) is one way of achieving these objectives. Supplementing policies for the efficiency and decarbonisation of energy and industrial uses, CCUS now occupies an important place in all the IPCC's decarbonisation scenarios.
Its rapid implementation is becoming a key factor for the credibility of decarbonisation trajectories in light of the climate emergency.

As a solution of last resort when faced with other technological means of reducing or eliminating GHGs, CCUS represents an important, if not decisive, decarbonisation opportunity for maintaining industrial competitiveness, and more broadly for the success of the energy transition.

In September 2024, CRE's Foresight Department published a report on this subject, proposing to increase the resources available to support CCUS:

- By fostering social acceptability of projects;
- By organising the planning and coordination of their implementation;
- By introducing flexible regulation of value chains;
- By supporting the investments that are essential to their development;
- By anticipating the economic and technical risks associated with their deployment.

It believes that these resources are necessary to guarantee the rapid development of CCUS projects, and thus to ensure, in good time, their effective contribution to the energy transition, as well as to widespread and sustainable reindustrialisation in France.

For more information on the report

A year of recovery from the crisis; a pivotal year at the European and international levels

At the European level, while the first half of 2024 saw the finalisation and publication of several major texts, such as the electricity market reform (EMD), the hydrogen and decarbonised gas package, the REMIT II regulation and the NZIA regulation (Net Zero Industry Act), the second half was a period of transition to institutions staffed by newly-elected members, and was characterised by a pause in legislative activity.

Following the European elections in June, the European Parliament was renewed for 5 years, retaining the historic coalition between the centre-right (PPE, Renew) and the left (S&D), but showing a balance of power more favourable to the right with an increase in conservative and nationalist MEPs.

The new European Commission took office on 1 December for a 5-year term, with a policy agenda focused on competitiveness. Aided by the Draghi report published in September, which reinforced the idea that energy is a major factor in Europe's competitiveness against the United States and China, a consensus has emerged on the need to curb energy prices. The European executive has therefore decided to focus its policy for the coming years on supporting European industry by reconciling competitiveness and decarbonisation.

The new Energy Commissioner is Dan Jørgensen from Denmark, whose responsibilities include completing the Energy Union, proposing an action plan for affordable energy prices, and drawing up a roadmap to put an end to Russian energy imports.

A number of major publications have been announced for 2025: a Competitiveness Compass, a Clean Industrial Deal and an *Omnibus* package to simplify a number of texts.

The new Energy Commissioner's responsibilities include completing the Energy Union, and putting forward an action plan for affordable energy prices.

Working within two European cooperation bodies (the Association of European Energy Regulators - CEER and the Agency for the Cooperation of Energy Regulators - ACER), CRE has continued its involvement, and notably participated in the drafting of the joint ACER/CEER document on the challenges of the future electricity system. Published on 11 July 2024, this "post-EMD" paper suggests ways of continuing to improve the operation of the European electricity system over the 2030-2040 period.

CRE also contributed to the CEER document assessing the proposals contained in the Draghi report (December 2024). Another highlight of 2024 came in December, with the reappointment of Christian Zinglersen as Director of ACER (for a term identical to that of the European Commission, i.e. 5 years).

A growing European focus on electricity networks

The need for investment in European networks is rising sharply: in its Action Plan for Grids, published in November 2023, the European Commission estimates that €584 billion will need to be invested by 2030.

As a result, the subject of electricity transmission and distribution networks drew significant attention at the European level over the course of 2024. Following a wide-ranging appeal from the sector and system operators, European institutions have begun to focus on the issue, and agree that grids and investment constitute a key component of the energy transition.

The main challenge is to modernise ageing networks, and adapt infrastructures to the energy transition. This adaptation requires appropriate planning for the development of internal and cross-border grids.

In May 2024, the Council of the European Union adopted conclusions on electricity network infrastructure, proposing measures for an interconnected and resilient network. In the European Parliament, an own-initiative report on grids was announced in December 2024.

Regulators examined the subject of anticipatory investments in an ACER-CEER position paper, published in March 2024.

The recommendations, endorsed by CRE, include encouraging grid users to indicate their future connection requests as early as possible, and developing instruments to reduce (as much as possible) uncertainties surrounding the development of new uses of the network.
It is also important that all European regulators approve the development plans for the electricity transmission network.

Continuing to work together

Alongside its activity at the European level, CRE has continued its cooperation work, which this year notably includes organising RegulaE.Fr workshops in Paris. RegulaE.Fr is a network created on 28 November 2016, at the initiative of CRE and in close collaboration with the regulators of Côte d'Ivoire (ANARE-CI), Belgium (CREG) and Quebec (Régie de l'énergie). Its purpose is to promote the exchange of best practices in energy regulation between Francophone regulators.

Find out more about RegulaE.Fr

Side notes

What are the RegulaE.Fr workshops?
The RegulaE.Fr workshops are key meetings for the 35 Francophone energy regulators who are members of the network, for which CRE acts as administrator. Held twice a year, they enable the network to meet and discuss the challenges facing the energy sector. Over the course of two days, key issues are addressed, followed by a technical day to explore certain subjects in greater depth.

Supported by the European Commission through its Energy Facility, these workshops encourage the sharing of experience and the enhancement of skills.

In what context did the RegulaE.Fr workshops take place in 2024?
In 2024, the workshops were held in conjunction with the XIXth Francophonie Summit (4 and 5 October in France), with the aim of raising awareness of energy regulation and the network's activities. Two editions took place: the first in Abidjan in June, followed by another in Paris in November, where Emmanuelle Wargon opened the discussions. RegulaE.Fr also took part in FrancoTech, the economic summit for the Francophone world, reinforcing its visibility and international presence.

What were the key lessons learned?
The 2024 workshops highlighted the challenges and opportunities of energy regulation in the Francophone world.
In Abidjan, discussions highlighted the importance of effective infrastructure planning and appropriate investment.
In Paris, a review of the network's 8 years of existence revealed the need for a stable framework, ongoing training and exchanges between peers. In addition, RegulaE.Fr joined the ICER, the International Confederation of Energy Regulators, which marks a new step forward for the network.

Cynthia Di Leonforte, Policy Officer, European, International Affairs and Cooperation Department

> The RegulaE.Fr workshops are key meetings for the 35 Francophone energy regulators who are members of the network.

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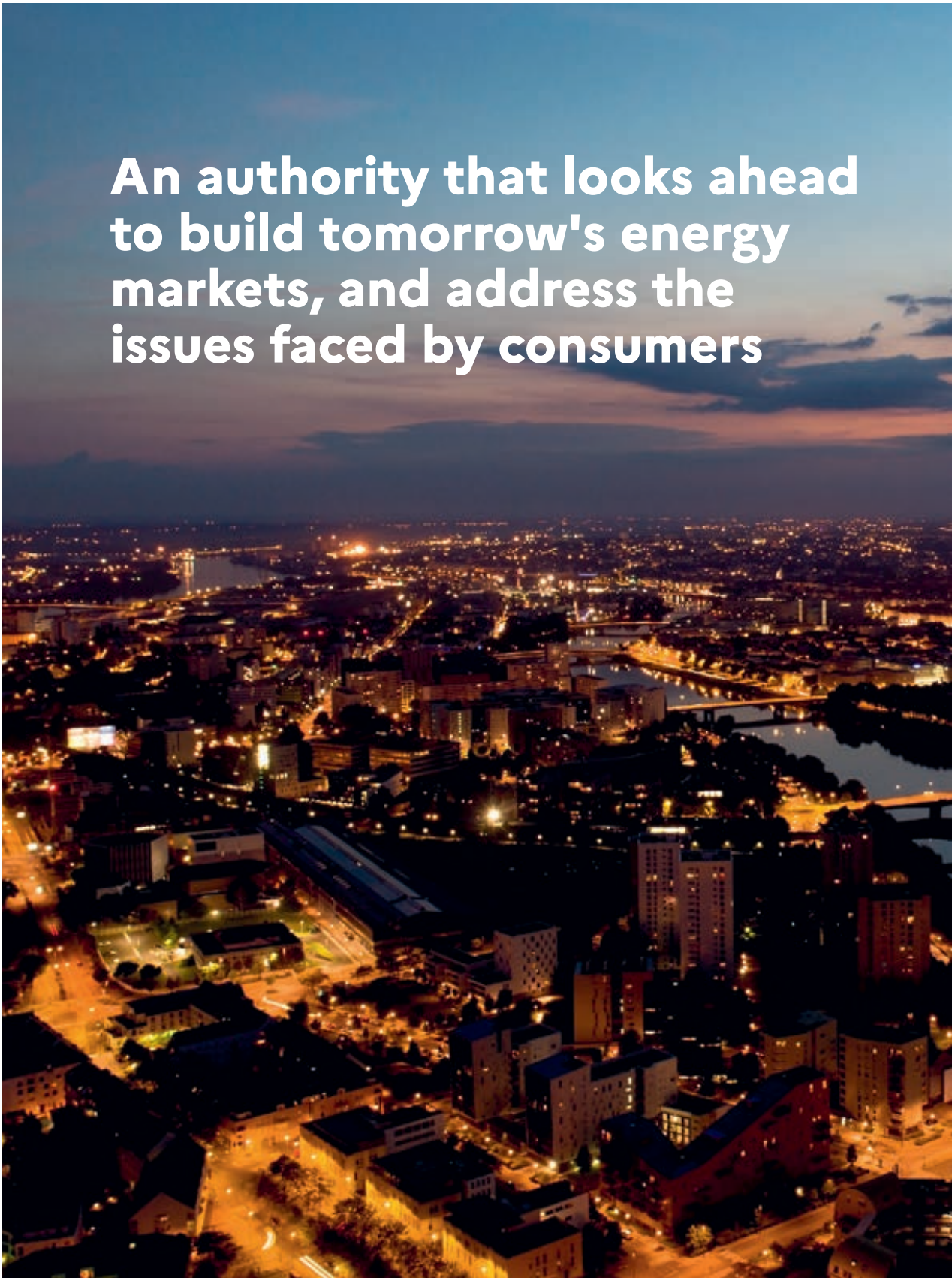
An authority that looks ahead to build tomorrow's energy markets, and address the issues faced by consumers



On the retail market

Strengthening consumer protection

Following the exceptional crisis in energy prices between 2021 and 2023, and as part of its mission to ensure the smooth operation of the electricity and natural gas markets in France, CRE published a roadmap in November 2023 designed to strengthen consumer protection and improve the functioning of the retail market.

In 2024, CRE brought together the main players in the sector to put this roadmap into practice, using a three-pronged approach:

strengthening consumer protection and information through the publication of "guidelines", i.e. best practices for suppliers, comprising 13 measures

introducing prudential controls to ensure that suppliers comply with prudent and responsible risk management practices

monitoring and analysing the consistency of the offers made by suppliers, to ensure that their prices match the economic conditions to which they are exposed

CRE guidelines published in July 2024

Insofar as the energy crisis of 2021 to 2023 highlighted certain areas of dysfunction, and even abuses on the part of a minority of suppliers, CRE wanted to strengthen the provisions governing the information provided to consumers, in order to help them choose their electricity and gas offers more effectively, and to help restore confidence in energy market operators. Following discussions with the National Energy Ombudsman (MNE), consumer representatives, electricity and natural gas suppliers and institutional stakeholders, CRE has drawn up 13 specific measures covering all phases of the electricity or gas supply contract:

13 best practices for suppliers

CRE has invited energy suppliers to commit to 13 best practices covering the entire customer journey: from subscription to the end of the contract.

WHEN THE CONTRACT IS TAKEN OUT

1. **Apply** a common categorisation of offers that everyone can understand
2. **Communicate** descriptions of each offer using a single template
3. **Systematically provide** an estimate of the annual bill
4. **Only offer** products for which the price is known at the time of purchase
5. **Guide** customers towards the offer best suited to their individual needs
6. **Present** a price development formula for the next 12 months, or a price ceiling over this period

DURING THE TERM OF THE CONTRACT

7. **Present** the impact of any price changes on the annual bill and/or monthly instalments
8. **Propose** a revised payment schedule during the year, as soon as a certain adjustment threshold is exceeded
9. **Uphold** fully and in good faith their commitments on prices and price trends
10. **Make** the current price of their offer available to all customers at all times
11. **Provide** each customer with useful information on their consumption, for optimised energy management

AT THE END OF THE CONTRACT

12. **Propose** the offer best suited to the consumer's situation at the end of the contract and when it comes up for renewal, together with an estimate of the annual bill
13. **Provide** 2 months' notice of the end of the contract in the event of non-renewal

On 8 October 2024, CRE published the list of suppliers who have committed to this approach, which includes almost all suppliers active in the residential segment. In total, over 99% of households will benefit from the application of the guidelines. CRE will monitor the proper implementation of these commitments and report on them regularly.

Scan this QR code to see the video

While these guidelines currently apply to the residential consumer segment, CRE plans to extend them during the summer of 2025, with the future version potentially being adapted in order to integrate feedback from all stakeholders.

This includes:

- non-residential consumers such as non-profit associations,
- homeowners' associations for single residential buildings,
- all professional consumers with fewer than ten employees and annual sales of less than €2m,
- local authorities with fewer than ten employees and an annual budget of less than €2m.

These guidelines are being applied progressively. They will become fully operational over the course of 2025.

From 2025, CRE will monitor the implementation of these best practices on a regular basis, and report on the results.

Together, these best practices will make it easier for consumers to choose their supplier and keep track of their energy contracts!

Proposing prudential rules

In the French electricity and gas supply market, the number of supplier bankruptcies was limited during the crisis.

Nevertheless, the period highlighted risky behaviour by some of these suppliers, particularly with regard to the disparity between the downstream commitments made in their supply offers, and the upstream coverage of these offers. In practical terms, some suppliers did not properly anticipate their supply needs, and ran the risk of not being able to serve their customers in accordance with their supply contract.

This is why, in line with the reform adopted by the European Parliament on 11 April 2024, and then by the Council of the European Union on 21 May 2024, pertaining to the framework for suppliers' hedging strategies, CRE thoughtfully considered the conditions for prudent and reasonable practices in the energy supply business.

This principle would aim to enshrine in regulation the reasonable and risk-averse sourcing strategy shared by the majority of suppliers during the crisis.

In its public consultation of 3 July 2024, CRE presented an initial proposal for a prudential mechanism.

At this stage, it plans to introduce a volume coverage obligation, mirroring the contractual commitments in supply contracts. This principle would aim to enshrine in the regulations a reasonable and risk-averse sourcing strategy, shared by the majority of suppliers during the crisis.

This obligation would also make it possible to:

- Limit operational constraints during the control phase, compared to a system of systematic stress tests;
- Eliminate the risks of barriers to entry, or even anti-competitive effects, that financial obligations might entail.

However, prudential regulation cannot reduce the risk of bankruptcy to zero, as it is undesirable to keep an inefficient supplier on the market at any cost. In addition, the existence of a back-up supplier system means that the consequences of a supplier going bankrupt can be covered operationally, and the additional costs for the customers involved can be limited.

Discussions are continuing with a view to completing the process by 2025, and stabilising the framework until the legislative measures have been implemented.

> CRE, at the instigation of its Chairwoman, took the initiative to suggest guidelines based on the free commitment of electricity and gas suppliers.

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Why has CRE embarked on this guidelines project?

Eloi : The energy price crisis not only led to higher bills for electricity and gas consumers, but also, in some cases, to disappointment due to misleading or incomplete information, or even arbitrary actions by their supplier. These findings called for a strengthening of the legislative and regulatory framework, which CRE had been calling for since 2023, but which was hampered by the political instability of 2024.

It was in this context that CRE, at the instigation of its Chairwoman, took the initiative to suggest guidelines based on the free commitment of electricity and gas suppliers.

How does this project fit in with CRE's remit?

Pauline and Eloi : The law tasks CRE with contributing to the smooth operation of the electricity and gas markets for the benefit of end consumers. In addition to its role in supervising the retail markets, CRE wanted to play its part in improving the operation of these markets, through measures designed to restore consumer confidence.

What does the Legal Affairs Department contribute to this type of project?

Pauline : The guidelines are a relatively rare legal instrument for CRE, and are a type of "soft law". The Legal Affairs Department (DAJ) provides substantial expertise in this area, in particular to check compliance with existing law.

A significant portion of this measure's technical makeup lies in its legal aspects. That's why the DAJ is fully involved in all stages of the project, from content development to operational implementation, bringing a perspective and ideas that complement those of the technical teams.

Are you used to working together? What does the breakdown of responsibilities look like?

Pauline et Eloi : The technical and legal departments are always working together at CRE, so this is no exception! The Legal Affairs Department's experts are integrated into the project teams from the outset, and contribute their analyses throughout the process. This habit of collaborative work flow, based on constant and regular dialogue, is an asset for an issue such as the guidelines, where the legal stakes are high.

What are the next steps in this project?

Pauline et Eloi : We're still a long way from the finish line! CRE will need to monitor the proper application of the thirteen measures by eighty suppliers, and gather their feedback in order to improve and readjust the system. Starting in summer 2025, the guidelines are also set to be extended to professional consumers. Not forgetting our proposal to codify the guidelines into law.

Pauline Kahn-Desclaux, Lawyer, Legal Affairs Department

and

Eloi de Villeneuve, Policy Officer, Market Development and Energy Transition Department

Monitoring the consistency of offers marketed by suppliers

Electricity and gas suppliers incur a range of costs, the breakdown of which varies in their supply offers depending on their own strategy. These costs vary according to the level of service offered, the specific characteristics of the consumer, and the supplier's commercial strategy.
The Energy Code entrusts CRE with the task of monitoring the consistency of offers made to consumers.

Article L.131-2 paragraph 4 of the French Energy Code stipulates that CRE "***monitors whether offers [...] made by producers, traders and suppliers, in particular to end consumers, are consistent*** *with their economic and technical constraints, and where appropriate with their conditions of supply through regulated access to historical nuclear electricity mentioned in Article L.336-1. [...]* ***It may formulate opinions and propose any measure to promote the smooth operation and transparency of the retail market, particularly with regard to prices."***

In its decision of 30 May 2024[12], CRE specified the framework within which it will carry out its task of monitoring the consistency of suppliers' offers. This consistency monitoring will cover the prices of offers marketed, i.e. offers available to new customers via subscription, and the prices of current contracts, i.e. current contracts in which prices may change before the end of the contract.

While this monitoring will be carried out on an ad hoc basis for medium and large consumers, in order to take account of the diversity of situations, it will be systematic for the small consumer market, starting with the residential consumer segment.

The aim of the consistency monitoring is to ensure that the offers marketed and the changes made over the course of contracts are properly correlated with the economic conditions in which suppliers operate. It involves comparing each offer marketed, including any changes during the contract, with benchmarks defined by CRE.

If CRE identifies an abnormal trend, the supplier will have to justify the origin of the price deviation on the basis of objective evidence (for example, by explaining its supply strategy).

Depending on the nature of the situation, CRE may implement corrective measures: request for correction, request for information to be sent to consumers, or referral to the Competition Authority or the Directorate-General for Competition, Consumer Affairs and Fraud Control (DGCCRF).

Since 20 December 2024, CRE has been receiving and monitoring all the prices of electricity and gas market offers for private individuals on a monthly basis, for the most widespread offers (basic and peak/off-peak options). In the coming months, this monitoring will be extended to cover offers for small professional users.

CRE will publish a report on its analyses and actions undertaken, which will enable general monitoring of the trends observed on the market and of suppliers' practices; the frequency of these publications has yet to be decided.

[12] Deliberation of 30 May 2024 on monitoring the consistency of offers made by electricity and natural gas suppliers.

CRE's work on regulated tariffs for the supply of electricity (TRVE)

At the end of December 2024, 58% of residential consumers had contracts under the regulated tariff for the supply of electricity (TRVE), making it the most widespread electricity offer. Its level is calculated twice a year by CRE.

58%
of residential consumers have a contract under the regulated tariffs for the supply of electricity (TRVEs)

In 2024, CRE conducted a public consultation, for which it received 33 contributions. This consultation looked at changes to the TRVE tariffs for the years 2025 and 2026, and in particular the structure of the TRVE tariffs, the pricing signals these tariffs give to consumers, and the method of their compilation for a portion of consumers whose subscribed power is greater than 36 kVA, starting on 1 February 2025.

In agreement with the majority of respondents, for 2025 CRE has opted to apply a method for calculating the TRVE that retains the economic benefits of the "peak/off-peak" option, as soon as "off-peak" consumption exceeds 30% of total consumption.

In addition, CRE plans to change the method of compiling pricing grids in 2026 to an alternative method favoured by the majority of respondents, maintaining the attractiveness of the peak/off peak option in a more natural way, while also strengthening the ability to compete with the TRVEs.

At the same time, CRE has identified a number of levers to better harness consumer flexibility in the TRVEs, i.e. their ability to shift some of their electricity consumption to times that are most favourable for the electricity system. It has therefore announced the abolition of the Base option for subscribed powers of 18 to 36 kVA for residential consumers from 2026 onwards, and the phasing out of the Base option for subscribed powers of 9 to 15 kVA starting from the February 2025 tariff changes. The base option does not include time-of-use price differentiation.

With regard to the level of TRVEs, CRE has proposed, in application of the calculation methodology in force, a rate that is practically unchanged excluding VAT (-0.18% on average) as of 1 February 2024.

After public consultation, CRE also recommended delaying (by three months, until 1 February 2025) the integration of the grid tariff (TURPE) increase that occurred on 1 November 2024 into the TRVEs.

Lastly, on 19 November 2024, CRE published its report on the evaluation of the TRVEs, as provided for in article L. 337-9 of the Energy Code. Public intervention in the form of the setting of TRVEs constitutes a deviation from the principle of the free determination of the price of electricity supply, which is permitted by European law under a number of conditions, in particular that of pursuing an objective of general economic interest.

As part of its analysis, CRE organised round tables with suppliers (both alternative and incumbent) and consumer associations. Following these discussions and its own analyses of the functioning of the retail market, CRE has recommended that the TRVEs be maintained for the next five years.

During a time when the market is emerging from crisis and with the regulated access to historical nuclear energy (ARENH) coming to an end, CRE felt that the TRVEs' consumer protection role could not be replaced in the short term. TRVEs contribute to price stability by smoothing prices over two years.

CRE also notes that TRVEs, through their tariff options, contribute to security of supply by maintaining a significant source of flexibility.

The "stacked" construction of TRVEs ensures that they are contestable, and does not hinder the smooth operation of the retail market. However, CRE notes that maintaining the TRVEs is making residential consumers less receptive to market offers. This trend became more pronounced during the crisis, and CRE is working to strengthen consumer confidence in the operation of the electricity market.

Through their tariff options, TRVEs contribute to security of supply by maintaining a significant source of flexibility.

Strengthening oversight of the ARENH system

In its report on the retail market for the years 2020-2022, CRE noted behaviour by a small number of suppliers that could be likened to seasonal arbitrage. Such behaviour is likely to constitute an abuse of the ARENH (the right to "Regulated Access to Historical Nuclear Energy") under the terms of Article L.134-26 of the Energy Code.

Seasonal arbitrage can be defined as the practice of modulating the number of sites in a portfolio in order to optimise ARENH deliveries. Such behaviour undermines the purpose of ARENH, in that the volumes of ARENH allocated to end consumers would consequently no longer match their consumption profile, and ultimately would not be used to supply them with electricity throughout the year.

For this reason, CRE opened investigations against three suppliers in the autumn of 2022, in order to determine whether the behaviour identified might constitute an infraction likely to seriously undermine the operation of the energy market under the terms of article L. 134-25 of the Energy Code, or might constitute an abuse of ARENH.

The investigation into OHM Energie resulted in a financial penalty of €6 million, imposed by CoRDiS on 11 July 2024. This was the first decision of its kind involving retail markets and an abuse of the ARENH right.
The other two investigations resulted in referrals to CoRDiS, which are currently being investigated.

In 2024, CoRDiS also issued decisions to partially suspend ARENH deliveries to two suppliers whose consumption trajectories clearly deviated from the estimates submitted to the ARENH window in November 2023, representing a total suspension of 9.6 GWh.

Completion of work on tariff shields and shock absorbers

In 2024, in the wake of the pricing crisis in the electricity and gas markets, CRE evaluated the definitive amount of charges to be paid to suppliers with regard to tariff shields and shock absorbers for 2023.

The electricity and gas tariff shields were discontinued in 2024, while the electricity shock-absorber mechanism was extended by the 2024 Finance Act, and has since evolved.

Firstly, the scope of eligible customers has been extended to include all very small businesses (VSEs), meaning that the scheme is now available to VSEs, small and medium-sized enterprises (SMEs), legal entities governed by public law, as well as local authorities, associations and similar bodies.

Secondly, the eligibility criteria are aimed at customers whose energy bills have a higher variable component. The way the scheme works remains the same, with the variable component being partly covered by the State for any customer who falls outside the target price threshold.

The final cost of the consumer protection measures implemented between 2021 and 2023 to deal with the crisis is €26bn.

CRE issued a number of decisions providing a precise framework for the implementation of shock absorbers in 2024. The compensation paid to suppliers under these schemes falls under the energy public service charges (CSPE) that CRE evaluates. CRE carried out its annual assessment of the CSPEs in a resolution dated 11 July 2024 and, exceptionally, re-evaluated the CSPEs in a resolution dated 5 December 2024.

The final cost of the consumer protection measures implemented between 2021 and 2023 to deal with the crisis is €26 billion, i.e. €21.1 billion for electricity and €4.9 billion for gas.

Lastly, CRE has monitored how the aid paid to suppliers is passed on to their customers:

- Introduction of a system of binding attestations for suppliers and their statutory auditors;
- In-depth individual discussions whenever departments have questions;
- Paying particular attention to requests from customers regarding their supplier's application.

In addition, CRE has systematically limited suppliers' compensation to the amount they actually pay to their customers, while also requiring them to submit new declarations until they apply the measures correctly.

The amount of CSPE charges covering shock absorbers in 2024 will be established by CRE in July 2025.

Preparing the market to operate after the end of ARENH

Regulated access to historical nuclear energy (ARENH) will end on 31 December 2025. From that date, the supply component of retail electricity prices will be based on an "all market" system, meaning that suppliers will now obtain 100% of their supplies from the market.

In November 2023, an agreement was reached between the French government and EDF, setting out the main principles for the sale of nuclear-generated electricity from 1 January 2026. Following this, the Finance Act for 2025 defines the new regulatory framework that will succeed the ARENH. This framework will cover the nuclear fleet, and aims to guarantee EDF's financial trajectory, protect consumers against electricity price rises and preserve the industry's competitiveness.

The scheme is based on two mechanisms:

- a tax on the use of nuclear energy when EDF's revenues from nuclear generation exceed two progressive thresholds, for example in the event of a prolonged episode of high wholesale prices, and
- redistribution of the amounts raised by this tax through a reduction in electricity prices, which will apply to all final consumers of electricity.

In 2024, CRE contributed to the establishment of this new framework by sharing the elements it considered essential for its proper implementation. Its recommendations have largely been followed, with the relevant provisions of the Finance Act for 2025 giving it a central role in the development and implementation of the scheme.

CRE's remit will therefore be to:

- recalculate (in 2025, and at regular intervals thereafter) the full production costs for the existing nuclear fleet, on which taxation thresholds will be based,
- calculate the revenue that is attributable to the production of electricity by nuclear power stations, and approve the appropriate nuclear revenue accounting. With this in mind, it has been regularly monitoring EDF's income from the sale of nuclear generation since the beginning of 2024 at all times,
- determine the tax on fuel use on the basis of calculated revenues and tax thresholds, and propose a unit reduction tariff for consumers to the Minister responsible for energy,
- ensure that suppliers pass on this reduction to all consumers.

Implementing an "all-market" mode of operation requires strengthening the role of medium- and long-term instruments (i.e. over a time frame of 4 years or more) on the market, in order to protect consumers from short-term price volatility and give them greater visibility over their electricity bills.

In line with this objective, since late 2023 EDF and the main alternative suppliers present within the business consumer segment have started to market offers with a 4-year or even 5-year timespan. These offers will partly replace existing supply offers with durations of 1-3 years for these consumers.

The new regulatory framework has already led to a sharp increase in the volume of liquidity traded on the electricity futures market, with the quantities previously delivered by EDF via the ARENH now being sold on the wholesale market.

CRE ensures that liquidity over 4- or 5- year timeframes allows suppliers to make commercial offers on these maturities, should they wish to do so. The trend observed in 2024 is encouraging for the 4-year time frame, but not yet for the 5-year time frame. Work is continuing to ensure that liquidity is sufficient in relation to the volume of the retail market over these medium-term time frames.

Implementing an "all-market" approach means strengthening the role of medium and long-term instruments on the market.

On wholesale markets

2024 outlook for the gas and electricity markets

One of CRE's tasks is to monitor wholesale markets. In 2024, subject to the outcome of any ongoing or future investigations or inquiries, wholesale electricity prices accurately reflected the balance between supply and demand. In France, wholesale gas prices have largely followed the Dutch price (the TTF), which has fluctuated significantly.

Gas

Gas consumption in France fell once again in 2024, by around 5.5% compared with 2023, to 361 TWh. This reduction is mainly due to lower use of gas-fired power stations: 16 TWh consumed in 2024, compared to 36 TWh in 2023, i.e. -56%.

Domestic consumption fell by 1.4% in climate-adjusted terms, while consumption by industrial customers connected to the transmission network rose slightly (+0.8%).

361 TWh

of gas consumed in 2024, down 5.5% compared with 2023

LNG now plays a dominant role in France's supply (271 TWh unloaded in France in 2024, compared with 196 TWh imported by pipeline, the vast majority coming from Norway). During the year, France maintained and even strengthened its significant role as a gateway for gas into Europe (24% of European LNG imports).

In 2024, the growth in biomethane production continued: 11.6 TWh of biomethane was injected into the networks (compared with 9.2 TWh in 2023, i.e. +26.1%), via 731 methanisation sites across all networks (+79 units).

On average over the year, the forward price of gas for delivery at the PEG the following month was €34.1/MWh, down 15% compared to 2023. The fall in prices seen at the start of the year was reversed from March onwards, driving prices up and ending the year at around €48/MWh, the highest level since November 2023.

The fall at the beginning of 2024 is part of the downward trend in prices since the crisis of 2022, supported in particular by favourable weather conditions: the winter of 2023-2024 was relatively mild, leaving French gas storage at particularly high levels in March, the highest ever recorded.

On the other hand, the tightening of the supply-demand balance during the year reversed the downward trend, and prices began to rise relatively steadily from March onwards.

This rise can be explained by the geopolitical context in the Middle East and the uncertainties surrounding the end of Russian gas transit through Ukraine. In addition, despite historically low gas consumption in France across all sectors, the rise in prices was underpinned by fears of a relatively cold winter in 2024-2025 and by low levels of renewable electricity generation, putting greater pressure on gas-fired generation in Europe.

Finally, due to delays or stoppages in infrastructure projects, the increase in LNG liquefaction capacity in 2024 has been much lower than forecast, thereby tightening supply.

Overall, liquidity improved significantly on all European gas markets, with a 25% increase in volumes traded, mainly thanks to the Dutch TTF market. Growing demand for LNG in Europe and Asia, combined with exceptionally low freight costs, led to intense competition between the two continents to attract ships in 2024. This has resulted in a record 95% correlation between Asian and European prices, underlining the increasing globalisation of the gas market.

Electricity

The nuclear fleet reached a production volume of 361.1 TWh, marking a strong recovery compared with previous years (320.4 TWh in 2023 and 279 TWh in 2022). Hydroelectric generation was also abundant, while renewable generation rose again in 2024. The use of fossil-fired power stations in France was 5%, the lowest since 1950.

Despite a slight increase in temperature-adjusted consumption (+0.7% compared with 2023), this remains well below the average for 2010-2019. The year 2024 saw a record net balance of electricity exports to neighbouring countries, at 89 TWh (compared with 50.1 TWh in 2023). These very high levels of exports have led to episodes of stress on the electricity transmission network, resulting in prices on the French spot market that are significantly lower than in neighbouring countries, with the exception of Spain.

413 TWh

net consumption after losses in 2024.

Spot electricity prices continued to fall in 2024, returning to pre-crisis levels, averaging €57.8/MWh compared to €96.9/MWh in 2023, thanks to a favourable supply-demand balance over the course of the year.

Their volatility has particularly increased as a result of changes in the energy mix. The peaks in renewable generation during the summer have intensified the frequency of negative price hours, reaching 352 hours in 2024 vs. 147 in 2023 (see analysis opposite). Conversely, falls in wind generation during the winter led to price spikes, particularly in Germany, which were passed on to a lesser extent in France.

Prices on electricity futures markets have fallen sharply.
The average French price for base load delivery the following year fell from €162.7/MWh in 2023 to €76.7/ Wh in 2024. However, these prices are still higher than pre-crisis levels.

Finally, against a backdrop of falling prices and reduced volatility, futures markets recorded a sharp increase in trading volumes.

In addition, the end of the ARENH in 2026 (see page 54) will strengthen the role of electricity futures markets.

352 hours at negative cost in 2024 - recommendations on support systems

In 2024, for 352 hours, or 4% of the year, electricity prices for next-day delivery were negative. Even if half of these hours are at a price close to 0, this year marks a sharp increase in this phenomenon, which can be seen throughout Europe to varying degrees.

These negative prices correspond to a market situation characterised by an over-abundance of supply in relation to demand. While negative prices are not inherently the result of a malfunction in the electricity system or the market, they may reflect a sub-optimal use of the installed generation capacity induced by public support schemes, resulting in an economic loss for the community.

In light of this situation, CRE published a paper in autumn 2024 containing 10 recommendations relating in particular to the adaptation of support contracts for renewable energies, most of which could be implemented in the coming months, following the adoption of article 175 of the Finance Act for 2025.

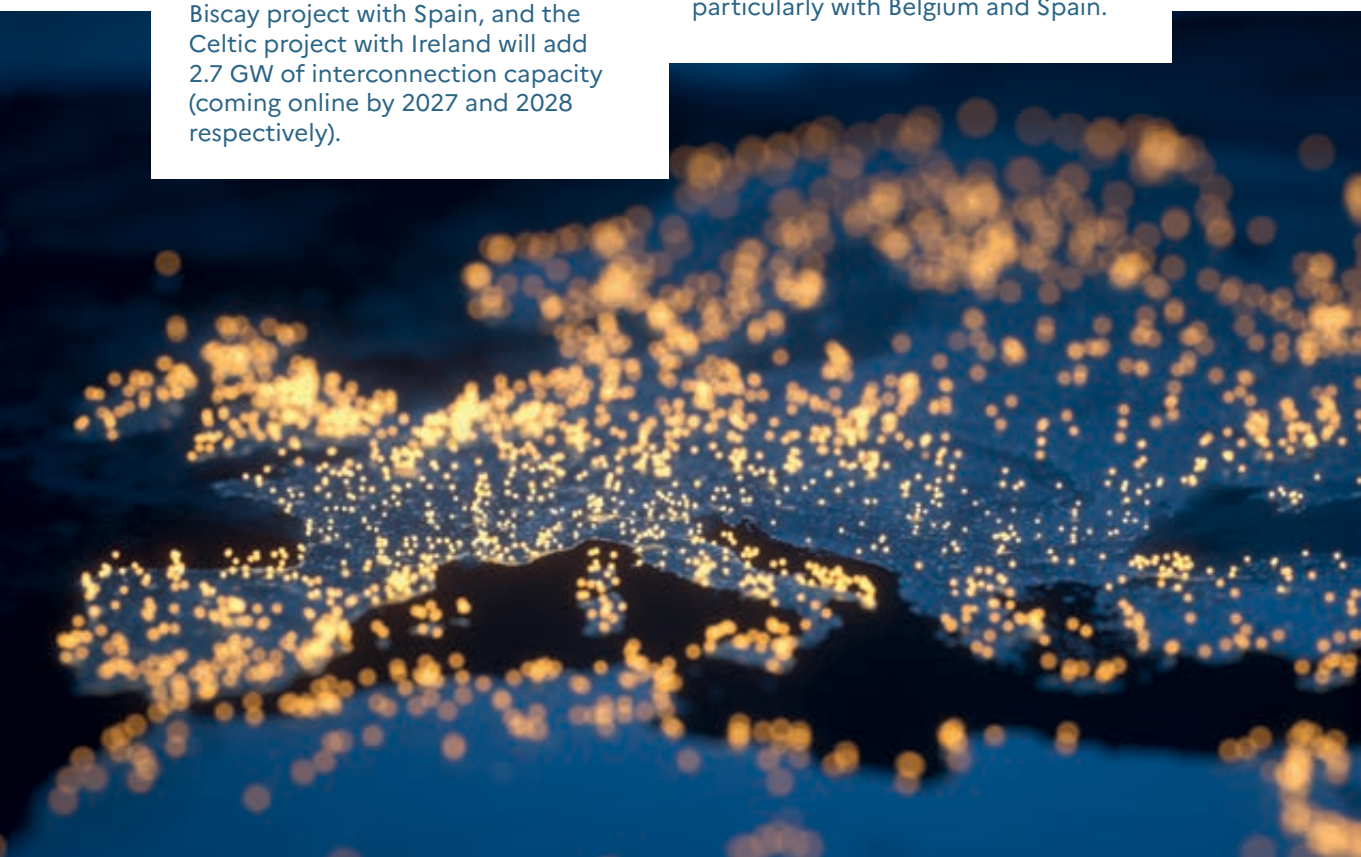
Operation of interconnections in 2024

After starting to grow again in 2023 (50.1 TWh), France's net electricity exports reached 89 TWh in 2024, breaking a record dating back to 2002.
This return to a strong export position marks a remarkable turnaround after the year 2022, during which the unavailability of nuclear power and the low level of hydro reservoirs required unprecedented use of interconnections. Imports made an essential contribution to security of supply, totalling 75.2 TWh in 2022.

Through its exports, France contributes to the overall stability of the European market. France's interconnections are an asset not only for the country's economy and balance of trade, but also for our neighbours. The forthcoming commissioning of the Bay of Biscay project with Spain, and the Celtic project with Ireland will add 2.7 GW of interconnection capacity (coming online by 2027 and 2028 respectively).

CRE is fully committed to greater European integration. It is working with network operators to identify new electricity interconnection capacities that could be developed. A certain amount of caution is called for in a context of heavy demand on electricity infrastructures. Strengthening networks is often a prerequisite for creating new cross-border lines.

In the gas market, liquefied natural gas now plays a major role in supply. With 271 TWh imported in 2024, it will account for 57% of gas entering France and 24% of European LNG imports. In this context, France's role as a transit country is set to grow, with net exports to neighbouring countries up 10% from 2023 (i.e. 125 TWh in 2024). Market players are increasingly exploiting the bi-directionality of gas interconnections for their arbitrage, particularly with Belgium and Spain.



The REMIT reform comes into effect

CRE's task of overseeing wholesale energy markets falls within the scope of European Regulation no. 1227/2011 of 25 October 2011 on the integrity and transparency of the wholesale energy market (REMIT).

This regulation aims to prevent market abuse, such as the exploitation of insider information or market manipulation that could affect wholesale energy prices.
Its aim is to strengthen confidence in the European energy market by ensuring that it operates transparently and fairly.
Part of a wider reform of EU electricity market rules, the revised REMIT came into force on 7 May 2024.

Work on drafting the implementing regulations is currently underway.

This far-reaching reform affects virtually all the existing provisions of the REMIT regulation and introduces new ones, notably by extending its scope to new markets, products, players and trading practices. These changes are directly linked to CRE's supervisory duties. In particular, CRE's powers of sanction have been strengthened by extending the REMIT regulation to market abuse practices involving financial instruments for electricity and gas.

In order to contribute to the operational implementation of the revised REMIT, CRE continues to participate actively in the dedicated ACER working groups.

Side notes

Does the reform of REMIT offer new opportunities for CRE in terms of monitoring?
The major advance introduced by REMIT is an extension of CRE's capacity to sanction (via CoRDiS) insider dealing and market manipulation involving wholesale energy products, which are also financial instruments. For years, CRE has been calling for a uniform supervisory framework for financial and physical products, which are essential to the formation of wholesale prices.

Overall, the framework offered by the revised REMIT is conducive to much more comprehensive monitoring, enabling irregularities to be detected more accurately. I also see new analytical perspectives covering the trading strategies of players, which are increasingly varied and sophisticated, involving different market segments as well as new trading technologies. This helps CRE to gain an in-depth understanding of market dynamics.

Do these changes require new forms of cooperation?
The changes introduced by the reform will strengthen cross-border coordination and cross-pollination of energy and financial expertise between national regulators, including CRE, ACER, ESMA and our counterparts representing financial authorities. I have already noted an increase in the frequency of our exchanges on the analysis of suspicious behaviour.
Enhanced cooperation should also promote the harmonisation of regulatory practices, while respecting the principle of non bis in idem, i.e. the impossibility of being prosecuted or punished twice for the same acts.

What challenges does CRE's monitoring team face in this context?
The extended scope of REMIT automatically leads to an increase in the amount and diversity of data, which brings new levels of complexity. To monitor the markets effectively, it is crucial to integrate this data efficiently into our databases, while ensuring their quality and organisation in accordance with best practices.

Today's oversight efforts require a highly meticulous team whose skills are constantly being enhanced. In addition, to effectively identify suspicious market behaviour, sophisticated alert systems must be put in place, which requires advanced detection technologies.

To meet these challenges, CRE's wholesale markets department was reorganised in 2024 to ensure that it is optimally adapted to these new requirements.

Alexia Boudier, Project Officer, Wholesale Markets Division

Focus on

Kseniya Khromova appointed Co-Chair of ACER's REMIT Steering Committee

Several working groups dedicated to the supervision of wholesale markets exist within ACER and CEER, contributing in particular to the operational implementation of the REMIT regulation by the national authorities in a coordinated manner.

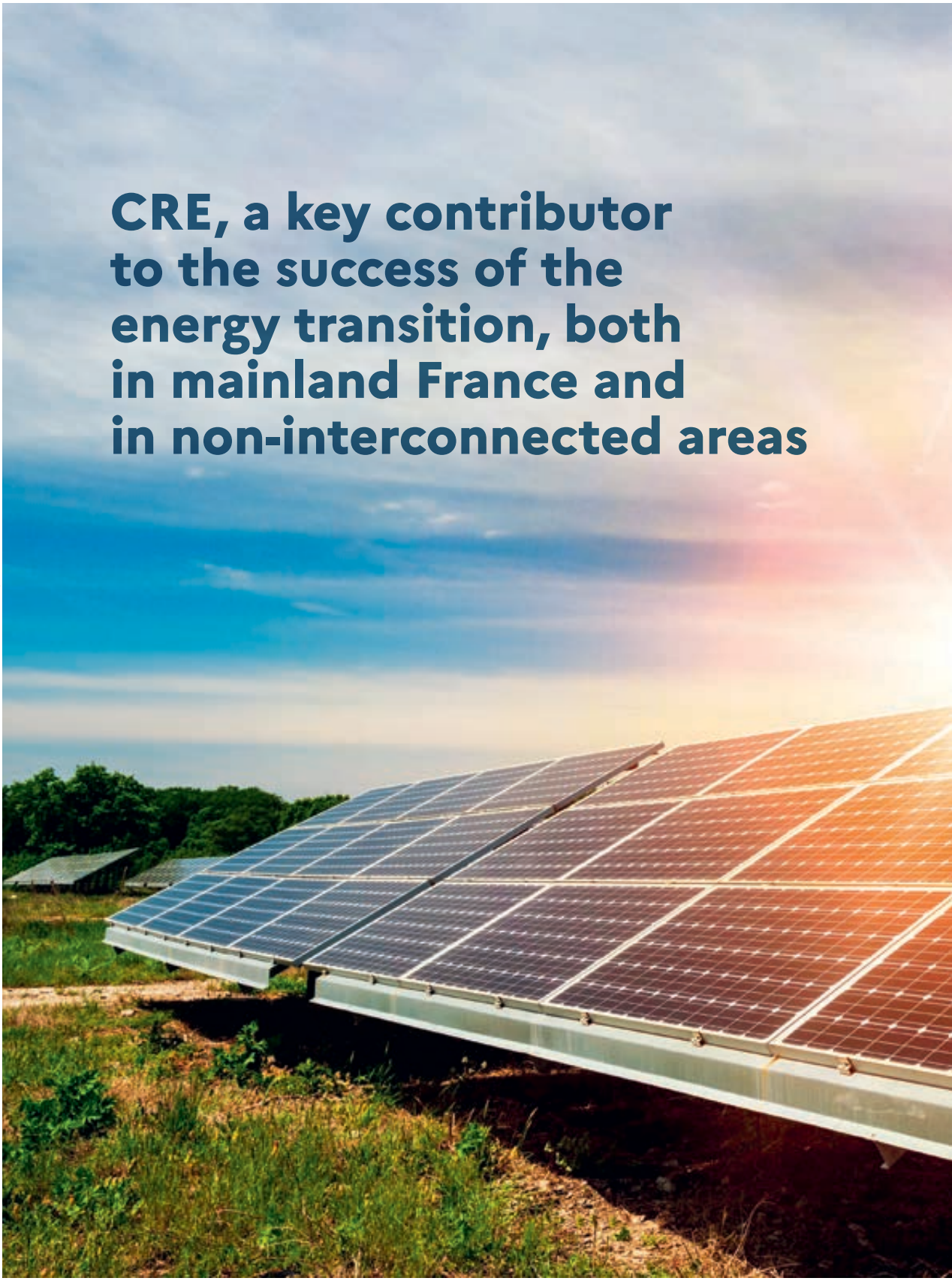
As a long-standing advocate of effective wholesale market supervision, CRE actively participates in European working groups and forums on REMIT.

In this context, Kseniya KHROMOVA, Director of Wholesale Markets at CRE, has held several offices within ACER, including Chair of the REMIT *Policy Task Force* since the end of 2018 and Vice-Chair of the REMIT Steering Committee since the beginning of 2021. In November 2024, she was appointed co-chair of this committee for a two-year term.

CRE attaches major importance to European collaboration on REMIT, and welcomes the confidence and recognition of its commitment through this appointment.

> CRE attaches major importance to European collaboration on REMIT

CRE, a key contributor to the success of the energy transition, both in mainland France and in non-interconnected areas



In gas networks

New gas networks tariffs come into effect

The new generation of tariffs for gas transmission, distribution and storage infrastructure came into force in 2024, following extensive consultation with stakeholders in 2023.
These tariffs meet the challenges identified for the 2024-2027 tariff period, as well as the longer-term issues facing the gas system.

These challenges include the downward trend in natural gas consumption, which will be very sharp in 2022 and 2023, and will continue over the long term. This reduction, which is an objective of the multi-annual energy plan (PPE), means both a reduction in the number of network users and lower unit consumption by residual customers.

The development of renewable and low-carbon gases, which meets another objective of the PPE, is also set to continue. The transmission and distribution networks will have to adapt to connect the production sites and transport the gas throughout the country.

This prospect has also led CRE to change the regulatory framework for tariffs in order to guarantee the long-term economic sustainability of the gas system. For example, for transmission and storage tariffs, the reduction in depreciation periods for new long-life assets (pipelines, new wells, etc.) from 50 to 30 years should reduce the burden borne by future consumers.

CRE has also changed the way inflation is taken into account in the regulated asset base, to avoid carrying it over to future years. Finally, the distribution tariff encourages GRDF to control and prioritise its investments, without penalising the injection of green gas into the networks.

CRE will continue these discussions in 2025 as part of its renewed work on gas infrastructures. In addition, in 2025 it will continue the development of network tariffs for local gas distribution companies, which will come into effect on 1 July 2026.

Side notes

How did CRE factor this context into its pricing decision?
To maintain a high level of infrastructure security and contribute to the energy transition, stable or only slightly decreasing fixed costs will be borne by a smaller user base than today.

In this context, controlling operators' costs is an essential challenge. CRE has set the operators' expenditure trajectories accordingly and will be vigilant when examining any new investment project submitted by transmission and storage operators.

Scan this QR code to see the video

How does CRE set operators' operating costs for a tariff period?
CRE commissioned a consultant to carry out an audit of their tariff applications. This gave CRE a clear understanding of operating costs and revenues, both for the most recent tariff period and for the next four years.
Following the public consultations, discussions continued with operators. At the same time, CRE carried out its own analyses to establish the operating cost trajectories included in the tariff deliberations.
The expenditure levels it has set will enable operators to carry out all their tasks, in particular guaranteeing the safety of the infrastructure.

What does a policy officer's job consist of when drawing up a tariff?
For a year and a half, policy officers in the Networks Department worked in collaboration with the various CRE departments, representatives of the operators and a wide range of market players. We have all taken part in the debate on the most appropriate ways of incorporating this long-term trend into network tariffs, and controlling the impact on consumers.

In addition, the preparation of the tariff is part of an overall reflection on the future role of gas in France's energy infrastructure, based in particular on the conclusions of the study on the future of gas infrastructure published by CRE in 2023.

Clémence Pèlegrin, Policy Officer, Networks Department

New tariffs for LNG terminals

CRE has set the new ATTM7 tariff for Elengy's LNG terminals from 1 April 2025, for a period of four years.

This new tariff institutes a number of changes compared with the ATTM6. In particular, the maximum depreciation period has been reduced from 40 to 20 years for the new facilities at Fos Cavaou and Montoir. In addition, a new tariff term applied to the quantities of LNG actually unloaded has been created, so as to better reflect the terminals' variable electricity charges. Elengy's terminals have been used intensively in recent years, and require increased maintenance.

In addition, the Montoir terminal, commissioned in 1982, is undergoing major renovation (see opposite). French terminal tariffs, which are paid by international transporters bringing LNG to France, remain competitive with other European terminals.

CRE has also changed the terms and conditions for marketing Elengy's terminals from 1 February 2025. Drawn up in consultation with users, these new arrangements make it possible for each transporter to minimise the difference between the quantities of LNG unloaded and the quantities of gas sent to the network in a given month.

Furthermore, in 2025 CRE has asked Elengy to examine (during its next user consultations) the creation of a virtual regulated backhaul service for possible implementation on 1 April 2026.

Elengy's terminals have been used intensively in recent years and require increased maintenance.

Focus on

Modernising the Montoir terminal

Elengy has undertaken a major renovation programme at the Montoir LNG terminal, where the facilities were ageing.

In 2022 and 2023, Elengy will has launched the modernisation of its electrical and control systems and the renovation of its pipelines. CRE has set two target budgets for these projects: €27.1m and €52.7m respectively.

From 2025, Elengy will launch the Ulysse project to continue modernising its industrial facilities and comply with European regulations on pollutant emissions.

The scope of the project includes:

- renovation of the four existing trickle-bed gasifiers. The work involves replacing high-pressure natural gas pipelines downstream of the gasifiers, replacing cracked compensators and sections of water supply/discharge pipelines for these gasifiers, as well as miscellaneous work on and around these gasifiers;
- the construction of two new trickle-bed gasifiers to replace the combustion gasifiers. This work involves dismantling or relocating existing facilities and building water supply structures for the new gasifiers;
- other renovation work on the civil engineering of the wharves, the high-pressure natural gas network and the site's electrical substation.

CRE has set a target budget of €220.1m for the Ulysse project.

€220.1m
target budget set by CRE for the Ulysse project

In electricity networks

Work on the publication of the Electricity Tariff (TURPE 7)

On 20 March 2025, CRE published the Tariff for the Use of Public Electricity Grids (TURPE) for the period 2025-2028, following consultations held since December 2023.

TURPE 7, which will apply to both transmission (RTE) and distribution (Enedis), will come into force on 1 August 2025 for a period of four years, with anticipated changes in tariff levels from February 2025. The tariff set by CRE takes into account the energy policy guidelines defined by the Minister for Energy in October 2023.

To achieve this, CRE conducted a wide-ranging consultation process, including public consultations, workshops and hearings. It took into account the needs of networks in light of future challenges, including the electrification of energy use and the development of renewable energies, as well as the need to strengthen the resilience of networks in the face of climate change.

This will involve major investments for RTE and Enedis, particularly for connections and infrastructure adaptations. Annual investment by RTE and Enedis will rise from €2.1 billion to €6.2 billion and from €5 billion to €7 billion respectively between 2023 and 2028.

This increase will enable networks to adapt to new electrification demands, climate change and renewable energy projects.

CRE has also updated the return on capital for grid operators. For RTE, the weighted average cost of capital (WACC) will be 5%, with a premium of 0.5% for offshore wind connections. Enedis will benefit from a margin on assets of 2.5% and a specific return on equity and borrowings. The resources allocated to the two operators will be increased, for maintenance and personnel costs among other things, while balancing the additional revenue generated by connections and interconnections.

The tariff structure of TURPE 7 remains broadly the same as that of TURPE 6, with a few notable adjustments.

For consumers who have opted for a peak/off-peak option, part of the off-peak hours will be moved to the afternoon, particularly during the summer period, from autumn 2025 and between now and 2027, both in order to offer a new consumption window during off-peak hours and to make better use of the abundance of photovoltaic production. The aim is to bring these off-peak times into line with the challenges facing the network, and the supply-demand balance.

In practical terms, this means shifting some of the poorly-timed hours (7am-11am or 5pm-11pm) to times when energy is abundant and cheap, mainly in the afternoon (11am-5pm), particularly in summer (1 April to 31 October). Consumers will retain a minimum of 5 consecutive off-peak hours in the middle of the night. As a result, they will benefit from a maximum of three off-peak hours in the afternoon.

In addition, users who do not wish to install a smart meter (Linky) will be billed separately, to cover the costs associated with the lack of automatic meter reading. In addition, a tariff option has been introduced for medium- and high-voltage storage sites, to encourage behaviour that reduces stress on the grid.

Finally, TURPE 7 strengthens performance incentives for RTE and Enedis, aimed at reducing connection times, controlling investment costs and encouraging the use of flexibilities. The growth in electricity networks required for electrification and the energy transition must be achieved by seeking the best network performance in terms of costs and quality of service.

Flexibility that benefits grids

Making flexibility work for the grid is a major challenge if we are to limit investment in new grid infrastructure, while at the same time responding to the need for electrification and the development of renewable energies.
In view of recent developments in advanced metering, storage, digital technology and automation, more and more equipment has the capacity to be flexible, i.e. to modify its injection or withdrawal curve in response to a signal.

TURPE 7 provides new incentives for RTE and Enedis to speed up the implementation of flexibilities for the network. They will need to use flexibility solutions whenever these are most effective, particularly to replace or delay heavy investment.

They will also be encouraged to optimise the management of peaks in renewable generation, and to extend the range of flexible connections, enabling storage sites to be better integrated into saturated areas.

Changes in balancing

On 25 January 2024, CRE decided to end the derogation granted to RTE for the contractualisation (via tendering) of secondary reserve capacity[13]. The first daily energy window was opened on 18 June 2024.

This competitive process enables the most competitive bids to be selected for the secondary reserve. Open to all technologies, the call for tenders contributes to the development of flexibilities: by the end of 2024, certifications for battery storage for secondary reserves were up by 150%, and those for distribution network withdrawal sites rose by 60%. The deployment of this new flexible capacity, which is highly effective in meeting RTE's secondary reserve requirements, means that generation resources can be redirected towards the wholesale markets, helping to optimise the power system as a whole.

+ 150%
increase in battery storage certification for the secondary reserve

+ 60%
on the distribution network at withdrawal sites

[13] CRE deliberation issued on 25 January 2024 concerning the decision to end the derogation granted to RTE under Article 6 of Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market in electricity

Connection to electricity grids: a major challenge that underwent significant changes in 2024

In the context of a sharp increase in requests for connection to electricity grids, from both consumers as well as producers and storage operators, it is essential to control connection times and costs.
CRE has considerably strengthened the financial incentives for RTE and Enedis with regard to connection times, and has modified various procedural rules and the management of connection queues.

In addition, two key measures were introduced in 2024:

Pooling zones:
In application of articles L. 342-2 and L. 342-18 of the Energy Code, RTE may anticipate and pool consumer connection operations, after approval by CRE, in order to optimise costs, lead times and environmental impact.

The deliberation of 7 November 2024 defines the procedure for CRE approval of RTE's pooling operations.
To date, CRE has pre-approved 8 pooling zones (Dunkirk, Fos-sur-Mer, Le Havre, Saint-Avold, Plan de Campagne, Île-de-France Sud, Vallée de la Chimie and Valenciennes) and formally approved one (Loire-Estuaire).

Changing grid connection capacity levels
Pursuant to article L. 342-24 of the Energy Code, grid operators may, in accordance with the procedures defined by CRE, modify users' unused connection power in order to optimise network sizing.

In its decision of 18 December 2024, taken after two public consultations and extensive consultation, CRE defined the terms and conditions for modifying grid connection powers.

These encourage users to optimise the size of their connection capacity, while taking into account the needs of players with a development dynamic that requires a gradual upscaling of their connection.
These new rules will come into force on 1 August 2025.

Focus on

Evaluation of thirty smart grid demonstrators

In December 2024, CRE published a report analysing thirty *smart grid* demonstrators set up in France to support the energy transition. Electricity grids need to integrate more renewable energies and adjust to new user habits, while gas grids need to incorporate green gases in a context of reduced consumption.

This report presents projects whose results justify their widespread use, such as GRDF's FLORES and Enedis' aVEnir projects. For other projects, the experience acquired remains partial, and does not make it possible to draw a comprehensive conclusion on the trail phases: CRE reiterates the need for greater economic monitoring of projects to optimise future decisions.

Accelerating the development of renewable energies

The development of renewable energies in France took a significant step forward in 2024. At the end of 2024, installed onshore wind capacity was 22.9 GW (+ 1.6 GW in 2024), and photovoltaic power plants amounted to 24.3 GW (+ 5.3 GW in 2024).

This year also marked a turning point for the offshore wind industry. Firstly, three new wind farms are now connected to the grid: the Saint-Brieuc and Fécamp wind farms, winners of the first call for tenders closed in 2012, and the Provence Grand Large pilot floating wind farm. Connected capacity for offshore wind projects in France now stands at 1.5 GW, including the Saint-Nazaire wind farm that went operational in 2022.

Signing the contract for the construction of the first DC offshore electricity platforms; Normandy and Oléron offshore wind farms

In addition, in 2024, three competitive procedures resulted in the approval of the first commercial wind farms in France using floating wind technology.

AO	Date	Location	Allocated power	Rate	Awarded to
AO5 South Brittany	15 May 2024	South Brittany	250 MW floating farm project	86.45 €/MWh for 20 years	Elicio and BayWa r.e
A06 Mediterranean	27 December 2024	Off the coast of Port-la-Nouvelle ("Narbonnaise" zone)	250 MW floating farm project	92.7 €/MWh	Ocean Winds (whose shareholders are Engie and EDP) and Eolien en Mer Participation (a wholly-owned subsidiary of the Caisse des dépôts et consignations, the investment arm of the French State)
A06 Mediterranean	27 December 2024	Off the coast of Fos-sur-Mer (Gulf of Fos zone)	250 MW floating farm project	85.9 €/MWh	Eoliennes Méditerranée Grand Large (shareholders: EDF Renouvelables and Maple Power)

Once again, this designation aligns with CRE's recommendation following its review of the call for tenders. These procedures have attracted a great deal of interest from major players in the sector, and have resulted in successful bids.
The AO6 procedure has enabled us to observe a certain increase in the maturity of the floating sector compared with the AO5 procedure.

Lastly, the pace of competitive procedures for awarding new projects is accelerating. The specifications for the AO7 (1.2 GW wind farm off the coast of Oléron) and AO8 (1.5 GW wind farm in the "Centre-Manche" zone) procedures were published on 29 November 2024. The deadline for submission of bids is 2 April 2025, and the winners could be chosen in August 2025 after CRE has examined the bids.

At the same time, the government launched the "AO9" procedure for four new wind farms, extending the AO5, AO6 and AO7 wind farms. Following CRE's examination of their applications, twelve consortiums were admitted to take part in the competitive dialogue.

Initial assessment of the results of the "PPE2" calls for tenders

In the summer of 2024, CRE published a report on the results of the "PPE2" calls for tenders, which were issued in late 2023 for onshore wind and photovoltaic power.

Working from the information stated by the bidders (and therefore on projected information), it aims to provide an overview of the economic and technical information for the projects CRE suggests nominating as the winning tenders.

While half of the volumes projected by the series of calls for tender have been called and examined since 2021 (14 GW out of 28 GW), winners have been designated for only a third of the planned volumes (10 GW). However, the application rate increased in 2023, mainly as a result of changes to the specifications.

The prices proposed by the candidates rose sharply from the launch of the PPE2 calls for tenders, whereas the previous series of calls for tenders (known as "CRE4") had been characterised by a clear downward trend. CRE notes that the stabilisation of prices in 2023 has not been followed by a period of reduction, even though the cost of certain raw materials and transport has fallen sharply in the case of photovoltaic power.

Lastly, while onshore wind projects rely heavily on European turbine manufacturers, only 6% of the cumulative installed capacity selected for photovoltaic solar power is expected to come from European manufacturers, with the rest of the modules being imported, mainly from Asia. However, the competitive landscape for projects submitted remains diverse, with no single player holding a dominant position in both the onshore wind and photovoltaic sectors.

CRE report on biomethane injection production facilities

At the end of 2024, CRE published a report on the technical and economic performance of facilities producing injected biomethane (excluding wastewater treatment plants and non-hazardous waste storage facilities).
The report is based on data collected from producers in mid-2023, with the aim of characterising the impact of the crisis on the economic profiles of projects, and ensuring that the support available to projects in the future is appropriately scaled.

The cost of public funding for the sector via the tariff decree is expected to be around €1 billion in 2024, which represents a major budgetary stake for the State.

The panel of facilities surveyed comprises around 700 installations (14.2 TWh HCV/year). The study marks the first time that data has been collected and analysed on this scale for the biomethane injection sector in France.

The analyses carried out by CRE highlight the industrialisation of the sector, which has lowered the cost of investment (although this cost subsequently increased during the crisis).

Operating costs were broadly stable before the crisis, but rose during it. With regard to project profitability, CRE notes that the median level of pre-tax internal rate of return (IRR) is high for these projects.

However, these levels conceal major disparities between facilities, demonstrating that it is difficult to define a uniform support framework for the entire sector. The impact of anaerobic digestion plants cannot be summed up by their IRR alone, as they encompass both agricultural and waste treatment stakes.

On the basis of these findings, CRE has issued a number of recommendations aimed at adapting support for biomethane injection facilities in order to match their needs as closely as possible, thereby supporting producers and enabling the sector to develop at the optimum cost.

Focus on

Public service charges for energy back to pre-crisis levels

In July 2024, CRE carried out the annual forecast evaluation of the public service charges for energy (CSPE) to be offset in 2025.
Given the end of the exceptional consumer protection mechanisms and the fall in wholesale electricity prices, the CSPE amounts for 2025 will gradually return to their pre-crisis levels.

The estimated cost for 2025 stands at €8.9 billion. These expenses are mainly based on the forecast expenses for 2025 (€9.5 billion), minus the ARENH 2024 price supplement which reverts to the State budget (€600 million), in accordance with the Finance Act for 2024.

CRE has also reassessed the charges for 2024, which stand at €4.2 billion.

The upward revaluation of expenses for 2024 is mainly the result of two opposing trends, both linked to the fall in wholesale energy prices:

- the increase in charges linked to supporting renewable energies in mainland France;
- the reduction in charges relating to tariff shields and shock absorbers for 2023.

The charges for 2024 and 2025 are not equal to the CSPEs for those years, as they also include adjustments from previous years. It is therefore beneficial to also examine the charges for these years, as these are charges whose proximate cause is linked to each individual year.

Thus, while renewable electricity sources represented a significant source of revenue for the State budget during the crisis in wholesale electricity prices (€1.9 billion in revenue for 2022 and €4.0 billion in revenue for 2023), they stand to once again represent a cost to the State from 2024 onwards, due to the fall in wholesale prices.

It should be noted, however, that the charges for 2024 are still lower than they were before the crisis, and that some sectors still represent a net income for the State budget (onshore wind power will bring in €0.3 billion for 2024).

Summary of costs by action for 2020 to 2025 (in €m)

	2020	2021	2022	2023	2024 (forecast from July 2024)	2025 (forecast from July 2024)
1. Support for renewable energies in mainland France	5 794.3	2 954.4	-1 854.5	-3 994.9	2 524.6	4 335.0
2. Biomethane injection in mainland France	200.5	221.9	78.7	787.6	1 061.8	1 182.4
3. Support in non-interconnected zones (ZNI)	1 993.1	2 192.0	2 486.0	2 429.2	2 425.8	3 000.6
4. Cogeneration and other forms of thermal power in mainland France	642.6	654.0	651.5	-252.3	299.7	553.3
5. Curtailment	3.0	13.1	72.0	14.4	198.7	316.0
6. Social services	27.6	29.0	34.4	37.5	41.4	39.7
7. Miscellaneous expenses	54.7	57.2	65.4	85.0	94.5	99.1
8. Exceptional consumer protection measures		351.6	3 967.8	21 497.6	356.4	0.0
TOTAL	**8 715.8**	**6 473.2**	**5 501.4**	**20 604.1**	**7 002.9**	**9 526.0**

In non-interconnected zones (ZNI)

Overseas France, Corsica and certain islands in Brittany and the Channel Islands are not connected to the mainland electricity grid (or in the case of Corsica, only to a limited extent).
These non-interconnected zones (ZNI) are technically and economically different from mainland France. Their climate and geographical characteristics, the related logistical constraints and the small size of the electrical systems justify the use of suitable technological solutions.

In this context, CRE supports these areas in their efforts to combine energy system security, control of public expenditure, the transition to a low-carbon economy and the interests of consumers. It has a number of specific missions to support these territories, including: guaranteeing tariff equalisation, validating all major investments in energy facilities (in particular by assessing and implementing support arrangements), and compensating for actions to control electricity demand, etc.

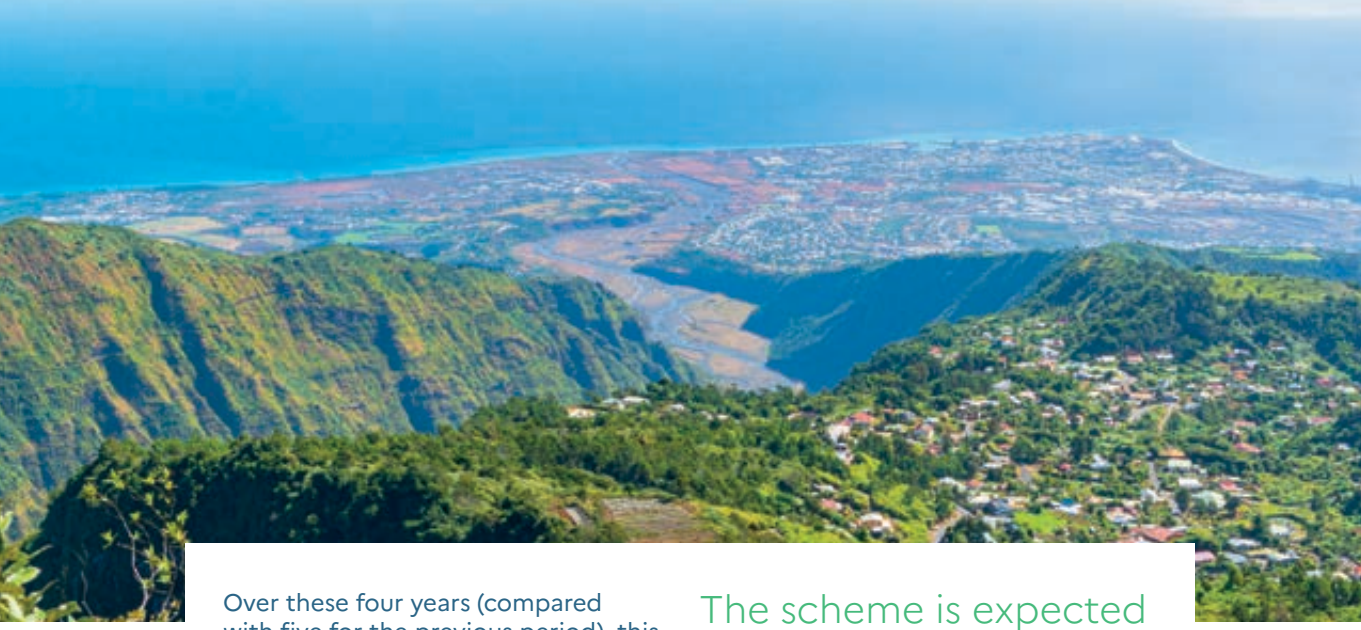
Review of energy demand management initiatives 2019-2024

In non-interconnected areas, energy demand management (EDM) actions, i.e. energy efficiency (insulation, solar water heaters, etc.), are essential.
They help to reduce energy consumption and associated CO_2 emissions, and increase energy self-sufficiency while improving public comfort.

At the end of 2024, CRE carried out a review of the compensation frameworks for energy demand management measures introduced in 2019 for a 5-year period.

The results are positive: €685 million in grants have been paid out for energy savings estimated at 1,365 GWh/year – around 12% of annual electricity consumption in these areas. This should lead to net savings of more than €3 billion over 30 years in public service charges for energy (SPE).

On the basis of this feedback, CRE has renewed the scheme for the period 2025-2028, with a projected deployment rate comparable to that observed over the previous period.



Over these four years (compared with five for the previous period), this scheme should lead to the payment of €546m in bonuses, generating 862 GWh/year in energy savings in ZNIs (i.e. 10% of electricity consumption in these regions in 2023) and net savings of €2.4 billion in energy public service charges (CSPE).
CRE has also adapted its methodology to further improve the operational implementation of this system.

The scheme is expected to pay out €546 million in bonuses, generating 862 GWh/year in energy savings in the ZNIs, and net savings of €2.4 billion.

Changes in appraisal methodology for storage tenders in the ZNIs

The referral windows for storage projects in Martinique and Reunion, held by CRE during 2024, resulted in the selection of six projects, which are expected to generate estimated savings of €185 million in SPE charges over 20 years.

In anticipation of the next windows in Guadeloupe and Corsica, for which bids are due to be submitted in the last quarter of 2025, and after consulting the industry, CRE published a revised version of its appraisal methodology on 5 November 2024.

The latter introduced changes relating in particular to:
- the specific treatment of technologies prioritised by the PPE and characterised by long development times, in particular PSH or PSEH;
- documents pertaining to the administrative authorisations required at the time of referral;
- connection of storage facilities, including an assessment of connection costs and associated documents;
- the characteristics of battery projects.

The aim of these changes is to optimise the development of storage projects in non-interconnected areas, thereby enabling better integration of renewable unavoidable energy.

22 November 2024: laying of the foundation stone for the Ricanto bioenergy plant in Ajaccio (Corsica)

Emmanuelle Wargon took part in the foundation stone ceremony for the Ricanto bioenergy plant in Ajaccio, Corsica, on 22 November 2024.

This participation reflects the important role CRE has played since the project's inception. CRE worked to ensure an appropriate cost level for the project, and its contribution to the island's energy security, then deliberated twice, on 4 April 2024 and 10 July 2024, to approve the investment required.

CRE has also taken action to renew and reinforce the SACOI (SArdaigne-COrse-Italy) direct current line, which is expected to contribute more than 20% on average to Corsica's electricity supply from 2029.

CRE and ARERA (the Italian regulator) have determined the appropriate level of French participation in the Italian investments made for the benefit of both countries. On 16 October 2024, CRE adopted the joint decision on cross-border cost allocation for the project.

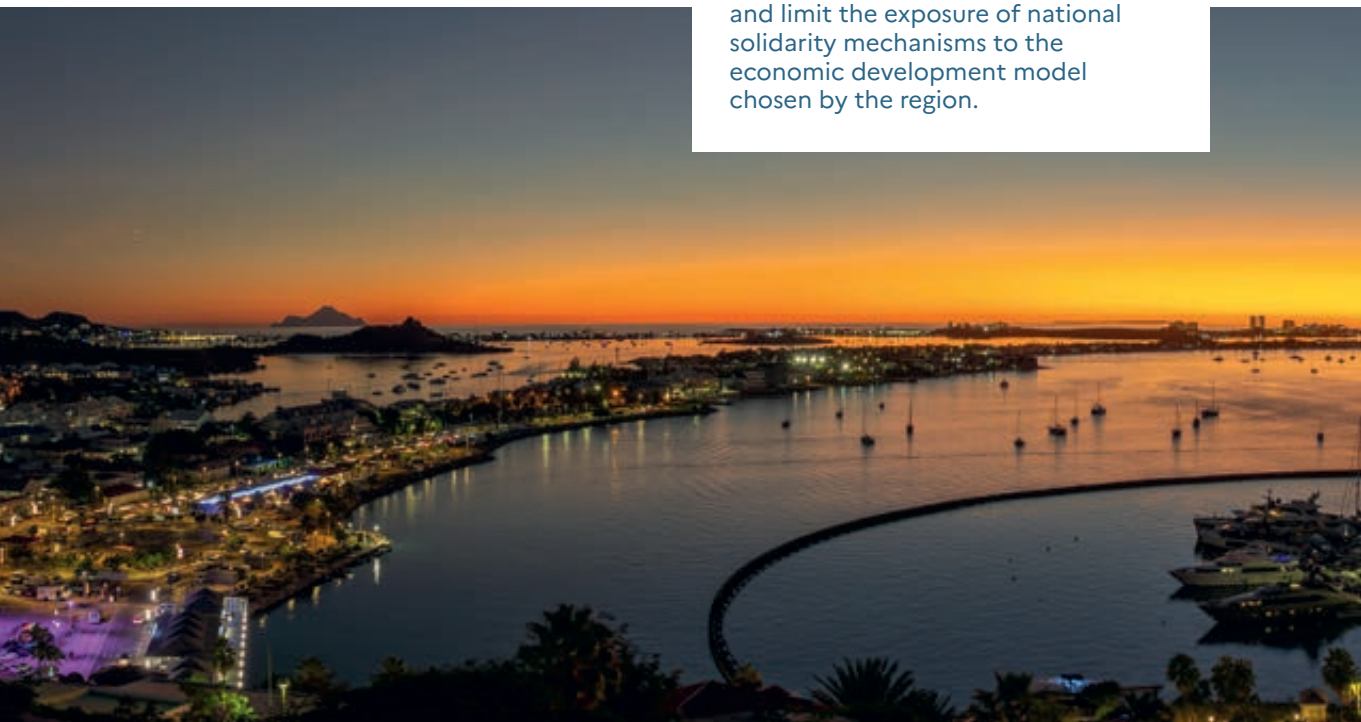
Multiannual energy planning projects (PPE) for Saint-Barthélemy and Saint-Martin

In March 2024, at the request of the French government, CRE analysed the draft PPEs for the territories of Saint-Barthélemy and Saint-Martin, and assessed their impact on public service charges for energy (CSPE).

In order to limit the demand on dispatchable power plants and contain the anticipated increase in energypublic service charges, CRE recommended the introduction of an ambitious energy demand management (EDM) policy, and the transposition of the "S24 ZNI" tariff decree to encourage the development of the photovoltaic sector in both territories.

For Saint-Barthélemy, CRE drew attention to the very high level of consumption per inhabitant (almost three times higher than the average for the other ZNIs) and recommended developing a system to expose the largest consumers to the real costs of production.

This is to encourage energy sobriety, and limit the exposure of national solidarity mechanisms to the economic development model chosen by the region.



Focus on

A special year for New Caledonia

CRE is assisting the Government of New Caledonia to ensure the success of the territory's energy transition, under a multi-year partnership agreement drawn up in 2018 and renewed in 2023.

The year 2024 was one of major challenges for the territory's energy and industrial future, with the launch of phase 2 of New Caledonia's Energy Transition Plan. This plan aimed to accelerate the decarbonisation of the electricity system, with nickel plants fully accounted for. These ambitions were set to be codified via a "Nickel Pact" with the French government, and transposed into operational terms through a PPE (energy performance plan).

However, the crisis following the riots in May 2024, along with the structural difficulties facing the nickel industry (illustrated in particular by the closure of the KNS plant), and persistent disagreements over the draft text led to abandon the Nickel Pact.

On these issues, CRE has provided its expertise to New Caledonia and government departments in the form of a technical and economic study on the development of the electricity system in New Caledonia, and its impact on the competitiveness of the nickel industry.

2024 was also a difficult year for the solar sector, which came to a standstill due to high costs and interest rates. In this sensitive context, exacerbated by uncertainties over the long-term outlets for solar production, CRE has supported the New Caledonian government in quantifying the risks in terms of capping and stranded costs of the short-term development trajectories envisaged for solar energy.

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CRE's annual report is the collective work
of all CRE's departments.
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to thank all the staff for their contribution to this essential
communication tool for the energy sector.

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The cover photo shows the Saint-Brieuc offshore wind farm
commissioned in May 2024. © Christophe Beyssier for Iberdrola France

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