

## Deliberation no. 2024-40

# Deliberation of the Energy Regulatory Commission (*Commission de régulation de l'énergie - CRE*) of 15 February 2024 concerning the decision on GRDF's regulated tariff for use of the public natural gas distribution networks

Translated from French: only the original in French is authentic

### The meeting was attended by:

Emmanuelle WARGON, Chair, Anthony CELLIER, Ivan FAUCHEUX, Valérie PLAGNOL and Lova RINEL, Commissioners.

Articles L. 452-2 and L. 452-3 of the Energy Code empower the Energy Regulatory Commission (CRE) to establish the methodology for setting tariffs for the use of natural gas distribution networks. Under the provisions of Article L. 452-3 of the Energy Code, CRE may make "*any changes to the level and structure of tariffs that it considers justified, particularly in the light of an analysis of operators' accounts and the anticipated trend in operating and investment costs*".

CRE is adopting this deliberation after extensive consultation with stakeholders. Between February and September 2023, CRE organised five topic workshops open to the public, followed by a public consultation on the next ATRD7<sup>1</sup> tariff from 12 October 2023 to 20 November 2023. 106 responses were received and the non-confidential responses have been published on CRE website. Following this consultation, CRE organised three round tables with suppliers and their associations, consumer associations, concession-granting authorities and local authorities on CRE's guidelines for gas distribution, transmission and storage tariffs. Finally, CRE has interviewed GRDF on several occasions, as well as its shareholder Engie.

This deliberation is based in particular on the business plans submitted by GRDF and on discussions with the latter, on CRE's internal analyses, on external auditors' reports and on the opinions expressed<sup>2</sup> by stakeholders in response to the public consultation, at round tables, workshops and hearings.

Finally, in accordance with the provisions of Article L. 452-3 of the Energy Code, CRE took account in its deliberation of the energy policy guidelines communicated by the Minister for Energy Transition in a letter dated 2 November 2023. These guidelines are published on CRE website at the same time as this deliberation.

### Main issues of the gas distribution tariff (ATRD7 tariff)

In addition to the targets of simplicity, predictability and continuity generally pursued by CRE in its pricing deliberations, the ATRD7 tariff meets the short-term challenges of the coming tariff period (2024-2027), but also prepares the gas distribution networks for the longer-term challenges of the gas system.

<sup>1</sup>Public consultation no. 2023-08 of the Energy Regulatory Commission of 12 October 2023 on GRDF's next tariff for use of the natural gas distribution networks

<sup>2</sup>An audit of GRDF's request in terms of operating costs for the 2024-2027 period and an audit of the request for a rate of return on GRDF's regulated assets, both published on the CRE website.

## Controlling GRDF's costs

The coming tariff period will be marked by a continuation of the downward trend in natural gas consumption that has already been observed for several years, and which is one of the targets of the Multiannual Energy Plan (MEP). This fall in consumption accelerated in 2022 as a result of high gas prices and efforts by gas consumers to be more frugal, combined with a fall in the number of consumers. This accelerated and unexpected reduction means that the revenue shortfall from the ATRD6 tariff will be carried over to the ATRD7 tariff for 2022 and 2023 and that the base on which GRDF collects its authorised revenue will be automatically reduced, leading to an increase in tariff terms.

Gas consumption is expected to continue to fall in subsequent tariff periods. The study on the future of gas infrastructures in 2030 and 2050, published by CRE on 4 April 2023<sup>3</sup>, shows that the size of the necessary infrastructures should only decrease slightly and that only limited parts of the network could be abandoned. Stable or only slightly falling fixed costs will therefore be borne by a smaller user base than today, leading to further increases in tariff terms. The framework for regulating the ATRD7 tariff is evolving to guarantee the long-term economic sustainability of the gas system.

Against this backdrop, keeping GRDF's costs under control is a key issue, especially as gas distribution tariffs account for a significant proportion of the bills of gas consumers connected to the distribution network. The load trajectories adopted by CRE to establish the ATRD7 tariff meet this challenge.

Finally, GRDF's investments will have to meet the priority targets of safety, network integrity and biomethane integration. In order to achieve these targets, the ATRD7 tariff takes into account the recent rise in market rates, in order to preserve operators' financing capacity and gives GRDF the necessary resources with a significant increase in the amounts allocated to network maintenance compared with the level of expenditure achieved in the last tariff period.

## The changing role of the gas distribution network

GRDF expects the role of the network to become more frequently insurance-based, with the development of back-up uses for specific consumers. These users continue to make costly use of the network, but only consume for a few days a year.

The ATRD7 tariff introduces a tariff term depending on the standardised flow rate of the largest meters, with the aim of pricing this type of usage at the right level to ensure better cover of the costs they generate.

## Biomethane injection and the development of renewable and low-carbon gases

The current multi-annual energy plan calls for both a downward trend in gas consumption and strong growth in gas from renewable sources. The Multiannual energy planning has set a target of 14 to 22 TWh per year of biogas fed into the grid by 2028. The growth seen in recent years, with 12 TWh of renewable gas injected by the end of 2023, is set to continue and GRDF will have to adapt its network accordingly, which will require targeted investment.

The ATRD7 tariff provides GRDF with the resources it needs to contribute to the energy transition, in particular by increasing maintenance budgets and the level of personnel needed to accommodate biomethane in the networks.

## Large-scale rollout of the Gazpar meter completed

GRDF's large-scale rollout of the Gazpar meter is now complete, with 11.1 million consumers equipped. The project is on budget and on schedule.

The ATRD7 tariff takes into account the operating cost savings identified when the project was validated.

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<sup>3</sup>CRE, "The future of gas infrastructures in 2030 and 2050, in a context of achieving carbon neutrality", 2023

## Framework for tariff regulation

The results of previous tariff periods and feedback from workshops and public consultations have shown that the incentivising regulation framework is working well and only needs to be improved to take account of changes in the gas system. Consequently, for the ATRD7 tariff, CRE is renewing the main incentivising regulation mechanisms in force for the ATRD6 tariff, in particular incentivising regulation to control operating costs and capital expenditure, incentivising regulation for quality of service and research and development and *a posteriori* cover of specific differences through the revenue and expenditure adjustment account (compte de régularisation des charges et des produits - CRCP).

The tariff period just ending has shown that the tariff framework has sheltered network operators from the Covid-19 health crisis and the energy price crisis, while limiting the impact on customer bills over the ATRD6 period. However, this capping of annual increases has led to a significant shortfall in tariff revenue being transferred to the costs to be covered under the ATRD7 tariff.

In addition, the regulatory framework needs to adapt to changes in the economic context and to the priority issues for gas consumers.

Consequently, for the ATRD7 period, CRE is making a number of changes to the tariff regulation framework.

### **CRE is changing the method for calculating the weighted average cost of capital (WACC) to take account of the recent rise in interest rates**

The method used by CRE to determine the weighted average cost of capital is based on a normative WACC structure that ensures an appropriate return on invested capital. Up to now, it has been based on the average of rates observed over the last ten years, reflecting the long life of gas network infrastructure. This method, which has changed very little over the last three tariff periods, has made it possible to maintain the attractiveness of energy infrastructures in France, while taking into account the downward trend in interest rates over the last 10 years.

After this long period of decline, interest rates have risen rapidly again over the last year or so. In view of this new situation, CRE is changing the method used to calculate the WACC to take better account of the short-term dynamics of interest rates.

To determine the WACC applicable during the ATRD7 tariff, CRE applies:

- a rate determined according to the method used for the ATRD6 tariff and previous tariffs, based on the analysis of long-term parameters, which amounts to 3.6% in real terms before tax (or 4.8% in nominal terms before tax, adjusted for average inflation of 1.2% over the last ten years);
- a rate based on more recent economic data, which is 5.4% in real terms before tax (or 7.5% in nominal terms before tax, adjusted for forecast average inflation of 2.0%<sup>4</sup> over the ATRD7 tariff period).

These rates are combined into a weighted rate that will apply during the ATRD7 period. This weighting is based on a normative breakdown of the respective share of old assets and new assets in the coming tariff period for a gas operator, i.e. 80% historical assets and 20% new assets.

**The weighted WACC is therefore 4.0%** in real terms before tax, or 5.3% nominal before tax, adjusted for inflation.

The actual WACC for the ATRD7 tariff is 0.1 points lower than for the ATRD6 tariff. It takes into account:

- through its component based on long-term parameters, the financing costs of existing assets, with market interest rates remaining low for a long period;
- through its component based on recent economic data, the rise in interest rates observed since 2022 and its consequences on the financing costs of new assets;
- a reduction in the asset beta from 0.48 to 0.45, to reflect the resilience of regulated activities compared with other sectors of the economy during recent crises (Covid 19, gas crisis). In addition, the regulatory framework of the ATRD7 tariff is more protective for GRDF than that of the ATRD6 tariff. However, the

<sup>4</sup>The inflation adjustment is obtained using the formula  $\text{Real WACC before corporation tax} = (1 + \text{nominal WACC before corporation tax}) / (1 + \text{inflation}) - 1$ .

risks to the future of gas infrastructures persist, justifying the use of a higher beta than for electricity network tariffs.

### **The ATRD7 tariff prepares for the future by modifying the framework applicable to new assets**

In its study on the future of gas infrastructures, CRE notes that the existing gas distribution network will still be needed for the most part by 2050, even in scenarios where consumption falls significantly. This has led to the introduction of a different tariff framework for new assets to accelerate their amortisation.

Consequently, for assets that will be included in the regulated asset base (RAB) from 2024, new assets will be recorded in the RAB at their book value, to which the nominal WACC rate (i.e. including inflation) set by CRE at 5.3% will be applied, as is the case, for example, for assets under the electricity transmission tariff.

The regulatory framework for assets entered into the RAB before 2024 remains unchanged.

### **The ATRD7 tariff introduces an incentive to control and prioritise investments**

In addition, in a context of decreasing gas consumption, the ATRD7 tariff provides an incentive for GRDF to control and prioritise its investments, in the form of an investment budget over the tariff period, beyond which GRDF is subject to a penalty. It may be adjusted during the period to take account of the real dynamics of connections of biomethane production sites and any changes in the regulations.

### **Changes to the annual ATRD7 tariff schedule**

The coefficient  $k$ , which takes into account the level of the CRCP each year, will now be limited to + or - 3%, instead of + or - 2% as previously. In addition, the annual increase in the tariff will include the difference between actual inflation in the previous year and forecast inflation.

These changes are designed to ensure a better match between actual costs and the level of the tariff, particularly during periods of volatile energy prices or inflation. CRE considers that the ATRD7 tariff maintains satisfactory visibility for users of the gas distribution networks.

### **Incentivising regulation of quality of service under the ATRD7 tariff is evolving to adapt to users' priorities**

The targets and incentives are changing in order to maintain the satisfactory overall level of quality of service that GRDF has achieved in recent years, while putting an end to the deterioration in specific indicators over the ATRD6 period. In particular, incentives on response times and claims handling have been strengthened.

In addition, the ATRD7 tariff introduces new indicators and incentives linked to GRDF's quality of service to biomethane producers, particularly concerning the volume of capped production.

### **The ATRD7 tariff puts an end to the incentive on the number of customers connected to gas distribution networks**

The ATRD7 tariff provides for the CRCP to cover transmission revenue associated with the number of gas consumers, which up to now has been the subject of a financial incentive for GRDF. GRDF is thus protected from the effects of erosion of its customer portfolio.

## **Tariff level**

### **Expenses to cover**

In its tariff application for the 2024-2027 period, GRDF states that it is facing a general rise in costs (inflation), particularly energy prices, as well as increasing maintenance and safety duties.

If GRDF had taken into account the information in the tariff file sent to CRE, this would have led to a very significant increase in the costs to be covered, which correspond to the sum of net operating costs and normative capital

costs. These would have amounted to €3,939m/year over the ATRD7 period (excluding the clearance of the ATRD6 CRCP), to be compared with €3,320m in 2022, i.e. +18%.

As a result, net operating costs rose by more than inflation, while gas consumption and the number of connected customers have been on a long-term downward trend.

On the basis of its analyses and the additional discussions it has had with GRDF since the public consultation of 12 October 2023, CRE sets the increase in costs to be covered at a lower level than that requested by GRDF. In particular, it aims to limit the increase in GRDF's net operating costs, while giving it the financial leeway it needs to maintain a high level of safety and make an active contribution to the energy transition. As far as capital costs are concerned, CRE is not modifying the investment trajectory presented by GRDF, but is not retaining the level of WACC requested by the operator.

As a result, the forecast level of expenses to be covered<sup>5</sup> during the ATRD7 period is on average €3,656m per year, compared with the level of expenses forecast for 2022 of €3,320m, i.e. an increase of 10%.

### **Operating expenses**

On the basis of its analyses, CRE has decided that GRDF's operating cost trajectory should be lower than the operator's request, but should enable it to:

- have the resources it needs to carry out all its engagements and in particular to guarantee the industrial safety of its facilities, with a significant increase in the amounts allocated to the maintenance of GRDF's network compared with the level of expenditure achieved in the last tariff period;
- have the necessary resources to continue integrating biomethane into its network, in line with the energy policy guidelines;
- keep its information systems up to date, particularly as regards cybersecurity and the advanced metering communication chain;
- carry out R&D work to enhance the safety, integrity and performance of the network, integrate renewable gases and prepare the network for structural changes linked to the energy transition;
- successfully complete the "Gas Change" project,<sup>6</sup> which is undergoing a growth phase as the project progresses and major cities, including Lille, are converted over the ATRD7 period.

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<sup>5</sup>Excluding CRCP and smoothing effect.

<sup>6</sup>The "Gas Change" project involves converting part of the Hauts-de-France region from B-gas (low calorific value) to H-gas (high calorific value).

The trajectory of GRDF's net operating expenses adopted by CRE takes into account the reduction in a number of items compared with the level of expenditure in 2022, updated for inflation. These reductions are due partly to favourable cyclical effects, such as lower taxation and lower forecast stranded costs and partly to GRDF's reduced requests on property and information systems. In addition, CRE has adjusted GRDF's request concerning communication actions for the promotion of gas.

Conversely, other items of expenditure have been set higher the forecast inflation rate, in particular purchases, works and personnel costs.

Overall, over the ATRD7 period, GRDF's net operating costs are expected to average €1,714 million per year, compared with €1,574 million in 2022, an increase of 9%. This level is slightly lower than actual expenditure in 2022, updated for past and forecast inflation.

The trajectory of net operating costs for the ATRD7 tariff corresponds to a global figure. GRDF is free to allocate this envelope between the different types of expenses, according to its management choices.

The ATRD7 tariff also includes a review clause to cover any costs arising from the implementation of the European regulation to reduce methane emissions once it has been adopted, as well as a general "review" clause linked to external events that would lead to an increase in operating costs of more than 1%.

### **Capital charges**

CRE is assuming a WACC of 4.0% real, before tax (or 5.3% nominal, before tax), compared with a WACC of 4.1% under ATRD6.

CRE has not modified the investment trajectory presented by GRDF. Against a backdrop of structurally declining gas consumption, GRDF will have to control its capital expenditure.

The average level of capital charges to be covered for the ATRD7 period is €1,941m per year.

Finally, it should be noted that GRDF's infrastructure investments are covered by the tariff on the basis of 100% of the expenditure recorded in the revenue and expenditure adjustment account and that GRDF is protected from inflation by the tariff.

### **CRCP balance at end of ATRD6 period**

In addition to the expenses to be covered, GRDF's authorised revenue includes the settlement of the estimated CRCP balance at the end of the ATRD6 period. The balance taken into account in the authorised revenue is €905m, representing an annual clearance of €243m over the ATRD7 period.

This exceptionally high balance is due to the large-scale phenomena that occurred at the end of the ATRD6 tariff period: revenue received by GRDF was lower than authorised due to the sharp fall in gas consumption in 2022 and 2023 and the cost of energy purchased by GRDF to cover losses rose. At the same time, the ATRD6 tariff increased only slightly over the period.

### **Forecast consumption**

The number of consumers and gas consumption have remained stable over the period 2020-2021. From 2022 onwards, gas consumption has fallen very significantly compared with the tariff forecasts, due to the high market prices and the efforts to reduce consumption made during the winter of 2022-2023 (-6.61% per year over the 2022-2023 period). The number of consumers has also fallen, albeit to a lesser extent (-0.69% over the 2022-2023 period).

For the 2024-2027 period, CRE's assumptions take into account the targets of a downward trend in gas consumption and more stable market prices. It uses assumptions for gas consumption close to GRDF's request, at -2.02% per year and assumes a growth in the number of consumers of -1.54% per year on average.



## Tariff structure

From 1 July 2026, the ATRD7 tariff will introduce a new tariff term, the "standardised flow rate term", which depends on the meter flow rate and the delivery pressure. This term will apply to consumers with the largest meters (i.e. around 125,000 consumers). It aims to better reflect network sizing costs, particularly for back-up customers, who have high sizing and maintenance requirements for the network even though they only use it occasionally. Given the forecast changes in the tariff schedule, the level of this term will be €5.52/year/Nm<sup>3</sup>/h on 1 July 2026. The two-year period will allow GRDF to raise awareness among the consumers concerned, who will be able to change their meter if it is unsuitable, and will allow the participants involved to adapt their information systems.

CRE does not accept GRDF's request to lower the threshold between tariff options T2 and T3 from 300 to 100 MWh/year, which it had reservations about in its public consultation.

The ATRD7 tariff also provides for the introduction, from 1 July 2024, of a new capacity tariff term applicable to renewable and low-carbon gas producers. For all producers of renewable and low-carbon gas, it will be added to the variable charge applied to the volumes injected and is designed to make a better contribution to the costs associated with injecting gas into the network.

## Residual meter reading charges

CRE has made a positive record of the large-scale rollout of the Gazpar smart meter, which was completed on schedule and at a cost close to the initial budget. GRDF will have to continue its reading mission for the invoicing of consumers not yet equipped with a Gazpar meter who do not submit their consumption indexes.

The ATRD7 tariff will introduce a residual meter reading term to cover the additional costs incurred by non-communicating consumers (who do not communicate their consumption index for more than 12 months from 1 January 2024) who are not equipped with a Gazpar meter. This tariff term is set at €3.65 excluding VAT per month.

## Transparency

In addition to this deliberation, CRE is publishing on its website:

- the energy policy guidelines communicated by the Minister for Energy Transition;
- the external audit of GRDF's request for operating costs for the 2024-2027 period;
- the external audit of GRDF's request for a rate of return on regulated assets;
- the non-confidential responses to the public consultation of 12 October 2023.

The Higher Energy Council, consulted by CRE on the draft deliberation, issued its opinion on 13 February 2024.

## Authorised revenue and changes in tariff terms

GRDF's authorised revenue (which corresponds to the sum of the expenses to be covered and the CRCP clearance) is €3,899 million per year on average over the 2024-2027 period.

As a result of the combined effect of the increase in authorised revenue and the fall in consumption, the average increase in the various tariff terms on 1 July 2024 is +27.5% compared with the tariff in force.

This sharp rise was due to the following factors:

- the carry-over of effects inherited from the ATRD6 tariff period, amounting to +20.0%, broken down into:
  - o +9.7% due to a strongly negative CRCP at the end of the ATRD6 tariff, mainly due to lower than expected revenues of €905m<sup>7</sup>;
  - o + 10.3% due to the fact that the ATRD6 tariff has been kept virtually stable for 4 years and will remain stable until 1 July 2024: tariff terms are lower than they would have been in the absence

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<sup>7</sup>Settled over 3.5 years (from 1 July 2024 to 31 December 2027).

of a cap on annual growth and must catch up with their theoretical level at the start of the ATRD7 tariff period;

- effects specific to the dynamics of the ATRD7 tariff:
  - o + 1.6% linked to changes in expenses to be covered for the ATRD7 period. The initial step will be followed by further annual changes over the period in line with inflation;
  - o + 5.9% due to the fall in consumption and in the number of gas consumers at the start of the ATRD7 tariff period. This fall in consumption and in the number of GRDF customers will continue over the course of the tariff, with an impact of around +1.9% per year.

The tariff terms will then change each year on 1 July according to the addition of the following three terms:

- inflation excluding tobacco and the inflation differential for the previous year;
- the corrective term  $k$ , capped at +/- 3%;
- a coefficient set at +1.91%, corresponding to the average annual rate increase resulting from the forecast gradual decline in gas consumption and the number of customers between 2024 and 2027.



## Key figures

Key figures for 2024-2027 (in current €)		
	ATRD7	2022 achieved
Operating expenses (€/year)	1,714	1,574
Capital expenditure (€/year)	1,941	1,746
<b>Expenses to cover (€/year)</b>	<b>3,656</b>	<b>3,320</b>
CRCP (M€/year)	243	3
<b>Authorised revenue (€/year)</b>	<b>3,899</b>	<b>3,323</b>
WACC (actual before tax)	4.0%	4.1%
<i>of which historic rate</i>	3.6%	N/A
<i>of which short-term rate</i>	5.4%	N/A
WACC (nominal before tax)	5.3%	5.5%
<i>of which historic rate</i>	4.8%	N/A
<i>of which short-term rate</i>	7.5%	N/A
Capital expenditure (€/year)	1,091.8	1,116.8

	2024	2025	2026	2027
Inflation assumptions <sup>8</sup>	2.5%	2.0%	2.0%	1.8%

The tariff schedule applicable from 1 July 2024 to 30 June 2025 is as follows:

– Main tariff options

Tariff option	Annual subscription incl. Rf (in €)	Proportional price (€/MWh)	Annual subscription term for daily capacity (€/MWh/d)	
			Share of capacity subscribed under 500 MWh/d	Share of capacity subscribed in excess of 500 MWh/d
T1	51.96	42.37		
T2	175.92	11.39		
T3	1,231.08	8.19		
T4	20,469.60	1.11	271.56	135.72

– "Local tariff" option (TP)

Tariff option	Annual subscription incl. Rf (in €)	Annual subscription term for daily capacity (€/MWh/d)	Annual rate per distance (€/metre)
TP	48,770.64	135.48	88.92

<sup>8</sup>Excluding tobacco.

- Biomethane producers

Level	Variable charge for the injection tariff term (€/MWh injected)	Capacity charge for the injection tariff term (€/MWh/d/year installed)
Level 3	0.7	50
Level 2	0.4	
Level 1	0	

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## 1. CRE's powers and the tariff-setting process

### 1.1 CRE's powers

The provisions of Article L. 134-2, 4° of the Energy Code give CRE the power to specify "*the conditions for using the natural gas transmission and distribution networks [...] including the methodology for setting the tariffs for using these networks [...] and tariff changes*".

Articles L. 452-1-1 to L. 452-3 of the Energy Code provide a framework for CRE's tariff powers.

In particular, the provisions of Article L. 452-1-1 stipulate that these tariffs "*will be established in a transparent and non-discriminatory manner in order to cover all the costs incurred by these operators, insofar as these costs correspond to those of an efficient network or facility operator. These costs take into account the characteristics of the service provided and the costs associated with this service, including the duties laid down by law and regulations, as well as the costs resulting from the performance of public service missions and the contracts mentioned in I of Article L. 121-46*".

Under Article L. 452-2, CRE establishes the methods used to set tariffs for the use of natural gas networks.

In addition, Article L. 452-3 of the Energy Code stipulates that CRE deliberates on changes to tariffs "*with, where appropriate, changes to the level and structure of tariffs that it deems justified in the light, in particular, of an analysis of the operators*" accounts and of foreseeable changes in operating and investment costs". CRE's deliberation may provide for "*a multi-year framework for changes in tariffs and appropriate short- or long-term incentives to encourage operators to improve their performance, particularly in terms of quality of service, integration of the internal gas market, security of supply and efforts to improve productivity*".

Article L. 452-3 also stipulates that CRE "*consults energy market players in accordance with the procedures it determines*".

In this deliberation, CRE defines the methodology for setting the tariff for use of GRDF's natural gas distribution networks and sets the tariff known as "ATRD7".

### 1.2 Tariff-setting process

#### 1.2.1 Stakeholder consultation

Given the need for visibility for stakeholders and the complexity of the issues, CRE organised five topic workshops open to the public between February and September 2023:

- the first, on 22 February 2023, concerned the structure of gas distribution tariffs. This workshop provided an opportunity to present the changes envisaged by CRE concerning the introduction of a tariff term invoiced according to the flow rate of users' meters, to take account of the development of back-up uses in distribution. It had 75 participants;
- the second, on 4 May 2023, concerned the structure of gas transmission tariffs. This workshop provided an opportunity to present the changes envisaged by CRE concerning the structure of the tariffs for the main transmission network, in particular the tariffs applicable to interconnections. It had 70 participants;
- the third, on 10 May 2023, concerned green gas. This workshop provided an opportunity to present the changes envisaged by CRE concerning the tariffs applicable to the injection of renewable and low-carbon gases into the grids. It had 85 participants;
- the fourth, on 20 June 2023, dealt with the future of France's gas infrastructure and possible adjustments to the tariff regulation framework to take account of the decline in natural gas consumption. This workshop provided an opportunity to present the changes envisaged by CRE concerning the depreciation schedule for the Regulated Asset Base (RAB), the inclusion of inflation in the regulated asset base and possible incentives for controlling investment. It had 86 participants;
- Finally, the fifth workshop, held on 13 September 2023, was devoted to GRDF's quality of service and provided an opportunity to present the changes envisaged by CRE for various quality of service indicators, including commissioning times, metering quality and claim handling times. It had 61 participants.



Following these workshops, CRE organised a public consultation published in French, which ran from 12 October 2023 to 20 November 2023 and received 106 responses.

The non-confidential responses to this consultation are published on CRE website.

Following this public consultation, CRE organised three round tables with suppliers, consumer associations, concession-granting authorities and local authorities to gather their comments on the guidelines presented in the public consultations on distribution, transmission and storage tariffs and on the impact of these guidelines on users.

Finally, CRE has interviewed GRDF and its shareholder on several occasions.

### **1.2.2 Energy policy guidelines**

Pursuant to the provisions of Article L. 452-3 of the Energy Code, CRE has taken into account the energy policy guidelines communicated by the Minister for Energy Transition in a letter dated 2 November 2023. These guidelines relate in particular to:

- the need to control costs in a context of falling gas consumption by strengthening the selectivity of future investments, which should focus on safety and the integration of renewable and low carbon gases;
- the structure of tariffs for the use of natural gas distribution networks, to take account of the accelerating decline in consumption of methane gas, or the reduction in the number of consumers connected;
- limiting GRDF's communications, which would run counter to the need to reduce methane gas consumption;
- the integration of renewable and low-carbon gases, in particular for the connection and reinforcement of biomethane and the injection of hydrogen residues into the networks;

CRE has not received any energy policy guidelines from the Minister for the Economy.

To meet these challenges, the ATRD7 tariff includes changes to the tariff structure, changes to incentivising regulation of investments and resources for the integration of renewable and low-carbon gases into the networks. CRE is also adjusting GRDF's communication budget for promoting gas consumption and production. For the ATRD7 period, it also introduces a change in the tariff framework, to control the trend of unit costs over the long term by not revaluing new assets brought into service for inflation, which are subject to a nominal weighted average cost of capital (WACC).

### **1.2.3 Transparency**

CRE is committed to ensuring that the work involved in setting network tariffs is transparent for all stakeholders.

As part of this approach, CRE has published on its website all the external studies on which it relied. These studies cover the following subjects:

- an audit of GRDF's request for its operating costs for the 2024-2027 period;
- an audit of GRDF's request concerning the rate of return on its regulated assets.

## 2 Framework for tariff regulation

### 2.1 Review and challenges of the regulatory framework

The main principles of the tariff framework for gas and electricity networks and infrastructures have been stable for more than 10 years, with three main targets:

- to encourage infrastructure managers to control their costs in order to limit the impact of infrastructure charges on end consumers;
- to enable operators to finance the necessary investment in infrastructure;
- to aim for a high level of quality of service, security and continuity of delivery.

To achieve this, it relies on financial mechanisms designed to encourage network managers and infrastructure operators to strive for efficiency over the long term. A four-year tariff period and the principle of multi-year financial incentives based on costs and quality of service have been introduced. The regulatory framework leaves a great deal of freedom in the management of each network operator and infrastructure provider, allowing them to seek the most appropriate improvements in performance.

CRE has made a positive assessment of this framework, which has made it possible to control costs over time while improving quality of service. This framework has also proved highly resilient in the face of the two major crises of recent years - the health crisis <sup>9</sup>and the energy price crisis - by giving operators the means to ensure business continuity under the right conditions.

Most of the respondents to the public consultation share CRE's conclusions on the positive assessment of the regulatory framework for the ATRD6 period, which has made it possible to control costs effectively for the benefit of end customers, to make the necessary investments and to operate gas infrastructures under good conditions in an unprecedented context of supply crisis. Network operators have asked for greater protection from changes in economic conditions in the light of recent events (particularly with regard to energy prices).

In the light of this assessment (see detailed assessment published in Annex 1 to the public consultation), CRE has decided to maintain most of the regulatory framework for the ATRD7 tariff as set out in the ATRD6 tariff, but to modify a number of mechanisms.

### 2.2 Main principles of the tariff framework

The ATRD7 tariff is based on the definition, for the coming tariff period, of an authorised revenue trajectory for GRDF and a forecast trajectory for the number of consumers and the quantities of gas distributed.

The ATRD7 tariff also sets out a regulatory framework that aims to limit the financial risk to GRDF and/or users for specific predefined revenue and expense items, through a revenue and expense adjustment account (CRCP) and to encourage GRDF to improve its performance through incentive mechanisms.

Taking all of these factors into account, the tariff applicable on 1 July 2024 and the terms and conditions for annual changes can be established.

#### 2.2.1 Determining authorised revenue

In this deliberation, on the basis of the tariff file submitted by GRDF and its own analyses, CRE sets GRDF's forecast authorised revenue for the 2024-2027 period. The authorised revenue covers GRDF's costs on a calendar basis insofar as these correspond to those of an efficient operator.

This provisional authorised revenue is made up of the provisional net operating expenses (CNE), the provisional normative capital expenses (CCN), the clearance of the balance of the revenue and expenditure adjustment account (CRCP) and the smoothing term (LIS):

$$RA = CNE + CCN + CRCP + LIS$$

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<sup>9</sup>Deliberation no. 2021-105 of the Energy Regulatory Commission of 25 March 2021 on the effects for 2020 of the COVID-19 crisis for network operators

Where:

- RA: forecast authorised revenue over the period;
- CNE: forecast net operating expenses over the period;
- CCN: forecast normative capital charges over the period;
- CRCP: clearance of the balance of the CRCP.
- LIS: smoothing term resulting from the tariff development methods defined in section 3.3.2).

The tariff framework ensures that the authorised revenue is collected.

### 2.2.1.1 Net operating expenses

Net operating expenses are defined as gross operating expenses less operating revenue (in particular fixed assets and non-price revenue).

Gross operating expenses consist mainly of energy costs for losses and differences, external charges, personnel costs, social security costs and taxes.

The level of net operating expenses used is determined on the basis of all the costs necessary for GRDF's activity insofar as, in application of Article L. 452-1 of the Energy Code, these costs correspond to those of an efficient network operator.

### 2.2.1.2 Normative capital charges

The forecast normative capital charges include the remuneration and depreciation of the regulated asset base. RAB is determined on the basis of the revalued net value of fixed assets, less subsidies and shareholdings received from third parties.

The RAB remuneration corresponds to the RAB value multiplied by the WACC.

$$\text{CCN} = \text{Annual depreciation of the RAB} + \text{RAB} \times \text{WACC}$$

## 2.2.2 Cost of capital and investment cover

### 2.2.2.1 Limit the risk of an excessive increase in the unit cost of transmission for future network users

In its study on the future of gas infrastructures<sup>10</sup>, CRE shows that, despite the fall in consumption, the sizing of French gas infrastructures is unlikely to change significantly between now and 2050:

- Both the gas transmission and distribution networks will continue to be needed for the most part. Some assets will nevertheless be releasable, albeit to a limited extent;
- A significant proportion of storage capacity will still be required to meet the need for seasonal modulation of consumption;
- The gas distribution network has been extensively upgraded in recent years. In all the scenarios, from a national perspective, it will remain necessary and essentially sized for the production of green gas. Locally, however, depending on the configuration, some assets could be abandoned, although the proportion is likely to remain very limited.

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<sup>10</sup>CRE, "The future of gas infrastructures in 2030 and 2050, in the context of achieving carbon neutrality", 2023

Networks could also continue to expand to support the development of green gas and will have to adapt to the emergence of backup use. As a result, gas operators' costs are not expected to fall in the same proportions or at the same rate as gas consumption by 2050, leading to an increase in the unit cost of transmission ("scissor" effect).

The lever identified to limit the "scissor" effect is to adapt the distribution of capital charges over time, with the aim of increasing them in the shorter term in order to reduce them in the longer term, in line with anticipated trends in gas consumption. This avoids passing on today's burdens to tomorrow's consumer.

In the public consultation, CRE presented three options for reallocating capital charges over time:

- ending the indexation of the RAB to inflation by changing the remuneration of the RAB to a nominal rather than a real WACC;
- adjusting the rate of depreciation (moving to degressive depreciation, higher at the beginning and lower thereafter), so that depreciation charges are more consistent with the decline in gas consumption;
- reducing the depreciation period of specific assets where this is relevant to their expected useful life.

Although the risk of a price squeeze has been clearly identified, most respondents did not agree or did not fully agree with the guidelines proposed by CRE. Many respondents feared that implementation would be too abrupt at a time when tariffs were already rising sharply. Others considered this development impossible to deploy in such a short space of time and were concerned about their economic neutrality. Finally, a gradual implementation was mentioned by various respondents.

CRE takes note of the opposition to implementing these measures too quickly. In particular, CRE considers that the level of tariff increases is already particularly high and does not make it possible to envisage large-scale measures that would affect all assets.

With regard to the possibility of reducing the depreciation period for specific assets, as CRE indicated in its public consultation, it considers that the necessary adjustments have already been made to the situations in which this solution could be applied, in particular with regard to building connections and pipelines in GRDF's ATRD6 tariff and that most of the other investments in pipelines are linked to the direct outlet of the biomethane and should therefore be extended. The majority of participants share this analysis.

As a result, CRE has decided to partially retain one of the measures presented by applying them only to new assets that will be included in the RAB from 1 July 2024: new assets will no longer be revalued in line with inflation and will, in return, be subject to a nominal WACC (i.e. including inflation).

This measure has an effect of less than 1% on the rate increase.

### **2.2.2.2 Calculation of the regulated asset base**

The regulated asset base represents the sum of the operator's tangible and intangible fixed assets (valued on 1 January each year):

- RAB increases when an asset is brought into service;
- RAB decreases as assets are depreciated, or if an asset is scrapped or disposed of.

#### **RAB entry value and revaluation**

##### **For "historic" assets entered into the RAB up to and including 1 July 2023**

For the ATRD7 tariff, CRE is renewing the RAB calculation methods in force for the ATRD6 tariff. The treatment of assets for the definition of forward-looking RAB differs depending on whether they were brought into service before or after 1 January 2003.

The conventional date for entering assets into the inventory is 1 July each year and the date for removing assets is 30 June.

Initial value of RAB on 31 December 2002 (assets brought into service before 1 January 2003):

Assets brought into service before 31 December 2002 are valued by indexing historical costs to inflation, using the following method:

- the historical gross values of assets are restated for revaluation differences authorised in 1976, subsidies received in respect of the realisation of these investments and shareholdings received from the beneficiaries of these investments;
- these restated gross values are revalued on 31 December 2002 by applying the "market GDP" price index.

For assets joining the RAB between 1 January 2003 and 1 July 2023 inclusive:

Assets included in the RAB between 1 January 2003 and 1 July 2023 inclusive are included in the RAB at their gross value.

Once included in the RAB, assets entered into the RAB up to and including 1 July 2023 are revalued on 1 January each year by the July-to-July inflation rate. For this reason, CRE uses a real WACC that does not include inflation. The revaluation index used is the 1763852 consumer price index excluding tobacco, for all households in France.

**For "new assets" joining the RAB from 1 July 2024 inclusive**

The value of the RAB is calculated on the basis of the net book value of assets in service. The conventional date for entering assets into the inventory is 1 July of each year in which they are brought into service and the date for removing assets from the inventory is 30 June. CRE is applying a nominal WACC for assets included in the RAB from 1 July 2024.

For all assets, regardless of the date on which they are brought into service, the amounts financed by third parties are treated in the same way as in the accounts:

- when the operator recognises third-party interests as liabilities, against the value of the facilities recorded as assets, they are deducted from the asset values included in the RAB;
- when the operator recognises third-party interests as operating revenue, the assets are included in the RAB at their total value and the amount of the third-party interests is deducted from the operating costs to be covered by the tariff.

**Depreciation of assets**

Assets are depreciated on a linear basis over their useful economic lives (the linear depreciation method is described in section 3.6.5). Land is stated at its historical value, revalued and not depreciated.

The useful lives adopted by CRE for the main asset categories are as follows:

Asset class	Normative service life
Pipelines and connections	Between 30 <sup>11</sup> and 45
Delivery, pressure reduction and metering stations	40 years
Compression	20 years
Other ancillary facilities	10 years
Buildings	30 years

**Assets written off**

<sup>11</sup>For house connections and mains - risers commissioned in 2005 or later.

Assets scrapped or disposed of before the end of their economic life are no longer included in RAB and are not depreciated or remunerated. The pricing treatment of assets removed from the inventory is described in section 3.2.2.2.3.

### 2.2.2.3 Calculation of the weighted average cost of capital

The method used to set the rate of return on assets is based on the WACC for a normative financial structure. GRDF's level of remuneration must enable it to finance the interest charges on its debt and provide its shareholders with a return on equity comparable to that which they could obtain for investments involving comparable levels of risk. This cost of equity is estimated using the Capital Asset Pricing Model (CAPM) methodology.

In its public consultation, CRE proposed changes to the method of calculating the WACC to take account of the recent sharp rise in interest rates.

To determine the WACC applicable during the ATRD7 tariff, CRE proposed to use:

- a rate determined according to the method used for the ATRD6 tariff and previous tariffs, based on the analysis of observed long-term parameters (e.g. 10-year average of risk-free rates);
- a rate based on more recent economic data.

In its public consultation, CRE specified that these rates could be applied to old and new assets respectively, or combined into a weighted rate.

With regard to determining the level of the WACC, network operators and their shareholders are generally in favour of changing the method of determining the WACC to take greater account of the recent rise in interest rates, while suppliers and consumer associations are against this, arguing that the stability of the method should take precedence.

In addition, most respondents were against the introduction of a double rate and in favour of a weighted rate.

Following the public consultation and in view of the above, CRE has decided for the ATRD7 tariff period to change the method for calculating the weighted average cost of capital by weighting two rates, one based on an analysis of long-term parameters (as in the ATRD6 tariff) and the other taking account of more recent economic data.

This weighting is based on a normative breakdown of the respective share of old assets and new assets in the coming tariff period for a gas operator.

### 2.2.2.4 Treatment of assets removed from the inventory

#### 2.2.2.4.1 Treatment of stranded costs

By "stranded costs", CRE means the net book value of assets withdrawn from the inventory before the end of their economic life, as well as expenses for technical studies and upstream approaches that could not be capitalised if the projects were not performed.

Under the ATRD6 tariff, stranded costs were dealt with as follows, on submission of the case files by the operators:

- recurring or foreseeable stranded costs are subject to a tariff trajectory based on an annual envelope;
- the cover of other stranded costs is examined by CRE on a case-by-case basis, on the basis of substantiated cases presented by GRDF.

Any costs to be covered by tariffs are taken into account at their book value less any proceeds from disposal.

CRE believes that the current regulatory framework is well adapted. This allows GRDF to cover its recurring stranded costs through an incentivised trajectory and to cover exceptional stranded costs on a case-by-case basis, depending on the efficiency of the costs presented by the operator.

In addition, GRDF is not asking for any changes to this regulatory framework.

CRE is therefore not making any changes to the regulatory framework for stranded costs for the ATRD7 period.

#### 2.2.2.4.2 Treatment of assets sold

When an asset is sold by an operator, it leaves the company's assets, is no longer included in the RAB and, as a result, ceases to generate capital charges (depreciation and remuneration). Where applicable, this sale may generate a capital gain for the operator, equal to the difference between the sale proceeds and the net book value.

##### Property and land assets

Within the tariff framework set out in the ATRD6 tariff, in the case of a transfer of property assets or land:

- if the sale gives rise to a capital gain, 80% of the proceeds from the sale, net of the net book value of the assets sold, are included in the CRCP, so that network users benefit from most of the gains from the resale of these assets, insofar as these users have borne the acquisition costs (the operators' authorised revenue covers the annual depreciation and remuneration of the RAB assets), while preserving an incentive for the operator to maximise this gain. The latter retains the remaining 20% of the profit;
- a sale giving rise to an accounting loss will be examined by CRE, on the basis of a substantiated case presented by the operator.

In its public consultation, CRE envisaged renewing the regulatory framework for property assets and land sold under the ATRD6 tariff. The inclusion of capital gains on disposals in the tariff is justified, given that the tariff has helped to finance the assets concerned. The majority of participants are in favour of this extension.

Consequently, CRE has decided to renew this regulatory framework for the property assets and land sold for the ATRD7 period.



## 2.2.3 Revenue and expenditure control account

### Calculation and clearance

The level of the ATRD tariff is set by CRE on the basis of assumptions about the forecast level of costs and revenues for each operator. A subsequent adjustment mechanism, the revenue and expenditure adjustment account, has been introduced to take all or part of the differences between actual revenue and expenditure and forecast revenue and expenditure, on predefined items. The CRCP therefore protects operators from variations in specific cost or revenue items by offsetting specific deficits and also protects consumers by allowing specific surpluses to be passed on. It is also used for the payment of financial incentives resulting from the application of incentivising regulation mechanisms, calculated on the basis of observed results.

Calculated on 31 December of each year N, the CRCP is cleared, within the limit of an annual tariff increase of +/- 2% for the ATRD6 period. If this limit is reached and the balance of the CRCP cannot be fully cleared in the tariff changes for year N+1, the balance not cleared in year N+1 is carried forward to year N+2. In addition, the balance of the CRCP recorded at the end of the tariff period is taken into account when establishing the authorised revenue for the following period. The CRCP balance is reset to zero at the beginning of each tariff period.

The +/- 2% cap has been used for several periods in most electricity and gas network tariffs, as it gives market stakeholders good visibility over the trajectory of tariffs over the four-year tariff period. It has been running smoothly for over 10 years.

However, the gas crisis at the end of the tariff period led to a very high CRCP for GRDF, due in particular to the rise in energy prices, inflation and the fall in gas consumption. This observation has led operators, in particular GRDF, to request a review of the clearance procedures during the annual changes.

A majority of respondents to the public consultation, including infrastructure operators, were in favour of adjusting the CRCP clearance cap to +/- 3% because of the high level of uncertainty surrounding specific expense items covered by the CRCP (particularly energy expenses and assumptions about gas consumption, in a context of falling demand). CRE considers that a cap of +/- 3% makes it possible to reconcile the targets of maintaining a satisfactory level of tariff stability over the tariff period and of better clearing the CRCP. In the light of these factors, CRE has decided to raise the limit for annual tariff changes associated with the CRCP to +/- 3%.

If this clearance limit is reached and does not allow the CRCP balance to be cleared in full in the tariff changes for year N+1, the balance not cleared in year N+1 is carried forward to year N+2. In addition, the balance of the CRCP recorded at the end of the tariff period will be taken into account when establishing the authorised revenue for the following period.

### Financial neutrality of the scheme

In order to ensure the financial neutrality of the scheme, the balance of the CRCP on 1 January of year N+1 is obtained by discounting the balance of the CRCP on 31 December of year N. Since the introduction of the CRCP mechanism in ATRD3, ATS1 and ATRT3, this discount rate has been defined as the risk-free rate.

Due to a large forecast CRCP balance at the end of the period, several operators have requested a change in this parameter. GRDF has requested that the discount rate correspond to the nominal pre-tax WACC or the nominal cost of debt, as it considers that it will have to bear financing costs pending clearance of the CRCP. Teréga requested a discount rate of 3.30%, including a risk-free rate and a "comfort premium", which is a specific adjustment to the yield on government bonds.

CRE points out that the return of the CRCP balance is always guaranteed, regardless of its level. In addition, the CRCP balance will be cleared, one way or the other, in the relatively short term. Accordingly, the level of long-term risk included in the WACC or the cost of debt is not relevant for discounting the balance of the CRCP. CRE accordingly considers that the risk-free rate remains the relevant parameter for discounting the balance of the CRCP.

In its public consultation, CRE proposed using the risk-free rate applied to new assets to discount the balance of the CRCP, in line with the new framework for remuneration of assets (see section 2.2.2.3) and the rate at which the CRCP is cleared. The new method for determining the WACC takes into account a risk-free rate based on historical parameters and a risk-free rate based on short-term data, which apply to historical assets and new assets respectively.

Some of the respondents to the public consultation, including infrastructure suppliers and operators, were in favour of CRE's proposal in the public consultation, i.e. to discount the CRCP at the short-term risk-free rate.

Some participants (mainly infrastructure operators) are in favour of remunerating the CRCP at the WACC, in order to offset financing costs pending clearance of the CRCP balance.

Other contributors are calling for the CRCP to be remunerated at the cost of debt, in order to offset the cost of debt for network operators who can use this financial leverage while waiting for the CRCP balance to be cleared.

CRE is maintaining its analyses presented in the public consultation and reiterated above and has decided to discount the balance of the CRCP at the risk-free rate applied to new assets during the ATRD7 tariff period, i.e. a rate of 3.8%.

## **2.3 Tariff calendar**

### **2.3.1 A four-year tariff period**

The ATRD6 tariff has been set for a period of around four years. In the public consultation, CRE envisaged maintaining this duration for the ATRD7 tariff.

In their responses to the consultation of 12 October 2023, the market participants stated that they were in favour of maintaining this period of around four years, considering, as CRE does, that it gives the market visibility over changes in infrastructure tariffs and gives operators the time they need to make efforts to increase productivity.

The ATRD7 tariff will accordingly apply for approximately four years, starting on 1 July 2024. It is intended to cover expenses for the calendar years 2024 to 2027. It is adjusted annually, on 1 July of each year, in accordance with the terms and conditions described in 2.3.3 of this deliberation.

### **2.3.2 Review clauses**

#### Mid-period review clause

As with the previous tariff, the ATRD7 tariff includes a review clause that GRDF can activate after two years.

Thus, the possible consequences of new legislative or regulatory provisions or of a court or quasi-judicial deliberation may give rise to a review of the tariff path for the last two years of the tariff period (2026 and 2027) if the level of net operating costs used in the ATRD7 tariff is modified by at least 1%.

#### Review clause on the impact of the future regulation on the reduction of methane emissions in the energy sector

The ATRD7 tariff also includes a review clause to take account of the additional costs that could be incurred as a result of the future European regulation on reducing methane emissions in the energy sector. In view of the remaining uncertainties about the nature of the measures that will be imposed on GRDF and the other gas infrastructure operators and about the resulting costs, CRE has decided not to set an anticipatory cost trajectory for this item. Once the regulation on the reduction of methane emissions has come into force, GRDF will be able to request a review of its trajectory for net operating expenses to take into account any new costs directly incurred as a result of this regulation. GRDF will submit a duly substantiated dossier to CRE. Where appropriate, CRE may also provide incentives for these measures.

### 2.3.3 Terms and conditions for annual tariff changes

#### Timetable for changes in tariff terms

Since the ATRD3 tariff came into force in 2009, GRDF's gas distribution tariff has changed on 1 July each year.

#### Annual change in tariff terms

Net operating costs, normative capital costs, the number of customers, the quantities of gas distributed and capacity subscriptions can all change significantly from one year to the next. To avoid excessively unpredictable changes in network usage tariffs, CRE has adopted a mechanical annual change for the ATRD6 tariff:

$$Z = IPC + X + k$$

Where:

- *Z* is the variation in the price scale at 1 July of year N expressed as a percentage and rounded to the nearest 0.01%;
- *IPC* is, for an adjustment of the tariff schedule on 1 July of year N, the forecast inflation rate for year N taken into account in the Finance Act for year N;
- *X* is the annual growth factor on the tariff grid set by CRE in these tariff deliberations, equal to - 1.9%;
- *k* is the percentage change in the tariff schedule resulting from the clearance of the CRCP balance; *k* is between +2% and -2%.

In the light of the responses to the public consultation and in response to GRDF's requests to improve the rate at which the CRCP is cleared in a more uncertain economic context, CRE has adopted two changes for the ATRD7 tariff:

- to take better account of the effect of inflation, the annual tariff update for year N will take into account the correction for the difference in inflation for year N-1 between the forecast in the Finance Act (PLF) for year N and the actual level as calculated by INSEE;
- the cap on *k* balancing factors is set at +/- 3%, compared with +/- 2% during the ATRD6 tariff period, as indicated in section 2.3.4.

As a result, GRDF's ATRD7 tariff will change annually, from 2025, on 1 July each year, according to the following principles:

- a) the level of the tariff grids (excluding the *R<sub>f</sub>* term) for the residual meter reading tariff component and the tariff terms for the injection of renewable and low-carbon gas changes on 1 July of each year N by the following percentage variation, compared to the level of the tariff in force on 30 June of year N:

$$Z = IPC + X + k$$

Where:

- *Z* is the variation in the price scale at 1 July of year N expressed as a percentage and rounded to the nearest 0.01%;
- *CPI*: the forecast rate of inflation excluding tobacco for year N taken into account in the Finance Act for year N plus the difference between actual inflation for year N-1 as calculated by INSEE<sup>12</sup> and the forecast rate of inflation excluding tobacco for year N-1 taken into account in the Finance Act for year N-1;
- *X* is the annual growth factor on the tariff grid set by CRE in the present tariff deliberation, equal to + 1.91%. It corresponds to the forecast gradual attrition of the gas consumption base during the ATRD7 tariff and makes it possible to limit the risk of a growing gap between revenues and expenses to be covered at the end of the tariff period (see section 3.3.1);

<sup>12</sup>Actual inflation for year N-1 is defined as the change in the average value of the consumer price index excluding tobacco for all households in France (INSEE reference 1763852) recorded over calendar year N-1, compared with the average value of the same index recorded over calendar year N-2.

- $k$  is the percentage change in the tariff schedule resulting mainly from the clearance of the CRCP balance;  $k$  is between +3% and -3%;
- b) the term  $R_t$ , defined in accordance with the terms set out in CRE Deliberation no. 2017-238 of 26 October 2017<sup>13</sup>, changes each year in line with inflation;

In addition, CRE may take into account changes in GRDF's incentivising regulation of quality of service and unit investment costs (addition, modification or deletion of indicators, targets or financial incentives) in the annual changes to GRDF's ATRD7 tariff.

### 2.3.4 Calculation of the CRCP balance on 1 January of year N

The overall balance of the CRCP is calculated after the final closing of GRDF's annual accounts. It is equal to the amount to be paid into or deducted from the CRCP for the previous year (year N-1) plus the balance of the CRCP outstanding from previous years.

The amount to be paid to or deducted from the CRCP is calculated by CRE, on 31 December each year, on the basis of the difference between the actual figures for each item concerned and the reference amounts defined in Annex 1. All or part of the difference is paid into the CRCP, the share being determined on the basis of the cover rate set out in this deliberation.

The cost and revenue items covered in whole or in part by the CRCP for the ATRD7 period are set out in paragraph 2.3.3 of this deliberation. The accounting data presented by GRDF will be used as the basis for the expenses and revenue taken into account through the CRCP, where possible. Where appropriate, the recognition of the various items through the CRCP will be accompanied by checks on the effective and prudent nature of the expenses incurred. These checks may focus, in particular, on the investments made by GRDF and the charges for losses and differences. The financial consequences of the audits performed by CRE will be taken into account through the CRCP.

The forecast balance of the CRCP on 31 December 2023 is taken into account in the calculation of the forecast revenue for the ATRD7 tariff and will be cleared over the 4 years of the tariff. The CRCP balance on 1 January 2024 is equal to the difference between the definitive CRCP balance (which will be set after GRDF closes its 2023 accounts) and the forecast balance taken into account in the ATRD7 tariff. This difference will be taken into account in the rate increase on 1 July 2025. The reference amounts and cover rates used to calculate this final balance are defined in GRDF's ATRD6 tariff deliberation of 20 January 2020.<sup>14</sup>

### 2.3.5 Calculation of the $k$ coefficient for clearing the CRCP balance

#### Calculation of the forecast CRCP balance at 1 July of year N

At the time of the annual tariff update for year N, the CRCP balance is calculated on 1 January N, based in particular on data from GRDF's accounts, whereas the annual adjustment takes place on 1 July of year N. During the six months between these two dates, there may be differences between the forecast revenue provided for in the tariff deliberation and the revised revenue from actual tariff changes, which would modify the CRCP balance initially recorded on 1 January (due to the adjustment provided for in the previous annual change). To take account of these differences, CRE calculates a forecast CRCP balance at 1 July N by calculating the forecast clearance allowed by the level of revenue between 1 January and 1 July N.

#### Calculation of the $k$ coefficient

The change in the annual tariff level, at 1 July of year N, takes into account a coefficient  $k$  which aims to clear, at 30 June of year N+1, the balance of the CRCP forecast at 1 July of year N. The coefficient  $k$  is capped at +/- 3%, as defined in section 2.3.3.

The coefficient  $k$  is determined in such a way that the tariff increase effectively implemented makes it possible to cover, within the limit of the coefficient  $k$  cap, the sum of the following costs to be covered:

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<sup>13</sup>Deliberation no 2017-238 of the Energy Regulatory Commission of 26 October 2017 amending the deliberations of the CRE of 25 April 2013, 22 May 2014 and 10 March 2016 on the equalised tariffs for use of the public natural gas distribution networks

<sup>14</sup>Deliberation no 2020-010 of the Energy Regulatory Commission of 23 January 2020 deciding on GRDF's regulated tariff for use of the public natural gas distribution networks

- the provisional smoothed authorised revenue for year N defined in this deliberation;
- the forecast clearance of the CRCP balance in year N.

The forecast revenue resulting from the application of the tariff schedules actually implemented over this period is based on the quantities of gas distributed and injected and the number of consumers served and producers connected, as forecast in this deliberation.

## 2.4 Incentivising regulation of control costs

### 2.4.1 Incentivising regulation of operating costs

The ATRD6 tariff provided for a 100% incentive on net operating costs, with the exception of specific predefined items that are difficult for GRDF to forecast or control.

In view of the positive results of the previous tariff periods and the favourable assessment of stakeholders expressed in the public consultation of 12 October 2023, CRE is renewing this principle for the ATRD7 tariff.

Thus, with the exception of the types of expenses and revenues covered in whole or in part by the CRCP, presented in 2.4.2 of this deliberation, any deviations from the trajectory set for the ATRD7 period will be borne respectively by or for the benefit of the operator.

### 2.4.2 CRCP cover of specific revenue and expense items

Network tariffs are calculated on the basis of assumptions about costs and revenues, which make it possible to define development paths for the various items. As indicated in section 2.2.3 of this deliberation, the CRCP is an adjustment mechanism that allows GRDF to take into account the differences between actual revenue and expenditure and forecast revenue and expenditure on specific previously identified items that GRDF cannot predict or control.

CRE considers that the inclusion of an item in the CRCP should be assessed in the light of the following two criteria:

- predictability: a predictable item is one for which it is possible, for the operator and for CRE, to forecast with reasonable confidence the level of costs incurred and revenues received by the operator over a tariff period;
- control: a controllable item is one for which the operator is in a position to control the level of expenditure/revenue over the course of a year, or has the power to negotiate or influence its level, if it comes from a third party.

These principles have been in force for several tariff periods and are widely supported by the stakeholders who responded to the public consultation. In addition, the tariff treatment cannot be reduced to a single alternative for covering the item, between 100% and 0% on the CRCP. Accordingly, for specific items that cannot easily be controlled and/or predicted, CRE considers that it is appropriate to give operators partial incentives.

In its public consultation, CRE envisaged several changes in relation to the ATRD6 period concerning the cover of GRDF's revenue and expenses by the CRCP:

#### Expenses for energy benefits in kind (EBK)

Employees of the Electricity and Gas Industries (EGI) and pensioners who have worked for at least 15 years in this industry, which includes GRTgaz, Storengy and GRDF, enjoy a preferential tariff for gas and electricity (known as the "agent tariff"). In return, every company in the electricity and gas industry that has employees with electricity and gas industry status pays EDF and Engie an amount each year to cover the difference between the agent tariff and the cost that these two companies indicate they incur in supplying energy to agents.

Under the ATRD6 tariff, these expenses were fully incentivised, as were the majority of operating expenses. GRTgaz and Storengy have asked for these costs to be 100% covered by the CRCP for the ATRD8 tariff period, given the uncertainties surrounding electricity and gas prices. GRDF has requested that the differences due to price effects, i.e. the differences between the reference electricity and gas tariffs chosen by EDF and ENGIE and the electricity and gas tariffs set for EGI agents, be covered by the CRCP for the ATRD7 tariff period.

As the amount of the payments made by the gas infrastructure operators to EDF and Engie is set under a contract negotiated between the various companies concerned, CRE proposed in its public consultation to maintain an incentive-based regulatory framework for this offset. In the consultation, CRE also envisaged maintaining an incentive based on the volumes of energy consumed, in line with the energy sobriety targets set by the government.

A large number of participants cite the unpredictable and uncontrollable nature of energy prices as a reason for covering EBK costs through the CRCP. Nevertheless, some participants accept CRE's analysis and argue that maintaining this incentive is justified in the context of the policy of energy sobriety.

CRE has decided to maintain the incentive on the "volume" part of the EBK charges, considering that it can to some extent be controlled and predicted by GRDF in that the distribution system operator (DSO) can, in particular, take action to encourage beneficiaries of the agent tariff to adapt their energy consumption and that the national efforts to reduce consumption promoted by the public authorities also apply to the latter.

With regard to price effects, CRE has decided to cover 100% of the CRCP for effects linked to changes in energy market prices and taxes. For the tariff period, it applies a reference price for electricity and gas based on recurrent and objective publications:

- for electricity, CRE applies the regulated electricity sales tariffs (excluding the effects of the tariff shield);
- for gas, it applies the benchmark selling price of gas, adapted to the average consumption of beneficiaries of the agent tariff (excluding the effects of the tariff shield).

The price difference between the forecast trajectory and this reference, recorded *retrospectively* each year, will be covered 100% by the CRCP. However, differences resulting from the choice of a price reference for calculating the EBK that differs from the one adopted by CRE will not be covered. The calculation methods are described in the confidential Annex 6 to this deliberation.

#### Tariff revenue

In its tariff application, GRDF requested that revenue linked to "subscription" tariff terms be at least partially covered by the CRCP, since they cannot be controlled.

In previous tariffs, including ATRD6, only the revenues received by GRDF on tariff terms proportional to the quantities of gas transported (and to capacity subscriptions since ATRD6) were 100% taken into account in the CRCP. GRDF was accordingly not exposed to the risk of variations in total consumption with a constant consumer base, but was incentivised by the number of consumers connected to its network.

In the context of the energy transition, fossil gas consumption needs to be sharply reduced and "green" gases will only be able to compensate for part of this reduction. In the public consultation, CRE considered that GRDF should no longer be incentivised on the basis of the number of customers connected and envisaged to take 100% of the difference between forecast and actual revenue from subscription terms into account in the CRCP, including the standardised flow rate term introduced for the ATRD7 tariff.

The majority of respondents to the consultation welcomed this proposal.

CRE has decided to cover 100% of GRDF's tariff revenue (excluding revenue from residual meter reading) in the CRCP.

#### Non-tariff revenue from ancillary services for the injection of renewable and low-carbon gas

In its tariff application, GRDF requested that revenue from ancillary services for the injection of renewable and low-carbon gas be fully covered by the CRCP. The services in question include studies (including the "Detailed Study" service), gas quality analysis and the "Injection Service". GRDF considers that these services are equivalent to the recurrent services of renting out substations to gas consumers and that there is uncertainty about the future of the sector.

Given the nature of these services, which comply with a regulatory provision (e.g. the "Detailed Study" service), or are of a recurrent nature (rental of the injection block), which are already covered by the CRCP for services to consumers and given their poor predictability over the ATRD7 period, CRE considered during the public consultation that these charges should be covered 100% by the CRCP.

The majority of stakeholders consulted responded favourably to this proposal. CRE has decided to cover 100% of the CRCP for non-tariff revenue from ancillary services for the injection of renewable and low-carbon gas by GRDF.



Consequently, the items included in the scope of the CRCP for the ATRD7 tariff are as follows:

Items fully covered by the CRCP

The difference between the forecast inflation taken into account by CRE for net operating costs and the inflation actually recorded is covered in full by the CRCP.

The expenses fully covered by the CRCP are as follows:

- capital costs borne by GRDF, 100% taken into account, with the exception of those covered by the incentivising regulation mechanism for "off-network" capital costs, for which only the inflation differential is taken into account;
- expenses relating to the consideration paid by GRDF to suppliers for the management of single-contract customers in accordance with the terms and conditions set out in CRE Deliberation no. 2017-238 of 26 October 2017, referred to above, 100% taken into account;
- expenses created through non-payment by customers on their transmission share, which are *ultimately* borne by GRDF in their entirety from 2016 and for customers on a market offer for the period prior to 31 December 2015, 100% taken into account;
- the repayment made by GRDF to the transmission system operators (TSOs) in respect of the share of the biomethane injection charge collected from producers connected to the distribution network, intended to cover the OPEX associated with the recharges, pipelines and indirect costs of the TSOs (see section 4.2.3), 100% taken into account in the CRCP;
- stranded costs or capital losses on disposals dealt with on a case-by-case basis and approved by CRE, covered at 100% by the CRCP;
- operating costs linked to the application of the European regulation on reducing methane emissions, the trajectory of which will be set by CRE once the regulation has been adopted.

The following products are fully covered by the CRCP:

- tariff revenues collected by GRDF 100% taken into account, with the exception of revenues associated with the residual meter reading term;
- revenue received by GRDF from third-party contributions and revenue generated by other recurrent services invoiced (e.g. meter rentals), in particular revenue from ancillary services relating to the injection of renewable and low-carbon gas, 100% taken into account. This is because the corresponding revenues are significant, the volumes involved are difficult to predict and a large proportion of the corresponding costs are generated by capital expenditure covered by the CRCP;
- penalties levied by GRDF for exceeding subscribed capacity for consumers benefiting from options T4 and LT, paid at 100%, so as to ensure the financial neutrality of the penalty system for GRDF;
- revenues received by GRDF from other ancillary services in the event of a change in the tariffs for these services during the tariff period, in order to neutralise the effect of the tariff change on GRDF's revenue, when this change is different from that resulting from the annual indexation formulas for the tariffs for these services, including non-tariff revenue from ancillary services relating to the injection of renewable and low-carbon gas.
- the repayment made by the transmission system operators (TSOs) to GRDF in respect of the "capacity" term of the injection charge, collected from producers connected to the transmission systems, as part of GRDF's indirect costs (see section 4.2.3), 100% taken into account in the CRCP.

Items partially covered by the CRCP

- energy costs: the annual reference trajectory is revised once the volume of consumption is known. To encourage GRDF to keep these costs under control, 80% of the difference between this new reference amount and GRDF's actual costs is covered by the CRCP;
- capital gains realised on the disposal of property or land, 80% of which is recognised in the CRCP;



- the differences in GRDF's energy benefit-in-kind expenses linked exclusively to price differences in relation to the electricity and gas price benchmark adopted by CRE are 100% covered by the CRCP (see confidential Annex 5); the remainder of these expense differences is not covered by the CRCP;
- costs relating to the "Gas Change" project<sup>15</sup>:
  - 80% of "IS-communication-management" costs are included in the CRCP;
  - the costs of "intervention at the consumer's premises" and the costs of replacing incompatible appliances are taken into account at 80% in the CRCP for differences in unit costs and at 100% for differences in conversion volume;
  - the costs associated with the conversion of inactive customers are 100% taken into account in the CRCP.

In addition, the bonuses and penalties resulting from the various incentivising regulation mechanisms described in the following sections (incentivising regulation of investment in 2.4.3, incentivising regulation of quality of service in 2.5 and incentivising regulation of research and development (R&D) and innovation in 2.6 of the deliberation) are paid to or collected from GRDF through the CRCP.

### 2.4.3 Investment incentivising regulation

For the ATRD7 tariff, CRE is renewing the general principle of 100% cover, through the CRCP, of the differences in capital costs between the forecast trajectories and the actual trajectories and of mechanisms to encourage efficiency in GRDF's capital expenditure.

CRE is renewing the two mechanisms in force in the ATRD6 tariff (unit network investment costs and "off-network" investment expenditure), with minor adjustments and is introducing the principle of a multi-year investment budget to encourage GRDF to control and prioritise its investments in a context of falling gas consumption.

#### 2.4.3.1 Unit costs of network investments

The ATRD6 tariff provided for an incentivising regulation mechanism for the unit costs of network investments in order to ensure that GRDF, as an efficient network operator, optimises the costs of network investments performed under its control, without compromising the choice and execution of the works necessary for the operation and safety of its network.

The mechanism is based on the definition of a reference cost model for the facilities commissioned by GRDF, taking into account their technical characteristics and a trend in costs over time.

For each year of the ATRD6 period, CRE evaluated the difference between the total cost of the facilities commissioned and theoretical total cost of those same facilities, calculated on the basis of the reference unit cost model applied to the volume of investment actually performed.

This difference, whether positive or negative, reflects the efficiency of the operator for the volume of investment actually made. It is shared between the operator and network users:

- the investments concerned are included in GRDF's regulated asset base at their real value, subject to any checks that CRE may carry out on the efficient and prudent nature of the costs incurred. The capital costs associated with these investments are thus still covered on the basis of actual expenditure. In this way, the end consumer benefits from or covers the operator's performance over the lifetime of the asset through lower or higher CCNs;
- a bonus or penalty equivalent to 20% of the difference between theoretical total cost corresponding to the volume of works performed and the actual total cost recorded is then applied through the CRCP. This mechanism accordingly has the effect of encouraging GRDF to control its unit investment costs, without calling into question the volume of investments made. This annual incentive is capped at +/- €9m.

Within each of these 13 categories, the cost of each investment is modelled by:

- a fixed part (which does not depend on the year of commissioning);

<sup>15</sup>Deliberation no. 2021-41 of the Energy Regulatory Commission of 11 February 2021 concerning the draft decision on the regulatory framework applicable to the industrial phase of GRDF's B-gas network conversion project

- a variable part based on the length of the pipeline concerned and/or the number of units (which does not depend on the year in which it was commissioned);
- an annual coefficient for the average increase in unit costs (identical for all categories of works and changing each year).

Over the ATRD6 period, this mechanism covered most of GRDF's network investments. GRDF's investments covered by this mechanism fall into 13 categories and represented a total of €411 million in 2020, out of a total of €715 million excluding the Gazpar project, i.e. around 57%.

In its public consultation, CRE presented an assessment of the incentivising regulation of unit investment costs for the ATRD6 period. In the light of this feedback, CRE has proposed that the scheme be renewed, with some minor changes. The vast majority of contributors to the public consultation were in favour of maintaining the system and the changes proposed by CRE, considering that it encouraged GRDF to optimise its investments in the networks, without reducing the volume, for the benefit of end consumers.

### **Adaptations to the scheme for the ATRD7 period**

For the ATRD7 period, CRE is renewing the incentivising regulatory system for unit network investment costs, with the adjustments described in the following sections.

#### **Reference level 2020-2022**

GRDF requested that the reference unit costs for the ATRD7 tariff period be based on the definitive costs for 2022 and 2023 (which will be known at the end of 2025 or start of 2026), considering that the years 2020 and 2021 are insufficiently representative due to the Covid-19 crisis. In the public consultation, CRE expressed its reservations about this request, considering that it would amount to setting targets retrospectively for the years 2024 and 2025. CRE also pointed out that the impact of the health crisis on unit costs in 2020 and 2021 was moderate (1.5%) and accordingly proposed to maintain the current methods for determining the unit cost benchmark, i.e. based on the final costs observed in 2020, 2021 and 2022.

Some participants expressed their opposition to CRE's proposal, considering that these reference years were not representative of the inflationary context from mid-2022 and future cost increases. However, one stakeholder spoke in favour of this reference, considering that the years 2020 and 2021 were not sufficiently atypical to change the current rules.

CRE considers that the 2020-2022 benchmark is not unfavourable to GRDF, insofar as it takes into account the economic consequences of the health crisis observed in 2021 and 2022 and specific cyclical effects that GRDF considers to be directly linked to the deterioration in its performance in 2022 (in particular the increase in work in urban areas linked in particular to the Olympic Games and the Grand Paris Express).

For the ATRD7 tariff period, CRE makes use of the years 2020 to 2022 to adjust the costs associated with each incentive category. However, CRE is introducing the possibility of updating, at its own initiative, the reference level halfway through the ATRD7 period, depending on observed changes in the cost environment in incentivising regulation over 2023 and 2024.

The values of the parameters and the annual coefficients for the average increase in unit costs are defined in a confidential annex to this deliberation.

#### **Incentivised investment segments**

GRDF also requested that several investment categories be merged, considering that they were very similar in terms of the nature of the operations or the cost drivers.

CRE considers that two of these categories can be effectively merged ("Renewal of connections (and associated networks)" and "Renewal of networks (and associated connections)") into a single category "Renewal of networks and connections", as they have similar unit costs and cover similar technical operations and materials.

However, it considers that merging the other four categories ("Connection of housing estates", to be merged with "ZI ZAC ZA"; and "Connection - 6 and 10 m<sup>3</sup>/h - with extension > 35m" to be merged with "Connection - 16 m<sup>3</sup>/h and more - with extension") would result in a loss of visibility for GRDF's performance. In particular, the sectors of activity associated with these categories (residential and tertiary respectively) will experience differing dynamics

during the forthcoming tariff period, as shown by the forecast trajectory of customers and quantities of gas transported (see section 3.2).

The participants who expressed their views on this point are in favour of merging investment categories that have strong similarities. For the incentivising regulation and for the ATRD7 period, CRE has decided to merge the "Connection renewal (and associated networks)" and "Network renewal (and associated connections)" categories and to maintain the distinction for the four other investment categories mentioned above, for which it considers that the differences observed justify it.

One contributor to the public consultation also considered that it would be appropriate to include more explicitly investments linked to the development of green gas. For the ATRD7 period, CRE is introducing the monitoring, without financial incentives, of a new "Mesh" investment category, in addition to the "Connection of biomethane production site" category also introduced without financial incentives in the ATRD6 tariff. This will make it possible to study the introduction of a financial incentive under the ATRD8 tariff for these two categories of investment linked to biomethane.

#### **2.4.3.2 Encouraging cost control for "off-network" investments**

Operators of gas distribution and transmission infrastructures are encouraged to control their normative capital costs in the same way as their operating costs within a perimeter of "off-network" costs including assets such as property, vehicles and information systems (IS). For GRDF, this regulatory framework was introduced in the ATRD5 tariff and renewed for the ATRD6 tariff.

By their very nature, these expense items are likely to give rise to trade-offs between investment and operating costs. This mechanism encourages operators to optimise all of their charges across these three cost items. It consists of defining, for the tariff period, the trajectory of changes in capital charges, which are excluded from the scope of the inflation-adjusted CRCP<sup>16</sup>. Any gains or losses are accordingly 100% retained by the operator during the tariff period. At the end of the tariff period, the actual value of the fixed assets is taken into account in the RAB, so that gains or additional costs can be shared with infrastructure users in subsequent tariff periods.

In its public consultation, CRE proposed to renew the incentivising regulation mechanism to control "*non-infrastructure*" investments, considering that feedback from the last tariff periods showed that this regulation mechanism was an effective incentive for operators to control their costs. However, CRE was considering changing this by including the "SAP S/4HANA" project in the scope of the "base" of incentivising regulation, having noted that its implementation had begun in 2023 and that a significant proportion of the resources had already been committed (nearly €20m), so that the situation no longer justified excluding the project from the scope of the incentivising regulation framework for the ATRD7 period.

In addition, CRE identified two projects that had been partially shifted from the ATRD6 period to the ATRD7 period and for which GRDF was again requesting a forecast cost trajectory (remote operation and OSCAN). As these projects are due to be performed or continued over the ATRD7 period, CRE planned to restate the normative capital charges associated with the two projects that were partially postponed from the ATRD6 period to the amounts of GRDF's forecast trajectory for the ATRD7 period.

A majority of respondents were in favour of extending the mechanism for the ATRD7 period. However, some participants questioned the relevance of including specific IT projects, particularly in view of the challenges of digitising the network and the economic and operational scale of specific projects. In particular, GRDF considered that the schedule risks associated with the SAP S/4HANA project justified keeping the project "off-base" for the ATRD7 period. Some suppliers, on the other hand, felt that it was not appropriate to exclude specific projects from the base.

CRE considers that IS expenditure as a whole, including that linked to the SAP S/4HANA project and cybersecurity expenditure, should continue to be incentivised in the same way as other off-network expenditure, due to the possibility of trade-offs between investment and operating costs.

Consequently, for the ATRD7 tariff, CRE is renewing the incentivising regulation mechanism to control GRDF's "off-network" investments and is reinstating within the scope of the mechanism all the projects that were excluded during the ATRD6 tariff.

CRE is also adjusting the forecast normative capital charges for the amounts not spent during the ATRD6 period on the two projects that were partially postponed to the ATRD7 period, totalling €3.9m.

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<sup>16</sup>Framework applied only to the scope of items relating to vehicles and property for Teréga.

During the ATRD7 period, the capital charges for the incentivised "*non-infrastructure*" assets will be calculated on the basis of the forecast values defined in section 3.1.4.3 of this deliberation. At the end of the tariff period, CRE will carry out an analysis of the commissioning trajectories of the investments concerned to ensure that any gains made during the tariff period are not offset by higher costs for subsequent tariff periods, for example because of delays in specific projects.

The estimated amount of "*off-network*" investments subject to this incentivising regulation for GRDF is €662.9 million over the ATRD7 period (€165.7 million per year on average, around 15% of the total investments planned in the operator's trajectory for the ATRD7 tariff).

### 2.4.3.3 Incentivising regulation to prioritise investments

In the context of the energy transition, the downward trend in gas consumption, which is faster than that in costs, could lead to a scissor effect on unit tariffs. CRE considers that this context calls for control of network operators' costs and investments. Aside from investments linked to the integration of green gases, network operators should optimise the management of their assets, prioritising their investments on the expenditure necessary to ensure the operation and safety of the network.

In its public consultation, CRE envisaged introducing a mechanism in the ATRD7 tariff to encourage GRDF to control and prioritise its investment volume.

CRE planned to set an investment budget for the tariff period, in line with GRDF's request. Investments in excess of this envelope, apart from those linked to green gas, would give rise to a reduced remuneration for the operator by means of a sharing of the difference in relation to the envelope. GRDF would accordingly be responsible for 20% of this difference, but the investments actually made would nevertheless include the RAB in their entirety.

A majority of contributors to the public consultation were against this proposal. Some participants, in particular GRDF and several gas distribution organising authorities (GDOAs), have pointed out that this mechanism could act as a constraint on GRDF's investments, to the extent that the franchise contracts between GRDF and the franchise-granting authorities include commitments to carry out investments within their franchise perimeter. Some participants also replied that the majority of GRDF's investments are in response to regulatory duties or the implementation of the energy transition, through the connection of biomethane producers and the reinforcement of distribution networks. Finally, some respondents consider that this mechanism goes beyond the powers of CRE and calls into question the powers of the granting authorities in their management of their network assets.

However, some participants consider that in the context of the energy transition, it is essential that franchise contracts are consistent with public policies and that investment is limited to what is strictly necessary to ensure network security and speed up the connection of biomethane. Finally, one participant indicated that, if this mechanism were introduced, a revaluation clause during the tariff period could make it possible to take account of any regulatory changes and the actual price evolution of green gas.

CRE points out that the aim of this mechanism is not to validate GRDF's investments, but solely to provide a regulatory incentive to help GRDF control its overall cost trajectory, which is particularly important in a context of reduced consumption. GRDF may, in fact, exceed this multi-year envelope, but its investments will be fully included in the RAB. In addition, the level of funding envisaged by CRE, which corresponds to the DSO's request, does not call into question GRDF's commitments to the franchise-granting authorities as known and defined in the franchise contracts, nor does it prevent the integration of green gas.

In view of the high stakes involved in the energy transition, CRE is introducing the mechanism envisaged in the public consultation for the ATRD7 period. The investment budget is determined at the level of GRDF's request for the ATRD7 period, i.e. €4,367.1 million in current prices for the period. The total level of the envelope will be adjusted annually according to the volume of low-carbon and renewable gas actually installed. The forecast expenditure for network connections and network reinforcements will be corrected respectively by the expenditure incurred and the expenditure validated by CRE as part of its validation powers. The investments made by GRDF in excess of this envelope will be shared out at the end of the ATRD7 period, with GRDF bearing a penalty equal to 20% of the difference between the trajectory and the actual expenditure. However, any investments actually made will be included in the RAB in their entirety, provided that they are genuinely efficient.

CRE is also introducing a "review" clause, which it can activate after two years if it considers that new legislative or regulatory provisions, or court or quasi-judicial rulings, could have an impact on GRDF's forecast investments. If necessary, CRE may re-examine GRDF's investment trajectory for the last two years of the tariff period.

At the end of the tariff period, CRE will conduct detailed feedback on the implementation of this new system introduced in the ATRD7 tariff.

## 2.5 Incentivising regulation of quality of service

The aim of GRDF's incentivising regulation of quality of service is to improve the quality of service provided to distribution system users in areas considered particularly important for the smooth operation of the gas market.

At two public workshops held on 20 May and 13 September 2023, CRE personnel presented preliminary guidelines on quality of service for biomethane, transmission and metering activities. In its public consultation, CRE then presented an assessment of the system of incentivising regulation of quality of service since 2008, together with proposals for its development. In this consultation, CRE noted in particular that GRDF's quality of service had improved significantly to reach an overall satisfactory level.

In their responses, the market participants shared this positive assessment and approved CRE's approach of pursuing ambitious targets for quality of service.

The quality of service indicators, targets and associated financial incentives are detailed in Annexes 2 and 3 to this deliberation.

### 2.5.1 Review and assessment

For the ATRD6 tariff period, GRDF's quality of service is monitored using 48 indicators, 21 of which are financially incentivised. A number of indicators are dedicated to the specific quality of service of the Gazpar advanced metering project (15 indicators, 6 of which are financially incentivised). These indicators were set by CRE after extensive consultation with market stakeholders, with the aim of improving quality of service and promoting the smooth operation of the market in the light of the challenges of the period.

Financial incentives are based on the establishment of a reference target. GRDF's performance, depending on whether or not it achieves this target, triggers bonuses or penalties. In addition, there is a cap on the latter.

Since 2016, GRDF has produced and published on its website an annual qualitative analysis of its performance<sup>17</sup>.

Since the introduction of quality of service regulation in 2008, GRDF's results have improved significantly and it has achieved a satisfactory level of quality of service overall, demonstrating the effectiveness of the mechanism.

Over the ATRD6 period, GRDF's overall performance was mixed. While the performance of the Gazpar metering system has exceeded the targets set by CRE, CRE has observed that the performance of the indicators associated with the transmission activity has fallen short of the targets. CRE notes in particular:

- with regard to delivery quality indicators:
  - o a performance that fell short of the targets it had set or deteriorated on indicators relating to compliance with commissioning deadlines and the management of data flows (publication of indexes in particular) transmitted to suppliers;
  - o an upward trend in distribution deviation account (CED) amplitudes by supplier and by metering frequency (see section 2.7);
  - o maintenance of the availability of the supplier portal at a high level of performance;
- indicators specific to the Gazpar metering system:
  - o for indicators relating to the measurement and publication of indexes: a downward trend in performance between 2017 and 2020, in line with the increase in the number of Gazpar meters installed, followed by a steady improvement from 2021 onwards to finish above the target set;
  - o for indicators relating to the availability of the customer portal and associated data: a continuous improvement in performance and the sustainable achievement of a level close to 100%;
  - o for the indicator relating to the proportion of meters that are non-communicating (for 3 months or more): difficulty in achieving the 0.5% target set by CRE from the second phase of the project.

This performance is reflected in the bonus/penalty amounts allocated to GRDF since the start of the ATRD6 period in 2020. In terms of financial incentives, GRDF has paid a penalty of €714k on all indicators for the period 2020-

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<sup>17</sup>Documents available here: <https://www.grdf.fr/institutionnel/actualite/publications/suivi-qualite-service-grdf>



2022. This amount breaks down into (i) a penalty of -€3.4m on the quality of service related to GRDF's transmission activity (excluding Gazpar) and (ii) a bonus of +€2.7m on Gazpar performance.

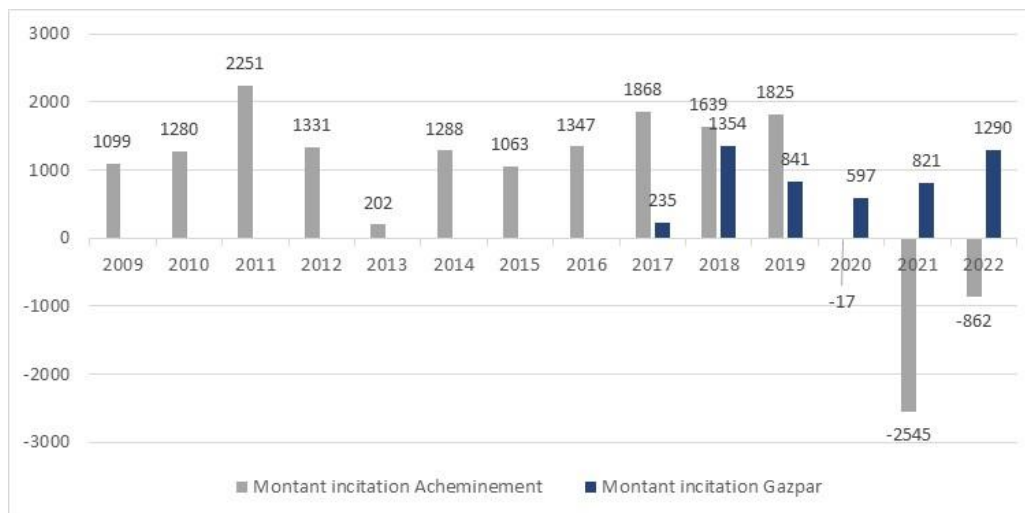


Figure 1. Level of financial incentives since 2010<sup>18</sup>

## 2.5.2 Adapting GRDF's incentivising regulation

In the 15 years since it was introduced, GRDF's incentive-based regulatory framework for quality of service has proved its effectiveness and has reached a high level in recent tariff periods. In addition, despite the slight deterioration observed during the ATRD6 period, GRDF's latest results do not seem to show any shortfall in the levels of the targets associated with each indicator. However, to remain effective, the indicators and associated incentives need to evolve on a regular basis, in line with the results achieved and the new challenges that emerge.

In addition, CRE considers that the decline in gas consumption and in the number of customers must not be accompanied by a deterioration in quality of service. In this respect, with regard to the indicators relating to GRDF's transmission activity (i.e. excluding advanced metering), CRE has identified three priorities:

- meeting deadlines for commissioning and decommissioning services;
- the relationship with the supplier, through the transmission of data necessary for the proper functioning of the market (consumption indexes from advanced meters and other data flows);
- the handling of claims, which is currently the subject of dissatisfaction among stakeholders and which is not achieving the targets set.

In addition, the large-scale rollout of the Gazpar meter in GRDF's territory ended in 2023. With the installation of more than 11 million advanced meters, the meter will make it possible to improve the reliability of consumer invoicing by reading consumption figures remotely. In this respect, the performance of the metering system's communication chain, linking the meters to GRDF's IT infrastructures on the one hand and GRDF's IS infrastructures to the market players (consumers, suppliers, third parties) on the other, must continue to improve.

Finally, the major challenge of the growth of renewable gases in the networks has led CRE to consider strengthening the regulatory framework for quality of service in this area.

To this end, in its public consultation, CRE proposed changes to the incentivising regulatory system for quality of service. Their principal purpose is to strengthen the system by adapting the level of incentives in specific areas and to modify the scope of regulation to take account of changes in GRDF's activities and performance and the expectations and needs of network users.

<sup>18</sup>Incentives excluding compensation paid directly to network users in the event of scheduled appointments not kept by GRDF.

### 2.5.2.1 Indicators relating to GRDF's gas transmission activities

#### Adjusting the incentive level for specific indicators

In its public consultation, CRE proposed adapting the incentive levels for specific indicators relating to the following themes:

- compliance with deadlines for carrying out services relating to the commissioning and decommissioning of metering and estimation points (PCE) and the processing in M+1 of flow rejections (for functional or technical reasons following an automatic check in GRDF's information system) for month M sent to suppliers: CRE has proposed strengthening the system by doubling the incentives to put an end to the deterioration in performance observed over the ATRD6 period;
- "Relations with the supplier", with the introduction of an asymmetrical incentive on the indicator relating to the availability of the supplier portal, with the removal of the bonus. This change is explained by a performance that has been consistently above the reference target set by CRE.

The majority of market participants were in favour of these guidelines. On the other hand, some network operators are opposed to the principle of asymmetric incentives, which they see as "punitive" regulation for the operator.

CRE considers that, given the history of the indicator relating to the availability of the supplier portal (performance of almost 99.95% over the ATRD6 period), the move towards an asymmetric incentive is appropriate. Asymmetrical incentives make it possible to maintain the operator's performance incentive at the level achieved, when it is deemed satisfactory, while avoiding windfall effects.

Consequently, for the ATRD7 period, CRE:

- is doubling the incentive levels for the indicators "Rate of activations (MES) completed within the requested timeframe", "Rate of deactivations (MHS) completed within the requested deadlines" and "Rate of processing rejections for month M in M+1";
- is introducing asymmetric regulation for the indicator "Supplier portal availability rate".

#### Handling claims

In its public consultation, CRE proposed strengthening GRDF's incentives to improve the way it handles claims. CRE has proposed, for the ATRD7 period:

- to encourage GRDF to deal with claims within a single period of 15 calendar days for all claims: GRDF is the only national network operator to offer different incentives for handling claims, depending on where they come from;
- for this indicator, to increase the level of the incentive in line with that of Enedis and to set a target level of 96% (the current target for the indicator measuring the processing, within 15 calendar days, of claims from suppliers);
- to provide financial incentives for the indicator "multiple claims rate". As part of the Gas Working Group (GWG), a number of participants alerted CRE to the increase in "rebounds" following the handling of claims. The purpose of this indicator is to encourage GRDF to improve the quality of its initial responses to claims.

Most market players are in favour of CRE's proposal to encourage GRDF to deal with all claims within a single period of 15 calendar days. GRDF, on the other hand, is opposed to this reform and considers that it would severely restrict its organisation, arguing that the target proposed in the public consultation (96%) is not suited to its current organisation.

CRE estimates that for the ATRD7 tariff period, GRDF will be able to process all its claims within 15 days, as other network operators do. In particular, CRE considers that the end of the large-scale rollout of the Gazpar advanced meter will lead to a reduction in customer claims, particularly those relating to the measurement of meter readings. However, CRE accepts GRDF's view that setting an ambitious target as early as 2024 could generate additional costs. To this end, CRE is adapting the target trajectory by introducing a more gradual trajectory (a target of 93% in 2024 to reach the target of 96% in 2027).

With regard to the indicator for rebound claims, all stakeholders are in favour of the proposal. Some participants are calling for the monitoring of this topic to be extended by introducing, without any associated financial incentive, the monitoring of more detailed indicators (for example, according to the origin or nature of the claim).

CRE considers that the proliferation of indicator monitoring may alter the readability of the incentivising regulatory framework. CRE encourages stakeholders to discuss the monitoring of indicators as part of the GWG consultation process.

Finally, with the large-scale rollout of the Gazpar advanced meter coming to an end, GRDF is requesting that the indicators currently monitored without financial incentive and relating to the volume and rate of claims linked to the rollout of advanced meters be removed.

CRE considers that, to the extent that GRDF already provides the monthly volumes of claims it receives through other monitored indicators (according to origin and nature, including claims related to Gazpar), these indicators provide little useful information and can be deleted.

In the light of these factors, for the ATRD7 period, CRE:

- is introducing an indicator entitled "Rate of response to claims within 15 calendar days" and removing the two indicators entitled "Rate of response to supplier claims within 15 calendar days" and "Rate of response to consumer claims within 30 calendar days";
- is introducing a "Multiple claims rate" indicator;
- is removing the indicators "Number of claims from end customers or suppliers relating to the rollout of smart meters, by type" and "Rate of claims from end customers or suppliers relating to the rollout of smart meters".

### **Amplitude of distribution difference accounts**

In its public consultation, CRE proposed modifying the calculation and incentive methods for the two indicators relating to the amplitude of the distribution discrepancy accounts, specifically:

- to modify the calculation of the CED amplitude indicator (annual volume of CEDs rather than the total of monthly amplitudes);
- to cause the target of the indicator "CED amplitudes by reading frequency and supplier" to evolve.

The majority of contributors are in favour of the changes proposed by CRE.

CRE accepts these proposals for the ATRD7 period and changes the wording of the indicator "Amplitude of distribution deviation accounts (CED)" to "Annual volume of distribution deviation accounts (CED)".

### **Performance of the Gazpar metering system - Access to daily consumption data**

In its public consultation and in the context of the end of large-scale rollout of the Gazpar project, CRE has proposed:

- to raise the level of the target for the indicator relating to the measurement of cyclical indexes on the scope of smart meters to take account of the performance observed over the ATRD6 period;
- to increase incentives (doubling bonuses and penalties) on the "Rate of cyclical indexes calculated 3 times or more" within the scope of smart meters;
- with regard to access to consumption data, to replace the financially incentivised indicator "Rate of provision of data to end customers" with the indicator "Transmission of daily consumption data", with a target of 99%.

Virtually all stakeholders are in favour of CRE's proposals. With regard to the indicator relating to the transmission of daily consumption data, although favourable, some suppliers warned of a discrepancy between the quality of the data received and the result of the indicator concerned, in particular with regard to the completeness of the data. They recommend monitoring other indicators to complete the system, but do not make any concrete proposals. With regard to the target associated with the indicator on the transmission of consumption data, GRDF is requesting for it to be adapted on the basis of past performance.

CRE considers that access to reliable, complete and timely daily consumption data is a major challenge to the success of the Gazpar project. Feedback from stakeholders on this issue shows that incentivising regulation as proposed does not capture all of the DSO's performance in this area.



Consequently, along the lines of the work performed in the electricity sector, CRE is asking GRDF to include this topic in the work programme of the GWG consultation bodies, with a view to developing a consolidated indicator with users by the end of 2025.

With regard to the indicator target, CRE considers that GRDF should eventually achieve a performance of 99% on a weekly basis. CRE has decided to make a marginal adjustment to the level of the target in order to make it more progressive and consistent with the performance observed in 2022. This indicator replaces an existing indicator measuring the performance of the Gazpar metering system. As such, CRE has decided to cap it in accordance with the terms and conditions set out in Annex 3 to this deliberation.

In addition, ongoing work on advanced metering projects by local distribution companies (ELDs) has shown that ELDs are performing well when it comes to publishing monthly indexes. In particular, CRE notes that GRDF's overall performance for this indicator is above the target set by CRE (99.5%). In this respect, CRE considers it appropriate to adapt the target associated with the indicator "Rate of publication of indexes to suppliers within the scope of smart meters" and has decided to set a more ambitious target of 99.7%.

In the light of these factors, CRE has decided, for the ATRD7 period:

- to adjust the target level for the indicator "Rate of publication of meter readings to suppliers within the scope of smart meters";
- to double the incentives (bonuses and penalties) associated with the indicator "Rate of cyclical meter readings calculated 3 times or more within the scope of smart meters";
- to introduce the financially incentivised indicator "Rate of publication of daily consumption data" and to remove the indicator "Rate of provision of data to end customers".

### **Other adaptations**

In its public consultation, CRE also proposed changing the target of the indicator relating to the publication of indexes by OMEGA for 6M readings (i.e. half-yearly readings - consumers not equipped with an advanced Gazpar meter) in order to take account of the reduction in the number of users not equipped with a Gazpar meter.

No participant opposed this development. CRE has accepted this proposal for the ATRD7 period.

Finally, on the basis of past performance, CRE has decided to raise the target for the indicator "Rate of outages (MHS) completed within the requested deadlines" to 96.5%, compared with 95.5% over the ATRD6 period.

### **2.5.2.2 Indicators relating to the injection of renewable and low-carbon gas**

CRE has included the following indicators (which are not financially incentivised) in GRDF's and the ELDs' ATRD6 tariffs:

- deadline for biomethane project developers to respond to detailed studies;
- number of claims following the connection of biomethane installations.

Given the increase in the number of biomethane production sites connected to gas networks, CRE considers that maintaining optimal conditions for these sites is a major challenge for GRDF and network operators in general.

At a workshop held on 10 May 2023 on the ramp-up of renewable and low-carbon gas, CRE asked the participants concerned about the relevant indicators to be taken into account to monitor operators' quality of service.

During the workshop, the participants confirmed the importance of the issues identified by CRE concerning the downward trend in gas consumption, which creates uncertainty about the outlet for renewable and low-carbon gas production. The participants also shared a desire to speed up the connection of installations and to develop flexibility solutions.

In the light of the issues identified and the feedback from the above workshop, CRE has proposed introducing and modifying several quality-of-service indicators dedicated to renewable and low-carbon gas production sites.

In its public consultation, CRE first of all planned to extend the existing indicators to all renewable and low-carbon gases and to provide financial incentives for the two existing indicators in the ATRD6 tariff ("Response time for detailed studies for biomethane project developers" and "Number of claims following connection of a biomethane installation").

CRE was also considering introducing new quality-of-service indicators (without financial incentives) to monitor GRDF's performance in injecting renewable and low-carbon gas into its network more closely. This monitoring is also consistent with GRDF's monitoring of the time taken to connect end consumers ("Compliance with the time taken to connect renewable and low-carbon gas production sites" and "Compliance with the time taken to commission reinforcements associated with the development of renewable and low-carbon gases").

Finally, in its public consultation, CRE envisaged the creation of an indicator relating to the volumes of renewable and low-carbon gas capped. Indeed, CRE has noted uncertainties about the outlet for renewable and low-carbon gas production, due to a downward trend in gas consumption. The indicator envisaged by CRE is designed to monitor changes in the number of zones and producers affected by the capping of their production. The aim would be to analyse the circumstances of local capping (seasonal or intra-monthly modulation, temporal and geographical evolution of the phenomenon, etc.), pending the implementation of network reinforcement investments validated by CRE.

The majority of respondents agree with the ideas put forward by CRE and are in favour of the planned changes. One supplier has asked for the new biomethane indicators that CRE is planning to introduce to be included in the ATRD7 tariff.

In the light of the responses to the public consultation, CRE has decided, for GRDF's ATRD7 tariff:

- to provide financial incentives for two indicators currently monitored, specifically:
  - o the indicator relating to the time taken by project developers to respond to detailed studies;
  - o the indicator relating to the number of claims following the connection of installations;
- to introduce three new indicators for monitoring purposes, without financial incentives:
  - o one indicator relating to compliance with connection deadlines for renewable and low-carbon gas production sites;
  - o one indicator relating to compliance with commissioning deadlines for reinforcements associated with the development of renewable and low-carbon gases;
  - o one indicator relating to the volumes of renewable and low-carbon gas capped.

With regard to the indicator relating to the volumes of renewable and low-carbon gas capped, in the light of the IS developments induced by the introduction of such an indicator, CRE is deferring its introduction until 1 July 2025.

For previous tariffs, CRE has generally introduced new indicators for monitoring without financial incentives, to enable performance data to be collected, reported and analysed before establishing the associated incentive level. Initially, the three new indicators will not be financially incentivised, in order to take account of feedback from the ATRD7 tariff period. These indicators are described in Annex 2 to this deliberation.

**Summary of quality of service indicators with financial incentives for the ATRD7 period**

Indicators relating to transmission activity
Number of scheduled reviews not kept by GRDF
Rate of commissioning completed within the requested deadlines
Rate of decommissioning completed within the requested deadlines
Rate of connections completed within the agreed deadlines
Rate of response to claims within 15 calendar days
Multiple claims rate
Supplier portal availability rate
Annual volume of distribution variance accounts (DVA)
Amplitude of distribution variance accounts (DVA) by reading frequency and by supplier

Rate of publication by OMEGA for DD/MM readings
Publication rate by OMEGA for MM readings
Publication rate by OMEGA for 6M readings
Contractual perimeter deviation rate for alternative suppliers
Processing rate for rejects from month M in M+1
<b>Indicators relating to the injection of renewable and low-carbon gas</b>
Number of claims following the connection of a renewable and low-carbon gas installation
Response time for detailed studies for renewable and low-carbon gas project developers
<b>Indicators relating to the advanced metering system</b>
Rate of publication of meter readings to suppliers within the scope of smart meters
Rate of cyclical meter readings measured within the scope of smart meters
Rate of meter readings based on contractual requests within the scope of smart meters
Rate of cyclical meter readings calculated 3 times or more within the scope of smart meters
Rate of publication of daily consumption data
Customer portal availability rate

### 2.5.2.3 Environmental indicators

The ATRD6 tariff included two environmental indicators, which were not financially incentivised: monitoring of greenhouse gas emissions into the atmosphere (in CO<sub>2</sub> equivalent) in relation to the volume of gas transported and monitoring of methane leaks into the atmosphere.

Given the uncertainties associated with the European regulation on methane emissions, which is being drawn up during the ATRD7 work, CRE has not envisaged any changes to the current indicators.

Nevertheless, it will be able to adapt the regulatory framework associated with these emissions once the European regulation has been adopted (see section 2.3.2). Targets and incentives linked to greenhouse gas emissions can be introduced at the same time.

## 2.6 Incentivising regulation of R&D and innovation

### 2.6.1 Incentivising regulation of R&D

Against a backdrop of rapid change in the energy landscape, network operators need to have the resources they need to carry out their research, development and innovation (R&D&I) projects, which are essential if they are to provide an efficient, high-quality service to users and develop their network operating tools. Network operators have a duty to use these resources efficiently and transparently.

In order to meet these two requirements, R&D&I incentivising regulation is currently based, for all operators, on:

- an asymmetrically incentivised R&D&I cost trajectory, which can be revised at mid-term: at the end of the tariff period, the amounts not spent over the period are returned to consumers, while the cost of trajectory overruns is borne by operators;
- the annual transmission to CRE of technical and financial information on all ongoing and completed projects and the publication of a biennial public report.

In its public consultation, CRE proposed maintaining the incentive arrangements for the ATRD6 tariff, which make it possible not to incentivise operators to choose between saving on their R&D&I expenditure and preparing for

the future. In addition, the update of the mid-term review of the trajectory gives network operators greater flexibility in adapting their R&D&I programme.

Finally, the *smart grids* counter for gas infrastructure operators, introduced for the ATRD6 tariff period, was not used. In its public consultation, CRE proposed not to renew it for the ATRD7 tariff period.

The majority of respondents did not comment on the regulatory framework for R&D&I, but rather on the level of charges in this area (see section 3.1.3). The participants who have expressed their views on this topic are in favour, arguing that the fact that these costs are monitored separately from other costs provides an incentive for operators to carry out the R&D required to prepare for the future with budgetary control.

One participant also thought it might be worth keeping the *smart grids* counter, even if it was not used during the previous tariff period.

CRE has decided to renew the incentivising regulatory framework for innovation and R&D&I for the forthcoming tariff period and to abolish the mid-period *smart grids* counter.

## 2.6.2 Incentivising regulation of innovation: encouraging external innovation

In its various deliberations and topic reports, CRE has made a number of requests to gas infrastructure operators to facilitate innovative uses of their networks. However, the timescales for network operators to implement some of the new measures required by law or requested by CRE are not always satisfactory and are sometimes incompatible with the sector's need for innovation. CRE considers that it is essential that these actions are implemented within the set deadlines, in a context of rapid changes in the gas system.

In its public consultation, CRE proposed to introduce, for the ATRD7 tariff and in GRDF's regulatory framework, the incentivising regulatory system on the deadlines for implementing priority actions that it has put in place for TURPE 6 HTA-BT<sup>19</sup>, TURPE 6 HTB<sup>20</sup> and the ATRD6 tariff for gas ELDs<sup>21</sup>. This system encourages network operators to respect the deadlines for implementing a limited number of actions identified by CRE as "priorities". It sets a deadline for each of these actions and provides for the payment of penalties if these priority actions are not completed within the allotted time.

To ensure that GRDF has the necessary responsiveness for innovation, CRE has specified that this list of priority actions would not be fixed at the start of the tariff period and could be added to throughout GRDF's ATRD7 tariff period in line with legislative and regulatory changes, priority projects identified by CRE and after consultation with market participants.

Most of the participants who gave their opinion on this point were in favour of introducing this system. However, some participants point out that R&D work is often performed over a long period of time and that there is not always a precise timetable for implementing specific actions.

This deliberation thus introduces, for the ATRD7 period, a regulatory system that provides an incentive for GRDF to meet the deadlines for carrying out actions identified by CRE as priorities, based on:

- a shortlist of priority actions to be included in the system: in order to provide the necessary responsiveness for innovation, this list of priority actions will not be fixed at the start of the tariff period and may be added to throughout GRDF's ATRD7 tariff period, in line with legislative and regulatory changes and priority projects identified by CRE and after consultation with market participants;
- a deadline for each action, based on legislative and regulatory instruments where the action is required by these instruments, or established in consultation with GRDF and market participants in the case of actions linked to projects deemed to be anticipatory by CRE;
- the payment of a penalty if these priority actions are not performed within the set deadlines, in that they constitute an obstacle to efficient access to the networks and to the proper functioning of the market. Calculated on a monthly basis, the amount of this penalty is progressive, in order to penalise significant delays more severely. The amounts are as follows:

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<sup>19</sup>Deliberation no. 2021-13 of the Energy Regulatory Commission of 21 January 2021 concerning the tariff for use of the public electricity distribution networks (TURPE 6 HTA-BT)

<sup>20</sup>Deliberation no. 2021-12 of the Energy Regulatory Commission of 21 January 2021 deciding on the tariff for use of the public electricity transmission networks (TURPE 6 HTB)

<sup>21</sup>Deliberation no. 2022-28 of the Energy Regulatory Commission of 27 January 2022 on the equalised tariffs for use of the public natural gas distribution networks by local distribution companies

- for an action implemented within 6 months of the date set by CRE, a penalty of €25,000/month will be applied;
- for an action implemented within 6 to 12 months following the date set by CRE, the penalty is increased to €50,000/month of delay for the months beyond the 6th month;
- for an action implemented more than 12 months after the date set by CRE, the penalty is increased to €100,000/month of delay for the months beyond the 12th month;
- the total amount of all penalties paid by GRDF will be capped at €250,000 per year.

At this stage, no action has been included in this mechanism for the ATRD7 period. Actions may be added to the mechanism during the period by following the process described above.

## 2.7 Incentivising regulation of losses and differences

Losses and differences correspond to the difference between the quantities delivered by the TSOs to the distribution network, the quantities of biomethane injected into the distribution network and the quantities actually invoiced to consumers on this network. They come from:

- the margin of inaccuracy in gas metering at transmission stations at the interface with the distribution network and at customer stations (metering bias), as well as other uncertainties linked in particular to the conversion of volumes read on meters into energy. The conversion of gas volume (in m<sup>3</sup>) into energy quantity (in kWh), based on the chemical composition of the gas, in fact leads to differences between the quantities of gas measured at the transport distribution interface points (DTIP) and the quantities taken into account when reading the meters of end consumers;
- non-technical losses such as fraud, discrepancies between the meter readings recorded when a customer leaves and those recorded when his successor arrives, meter reading errors, errors in invoicing files, etc.;
- technical losses linked to the filling of new networks, the cleaning of facilities before work is performed, damage to facilities in service during works or possible leaks.

### 2.7.1 Description of the system

To compensate for losses and differences, GRDF buys quantities of gas on the wholesale market, corresponding to a theoretical loss rate. These purchases include the item "Losses and differences" (LD), which comprises the following categories:

- energy purchase costs, which are calculated on a forecast basis for the tariff period in the same way as all operating costs. Forecast volumes are valued at forward wholesale prices when the tariff is drawn up. These costs also include the cost of transporting gas from the marketplace (PEG) to the DTIPs;
- the inter-operator account (CIO) between GRDF and the transmission system operators, which is used to regularise metering discrepancies at the DTIPs. The forecast is zero;
- the distribution difference account (CED) with suppliers, which is used to ensure retrospective, on the basis of end-consumer statements, that each supplier actually pays for the gas consumed by its customers (the gas offset being valued at a market price).

The CED is used to record differences between the quantities delivered to customers and the quantities allocated by GRDF.

At the time of the readings, the quantities delivered to customers differ from the quantities allocated: the discrepancies are linked in particular to metering and profiling errors. The situation must then be regularised with the suppliers (reimbursement of the excess quantities of gas transported or invoicing of the missing quantities at the spot price): this is the role of the distribution discrepancy account. There is a CED by supplier and by reading frequency.

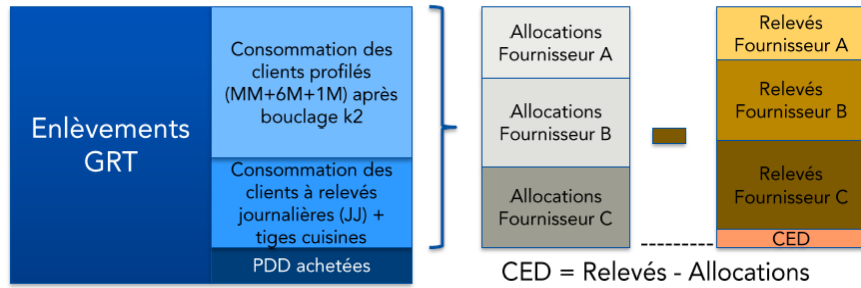


Figure 2. Breakdown of the Distribution Difference Account (source GRDF)

The actual PDDs, which are the difference between the TSO gas delivery and the supplier readings, accordingly correspond to the total of the LDs purchased by GRDF and the CEDs.

GRDF does not have a direct influence on the level of forecast energy costs set out in the tariff: in fact, factors such as the price of gas and volumes distributed, over which GRDF has no control, can have an impact on this amount. For this reason, the expenses incurred are fully covered by the CRCP. On the other hand, to encourage GRDF to control these costs, the tariff defines a reference trajectory, based on a reference volume (product of the quantities actually distributed and a theoretical loss rate) and a reference price (calculated on the basis of observed wholesale prices for a predefined basket of reference products). The difference between actual costs and the reference trajectory was encouraged to 20% in the ATRD6 tariff.

In its public consultation, CRE envisaged maintaining the principle of incentivising regulation for LDs by keeping the strength of the incentive at the level of the ATRD6 tariff.

None of the participants was opposed to maintaining the principles and level of incentivising regulation for LDs.

CRE renews the principles of incentivising regulation of LDs for the ATRD7 tariff. The loss rates proposed by CRE during the public consultation were welcomed by all respondents.

The calculation of the *ex-post* reference amount accordingly remains as follows:

- the reference volume is calculated as the product of the quantities actually distributed and a theoretical loss rate defined in paragraph 2.7.2;
- the reference price is calculated on the basis of observed market prices for a predefined basket of reference products (defined in the confidential Annex 5).

The difference between this reference amount and GRDF's actual costs is incentivised at a rate of 20%.

However, CRE noted in its review of the ATRD6 period, which it presented for public consultation, that GRDF has insufficient control over CED volumes, due in particular to the absence of any revision of its purchase forecasts during the tariff period and to poor forecasts of the allocation of consumption to customers whose meter reading has failed successively. In this respect, CRE considers that it is important for GRDF to have better control over the volume of CEDs and consequently over the forecast volumes of gas to be purchased on the market. CRE proposes to introduce dedicated quality of service indicators (see section 3.4.2).

### 2.7.2 Theoretical loss rate applied

Theoretical loss rate is reassessed by CRE for each tariff period, based in particular on the operator's actual performance.

The reference loss rates for the ATRD6 period are shown in the table below, together with the actual loss rates.

(as a percentage of quantities distributed)	2020	2021	2022	2023
Theoretical loss rate in deliberation ATRD6	0.50%	0.48%	0.46%	0.45%
Realised loss rate	0.56%	0.51%	0.11%	-



For the ATRD7 period, GRDF is proposing a reference rate of 0.45%, constant throughout the period. This rate corresponds to the theoretical loss rate for 2023, which includes the gains generated by the Gazpar meters brought into service at that date: one of the benefits expected from the rollout of Gazpar meters is the reduction in non-technical losses linked in particular to customer consumption without a supply contract.

CRE considers that the discrepancies observed between the reference loss rates over the ATRD6 period and the actual loss rates over the period are partly linked to errors and shifts in consumption estimates and that the year 2022 is particularly atypical. In addition, GRDF considers that there may be a carry-over effect of losses to the years after 2022. Consequently, during the public consultation, CRE envisaged using the 2023 reference loss rate as a basis by applying the Gazpar gains expected over the ATRD7 period, with the widespread rollout of additional meters. These loss rates were welcomed by all respondents to the public consultation.

CRE has accordingly adopted the following theoretical loss rate for the ATRD7 period:

(as a percentage of quantities distributed)	2024	2025	2026	2027
Theoretical loss rate	0.44%	0.44%	0.44%	0.44%

## 2.8 Incentivising regulation of charges relating to the "Gas Change" project

Part of the Hauts-de-France region is currently supplied with low calorific value natural gas (hereinafter "B-gas"), mainly from the Groningen field in the Netherlands. The gradual depletion of the field (whose production has also been halted by the Dutch government) means that the supply contract between the Netherlands and France cannot be extended beyond its current term in 2029. To ensure continuity of supply for the 1.3 million consumers in this region, the natural gas network needs to be converted to accept the high-calorific gas (hereinafter "H-gas") that supplies the rest of France. In addition to adapting its network and creating an IS dedicated to the project, GRDF will have to check, adapt and adjust the equipment of consumers connected to its network. This represents around €500 million in operating costs and €50 million in investment for GRDF between 2021 and 2029.

In addition, the Finance Act for 2019<sup>22</sup> introduced a duty for GRDF to facilitate the replacement of equipment that cannot be adapted, as part of the conversion project, in particular by covering the cost of replacing this equipment under the ATRD tariff, subject to caps defined by decree<sup>23</sup> and a perimeter of beneficiaries specified by order<sup>24</sup>.

### 2.8.1 Framework for incentivising regulation of charges relating to the "Gas Change" project for the ATRD6 period

On the basis of feedback from the pilot phase (2016-2020), CRE defined, in its deliberation of 11 March 2021<sup>25</sup>, the terms and conditions for covering operating costs for the industrial rollout phase for the ATRD6 period (2021-2023).

The regulatory framework defined on this occasion consists of encouraging GRDF to control all its operating costs, i.e. the costs of servicing customers, the costs of replacing equipment and IS, communication and control costs, by partially covering the difference between the actual trajectory and the reference trajectory, with 80% of this difference being taken into account through the CRCP.

On the other hand, given the uncertainties surrounding specific operating methods and the volumes of equipment to be adapted at consumers' premises, the framework adopted provides for total cover of the risks associated with the total number of consumers to be converted and the volume of equipment to be replaced, over which GRDF has very limited room for manoeuvre.

The reference amount for year N, 80% of which is accounted for by the CRCP, corresponds to the total of:

- IS-communications-management operating costs for year N, adjusted for actual inflation;

<sup>22</sup>Article 183 of the Finance Act 2018-1317 of 28 December 2018 for 2019

<sup>23</sup>Decree no. 2019-114 of 20 February 2019 on the financial assistance mentioned in II of Article 183 of the Finance Act 2018-1317 of 28 December 2018 for 2019

<sup>24</sup>Order of 25 February 2021 on the rollout arrangements for the conversion of the B-gas network

<sup>25</sup>Deliberation no. 2021-57 of the Energy Regulatory Commission of 11 March 2021 deciding on the regulatory framework applicable to the industrial phase of GRDF's B-gas network conversion project



- the product of the unit cost for a technician’s intervention and the replacement of incompatible equipment, adjusted for inflation and the volume of interventions and replacements of incompatible equipment performed in year N.

CRE considers that, during the ATRD6 period, the gas changeover operation went satisfactorily. Since 2022, the project has been ramping up and GRDF has been able to maintain the pace of conversion. GRDF, which operates beyond its usual sphere of responsibility, has performed well in terms of both costs and customer relations. Satisfaction surveys show satisfaction rates in excess of 95% for the inventory and adjustment phases over the years 2021-2022. CRE considers that GRDF is meeting its commitments and operating in a way that is satisfactory for all stakeholders.

### 2.8.2 Adaptation of the framework for the ATRD7 period

In the light of the satisfactory results of the ATRD6 period, CRE proposed in its public consultation to renew the incentivising regulation of the "Gas Change" project, while updating the level of reference unit costs on the basis of the operating cost trajectory assumed by CRE for this project for the ATRD7 period. The majority of stakeholders were in favour of this proposal. However, some participants are opposed to this, fearing that it will have a negative impact on users by limiting expenditure.

CRE considers that the regulatory framework was effective over the ATRD6 period, to the extent that GRDF was encouraged to control its costs while ensuring stakeholder satisfaction and has accordingly decided to extend it over the ATRD7 period.

In its initial application, GRDF estimated the operating costs of the gas switching project at €353 million over the ATRD7 period. These expenses are of three types:

- "IS-communication-steering" expenses, dedicated in particular to the communication set up by GRDF, the development of the IS linked to the conversion project and the steering of the project. Most of these costs are independent of the number of conversions performed;
- expenses for "work on consumers' premises", excluding expenses for replacing incompatible appliances, which depend directly on the number of consumers to be converted during the period, in connection with all the services that GRDF has to carry out on consumers' appliances;
- the cost of "replacing incompatible appliances", which corresponds to the cost of replacing equipment for appliances that cannot be adjusted or adapted for H-gas operation.

At the end of its analyses and taking into account the Decree of 21 December 2023 on financial assistance for the replacement of incompatible equipment<sup>26</sup>, CRE has adopted the following unit costs and reference trajectories to cover the various costs associated with GRDF's conversion project for the ATRD7 period:

- the unit cost of intervention at the customer's premises is €210.25 2022/year/customer;
- the unit cost of replacing incompatible equipment is €4,037.71 2022/device;
- The IS and management cost trajectory (corresponding to all expenses excluding customer intervention and equipment replacement in the graph below) is presented in the table below:

€M <sub>2022</sub>	2024	2025	2026	2027
IS communication piloting operating expenses - ATRD7 period	22.6	25.0	20.0	13.3

As for the period 2020-2022 and in order to ensure that the associated costs are covered by the ATRD tariff, including possibly after 2029, CRE has opted for full cover through the CRCP of the costs associated with the conversion of inactive customers.

<sup>26</sup>Decree no. 2023-1237 of 21 December 2023 amending Decree no. 2019-114 of 20 February 2019 on the financial assistance mentioned in II of Article 183 of Law no. 2018-1317 of 28 December 2018 on finance for 2019

### 3 Level of costs to be covered and forecast in GRDF's tariff for use of the natural gas distribution network

#### 3.1 Level of expenses to be covered

##### 3.1.1 GRDF's tariff request and the operator's main challenges

In its tariff application, GRDF anticipates that the 2024-2027 period will again be marked by high energy prices and inflation due to the geopolitical context in Europe. GRDF also considers that the recent regulatory context, which is unfavourable to natural gas, particularly in housing and tertiary buildings (RE2020, tertiary decree, classification of urban heating networks), will contribute to accelerating the fall in gas consumption and the number of customers, already observed in the ATRD6 tariff.

In addition, GRDF anticipates continued public support for the biomethane and renewable, low-carbon gas sector and its development in France, with a target of 50 TWh of biomethane injection capacity by 2030 set out in its tariff application.

In this context, GRDF states that its tariff application aims to respond to the following issues:

- maintaining a safe, high-performance industrial base, in compliance with new regulatory duties and adapting its information systems to new requirements, particularly in terms of cybersecurity;
- contributing to European energy transition targets and supporting a number of industry sectors (mobility, construction, gas production) and local authorities (through the rollout of the new franchise contract model) in their energy transition;
- pursuing an R&D programme in the fields of safety and operational performance, renewable gases, smart grids and downstream safety;
- a slowdown in the erosion of the customer portfolio, despite the downward trend in consumption and the number of customers;
- the continuation of the "Gas Change" project in the Hauts-de-France region, including the conversion of the Lille metropolitan area in 2025-2026;
- in general, GRDF's adaptation to these challenges in terms of technical and managerial skills.

Since the public consultation, GRDF has updated its trajectory for net operating expenses (see section 3.1.3).

Average annual net operating costs over the ATRD7 period, excluding energy, increase by 19% compared with the level reached in 2022.

Taking into account the issues identified by GRDF, the operator is requesting total net operating expenses and capital costs of around €3,939 million per year, an increase of 18% on the 2022 figure.

Authorised revenue<sup>27</sup> corresponding to GRDF's updated request would increase by 21% in 2024 compared with the updated 2023 authorised revenue level.

##### 3.1.2 Feedback from the public consultation

Most suppliers and some consumers have expressed concern about the level of charges to be covered by GRDF. Some participants consider that any long-term increase in charges must be justified. They also question the discrepancy between the decrease in gas consumption and GRDF's requests for increased expenditure. Others are calling for the tariff increase for the ATRD7 tariff to be limited, in particular to limit the impact on consumers. However, the network operators, their shareholders and the trade unions consider that GRDF's request is justified.

As far as R&D costs are concerned, the suppliers who have expressed their views share CRE's position and consider that only expenditure linked to regulated activities should be covered by the tariff. The operators, their shareholders and their partners share GRDF's request.

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<sup>27</sup>Authorised revenue includes CCNs, CNEs, the CRCP settlement and a smoothing term.

### 3.1.3 Net operating expenses

To set the trajectories for GRDF's net operating costs, CRE applies the following inflation assumptions (updated since the public consultation):

	2023	2024	2025	2026	2027
CPI excluding tobacco <sup>28</sup>	4.80%	2.50%	2.00%	2.00%	1.80%

#### 3.1.3.1 GRDF request

The forecast net operating costs presented by GRDF in its initial application, including energy costs, for the ATRD7 period (2024-2027) are as follows:

In current € millions	2022 Achieved	2024	2025	2026	2027
Net operating expenses	1,573.7	1,894.8	1,898.6	1,880.3	1,875.6

Figure 3. GRDF's initial CNE request for the ATRD7 period (in current €M)

GRDF's request shows a sharp increase in net operating costs (including energy costs) between 2022 and 2024, of €321 million (i.e. +20%). Net operating expenses then fall by around 0.3% per year between 2024 and 2027. Excluding energy, the increase between the 2022 forecast and the 2024 request is 18% and net operating expenses then rise by an average of 0.3% per year. The main items in GRDF's request that will change between 2022 and 2024 are as follows:

- external charge (up €73m, or 10%): GRDF explains this increase mainly by the expected expenditure on "Materials and supplies" and "Works and maintenance", due to the impact of the regulatory duties that came into force during the ATRD6 period, a programme to modernise facilities and numerous worksites in GRDF's service territory (major development programmes, relocation of facilities at the request of third parties);
- charges relating to status and social works (+€66m, i.e. +49%), the increase in which is mainly explained by the effects of the rise in electricity prices in 2023 and the assumption that they will remain at a high level over the start of the ATRD7 period on the amounts of the Energy Benefit in Kind;
- energy costs (up €48m, or 195%): this increase is mainly due to an exceptionally low 2022 baseline (the volume of losses and differences in 2022 was 77% lower than forecast), as a result of a negative distribution variance account, which should be offset in 2023, and to the expectation of high electricity prices over the forthcoming tariff period;
- expenses relating to the "Gas Change" project, with projected net operating expenses of €88.2m in 2024, €106.4m in 2025, €89.5m in 2026 and €66.5m in 2027 (i.e. €87.6m per year on average), in connection with the ramp-up of the conversion from L-gas to H-gas in northern France. The level achieved in 2022 was €51.6m.

Since the public consultation, GRDF has updated its request for net operating expenses, taking into account new inflation assumptions, changes in energy prices and changes in the tax rules set out in the draft Finance Act for 2024.

The forecast net operating costs requested by GRDF, updated to take account of these factors, are as follows:

	2022 Achieved	2024	2025	2026	2027
Updated net operating expenses	1,573.7	1,906.7	1,910.2	1,891.8	1,887.8

<sup>28</sup>The inflation forecast for 2024 corresponds to the assumption in the PLF 2024. The inflation forecasts for 2025 to 2027 correspond to the IMF assumptions (October 2023).

### 3.1.3.2 Analytical approach adopted

CRE asked operators to present their tariff applications on the basis of the most recent figures, justifying any significant deviation from the forecast 2022 figure and breaking down each item to the nearest euro, to ensure that any additional requirements cannot be covered by resources released from actions that are coming to an end.

CRE commissioned H3P-ORCOM to carry out an audit of GRDF's operating costs. The work took place between April and July 2023. The auditor's report, based on GRDF's updated application, was published at the same time as the public consultation document of 12 October 2023.

This audit has provided CRE with a clear understanding of GRDF's operating costs and revenue for the ATRD6 period and the forecast operating costs presented by GRDF for the coming tariff period (2024-2027). The targets of this audit are to:

- provide expert advice on the relevance and justification of the trajectory of operators' operating costs for the forthcoming tariff period;
- assess the level of actual (2020-2022) and forecast (2024-2027) expenses;
- make recommendations on the efficient level of operating costs to be taken into account for the ATRD7 tariff.

CRE also audited specific items, in particular R&D expenditure and energy costs.

The conclusions of the audit reports were the subject of an adversarial discussion with GRDF in July 2023. GRDF was thus able to comment on the results of the auditor's work.

Following the public consultation, discussions continued between GRDF and CRE on a number of items in the net operating expenses. The level finally adopted by CRE is the result of its discussions with GRDF and its own analyses of the adjustments recommended by the auditor.

### 3.1.3.3 Summary of audit results and CRE's additional adjustments to specific items

The scope of costs audited by the consultant includes net operating expenses, with the exception of the items "Energy purchases" and "R&D" audited by CRE.

In current € millions	2022 achieved	2024	2025	2026	2027
Trajectory requested by GRDF	1,573.7	1,894.8	1,898.6	1,880.3	1,875.6
Actual 2022 inflation-adjusted		1,685.6	1,715.2	1,742.7	1,769.9
Trajectory of the auditor*		1,756.7	1,734.5	1,678.0	1,653.7
Impact on GRDF's request		-138.1	-164.1	-202.3	-221.9

*\*In this figure, the "Energy purchases" and "R&D" items are taken at the level of GRDF's request.*

The main adjustments recommended by the auditor relate to the items "Personnel costs", "Personnel costs and welfare benefits" and within external charges, to the items "Purchases of materials and supplies", "Work and maintenance" and "Other external charges".

### **Personnel costs**

In its initial request, GRDF presented a trajectory of personnel costs rising by 14% between 2022 and 2024, based on a trajectory of slightly falling headcount (-0.1%/year over the period), changes agreed at branch level for 2023 and several labour cost assumptions, in particular relating to the basic national salary (SNB) and the technical ageing effect (GVT), for the ATRD7 period.

The auditors adjusted the forecast trajectory by a cumulative €252m over the period (an average of €63m per year, or -6%). This adjustment results from the application of a productivity trajectory to GRDF's workforce trajectory in relation to the number of employees in 2022, which is higher than that set out in GRDF's request. This adjustment, common to all infrastructure operators (ATRT8 and ATS3), has been made possible in particular by a large number of retirements and is part of a downward trend in the number of GRDF employees since 2008. The auditor also uses SNB and GVT assumptions that are in line with those of the other infrastructure operators (ATRT8 and ATS3) and lower than those of GRDF. Finally, for the calculation of social security charges, the auditor uses the latest known rate, i.e. that for 2022.

### **CRE analysis**

CRE agrees with the auditor's general analysis but has made several upward adjustments following its discussions with GRDF. CRE has adopted an alternative headcount trajectory to that of the auditor, which is higher, based on an item-by-item analysis of the needs identified by GRDF over the ATRD7 tariff period. It also changes a number of assumptions concerning main salaries, the GVT balance, the rate of variable remuneration and specific social security charges in order to take into account the final internal agreements on salary increases for the second half of 2023.

### **Statutory charges and social works**

In its initial request, GRDF presented a projected increase of €66 million between 2022 and 2024, i.e. +49%, in statutory charges and social works, based on the rise in electricity prices in 2023 and an assumption that they would remain at a high level over the start of the ATRD7 period for the amounts of the energy benefit in kind.

The auditor proposed a correction of -€91.8 million over the period (-€22.7 million per year on average, or -15%) compared with GRDF's request, which stems mainly from a revised estimate of the energy benefit in kind, on the basis of a fall in energy prices over the ATRD7 period and an assumption of sobriety in gas and electricity, resulting in a forecast fall in the volume of energy consumed of 10.5% in gas and 10% in electricity over the period compared with 2022.

### **CRE analysis**

CRE updates the energy price assumptions and adopts a forecast electricity consumption higher than that of the auditor. Nonetheless, the consumption trajectory assumed includes the implementation by employees of sobriety efforts, in the same way as the rest of French households, in order to encourage regulated operators to promote sobriety within the electricity and gas industries.

### **External charges**

GRDF's request for external charges forecasts an increase of €76 million between 2022 and 2024, i.e. +10%). GRDF explains this increase mainly by the expected expenditure on "Materials and supplies" and "Works and maintenance", due to the impact of the regulatory duties that came into force during the ATRD6 period, a programme to modernise facilities and numerous worksites in GRDF's service territory (major development programmes, relocation of facilities at the request of third parties). Other sub-items have also risen, such as "Transport and travel expenses" and "Gas diagnostics, energy transition financial contributions" (see dedicated paragraph on p. 61).

The auditors recommend adjustments of €51m (-16%) and €43m (-8%) to the sub-items "Materials and supplies" and "Works and maintenance" respectively. The auditor's main adjustments relate to "Networks and Intervention" (hereinafter "R&I") costs, which are partly linked to the implementation of GRDF's regulatory duties. The auditor took into account the forecast volumes of operations related to regulatory duties over the ATRD7 period, retaining the costs observed in 2022 for specific operations for which the estimated future unit costs were not sufficiently substantiated by GRDF. Concerning R&I operations not linked to regulatory duties, the auditor retained the 2022 value inflated over the ATRD7 period, arguing that the increases requested by GRDF were not sufficiently substantiated.

In addition, the auditor has made adjustments to the costs associated with "Green Gas" projects, for which he has used the level of costs observed in 2022 or the average for 2020-2022, as the forecast ATRD7 trajectory was not sufficiently substantiated by GRDF.

Within the "Materials and supplies purchases" sub-heading, the costs of fuel and building fluids have also been adjusted. The auditor used different price assumptions to establish the trajectories for the ATRD7 period. For fuels, the cost observed in 2022 for GRDF's fleet of internal combustion vehicles over the ATRD7 period (excluding long-term leases) has been applied and factored in. For building fluids, the auditor used the average fluid costs observed between 2020 and 2022, considering the rise in costs observed in 2022 to be exceptional.

#### CRE analysis

With regard to the sub-items "Materials and supplies" and "Work and maintenance" and more specifically R&I costs, CRE reinstates GRDF's request, to enable it to guarantee the industrial safety of its facilities, with a significant increase in the amounts allocated to the maintenance of GRDF's network compared with the level of expenditure achieved in the last tariff period and to meet its regulatory commitments, in particular relating to the renewal of regulators and the securing of non-productive connections.

As regards the costs associated with green gas, CRE has adopted a methodological approach that is consistent between the two sub-items for estimating forecast costs, based on the method applied by the auditor to the "Works and maintenance" sub-item, i.e. a unit cost per site in operation observed on average between 2020 and 2022, applied to the forecast number of sites and indexed to inflation.

As regards the costs associated with property fluids, CRE accepts the auditor's adjustment, considering the additional justifications provided by GRDF to be insufficient. On the other hand, with regard to fuel costs, GRDF demonstrated that its fleet of vehicles was not electrified and made a counter-proposal based on costs observed in 2022 and inflation-adjusted. CRE accepts this counter-proposal.

Within external charges, CRE has also reintegrated other costs sufficiently substantiated by GRDF after the public consultation, in particular the sub-items "IT", "Property" and "Transport and travel".

#### "Gas diagnostics, financial contributions to the energy transition"

Concerning the item "Gas diagnostics, financial contributions to energy transition", within external charges, CRE has retained an adjustment additional to that of the auditor on the sub-item "Energy transition communication, green gas and the place of gas". In particular, it has adjusted the budgets for communication to promote gas.

CRE has, however, retained the budgets for coordinating the sector, which are intended, for example, to produce technical and regulatory webinars for professionals, to raise awareness and provide training for the technical and agricultural sectors on gas safety and quality, or to support the management of network saturation in a context of integrating green gas into the networks.

This additional adjustment will enable GRDF to communicate on its activities as a network operator and to inform and train industry participants on the various associated issues, such as safety, quality and regulatory compliance. This adjustment is supported by the guidance letter from the Minister for Energy, in which she stated that *"communications that run counter to the necessary reduction in methane gas consumption should be avoided"* and called for stricter supervision of the DSOs' communications activities.

#### R&D

GRDF's request for R&D has risen significantly compared with the ATRD6 period, with a budget of €21 million per year on average (i.e. €84 million over the period), compared with €15.7 million per year between 2020 and 2022 (€47 million in total, spent in full), i.e. an increase in annual expenditure of 33%.

GRDF divides its R&D request into four research areas:

- safety and operational performance (€4.9m per year on average, €19.7m over the period);
- "smart gas grids" (€3.5m per year on average, €13.9m over the period);
- downstream, security and flexibility (€4.7m per year on average, €18.7m over the period);
- green gas (€7.9m per year on average, €31.7m over the period).



Generally speaking, GRDF's request for R&D shows a decline in projects relating to the historical perimeter, particularly those linked to safety and operational performance, in favour of projects, some of which appear at this stage to be outside GRDF's regulated area of activity. The "Downstream, security and flexibility" topic is an extension of the scope of GRDF's R&D activities already identified during the ATRD6 period and includes projects that appear to fall within the "downstream meter" field. Similarly, the "Green Gas" topic includes budgets dedicated to research into the distribution of hydrogen in dedicated networks and the optimisation of biomethane production volumes. These two types of project would accordingly go beyond the current scope of GRDF's regulated activities.

In its public consultation, CRE proposed a number of adjustments to define GRDF's R&D trajectory, particularly for projects that would go beyond GRDF's regulated perimeter and potentially involve competitive activities. CRE has accordingly proposed the exclusion of projects relating to the optimisation of biomethane production and the operation of 100% hydrogen distribution networks, as well as projects that appear to have gone beyond the R&D stage because they are at an advanced level of technological maturity, allowing them to be developed operationally in a real environment.

The majority of respondents were against the trajectory proposed by CRE in its public consultation. A number of participants have emphasised the role played by GRDF in supporting the green gas sector. A number of participants, including trade associations and companies that have received funding from GRDF through the ATRD tariff, have specifically mentioned the importance of supporting green gas production processes that are less mature than methanisation, with a view to decarbonisation.

However, several participants are in favour of the trajectory proposed by CRE, arguing that R&D expenditure should be limited to the regulated sector and that other market stakeholders and sources of financing could bear the costs of such projects.

#### CRE analysis

CRE considers that it is important to select projects that contribute to reinforcing the security, sustainability and efficiency of the distribution network. As a result, it promotes the cover of initiatives relating to the integrity, operational safety and maintenance of the network, as well as accident prevention. CRE also considers it crucial for GRDF to be able to carry out its tasks while optimising infrastructure to reduce the cost of injecting renewable or low-carbon gas and controlling the impact of green gas on the network.

Compared with the public consultation, CRE is accordingly reinstating in full the budget associated with optimising the injection of biomethane in accordance with the capacity register<sup>29</sup>, as well as the budget associated with developing solutions to organise the complementarity of energies, as they are directly related to improving the injection of low-carbon and renewable gas into the networks and developing dynamic operation of the distribution networks.

On the other hand, CRE does not include expenditure linked to support for the production of green gas and pure hydrogen projects, arguing that these activities fall outside the scope of the regulated activities of a network operator. In addition, specific unjustified expenditure or expenditure that has progressed beyond the R&D stage is not included in the tariff trajectory.

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<sup>29</sup>The capacity register lists the number of sites and the maximum capacities of biomethane, renewable gas and recovered gas injection projects.



CRE has decided on an R&D budget of €52.1 million for the ATRD7 period, with the possibility of a mid-period review. In particular, this budget will enable GRDF to carry out R&D work aimed at improving the safety, integrity and performance of the network, improving the injection of green gas into the network and controlling its impact and more generally adapting the network to changes in the energy system.

The trajectory assumed by CRE for the ATRD7 period is as follows:

In current € millions	2022 achieved	2024	2025	2026	2027	ATRD7
Trajectory assumed by CRE	17.1	12.7	12.9	13.2	13.4	52.1

Figure 4. R&D trajectory assumed by CRE for the ATRD7 period

R&D costs are subject to asymmetrical incentives as described in section 2.6 of this document.

The regulatory framework allows GRDF to request a mid-period review of the trajectory if it identifies new needs or projects.

### **Energy costs for purchases to cover losses**

GRDF's request for the ATRD7 period is based on gas price assumptions communicated by CRE at the start of 2023. It amounts to €211.1m over the period, an average of €52.8m per year and represents an increase of 12% compared with expenditure between 2020 and 2022.

GRDF's request (current €M)	2020 achieved	2021 achieved	2022 achieved	2024	2025	2026	2027	ATRD7
Energy costs	20.7	96.6	24.5	72.2	58.5	42.8	37.6	211.1
Volume generated (GWh)	1,438	1,472	260					
Loss rate (%)	0.56%	0.51%	0.11%	0.45%	0.45%	0.45%	0.45%	0.45%

CRE has updated gas prices based on the levels observed on the French market during the first half of November. CRE also uses a loss rate of 0.44% (which is applied to total consumption to determine the volumes of energy to be purchased), in order to take into account the gains resulting from the rollout of Gazpar meters (see section 3.1.3.3).

These adjustments lead to the following trajectory:

CRE trajectory (current €M)	2022 achieved	2024	2025	2026	2027	ATRD7
Energy costs	24.5	42.2	41.9	36.8	31.0	151.8
Loss rate (%)	0.11%	0.44%	0.44%	0.44%	0.44%	0.44%
Impact on GRDF's request		-30.0	-16.7	-6.0	-6.7	-59.3

Energy charges are subject to a specific incentivising regulation described in 2.7.

### **"Gas Change" project**

As regards the costs associated with the regulators, CRE accepts the auditor's adjustment, considering the additional justifications provided by GRDF to be insufficient.

Compared with the public consultation, CRE has updated the cost trajectory for incompatible replacements in line with the new amounts of financial assistance set out in the above decree on financial assistance published on 21 December 2023.

With regard to the other items in the "Network preparatory work/Adjustments/Safety" and "Adaptation of residential and tertiary customers without process" sub-items, CRE reinstates GRDF's request concerning expenditure on purchases and support costs for the replacement of incompatible equipment.

GRDF, In current €M - "Gas Change" project	2022 achieved	2024	2025	2026	2027
GRDF request	51.6	88.4	106.9	90.2	67.2
Adjustment assumed by CRE		-9,9	-13,6	-9,7	-6,1
<b>Trajectory assumed by CRE</b>		<b>78.5</b>	<b>93.3</b>	<b>80.4</b>	<b>61.0</b>

**Summary of CRE's analysis excluding energy costs and the "Gas Change" project**

By way of summary, the following table shows the trajectory of net operating costs, resulting from the adjustments adopted by CRE for the ATRD7 tariff, excluding energy costs and the "Gas Change" project.

GRDF, in current €M - excluding energy costs and "Gas Change" project	2022 achieved	2024	2025	2026	2027
GRDF request	1,497.6	1,746.1	1,744.8	1,758.8	1,783.0
Adjustment assumed by CRE		-143.6	-160.4	-162.0	-174.3
<i>Of which NSA* adjustment</i>		<i>-54.1</i>	<i>-54.7</i>	<i>-45.0</i>	<i>-48.5</i>
<b>Trajectory assumed by CRE</b>		<b>1,602.5</b>	<b>1,584.4</b>	<b>1,596.8</b>	<b>1,608.7</b>

\*This adjustment is mainly due to the fall in market prices since GRDF's tariff application (see p. 60).

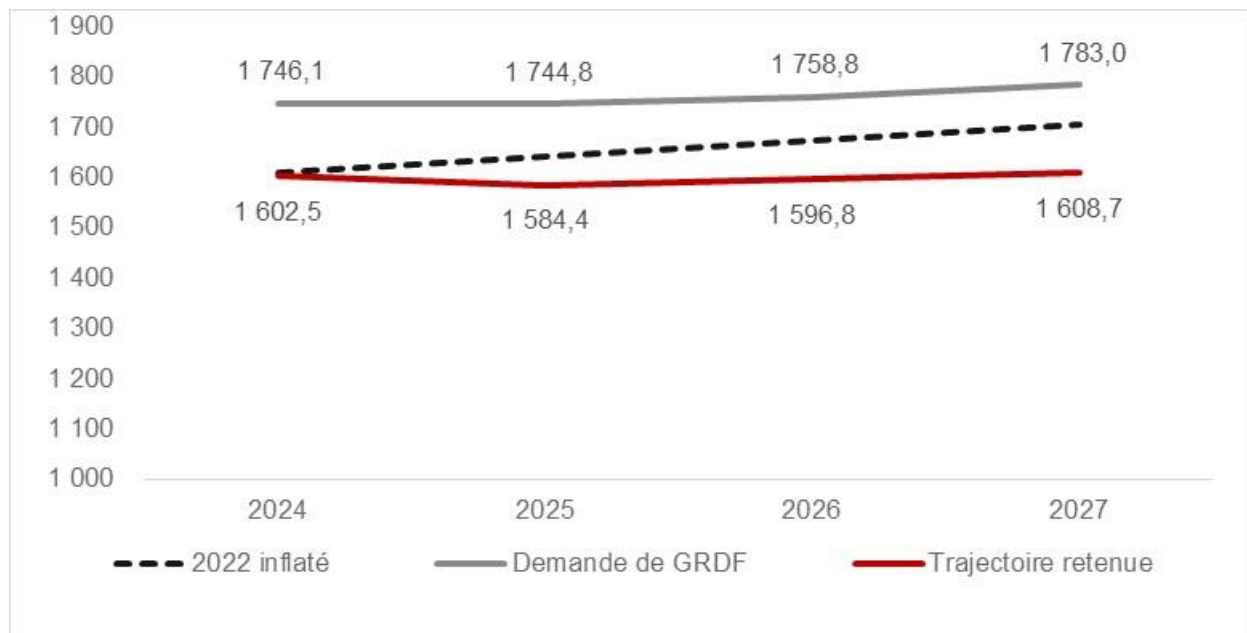


Figure 5. GRDF's net operating costs, excluding energy costs and the "Gas Change" project (in €M per year)

The CNE trajectory excluding energy costs and the "Gas Change" project for the ATRD7 period is €6,392.3m, or €1,598.1m per year on average. This trajectory has been adjusted by -€640.4 million compared with GRDF's updated request (-9%). It is lower than the inflation-indexed CNEs achieved in 2022, at 3.7% (i.e. €58.7m per year on average), for several reasons:

- GRDF's request already included a number of effects that were significantly lower than the forecast for 2022, with a number of items already on a downward trajectory compared with the ATRD6 tariff (in particular the items "Property", "IT", "Transport and travel expenses" and "Fees");
- The actual figures for 2022 do not take account of specific changes, such as the reduction in business taxation from 2023 and a high level of stranded costs in 2022;
- At the end of the audit, GRDF did not contest a number of adjustments made by the auditor (e.g. on operating revenue and other external charges) or by CRE (e.g. on R&D) and made a counter-proposal that was lower than its initial request.

### Net operating expenses

GRDF's net operating expenses for the ATRD7 tariff period totalled €6,857.5 million, or €1,714.4 million per year on average.

GRDF, In current €M	2022 achieved	2024	2025	2026	2027
Trajectory assumed by CRE	1,573.7	1,723.2	1,719.5	1,714.1	1,700.7

As a result, the total trajectory of net operating expenses set by CRE forecasts a 9.5% increase in GRDF's net operating expenses between 2022 and 2024 (+8.5% excluding energy expenses). Net operating expenses will then rise by an average of -0.4% per year over the 2024-2027 period (-0.2% per year excluding energy).

The trajectory assumed by CRE gives GRDF the means to:

- have the resources it needs to carry out all its missions and in particular to guarantee the industrial safety of its facilities, with a significant increase in the amounts allocated to the maintenance of GRDF's network compared with the level of expenditure achieved in the last tariff period;

- have the necessary resources to continue integrating biomethane into its network, in line with energy policy guidelines;
- keep its information systems up to date, particularly as regards cybersecurity and the advanced metering communication chain;
- carry out R&D work on the security, integrity and performance of the network, the integration of renewable gases and the preparation of the network for structural changes linked to the energy transition;
- successfully complete the "Gas Change" project<sup>30</sup>, which is undergoing a growth phase as the project progresses and major cities, including Lille, are converted over the ATRD7 period.

The ATRD7 tariff also includes a review clause to cover the costs of implementing the European regulation to reduce methane emissions (see section 2.3.2).

### 3.1.4 Calculation of normative capital charges

#### 3.1.4.1 Weighted average cost of capital

##### 3.1.4.1.1 GRDF request

GRDF's tariff application was drawn up using a weighted average cost of capital of 4.65% (actual before tax), higher than that of the ATRD6 tariff (4.1%). This request is based on the conclusions of a study commissioned by the gas infrastructure operators of the Engie group from an external consultant.

##### 3.1.4.1.2 Summary of the results of CRE's external audit

As part of the work to prepare the ATRD7 tariff, CRE re-examined the assumptions and parameters used to calculate the operators' remuneration rate. To this end, it asked Compass Lexecon to carry out an audit and an analysis of the remuneration requests of the two TSOs, the storage operators and GRDF on the basis of the conclusions of their advisers. The consultant's report was published on CRE website at the same time as the public consultation of 12 October 2023 for the part specific to GRDF.

Following his audit of GRDF's application, the auditor recommended several WACC ranges depending on the assets to which they apply. For historical assets, the auditor recommended a nominal pre-tax WACC range of between 3.72% and 4.14%, or an actual pre-tax WACC range of between 2.51% and 2.93%. For new assets, the auditor recommended a nominal pre-tax WACC range of between 5.69% and 6.21%, or an actual pre-tax WACC range of between 2.74% and 4.23%.

##### 3.1.4.1.3 CRE analysis

The method used by CRE to determine the weighted average cost of capital is based on a normative WACC structure that ensures an appropriate return on invested capital. Up to now, it has been based on the average of rates observed over the last ten years, reflecting the long life of gas network infrastructure. This method, which has changed very little over the last three tariff periods, has made it possible to maintain the attractiveness of energy infrastructures in France, while taking into account the downward trend in interest rates over the last ten years.

After this long period of decline, interest rates have risen rapidly again over the last year or so. In the light of this new situation, CRE is changing the method used to calculate the WACC to take better account of the short-term dynamics of interest rates.

In its public consultation, CRE indicated that it envisaged a WACC in a range of between 2.9% and 4.0% (real before tax), based on a weighting of a long-term rate according to the method used for the ATRD6 tariff and a short-term rate based on the analysis of shorter-term parameters and retaining a weighting of 80/20 respectively between the two terms. This range was lower than the WACC for the ATRD6 tariff (4.1%). In nominal pre-tax terms, the range was 4.4% - 5.4%.

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<sup>30</sup>The "Gas Change" project involves converting part of the Hauts-de-France region from B-gas (low calorific value) to H-gas (high calorific value).

In this context (see section 2.2.2.3), CRE has decided, for the ATRD7 tariff period, to change the method for calculating the weighted average cost of capital by weighting two rates:

- a rate determined according to the method used for the ATRD6 tariff and previous tariffs, based on the analysis of long-term parameters, which amounts to 3.6% real before tax (or 4.8% nominal before tax, adjusted for the average inflation of 1.2% seen in recent years);
- a rate based on more recent economic data, which is 5.4% in real terms before tax (or 7.5% in nominal terms before tax, adjusted for forecast average inflation of 2.0% over the ATRD7 tariff period).

The weighting adopted by CRE is based on a normative breakdown of the respective share of new assets and old assets, assessed over the coming tariff period for a gas operator and for the tariff period under consideration is 80% for the rate based on long-term data and 20% for the rate based on more recent data.

As a reminder, the WACC is calculated by applying the following formulae:

$$\text{Nominal WACC before corporation tax} = [(TSR + \text{debt spread}) \times (1 - \text{deductibility of financial charges} \times \text{corporation tax}) / (1 - \text{corporation tax})] \times g + (TSR + \beta \times \text{PRM}) / (1 - \text{corporation tax}) \times (1 - g)$$

$$\text{Actual WACC before corporation tax} = (1 + \text{nominal WACC before corporation tax}) / (1 + \text{inflation}) - 1$$

For the ATRD7 tariff, CRE applies the value of 4.0% (actual before tax) as the WACC to remunerate the so-called "historical" assets of GRDF's RAB. For so-called "new assets", CRE applies a WACC of 5.3% (nominal before tax). The rounded values adopted by CRE for each of the parameters are shown in the table below:

ATRD7 WACC parameters (rounded values)			
	Long-term data	Short-term data	Weighted value (80% - 20%)
Nominal risk-free rate (TSR)	1.3%	3.8%	1.8%
Debt spread	1.1%	0.5%	1.0%
Asset beta	0.45		
Equity beta (β)	0.79		
Market risk premium (MRP)	5.2%		
Leverage (debt/(debt+equity)) (g)	50%		
Corporation tax rate (IS)	25,83%		
Cost of debt (nominal, before corporation tax)	2.4%	4.3%	2.8%
Cost of equity (nominal, after corporation tax)	5.4%	7.9%	5.9%
<b>WACC (nominal, before corporation tax)</b>	4.8%	7.5%	<b>5.3%</b>
Inflation	1.2%	2.0%	1.3%
<b>WACC (actual, before corporation tax)</b>	3.6%	5.4%	<b>4.0%</b>

Compared with the values taken into account to define the WACC of the ATRD6 tariff, the main changes, consistent with changes in macroeconomic and financial data, relate in particular to changes in the risk-free rate, asset beta and taxation.

The risk-free rate is 1.8% and is determined by observing yields on French government bonds (FGBs), considered to be the lowest-risk investments. This rate is determined as the weighting between the 10-year average of the 15-year FGB and the average of the four implied forward rates for the years 2024 to 2027 of a 15-year FGB. The

weighting used is 80/20 for the tariff period in question, as explained above. To determine the risk-free rate, CRE has opted to observe FGB yields not for a 10-year maturity, as has been the case up to now, but for a 15-year maturity.

The debt spread is 1.0% and is determined by observing the average iBoxx EUR NF 10+ BBB' bond yields; for long-term data over an average of 10 years and for short-term data over an average of 1 year. The weighting between these two values is also 80/20 for the tariff period in question, as explained above.

Compared with the previous tariff period, the asset beta has been lowered from 0.48 to 0.45. CRE bases its deliberation on market observations and betas of gas operators' activities in Europe. This reduction is also justified by the level of protection provided by the ATRD7 tariff regulatory framework, which gives operators greater protection against variations in energy prices. In addition, the regulatory framework has proved highly resilient during the successive Covid and energy crises. Overall, CRE considers that the regulatory framework is consistent with a measured reduction in the asset beta to 0.45. Indeed, the risks to the future of gas infrastructures persist, which justifies the use of a higher beta than for electricity networks.

CRE also takes into account the reduction in the standard rate of corporation tax to 25.0%, combined with the social contribution corresponding to 3.3% of the amount of corporation tax, giving a tax rate of 25.83%.

### 3.1.4.2 Investments

The capital expenditure trajectory planned by GRDF for the ATRD7 period is stable compared to the ATRD6 period. Excluding the Gazpar<sup>31</sup> project, for which the large-scale rollout phase was completed in 2023, GRDF's investment increased by an average of 20% between the trajectory achieved between 2020 and 2022 and the ATRD7 period, rising from an average of €880 million per year to an average of €1,091.8 million per year. This increase is due in particular to the forecast rise in investment linked to the development of green gas and investment in the modification and modernisation of facilities.

In particular, GRDF envisages:

- the rise in investment linked to the integration of biomethane production into the networks (+€210m over the period, or +50%), due to the development of the green gas sector and the increase in the number of sites in operation;
- the increase in expenditure on modifying and modernising facilities (+€595m over the period, or +38%) due to:
  - o the implementation of regulatory duties (renewal of regulators<sup>32</sup>, elimination of bituminous sheet metal, ductile iron and copper pipelines, etc.<sup>33</sup>) introduced during the ATRD6 period;
  - o investment linked to the transition to dynamic network operation, through the rollout of remote control systems, for example;
  - o modernisation work, through preventive or corrective renewals, with a view to overall supervision of facilities and risk management on the distribution network;
  - o major programmes requiring the relocation of structures at the request of third parties, particularly in the Île-de-France region, with work in the run-up to the Olympic Games and sites associated with the Grand Paris Express;
- continued investment in the "Gas Change" project (€26.9m over the period), in line with the project plan.

These increases are offset by a reduction in forecast expenditure on:

- the slowdown in investment linked to the Gazpar programme: large-scale rollout was completed in 2023 (€688 million over the entire ATRD6 period) and is now entering the phase of large-scale rollout, with

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<sup>31</sup>Investments specific to the Gazpar programme, as well as investments linked to the rollout of communicating meters post large-scale rollout referenced by GRDF in the "Meters and customer delivery stations" category, have been restated.

<sup>32</sup>Order of 4 March 2021 amending the order of 23 February 2018 on the technical and safety rules applicable to fuel gas installations in individual or collective residential buildings, including common areas

<sup>33</sup>Order of 6 December 2021 amending the order of 13 July 2000 on safety regulations for the distribution of combustible gas through pipelines

investment of €112.9 million over the period, or €28.2 million per year on average (included in the "Customer meters and delivery stations" category);

- consumer connections (-€273m over the period, or -30%), due to a steady decline in the number of new customers across all sectors, with the exception of CNG/bio-NGV stations.

### CRE analysis

The prospect of falling gas consumption reinforces the importance of selectivity and prioritising investment around specific targets, such as network security and the integration of green gas.

CRE notes that the trajectory requested by GRDF (excluding Gazpar) is up on the ATRD6 period. The increase is higher than inflation between the two tariff periods, mainly due to the forecast increase in expenditure on biomethane, up by 50% and expenditure on modifications and upgrades to facilities, up by 38%. Off-network expenditure was stable compared with the previous period, representing an average of €165.7m per year, or 15% of expenditure over the period. They are eligible for incentivising regulation of off-network investments (see section 2.4.3.2).

CRE considers that the trajectory requested by GRDF is consistent with the prospects for the development of green gas and with the known regulatory requirements for the next period, such as the renewal of regulators and the replacement of bituminised sheet metal, ductile cast iron and copper pipelines. CRE is accordingly not making any changes to GRDF's planned investment trajectory. However, it considers that in the context of the structural decline in gas consumption and the risk of an increase in the associated unit cost of transmission, operators' capital expenditure must be kept under control. GRDF's investments will accordingly have to be compatible with the outlook for lower gas consumption.

As a result, CRE has adopted the following capital expenditure trajectory for GRDF for the ATRD7 period:

In current € millions	2024	2025	2026	2027	Annual average ATRD7	Annual average ATRD6*
Connections	173.7	157.8	154.7	139.6	156.4	224.6
Biomethane	153.1	120.5	133.8	222.1	157.4	104.9
Modernisation and modification of structures (MMO)	512.8	525.5	543.3	578.3	540.0	391.2
"Gas Change" project	17.3	7.3	1.5	0.8	6.7	16.0
Gazpar	0.0	0.0	0.0	0.0	0.0	172.0
Customer meters and delivery stations	71.1	55.3	44.4	46.9	54.4	29.0
Logistics (Property, IS Telecom, Other)	71.9	54.7	47.8	53.0	56.9	50.8
Intangible fixed assets	132.5	128.9	116.2	102.5	120.0	115.9
<b>Total</b>	<b>1,132.3</b>	<b>1,050.0</b>	<b>1,041.6</b>	<b>1,143.1</b>	<b>1,091.8</b>	<b>1,104.7</b>

\*Average of completed investment programmes 2020, 2021, 2022 and estimated 2023

### 3.1.4.3 Normative capital charges

The table below shows the projected trajectory of GRDF's RAB from 2024 to 2027:

GRDF, in current €M	2024	2025	2026	2027	Annual average ATRD7
BAR at 01/01/N	17,479.1	17,820.3	18,025.1	18,155.0	17,869.9



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Commissioning*	1,132.4	1,049.9	1,041.6	1,143.1	1,091.8
Amortisation	1,118.9	1,158.0	1,180.0	1,195.2	1,163.0
Revaluation	327.8	312.8	268.3	254.9 <sup>34</sup>	290.9
BAR at 31/12/N+1	17,820.3	18,025.1	18,155.0	18,357.8	18,089.5

\*Investments included in RAB less forecast asset disposals

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<sup>34</sup>With an inflation assumption of 1.8% in 2028, based on IMF forecasts.

The table below sets out the projected trajectory of GRDF's normative capital charges from 2024 to 2027:

GRDF, in current €M	Average 20-22	2024	2025	2026	2027	Annual average ATRD7
Depreciation of assets in service	961.2	1,118.9	1,158.0	1,180.0	1,195.2	1,163.0
Remuneration of assets in service	668.8	746.2	771.2	790.7	809.6	779.4
Correction of delayed incentive expenditure <sup>35</sup>		-3.9				
<b>Total normative capital charges</b>	<b>1,630.1</b>	<b>1,861.2</b>	<b>1,929.2</b>	<b>1,970.8</b>	<b>2,004.8</b>	<b>1,941.5</b>
Of which "off-network" CCN	122.7	169.3	180.0	180.8	176.0	176.5

The table below details the specific RAB and CCN trajectory for GRDF's "off-network" assets from 2024 to 2027:

GRDF, in current €M	2020-22	2024	2025	2026	2027	Annual average ATRD7
<i>BAR at 01/01/N</i>	<i>488.4</i>	<i>602.6</i>	<i>658.2</i>	<i>688.5</i>	<i>703.9</i>	<i>663.3</i>
Depreciation of assets in service	100.8	140.4	147.1	145.3	138.6	142.8
Remuneration of assets in service	21.9	28.9	32.9	35.5	37.4	33.7
<b>Total "off-network" CCNs</b>	<b>122.7</b>	<b>169.3</b>	<b>180.0</b>	<b>180.8</b>	<b>176.0</b>	<b>176.5</b>

Off-network assets are subject to a specific regulation defined in 2.4.3.2 of the deliberations.

### 3.1.5 CRCP on 31 December 2023

The overall balance of the CRCP at the end of the ATRD6 period is calculated before the final closing of the 2023 financial statements. It is equal to the amount of the CRCP for the previous year, based on the best estimate of annual expenses and revenue (known as the estimated CRCP), plus, where applicable, the balance of the CRCP not cleared for the years 2020 to 2022.

In its tariff file, GRDF estimated the balance of the CRCP on 31 December 2023 at + €739.7 million to be returned to the operator<sup>36</sup>, corresponding to the amount:

- the updated balance of the previous CRCP, i.e. + €395.7m<sup>37</sup>, mainly due to 2022;
- of the estimated CRCP for 2023, i.e. + €344.0m.

GRDF's estimated CRCP for 2023 consists mainly of:

- revenue from tariff terms lower than forecast (+€54.0m), particularly revenue proportional to volumes transported, as a result of efforts to reduce consumption since the energy crisis;
- costs associated with losses and differences higher than forecast (+€106.9m), as gas purchase prices in the first few months of 2023 were very high;

<sup>35</sup>This restatement corresponds to the capital charges already allocated for the ATRD6 period under the incentivising regulation mechanism for "off-network" investments and carried over to the ATRD7 period: this restatement avoids double counting.

<sup>36</sup>By convention, as far as the CRCP is concerned, a "-" sign corresponds to an amount to be returned to users and a "+" sign to an amount to be returned to the operator.

<sup>37</sup>This CRCP balance is due in particular to the capping of tariff increases. The final balance of the CRCP on 31 December 2022 had not been set by the CRE when GRDF's tariff file was drawn up, which explains why there may be a difference with the balance of €393.6 million set by the CRE.

- higher capital costs (+€99.3m) and net operating costs (+€83.8m), due to an expected inflation rate (+12.1% cumulatively since 2019) higher than the tariff forecast (+6.8% cumulatively since 2019).

In its public consultation, CRE estimated a CRCP on 31 December 2023 of + €699.4m, by correcting the remaining CRCP and specific items of authorised revenue and indicated that it would use the most up-to-date view of the various costs and revenue for the CRCP at the end of the ATRD6 tariff. The contributors to the public consultation are in favour of CRE's proposal. Some participants have called for the 2023 revenue forecasts to be revised to reflect the best view to date.

Taking into account the updated invoicing data for 2023, CRE considers that the estimated balance of the CRCP on 31 December 2023 is + €904.5 million, to be returned to GRDF. This balance is the total of the following items:

- the updated balance of the previous CRCP (i.e. + €393.6m, in accordance with CRE Deliberation of 10 May 2023<sup>38</sup>);
- the CRCP estimated by CRE for 2023 (i.e. +€510.9m). The difference between GRDF's request and the level adopted at this stage by CRE (+€164.8 million) is mainly due to:
  - o the revision of revenue from tariff terms, which was lower than forecast (+€205.5m) due to a warmer year (+€83.0m) and greater customer sobriety and loss than initially anticipated (+€122.5m).
  - o the failure to take into account, when calculating PDD costs, the resale at a lower cost of the surplus gas purchased in the first few months of 2023. CRE considers that it is not specific that the surplus gas that GRDF estimates it purchased over the first few months of 2023 will be sold at a lower price through the ERCs (- €17.7 million);
  - o the correction of GRDF's estimates for the costs of the Gas Change project for 2023. CRE sets the trajectory of gas switching costs at the level of the reference amount for 2023 (- €12.1 million, see the "Gas Change" project in section 3.8.2);
  - o taking into account inflation from 1 July 2022 to 1 July 2023 for capital costs, i.e. 4.2% instead of the forecast value for 2023<sup>39</sup> sent by CRE to GRDF, i.e. 4.6% (-€6.7m);
  - o the update of outstanding payments requested by GRDF (+€8.0m);
  - o a difference in revenues excluding subscription fees (-€4.2m);
  - o the inclusion of revenue from penalties for exceeding subscribed capacities by T4 and TP consumers at the level of the 2020-2022 average (-€1.7M).

The balance of the CRCP on 1 January 2024 to be taken into account in calculating the authorised revenue is +€919.8m and corresponds to the balance on 31 December 2023 (+€904.5m) and its discounting at the ATRD6 risk-free rate (+€15.4m). In application of the ATRD6 tariff rules, this sum will be returned to the operator during the ATRD7 tariff, in the form of a constant annual instalment spread over the 4 years of the tariff period, discounted at the short-term risk-free rate. This annuity amounts to €243.0m over the ATRD7 period.

## **3.2 Assumptions for quantities of gas distributed and number of consumers served**

### **3.2.1 Changes observed over the period covered by the ATRD6 tariff**

Over the period 2020-2023, the ATRD6 tariff forecast a fall in average gas consumption of -0.40% per year<sup>40</sup> and a stable number of consumers, with an average increase of -0.01% per year.

Over the period 2020-2023, the number of consumers actually connected has risen by an average of -0.44% per year. The quantities of natural gas actually transported, in an average climate, have changed by an average of -4.40% per year.

<sup>38</sup>Deliberation no. 2023-123 of the Energy Regulatory Commission of 10 May 2023 concerning changes to the tariff schedule for GRDF's regulated tariff for use of the public natural gas distribution networks on 1 July 2023.

<sup>39</sup>Consumer price index excluding tobacco, as calculated by INSEE for all households throughout France (INSEE reference 1763852).

<sup>40</sup>The calculation of changes in relation to 2020 does not take into account the restatement of 2020, which is a leap year.

		2020		2021		2022		2023	
		Prev. ATRD6	Achieved	Prev. ATRD6	Achieved	Prev. ATRD6	Achieved	Prev. ATRD6	Estimated
Number of consumers		11,168,861	11,159,403	11,181,048	11,165,557	11,178,841	11,109,251	11,164,042	11,011,276
Consumption (GWh)	medium climate	281,801	276,248	279,780	276,753	279,172	258,201	278,401	241,380
	in real climate		256,915		287,490		240,833		

The ATRD6 period was marked by several events that had an effect on consumption and consumer trajectories:

- the health crisis in 2020, which mainly resulted in a one-off drop in gas consumption in the first half of 2020 (around -6 TWh in climate-adjusted consumption);
- the entry into force of Environmental Regulation 2020 ("ER 2020") on 1 January 2022, with maximum emission thresholds for installations that make it difficult to connect new customers to natural gas. It will initially apply to single-family homes, for all new building permits from 1 January 2022, before being extended to collective heating systems over the ATRD7 period. Although there is a significant inertia effect in the new-build sector, the effects of these new regulations will become perceptible at the end of the ATRD6 period;
- for commercial customers, the implementation of the tertiary <sup>41</sup>sector decree requires major energy efficiency efforts on the part of customers connected to gas, encouraging them in some cases to electrify their uses where possible. Industrial customers are also eligible for conversion incentives. Since 2022, these regulatory and financial measures have begun to have an impact on the balance of business customers;
- Since the start of 2022, the gas crisis has had a major impact on gas consumption. On the one hand, professionals and manufacturers are directly affected by the rise in gas prices, leading them to reduce their consumption as much as possible and in some cases even to suspend their industrial processes. In addition, there are an increasing number of cases where industrial companies connected to the gas network are switching to another energy source, as part of an economic trade-off, when their process is compatible. On the other hand, although protected by the tariff shield, residential customers have been widely encouraged by the public authorities to make frugal efforts to reduce their energy consumption.

GRDF has observed that these effects will continue in 2023.

### 3.2.2 GRDF request

Over the 2024-2027 period, GRDF estimates that consumption will continue to fall at an average rate of -2.38% per year<sup>42</sup> and that the number of consumers will also fall by an average of -1.80% per year.

The development prospects that GRDF has proposed to use as a reference for the ATRD7 period are as follows:

	2024	2025	2026	2027
Number of consumers	10,830,218	10,657,322	10,465,862	10,254,863
Change N/N-1		-1.60%	-1.80%	-2.02%
Consumption (GWh)	247,168	241,044	236,032	229,925
Change N/N-1		-2.48%	-2.08%	-2.59%

These consumption forecasts take into account the change in the climate correction model, linked to the update of the climate reference by Météo France in 2021, which has an impact of -6 TWh/year on forecast consumption during the ATRD7 tariff.

<sup>41</sup>Decree no. 2019-771 of 23 July 2019 on duties to take action to reduce final energy consumption in tertiary buildings

<sup>42</sup>The calculation of changes in relation to 2024 does not take into account the restatement for 2024, which is a leap year.

GRDF breaks down the main effects of changes in the number of consumers by sector (residential, tertiary, industry, NGV) on the basis of assumptions concerning new connections, the switch from gas, energy efficiency gains and the effect of energy prices.

GRDF forecasts a very sharp fall between 2022 and 2027 in the number of new connections in the residential (-65%) and tertiary (-48%) sectors as a result of the application of the RE 2020 and the tertiary decree. GRDF also expects to see a continuation of the trend in the number of residential customers switching away from gas, which has accelerated in recent years (113,000 customers in 2020, 212,000 customers in 2022 and an estimated 241,000 customers in 2027). GRDF considers that the move away from gas in the tertiary sector will also accelerate in premises that will not be able to meet the 2030 final energy consumption reduction target set by the decree without major investment.

GRDF has also estimated energy efficiency gains and the effect of energy prices for the residential, tertiary and industrial sectors:

- on the assumptions of unit consumption by sector, GRDF estimates various effects:
  - o different degrees of energy renovation of buildings and growth in the number of annual energy renovation operations in the residential sector (with a cumulative effect of between - 0.3 TWh/year and - 0.5 TWh/year over the ATRD7 period);
  - o energy renovation and growing penetration of hybrid heat pumps in the tertiary sector (the total effect of which is estimated at -0.7 TWh/year over the ATRD7 period);
  - o electrification of the industrial sector: according to GRDF, annual consumption in this sector could fall by 1.5 TWh/year as a result of energy efficiency efforts and changes in industrial production in France by 2027;
- on energy price assumptions, GRDF estimates that, assuming a return to a gas price of around €20/MWh, i.e. a return to a fluid pre-crisis energy market, residential consumption could rebound by 3%, in the tertiary sector this rebound effect would reach 4% and 6% in the industrial sector.

### 3.2.3 CRE analysis

CRE considers that the trend assumptions used by GRDF in its application are consistent with the context and changes in the regulations, particularly as regards the forecast fall in consumption and the reduction in the number of new connections. On the other hand, CRE considers that the gas abandonment volumes anticipated by GRDF are high compared with the latest data. In fact, GRDF's gas abandonment forecasts for the ATRD7 period are higher than those observed in 2022, when the economic and geopolitical context was particularly averse to gas consumption and estimated for 2023. During the public consultation, CRE accordingly envisaged limiting abandonments to the estimated level for 2023.

Some participants consider that this trajectory is too conservative in the context of a future fall in gas consumption. Other participants agree with CRE's proposal to be more cautious than GRDF in their assessment of the fall in consumption.

CRE considers that the level of gas abandonment observed in 2023 is high and corresponds to a voluntary trajectory of lower gas consumption, in a context of lower gas prices on the wholesale market for the years of the ATRD7 period compared to 2023.

As a result, CRE has adopted the following trajectories for the ATRD tariff:

	2024	2025	2026	2027
Number of consumers	10,839,147	10,683,303	10,519,324	10,344,768
Change N/N-1		-1.44%	-1.53%	-1.66%
Consumption (GWh)	247,511	242,041	237,944	232,831
Change N/N-1		-2.21%	-1.69%	-2.15%

Over the 2024-2027 period, this trajectory corresponds to an average change in consumption of -2.02% per year and an average change in the number of consumers of -1.54% per year. This scenario falls between the ADEME's

S3 scenario (consumption down by 2.69% per year) and the network operators' scenario (consumption down by 1.67% per year) used in CRE's study on the future of gas infrastructures.

Compared with the trajectory proposed by GRDF, the difference is an average of 1% in tariff revenue over the entire tariff period.

### 3.3 GRDF's authorised revenue growth trajectory

#### 3.3.1 Authorised revenue not smoothed over the tariff period ATRD7

GRDF's unsmoothed authorised revenue for the 2024-2027 period is defined as the total of the following elements:

- net operating expenses (see section 3.1.3);
- capital charges (see section 3.1.4);
- clearance of the balance of the CRCP calculated on 31 December 2023 (see section 3.1.5).

GRDF's unsmoothed authorized revenue for the ATRD7 period breaks down as follows:

in current €M	2023 Smoothed authorised revenue	2024	2025	2026	2027
Net operating expenses		1,723.2	1,719.5	1,714.1	1,700.5
Normative capital charges		1,861.2	1,929.2	1,970.8	2,004.8
Clearance of the ATRD7 CRCP balance		243.0	243.0	243.0	243.0
<b>Unsmoothed authorised revenue</b>	<b>3,429.0</b>	<b>3,827.4</b>	<b>3,891.7</b>	<b>3,927.8</b>	<b>3,948.4</b>
<i>Annual change</i>		<i>11.6%</i>	<i>1.7%</i>	<i>0.9%</i>	<i>0.5%</i>

Excluding smoothing effects, the costs to be covered adopted by CRE for GRDF lead to an increase of +11.6% in authorised revenue between 2023 and 2024, followed by an average increase of +1.0% per year over the ATRD7 period.

#### 3.3.2 Authorised revenue smoothed over the 2024-2027 tariff period

As explained in section 2.3.4, in order to calculate the tariff change on 1 July 2024 and for each annual change, CRE has decided to smooth the change in forecast authorised revenue. This smoothing has no impact on the overall charges recovered by GRDF over the duration of the tariff, but avoids major changes in opposite directions from one year to the next.

In its public consultation, CRE presented two possible options for the initial increase and subsequent annual changes:

- 1<sup>st</sup> option: simple smoothing in the form of " $Z = CPI + k$ ", i.e. an "initial march" type change followed by an annual change in line with inflation. This is the method proposed by GRDF;
- 2<sup>nd</sup> option: smoothing in the form of " $Z = CPI + X + k$ " with a coefficient X corresponding to the effect of the average annual fall in consumption and the number of consumers during the ATRD7 tariff. The initial step, in this case, would be followed by an annual change equal to the total of inflation and the X coefficient.

The majority of participants were in favour of the 2<sup>nd</sup> option. However, some have expressed reluctance to adopt the second option, as spreading the increase out too far could lead to a gap between revenues and costs at the end of the tariff period. CRE considers that the choice of a coefficient that would offset the effect of the average annual fall in consumption and the number of consumers during the ATRD7 tariff makes it possible to limit this risk.



CRE considers that the gradual decline in gas consumption will lead to a rise in tariffs and that it is consistent to take this impact into account gradually. CRE has accordingly chosen the option based on an initial rate of 27.52% and subsequent annual increases in line with inflation and a coefficient X equal to +1.91%.

By way of indication, the forecast changes (excluding the CRCP adjustment) would break down as follows:

	2024	2025	2026	2027
Forecast inflation between year N-1 and year N	2.5%	2.0%	2.0%	1.8%
Initial run	27.52%			
Evolution factor X		+ 1.91%	+ 1.91%	+ 1.91%
Forecast change at 1 July of year N (excluding clearance of CRCP balance)	27.52%	3.91%	3.91%	3.71%

GRDF's authorised revenue for the 2024-2027 period is defined as the total of the following elements:

- the unsmoothed authorised revenue (see section 3.3.1);
- the smoothing term to allow tariffs to evolve in line with the terms defined above.

Thus, for the ATRD7 tariff period, the smoothed forecast authorised revenue breaks down as follows:

in current €M	2023	2024	2025	2026	2027	VAN <sup>43</sup>
Unsmoothed authorised revenue		3,827.4	3,891.7	3,927.8	3,948.4	14,752.6
ATRD7 smoothing term		- 324.8	+ 67.7	+ 117.7	+ 168.1	0
Smoothed authorised revenue/Forecast revenue	3,429.0	3,502.7	3,959.4	4,045.5	4,116.5	14,752.6
<i>Annual change</i>		+ 2.1%	+ 13.0%	+ 2.2%	+ 1.8%	

<sup>43</sup>Unsmoothed authorised revenue and forecast revenue are equal in net present value using the CRCP discount rate (3.80%).

## 4 Tariff structure

### 4.1 How the distribution network tariff structure works

Around 11.6 million consumers are connected to the natural gas distribution networks. They are supplied by 24 natural gas distribution network operators of very different sizes. With 200,000 kilometres of networks, GRDF distributes 96% of all natural gas and transports it throughout most of France.

Most of this network is supplied at medium pressure, up to 4 bar.

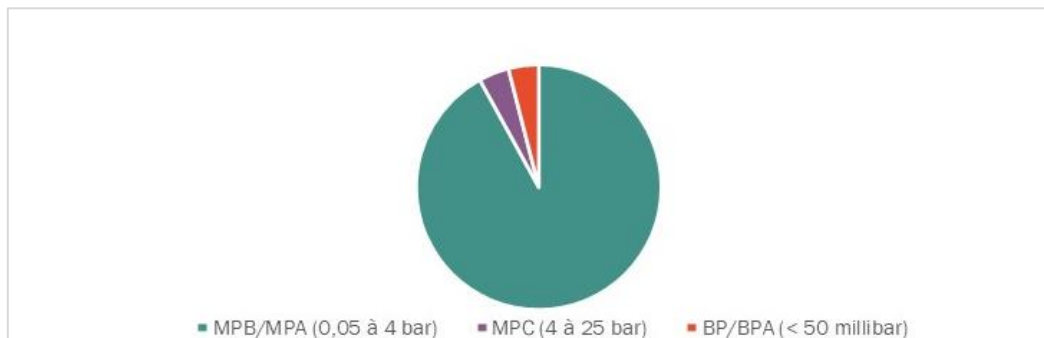


Figure 6. Breakdown of GRDF's network by pressure level

The structure of gas distribution tariffs is common to all DSOs. In this way, all the equalised tariffs of the ELDs and the non-equalised tariffs are expressed in the form of GRDF's ATRD grid, to which a multiplication coefficient is applied. These methods ensure simplicity and comparability.

The customer portfolio is segmented into 4 main tariff options:

- three options T1, T2, T3, of the binomial type, each comprising a subscription and a term proportional to the quantities delivered:
  - o T1: annual consumption of 0 to 4,000 kWh (around 3.2 million consumers representing 11.8% of GRDF's authorised revenue). In theory, it corresponds to domestic hot water and cooking;
  - o T2: annual consumption of between 4,000 and 300,000 kWh (around 7.8 million consumers accounting for 65.6% of GRDF's authorised revenue). In theory, it corresponds to heating use;
  - o T3: annual consumption of 300,000 to 5,000,000 kWh (approximately 98,000 consumers for 17.6% of GRDF's authorised revenue). In theory, this corresponds to collective heating or consumption in the tertiary sector or small-scale industry;
- a trinomial T4 option, comprising a subscription, a charge proportional to the daily capacity subscribed and a charge proportional to the quantities delivered, designed for consumers with annual consumption of more than 5,000,000 kWh (around 2,700 consumers representing 5% of GRDF's authorised revenue). This option is for large consumers in the tertiary or industrial sectors.

A special tariff option known as the "proximity tariff" (LT), of the trinomial type (distance to the transmission network, capacity and annual subscription), has been introduced for large consumers located close to the gas transmission network and already supplied by the distribution networks. The term proportional to distance is multiplied by a coefficient that depends on the population density of the local authority in which the delivery point concerned is located. Around fifty consumers now enjoy this option.

For a given delivery point, the choice of tariff option is left to the supplier on behalf of the consumer concerned. The tariff applies per delivery point.

Finally, a penalty mechanism for exceeding subscribed capacity exists for tariff options T4 and LT.

For consumers who do not have an individual meter (around 150,000 consumers), the invoicing arrangements are as follows:

- for all end consumers in a building or group of dwellings who do not have an individual meter, but who do have a collective meter and have signed a collective supply contract, a subscription equal to that for option T1 is charged, applied to the number of dwellings supplied with gas and a proportional share equal to that for tariff option T1 is applied to the gas consumption measured by the collective meter;

- for consumers who do not have an individual or collective meter, a flat rate based on an annual consumption of 660 kWh is applied.

Tariff option	T1	T2	T3	T4	TP
Number of consumers by the end of 2022	3.2 million	7.8 million	99,000	2,600	47
Theoretical" type of use	Cooking and/or DHW	Individual heating	Collective heating + small tertiary	Large commercial or industrial	
Theoretical annual consumption threshold	< 4 MWh	Between 4 and 300 MWh	Between 300 and 5,000 MWh	More than 5,000 MWh	not applicable
of quantities transported	Approximately 2%	Approximately 48%	Approximately 30%	Approximately 20%	
Theoretical consumption profile	P011	P012	P013 to P019		
% of authorised revenue	11.8%	65.6%	17.6%	5.0%	

Figure 7. Summary of GRDF's customer portfolio

The consumption profiling system, defined by the gas working group, is made up of nine profiles adapted to the different types of user consumption. Two consumption profiles are specifically associated with consumers with half-yearly readings or fitted with a smart meter and whose readings were initially half-yearly and are automatically allocated on the basis of the annual reference consumption (CAR) of the PCE<sup>44</sup>:

- the "P011" profile for consumers with half-yearly meter readings or with a smart meter whose CAR is less than 4 MWh per year;
- the "P012" profile for consumers with half-yearly meter readings or with a smart meter whose RAC is between 4 and 300 MWh per year.

For PCEs in options T3 and T4, which are metered monthly or daily, a consumption profile is assigned based on the proportion of consumption in winter (PH), from November to March, in relation to total annual<sup>45</sup> consumption.

Finally, since the first ATRD tariff came into force, the terms of the tariff options have been defined to ensure continuity in the consumption thresholds separating each tariff option. This principle of continuity at the thresholds is designed to avoid a drop in levels between tariff options and to encourage suppliers to choose the tariff option best suited to the user's consumption level. Since the ATRD6 tariff, continuity at the threshold is calculated without taking into account the transport tariff contribution (TTC).

<sup>44</sup>PCE: metering and estimation point.

<sup>45</sup>P013 if PH ≤ 39%; P014 if 39% < PH ≤ 50%; P015 if 50% < PH ≤ 58%; P016 if 58% < PH ≤ 69%; P017 if 69% < PH ≤ 75%; P018 if 75% < PH ≤ 81%; P019 if PH > 81%.

As a reminder, GRDF's tariff schedule in force from 1 July 2023, excluding the  $R_f$  term, is as follows:

- Main tariff options:

Tariff option	Annual subscription excluding $R_f$ (€/year)	Proportional price (€/MWh)	Annual subscription term for daily capacity (€/MWh/d)	
			Share of capacity subscribed under 500 MWh/d	Share of capacity subscribed in excess of 500 MWh/d
T1	33,48	33,23	N.A	N.A
T2	130,68	8,93	N.A	N.A
T3	884.52	6.42	N.A	N.A
T4	15,971.16	0.87	213.00	106.44

- "Local tariff" option (TP):

Tariff option	Subscription excluding $R_f$ (€/year)	Capa. subscription term J (€/MWh/d)	Annual distance charge (€/metre/year)
TP	38,164.56	106.20	69.72

A multiplying factor is applied to the annual distance term. It is equal to:

- 1, if the population density of the local authority is less than 400 inhabitants per km<sup>2</sup>;
- 1.75, if the population density of the local authority is between 400 inhabitants per km<sup>2</sup> and 4,000 inhabitants per km<sup>2</sup>;
- 3, if the population density of the local authority is greater than 4,000 inhabitants per km<sup>2</sup>.

### **Biomethane producers:**

The biomethane injection tariff term introduced in the ATRD6 tariff is based on the definition of three levels of injection term, each applicable to a zone of the territory, in order to differentiate the amount paid by producers according to the costs generated by their choice of location, the levels of which are as follows:

Level	Injection tariff term (€/MWh)
Level 3	0.7
Level 2	0.4
Level 1	0

## **4.2 Change in structure for the ATRD7 tariff**

### **4.2.1 Issues**

CRE has identified a number of structural issues for the ATRD7 period, on which it organised public workshops prior to the public consultation. These workshops, held on 23 February 2023 and 10 May 2023, asked stakeholders about:

- adjusting the structure of natural gas distribution tariffs;

- tariff to take account of the increased use of renewable and low-carbon gases.

The feedback from workshop participants and the ensuing discussions provided CRE with food for thought on the changes envisaged at the public consultation stage.

The first challenge identified concerned adapting the tariff structure to the changing role of the distribution network, in the context of the energy transition. Gas distribution networks are undergoing major changes, which will increase both in terms of their use by consumers and the proliferation of new users, including biomethane producers. The gas distribution network is thus evolving from a historical model of unidirectional supply of gas from the transmission network to end consumers to a new model of decentralisation of production, due to the development of the green gas sector.

What's more, for some consumers, gas is no longer the main energy source, but a back-up or back-up for another energy source. These consumers, who are generally in industry, can switch between gas and another energy source depending on short- or medium-term economic considerations. These consumers can also be district heating networks (DHNs), which keep gas as a back-up energy source, in order to serve end customers who have left gas.

These consumers generate high sizing and maintenance costs, even though they only use the network occasionally. The tariff system, which up to now has been largely based on consumption volume, does not cover the costs they generate. As this type of use of the network is set to become more frequent, GRDF has proposed to CRE that a standardised flow rate term be introduced.

Against this backdrop, CRE has presented the following three changes:

- the introduction of a standardised flow rate term, based on meter flow rate and delivery pressure;
- lowering the threshold between tariff options T2 and T3 from 300 MWh/year to 100 MWh/year;
- changes to the tariffs applicable to renewable and low-carbon gas producers.

In the present deliberation, CRE has decided to implement the changes to the flow term (see section 4.2.2) and specific changes to the tariffs for renewable and low-carbon gas production (see section 4.2.3).

However, it does not support the lowering of the T2/T3 threshold. GRDF had proposed this change to address the issue of heterogeneity within the T2 tariff option, which covers consumers with varying levels of consumption and use of the distribution network.

In its public consultation, CRE expressed reservations about this change in threshold between tariff options T2 and T3, given the significant redistributive implications (lower ATRD bills for small T3 customers and higher ATRD bills for T2 and large T3 customers).

Feedback from stakeholders on this issue is mixed. Some participants agreed with GRDF's analysis, arguing that lowering the threshold would make it easier to match the nature of customers with their option and with the costs to the network. Others, on the other hand, stressed the need to conduct a more detailed analysis of behaviour before implementing these changes. Some participants note that the change in the threshold between options T1 and T2 decided in the ATRD6 tariff has not, in fact, led to the expected switchovers by suppliers.

CRE shares some of the reservations raised: although there is a higher proportion of professionals and collective heating systems than individual homes in the annual reference consumption brackets of 50 MWh to 100 MWh and 100 to 300 MWh, more precise analyses have yet to confirm that their behaviour is different. It is also possible to work in working groups on changes to profiling. In addition, as indicated in the public consultation, this change would lead to redistributive effects between the bills of small T3 consumers (lower bills) and T2 and larger T3 consumers (higher bills).

For these reasons, CRE does not accept the change in the T2/T3 threshold.

## 4.2.2 Introduction of a standardised flow term

### 4.2.2.1 Developing the use of gas for back-up purposes

The role of the grid is becoming more insurance-based than before, particularly with the development of "back-up" or "emergency" uses for specific consumers. These users are connected to the gas network, but only use gas for a few days a year, either for insurance reasons in the event of failure or insufficiency of another main energy source, or for reasons of trade-off between gas and other energy sources depending on economic conditions (as

was the case during the gas crisis, for example, for industrial users equipped with mixed gas/oil burners). However, the network must remain sized to meet their peak requirements and be regularly maintained.

To date, GRDF has identified around 3,200 back-up customers, based on a meter flow rate greater than 160 Nm<sup>3</sup>/h and annual consumption concentrated over less than 10 days. As the notion of back-up is not strictly defined, other consumers with lower flow rates or a slightly lower concentration of consumption may also be considered as such.

Under the ATRD6 tariff structure, these users pay a subscription fee per site, plus a variable part: this structure is suitable for consumers whose consumption is regular. However, in the case of occasional consumption, the consumer will pay a subscription fee and a variable fee for small volumes. This structure does not reflect the sizing and maintenance costs of the network of back-up customers, which remain independent of usage.

The expected growth in the number of these users accordingly raises two questions, set out by CRE during its public consultation, which are the reflection of network costs by the user who generates them and the incentive to size the network as closely as possible to the user's needs.

The majority of stakeholders expressed their views on these issues in their responses to the public consultation and share these concerns. In particular, network operators and Energy Distribution Authorities (AODE) and their representatives are in favour of passing on to users the costs they generate.

However, some participants, mainly suppliers, are questioning the economic relevance of developing a system to deal with a limited number of cases. CRE points out, firstly, that the strict categorisation of back-up use is not strictly defined and that the criteria defined by GRDF to illustrate this use are not limitative and secondly, that this category of users is potentially going to increase in the light of the reduction in gas consumption and thus generate increasing network maintenance costs.

CRE considers that it is necessary and appropriate to address this issue.

#### 4.2.2.2 Principle of the standardised flow rate term

At the workshop on the structure of the distribution tariff and then during the public consultation, CRE presented GRDF's proposal to introduce a new tariff term to better reflect the costs associated with scaling the network: the standardised flow rate term.

The standardised flow rate corresponds to the meter flow rate weighted by a consumer's delivery pressure.

In order to invoice this standardised flow, CRE has proposed the following formula:

$$\text{Facturation du débit normalisé} = \text{terme de débit} \times [(\text{débit du compteur} * (1 + \text{pression de livraison})) - \text{seuil}]$$

Where:

- *Terme de débit*: tariff term used for invoicing purposes and expressed in €/year/Nm<sup>3</sup>/h;
- *Débit du compteur*: volume of gas that can be delivered per hour by the meter, in m<sup>3</sup>/h;
- *Pression de livraison*: this parameter is mainly concentrated in the 21 mbar and 300 mbar (up to 6 bar) pressure ranges;
- *Seuil*: standardised flow rate at which the flowterm is to be invoiced (proposed by GRDF as 40 Nm<sup>3</sup>/h).

CRE has proposed applying these terms to options T1, T2 and T3, as option T4 already includes a capacity term. It has also proposed a threshold for application from a standardised flow rate of 40 Nm<sup>3</sup>/h so that this tariff term does not apply to individual consumers, more than 99% of whom have standardised flow rates of 6 or 10 Nm<sup>3</sup>/h.

CRE has proposed a level for the flow term of €4/year/Nm<sup>3</sup>/h, lower than GRDF's proposal of €12/year/Nm<sup>3</sup>/h, in order to avoid knock-on effects on other consumers.

The majority of stakeholders who expressed their views on the term "throughput" during the public consultation were in favour of the principle. Several participants consider this to be an appropriate solution, despite the disadvantages presented, such as the operational difficulties of implementing the term. *On the other hand*, other participants consider that the meter's characteristics are not a suitable reference or that the parameters are too complex to use for invoicing emergency backup use. Instead, they recommend basing this invoicing on a capacity subscription, as for the T4 tariff option, or automatically switching so-called "back-up" consumers to a T4 tariff option.



Some participants have asked about a solution that would involve applying a specific term through the invoicing of a "catalogue service", in order to target only the consumers concerned, without involving IS developments.

With regard to the scope of application of the term, the participants expressed themselves in favour of the 40 Nm<sup>3</sup>/h threshold, arguing that this threshold effectively corresponds to so-called industrial meters and that it will de facto exclude private individuals from the scope of this term. However, several participants point out that the possible existence of a debit term on T1 and T2 tariff options will still force suppliers to undertake major IS developments. One participant proposed an alternative solution, which would consist of excluding consumers with meters with a flow rate equal to or greater than 40 Nm<sup>3</sup>/h from T1 and T2 tariffs.

Finally, with regard to the level of the term, some stakeholders who expressed an opinion considered that it was too low and that the level should be sufficiently significant for the right scaling price signal to be perceived by customers. *On the other hand*, other participants have indicated that the level envisaged by CRE would lead to very high increases for specific consumers, particularly in the food industry and have called for the introduction of a differentiated debit term for these uses.

### CRE analysis

CRE considers that network scaling is part of GRDF's remit and that tariff for this activity should accordingly be included in the ATRD tariff and not in the operator's service catalogue.

As indicated in its public consultation, CRE points out that introducing a capacity term based on Normalised Daily Consumption (NDC) or switching back-up customers to the T4 tariff option would only partially address the problem, as this use is not necessarily correlated with a consumer's winter consumption, unlike NDC and capacity subscription.

In addition, it considers that the compulsory switchover to Q4 of customers identified retrospective as "back-up" would have serious implications for the consumers concerned, who would have to plan for capacity subscriptions and for their suppliers, who would have to accompany these switchovers.

CRE has examined the possibility of excluding consumers with meters with a flow rate of 40 Nm<sup>3</sup>/h or more from the T1 and T2 tariff options. It emerged that this solution would not provide the simplification sought, as it would involve a customer identification phase, estimated at around 20,000 customers, followed by a possible meter adjustment for some customers, before suppliers put the remaining customers on the T3 option. As a result, CRE considers that it is preferable to maintain the application of this standardised flow rate term for the 3 options T1, T2 and T3.

As regards the level, CRE considers that the level of €4<sub>2023</sub>/year/Nm<sup>3</sup>/h is appropriate and that a higher level could lead to very large increases in bills for some consumers. This level seems appropriate from the point of view of a cost/benefit analysis, in that it will make it possible to collect around €50m/year in revenue, out of total authorised revenue of around €3.4bn in 2023.

CRE has accordingly decided to introduce a flow rate term into the ATRD7 tariff, at a level of €4<sub>2023</sub>/year/Nm<sup>3</sup>/h, applicable to consumers in options T1, T2 and T3 with a standardised flow rate equal to or greater than 40 Nm<sup>3</sup>/h.

In the light of the IS adaptations and the awareness-raising exercise to be performed around the introduction of this new term, CRE has opted for an entry into force date of 1 July 2026 and asks GRDF to carry out an awareness-raising and support phase for the users concerned (see section 4.2.4).

Taking into account the +27.52% change in the terms of the tariff schedule on 1 July 2024, to which will be added the changes on 1 July 2025 and 1 July 2026, estimated to date at +3.9% on 1 July 2025 and +3.9% on 1 July 2026 (these changes will take into account the effective clearance of the CRCP and inflation), the estimated level of this term is €5.52/year/Nm<sup>3</sup>/h on 1 July 2026.

## **4.2.3 Changes to the tariffs applicable to renewable and low-carbon gas producers**

### **4.2.3.1 Tariff adapted to a fast-growing category of network users**

Article 94 of the law of 30 October 2018<sup>46</sup>, known as the "EGalim law", introduced the principle of the right to injection for biogas producers into the Energy Code. This principle was extended to all renewable or low-carbon

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<sup>46</sup>Law no 2018-938 of 30 October 2018 for balanced trade relations in the agricultural and food sector and healthy, sustainable food accessible to all

gases by the law of 10 March 2023<sup>47</sup>, known as the "APER law". Article L. 453-9 of the Energy Code states that "[w]hen a renewable gas production facility, including biogas, or low-carbon gas production facility is located near a natural gas network, natural gas network operators will carry out the necessary reinforcements to enable the renewable gas, including biogas, or low-carbon gas produced to be injected into the network, under conditions and within limits that ensure the technical and economic relevance of the investments [...]".

The procedures for implementing this Article were specified by the decree of 28 June 2019<sup>48</sup> and by the order of 28 June 2019<sup>49</sup> issued in application of this decree.

The above decree of 28 June 2019, the provisions of which are now codified in Articles D. 453-20 to D. 453-25 of the Energy Code, introduced three mechanisms aimed at the efficient development of biomethane injection into natural gas networks: a system of zoning approved by CRE, a system for assessing and financing the associated costs by the network operators, within the limit of a technico-economic Investment/Volume ("I/V") ratio and a system for sharing the costs of shared facilities between producers in the same zone.

In addition, the provisions of Articles L. 452-1 and L. 452-1-1 of the Energy Code specify that the costs borne by TSOs and DSOs<sup>50</sup> include part of the costs of connecting renewable gas production facilities, including biogas, or low-carbon gas production facilities to these networks and that the level of cover may not exceed 60% of the cost of the connection.

All of the above provisions mean that reinforcement costs in technically and economically relevant areas, as well as the majority of connection costs, are pooled in the ATRD and ATRT tariffs: this pooling does not necessarily encourage producers to make location choices that are optimal for the public.

With the aim of preserving a signal at the optimum location and covering the operating costs of reinforcement works, CRE has introduced an injection charge in the ATRD6 tariff, differentiated according to the network reinforcement investments planned in the zone. The level of this charge has been set to take account of the direct costs associated with injection, specifically maintenance and compression energy costs.

#### **4.2.3.2 Changes in the injection timbre for the ATRD7 period**

During the public consultations of 26 July 2023 and 12 October 2023 and after gathering the views of stakeholders through a workshop in May 2023, CRE envisaged several changes to the injection charge.

##### Injection term maintained and extended to renewable and low-carbon gases

CRE first consulted stakeholders on the principle of renewing the injection charge and extending it to renewable and low-carbon gases, arguing that since 2023, Article L. 453-9 of the Energy Code has been amended and now requires natural gas network operators to carry out the necessary reinforcements to allow the injection into the network of renewable gas, including biogas, or low-carbon gas produced and that the right to injection has accordingly been extended to all renewable and low-carbon gases.

The majority of stakeholders are in favour of maintaining the injection charge, although a number are in favour of simplifying the charge by introducing a single term. In addition, several participants consider that the signal to locate already exists through the connection and that the charge has no operational effect on the location of projects. In addition, none of the participants opposed the extension of the injection charge to renewable and low-carbon gases.

CRE considers that the complexity of the injection charge is relatively limited, with a collection and rebilling mechanism that is now operational. In addition, CRE considers that the location signal is very strongly attenuated by the systems in force, which justifies maintaining a differentiation between zones. Producers also have the opportunity to react to this price signal, for example when they have several facilities and have to choose where to install their biomethane production.

##### Evolution of the shape of the injection charge

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<sup>47</sup>Law no. 2023-175 of 10 March 2023 on accelerating the production of renewable energies

<sup>48</sup>Decree no. 2019-665 of 28 June 2019 relating to the reinforcement of natural gas transmission and distribution networks required to allow the injection of biogas produced

<sup>49</sup>Order of 28 June 2019 defining the terms and conditions for applying Section 6 of Chapter III of Title V of Book IV of the Energy Code

<sup>50</sup>For networks that are not licensed under Article L. 432-6 of the Energy Code.

In its public consultation, CRE proposed two options:

- 1) renewal of the principles applied during the ATRT7/ATRD6 period, with updated cost parameters to take account of trends observed during the ATRT7/ATRD6 period.

On the basis of these assumptions, the levels of the feed-in tariff terms used to recover direct costs and presented for public consultation were as follows:

Charge	Current grid (€/MWh injected)	Price scale envisaged at the public consultation stage for the ATRT8/ATRD7 period (€/MWh injected)	Of which backward OPEX (€/MWh injected)	Of which network and connection OPEX (€/MWh injected)
3	0.7	1.8	1.4	0.4
2	0.4	0.4	0.00	0.4
1	0	0	0.00	0.1 <sup>51</sup>

- 2) broadening the scope of costs covered by the injection charge by including indirect operating costs associated with the production of renewable and low-carbon gases in the cost base to be covered by producers of these gases.

If the scope of the costs to be covered by the injection charge were to be extended to indirect costs, CRE planned to retain a level consistent with that of an entry charge on the GRTgaz or Teréga network, estimated at €130/MWh/d/year on average over the period, to the extent that injection into the networks is similar to an entry point on the single market place, on which the gas is transported and can be traded and accordingly represents the same service for its user.

A large majority of participants consider that the levels proposed by CRE are too high. In particular, a number of stakeholders in the biomethane sector consider that increasing the level of the injection charge too much would run counter to energy policy guidelines.

Many renewable and low-carbon gas producers have also told CRE that additional charges would have a significant impact on their profitability.

However, the increase in the level of the charge is supported by specific participants who consider that the biomethane sector should bear the costs of structuring and operating that it generates for the network operators.

Finally, a number of participants who opposed the increase proposed by CRE nonetheless spoke out in favour of a single term for tariff the injection of renewable and low-carbon gas, arguing that over time, more than 80% of zones will require the presence of a rebate, which would justify ending the differentiation of the charge level by zone.

In the light of all these factors and so as not to introduce a significant break in the economy of the renewable and low-carbon gas sector and arguing that a capacity term makes it possible to provide an incentive for the correct scaling of installations, CRE has decided to adapt the injection charge as follows:

- it retains the "volume" term (linked to the volumes of renewable and low-carbon gas injected), differentiated according to zones, but with no change in its amount compared with the current grid in order to maintain a tariff signal to encourage the optimisation of installed capacity and its location. Although the majority of the country's zones will eventually be equipped with a bollard, this is still far from being the case, with 14 bollards in service to date and 20 under construction;
- it is introducing an additional "capacity" term (linked to the maximum renewable and low-carbon gas production capacity of each site) associated with the operators' overheads, which will be applicable to all phases of the sites (see definition in section 5.1.1), in service and future, the level of which is set at €50/MWh/d/year.

<sup>51</sup>Given the low amount associated with level 1, the CRE has set it at €0/MWh/injected.

The resulting grid and its breakdown are as follows:

Injection term	Grid selected (€/MWh injected)	of which OPEX reverse (€/MWh)	of which OPEX transmission connections (€/MWh)	of which OPEX grids and distribution connections (€/MWh)	Grid selected (€/MWh/d/year)	of which OPEX distribution (€/MWh/d/year)	of which OPEX transport (€/MWh/d/year)
Level 3	0.7	0.55	0.03	0.12	50	38	12
Level 2	0.4	0.00	0.05	0.35			
Level 1	0	0.00	0.00	0.00			

In addition, these terms will change in accordance with the annual changes defined in 2.3.3 of this deliberation.

#### 4.2.3.3 Operational procedures for invoicing and repayment of the injection charge

Finally, CRE wished to specify in its public consultation that, for the ATRD7 tariff period, invoicing of the "volume" term of the injection charge would be applied differently according to the phases of a site, to the extent that when a producer wishes to increase its Maximum Injection Capacity (Cmax), a new phase must be added to the capacity register. However, between the initial phase of a site and its capacity increases, the zoning situation may have changed.

No specific comments were made by stakeholders on this proposed change.

For GRDF's ATRD7 tariff, CRE is adapting the invoicing of the "volume" term of the injection charge by adopting the principle of invoicing per phase of the same site rather than a single term per site.

CRE also specifies that invoicing between the different phases of a site will be performed in proportion to the volumes injected.

For example, a producer with a maximum total injection capacity of 300 Nm<sup>3</sup>/h, including:

- 100 Nm<sup>3</sup>/h subject to level 3 of the "volume" term of the injection charge, because commissioned on a zoning with a backflow; and
- 200 Nm<sup>3</sup>/h subject to level 1 of the "volume" term of the injection charge, because it was commissioned at a time when the zoning had not yet been reversed;

injecting 150 Nm<sup>3</sup>/h instead of 300 Nm<sup>3</sup>/h (Maximum Injection Capacity) would be invoiced:

- 50 Nm<sup>3</sup>/h (100 Nm<sup>3</sup>/h capacity at level 3 of the "volume" term of the injection charge \* 150 Nm<sup>3</sup>/h actually injected/300 Nm<sup>3</sup>/h maximum injection capacity) with a level 3 "volume" term of the injection charge;
- 100 Nm<sup>3</sup>/h (200 Nm<sup>3</sup>/h capacity at level 1 of the "volume" term of the injection charge \* 150 Nm<sup>3</sup>/h actually injected/300 Nm<sup>3</sup>/h maximum injection capacity) with a "volume" term of the injection charge of level 1;
- 300 Nm<sup>3</sup>/h with a "capacity" injection charge of €50/MWh/d/year.

To avoid multiplying the number of contacts for producers, CRE had adopted for the ATRD7/ATRD6 period the principle of invoicing the injection charge by the network operator to which each producer is connected. As a result, CRE has introduced a repayment to TSOs of revenues received by DSOs in respect of reverse OPEX. The payment is made annually. The volumes associated with these transfers between operators are included in the CRCP at 100%.

In its public consultation, CRE proposed that these invoicing and repayment procedures be renewed and that they be applied to revenue from the capacity charge, if introduced, with all volumes being taken into account in the CRCP.

The majority of participants expressed their support for these principles. As a result, CRE is renewing the principle of transferring the charge and is setting the share of revenues received for the "volume" term of the level 3 injection

charge, transferred by the DSOs to the TSOs concerned, at €0.58/MWh, corresponding to the share of OPEX for return lines and transmission pipelines.

It also sets the share of revenues received for the "volume" term of the level 2 injection charge, paid by the DSOs to the TSOs concerned, at €0.05/MWh corresponding to the share of transmission pipelines.

Payment will be made on an annual basis, according to the volume of injection revenue actually received during the year, for producers connected to the distribution network who have been allocated the "volume" term of the level 3 or 2 injection charge. The volumes associated with these transfers between operators will be taken into account in the CRCP at 100%.

With regard to the "capacity" term of the injection charge, CRE is also adopting a principle of annual repayment between the TSOs and GRDF of revenue collected on behalf of another operator. Payment is made on an annual basis, according to the volume of revenue actually collected during the year, for all producers connected to the distribution network.

CRE sets GRDF's share of revenue from the "capacity" term of the injection charge as indirect TSO costs at €12/MWh/d/year. It sets the share of revenues received from the "capacity" term of the injection charge by TSOs, as part of GRDF's indirect costs, at €38/MWh/d/year.

Injection term	Grid selected (€/MWh injected)	Amounts paid by GRDF to TSOs	Amounts paid by TSOs to GRDF	Grid selected (€/MWh/d/year)	Amounts paid by GRDF to TSOs	Amounts paid by TSOs to GRDF
Level 3	0.7	0.58	0.00 <sup>52</sup>	50	12	38
Level 2	0.4	0.05	0.00 <sup>53</sup>			
Level 1	0	0.00	0.00			

The volumes associated with these transfers between operators are included in the CRCP at 100%.

The changes to the terms "injection volume" and "injection capacity" decided in this deliberation also apply to TSOs for the ATRT8 period<sup>54</sup>.

#### 4.2.4 Timetable and roadmap

As regards the timetable for implementing changes to the tariff structure relating to the introduction of a debit term, CRE has proposed the date of 1 July 2026, to give the various participants time to implement the associated changes, particularly to information systems and to allow the structural changes to be implemented at the same time as the ELDs' ATRD7 tariffs come into force.

On the other hand, CRE proposed to implement the changes relating to the injection charge from 1 July 2024, arguing that this change concerns a small number of users and could be implemented without requiring major changes to the information systems.

The majority of stakeholders are in favour of this timetable. As a result, CRE has decided to implement the changes concerning the injection charge on 1 July 2024 and the changes concerning the flow term on 1 July 2026.

With regard to the flow rate term, CRE is also asking GRDF to put in place an action plan to take advantage of the two-year period for implementing the flow rate term to identify and support situations where the meter seems clearly unsuited to the customer's consumption or use. This action plan will include:

<sup>52</sup>Producers connected to the transmission networks who are allocated a level 3 "volume" term on the injection stamp are those who enjoy a "Transport/Transport" rebate, so the CRE is not introducing an amount to be paid by the TSOs to GRDF for this term.

<sup>53</sup>By default, producers connected to the transmission networks cannot be allocated a level 2 "volume" term for the injection stamp, so the CRE is not introducing an amount to be paid by the TSOs to GRDF for this term.

<sup>54</sup>Deliberation no. 2024-22 of the Energy Regulatory Commission of 30 January 2024 concerning the tariff for use of the GRTgaz and Teréga natural gas transmission networks



- the launch of a WG on the subject;
- GRDF will identify all unsuitable meters and contact the consumers concerned to inform them;
- raising awareness among all consumers affected by the application of the flow rate term;
- planning the replacement of unsuitable meters.

## 4.2.5 Residual meter reading

### 4.2.5.1 Background and reminder of the system envisaged in the public consultation

In its public consultation, CRE indicated that a significant proportion of the benefits of the Gazpar project at DSO level were linked to the reduction in meter reading costs made possible by the end of walk-by meter reading and its replacement by remote meter reading. This gain is directly reflected in the forecast trajectory of GRDF's operating expenses (see section 3.1.3). In practice, this means that footfall replacement contracts will cease from 2024. Accordingly, over the ATRD7 period, GRDF will no longer be in a position to carry out systematic meter reading for all users not equipped with Gazpar meters, without a significant increase in its costs.

At the end of the large-scale rollout phase, which saw over 95% of GRDF's meters installed, a residual population of almost 550,000 users remains to be equipped (including almost 282,300 active connection points<sup>55</sup>).

In this context, for users not equipped with a Gazpar, GRDF is required:

- on the one hand, to maintain a residual meter reading activity;
- secondly, to implement the most flexible and effective means possible for the installation of a Gazpar meter.

On the second point, there are various reasons why users are not being fitted with Gazpar meters (contact difficulties, technical problems, explicit refusal, etc.). The large-scale rollout period, which will be spread over the ATRD7 period, should enable the majority of these situations to be regularised.

CRE considers that at this stage in the rollout of the Gazpar meter, only customers who are not equipped with an advanced meter and do not allow access to their meter should bear the cost of the residual reading they generate. In its public consultation of 29 April 2021<sup>56</sup> and then in its deliberation of 28 July 2021 on the ATRD6 tariff, CRE indicated that it had begun discussions with GRDF on the organisation of the residual meter reading at the end of the rollout and on the arrangements for invoicing this to consumers who are not equipped with a Gazpar meter at the end of the rollout when this situation is the result of a clear desire on the part of the consumer not to be fitted with a Gazpar meter.

These principles have been adopted by CRE in the case of residual meter reading for electricity consumers not fitted with Linky meters in Enedis's service territory<sup>57</sup>. A transitional phase has been defined, based on the principle of self-metering for users not fitted with Linky smart meters and on a policy of targeted interaction on the part of the DSO to facilitate and encourage the installation of an advanced meter.

To this end, arguing that GRDF's situation is similar to that observed in Enedis's service territory at the end of the large-scale rollout of its advanced meters, CRE proposed in its public consultation to replicate the system applied to Enedis for GRDF over the ATRD7 period. CRE has accordingly proposed introducing a specific component for handling residual meter reading, which would be invoiced to consumers who meet the following two cumulative conditions:

- the consumer does not have an advanced Gazpar meter;

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<sup>55</sup>Connection point equipped with a meter to which a gas supply contract is attached.

<sup>56</sup>Public consultation no. 2021-05 of the Energy Regulatory Commission of 29 April 2021 on updating the incentivising regulation of the quality of service of GRDF's Gazpar project

<sup>57</sup>Deliberation no 2022-82 of the Energy Regulatory Commission of 17 March 2022 on the incentivising regulatory framework for the Enedis advanced metering system in the LV ≤ 36 kVA voltage range (Linky) for the period 2022-2024 and amending Deliberation no 2021-13 on the tariff for use of the public electricity distribution networks (TURPE 6 HTA-BT)



- from 1 January 2024, the consumer has not provided GRDF with his consumption index for more than 12 months ("non-responsive" user - who will be sent an "Energy Transition Law" or "LTE" letter<sup>58</sup>).

In practice, accordingly, "non-responsive" users cannot be invoiced until 1 January 2025.

Based on GRDF's cost estimates, CRE proposed in its public consultation that this component should amount to €44 excluding VAT/year. This cost is explained by:

- costs relating to the user trajectory:
  - o multiple contacts (email, SMS, letters, incoming and outgoing calls) to invite the customer to provide a self-reading index and/or to schedule an appointment for the installation of an advanced meter or the dispatch of the LTE letter with acknowledgement of receipt;
  - o the additional costs involved in handling claims;
  - o travel in the field;
- information systems costs.

Finally, CRE indicated in its public consultation that this system would coexist with the existing procedure resulting from consultation within the gas working group<sup>59</sup>, which allows gas DSOs to contact customers who have not made their consumption index available (during cyclical readings or self-reading indexes), to give them formal notice to access the meter and to interrupt their gas deliveries without any action on their part.

In this context, if GRDF activates the procedure, CRE has indicated that it will ensure that the two systems coexist by ensuring that costs are properly allocated between the two systems and that invoicing stops if gas deliveries are interrupted under the procedure.

#### 4.2.5.2 Feedback from stakeholders and CRE analysis

Most of the participants who contributed to this topic are in favour of the principle of passing on the costs of residual meter reading to the consumers who generate them. However, some participants have expressed reservations. In particular, without proposing any changes to the system as presented, some participants are drawing CRE's attention to the need for the level of this component to take account of the precarious situation of consumers.

In addition, although they agree with the approach proposed by CRE, some participants consider that the scope of invoicing could be adapted so as to only invoice some of the consumers concerned, by only targeting consumers who have explicitly refused to have the Gazpar meter installed, or by excluding cases of technical impossibility for which GRDF is responsible.

With regard to invoicing methods, some suppliers have alerted CRE to the costs to information systems that would result from implementing this component through the ATRD tariff. In this respect, some of them are wondering why CRE is not proposing to include this component in the ancillary services provided exclusively by GRDF.

Regarding the frequency of invoicing, GRDF states that replicating the system already decided for the Enedis service territory (invoicing every two months) would entail significant IS costs, as this invoicing frequency does not exist at GRDF.

##### Invoicing perimeter

With regard to the inclusion of precarious consumers in the system, CRE points out that it is not its role to decide on tariff differentiation on the basis of socio-economic criteria.

With regard to the invoicing perimeter, CRE states that all consumers who are not fitted with an advanced meter and do not transmit their consumption index generate an additional residual reading cost for GRDF. In this respect,

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<sup>58</sup>This letter is in response to Article L. 224-11 of the Consumer Code, which states that "*The electricity or natural gas supplier will invoice, at least once a year, according to the energy consumed. No electricity or natural gas consumption more than fourteen months prior to the last reading or self-reading may be invoiced, except in the event of lack of access to the meter, failure by the consumer to send an index relating to actual consumption, following a letter sent to the customer by the network operator by registered letter with acknowledgement of receipt, or fraud.*"

<sup>59</sup>Procedure in the event of multiple successive absences of the 6M customer from the statements and the absence of a self-reading following the statements (Public document on the [www.consultation.cre.fr](http://www.consultation.cre.fr) site - Can be consulted directly [here](#)).

CRE considers it appropriate, as a first step, to adopt an invoicing perimeter corresponding to the two cumulative conditions envisaged in the public consultation. Nevertheless, there are specific situations in which a consumer would like to be fitted with a Gazpar meter but, for technical reasons, it is not possible to install it. CRE considers that these situations should not lead to invoicing of the residual meter reading term. In this respect, invoicing for this term must be suspended as soon as the consumer applies to install a Gazpar meter and then gives access to his installation for the meter to be installed (whether or not he encounters a technical problem due to GRDF). Invoicing must also be suspended if the technical problem is GRDF's fault and has been identified during an appointment initiated by GRDF (during a contractual intervention or meter installation initiated by the DSO) and for as long as the customer allows access to the installation.

In this respect, CRE is asking GRDF to provide tools to facilitate access to the request to install an advanced meter or to transmit an invoicing index.

#### Invoicing terms and conditions

As meter reading is one of GRDF's public service missions under Article L. 432-8 7° of the Energy Code, CRE considers that the introduction of this additional component in GRDF's catalogue of ancillary services is inappropriate.

However, in order to make this component clearer for the end consumer and with a view to saving IS-related costs, CRE is in favour of this component being invoiced as a charge (i.e. in the same way as an ancillary service), as is the case for invoicing residual meter reading for electricity in the Enedis service territory.

As regards the invoicing interval, CRE considers that annual invoicing does not send the right signal to consumers to encourage them to ask for an advanced meter to be installed. However, CRE considers that the residual volume of PCE not fitted with Gazpar does not justify the implementation of costly adaptations to the information systems for the public. As a result, monthly invoicing, which is better suited to GRDF's operations, is appropriate.

#### **4.2.5.3 System selected**

In the light of the above, CRE is introducing a specific tariff component for the ATRD7 tariff period for handling residual meter reading.

This component is transmitted to the user, if necessary through his supplier, who meets the following cumulative conditions:

- the delivery point is eligible for the installation of a Gazpar meter, but is not fitted with one;
- the consumer has not provided GRDF with his consumption index for more than 12 months from 1 January 2024.

This component is invoiced monthly until:

- the request to install an advanced Gazpar meter through the supplier or directly with GRDF;
  - o If GRDF is unable to install the system (technical impossibility, etc.), then invoicing remains suspended;
  - o If the user is unable to install the equipment (refusal, absence, etc.), the suspension of invoicing will be cancelled. In this case, the user is liable for the entire component owed to GRDF, including for the months for which the DSO had suspended invoicing;
- the installation of an advanced Gazpar meter;
- the interruption of gas delivery from the metering point in application of the procedure in the event of multiple successive absences of the 6M customer from the readings and the absence of self-readings following the readings.

The amount of the component for the tariff treatment of residual meter reading applicable from 1 January 2025 is €43.80 excluding VAT/year, i.e. €3.65 excluding VAT per month<sup>60</sup>. This component is in addition to the amounts shown in the table in section 5.2.1. From 1 July 2025, this component will change as described in section 5.2.2.

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<sup>60</sup>After applying a reduced VAT rate of 5.5%, this works out at €46.21/year (€3.85/month).

## 5 Tariff for use of GRDF's natural gas distribution networks, applicable from 1 July 2024

### 5.1 Tariff rules

#### 5.1.1 Definitions

**Delivery point:**

Exit point of a distribution network where a DSO delivers gas to an end consumer, in performance of a transmission contract on the distribution network.

**Injection station:**

Entry point of a distribution network where gas is injected, in application of an injection contract between the gas producer and the DSO.

**Transmission distribution interface point (DTIP):**

Physical or notional interface point between a transmission network and a natural gas distribution network.

**Metering and estimation point (PCE):**

Point on the distribution network where a quantity of energy is calculated from meters or estimates.

**Annual reference consumption (CAR):**

The CAR corresponds to the estimated annual consumption of a PCE in an average climate year.

**Injection charge "volume" term:**

Term applicable to the quantities of renewable and low-carbon gas (mainly biomethane) injected into the gas distribution network.

**Injection charge "capacity" term:**

Term applicable to the Maximum Injection Capacity of renewable and low-carbon gases (mainly biomethane) from renewable and low-carbon gas production sites.

**Renewable or low-carbon gas production site phase:**

Maximum injection capacity band requested by the production site. When a generator increases its capacity, a new phase is created in the capacity register. These capacity increases are monitored in the capacity register with specific, simplified milestones. The different phases of a renewable or low-carbon gas production site can be assigned different levels of variable term (proportional to the quantities injected).

**R<sub>f</sub> term:**

Average amount taken into account as financial compensation paid to suppliers for customer management performed by the latter on behalf of DSOs.

**T1, T2, T3 and T4 options:**

Main tariff options applicable to the various consumers connected to the distribution network, depending on their level of natural gas consumption. They include a subscription and a charge proportional to the quantities of gas consumed.

For consumers in options T1, T2 and T3, a term proportional to the standardised flow rate applies in addition from a threshold of 40 Nm<sup>3</sup>/h.

For consumers with option T4, two terms proportional to the subscribed daily capacity apply in addition.

**Local tariff (TP):**

Tariff option created for large consumers located close to the gas transmission network and already supplied by the distribution networks. It comprises a subscription fee, a charge proportional to the daily capacity subscribed and a charge proportional to the distance as the crow flies between the delivery point and the nearest transmission

network, to which is applied a multiplying coefficient depending on the population density of the local authority in which the consumer is located.

### **5.1.2 Services covered by GRDF's tariff for use of the public natural gas distribution networks**

Use of GRDF's distribution networks may not give rise to any charges other than those resulting from the application of this tariff, with the exception of charges for ancillary services provided exclusively by natural gas distribution system operators, for which the tariffs are set by deliberation of CRE.

The services whose cost is covered by the tariff for use of GRDF's public distribution networks include the following:

- quality and safety services:
  - continuity of supply under the conditions defined by Article R. 121-11 of the Energy Code;
  - information about a service interruption due to works, in accordance with Article R. 121-12 of the Energy Code;
  - availability of a 24-hour emergency and breakdown number;
  - emergency intervention 24 hours a day in the event of a safety-related problem, in accordance with the Decree of 13 July 2000 on safety regulations for the distribution of fuel gas through pipelines;
  - guarantee of the calorific value as defined by the Decrees of 16 September 1977 and 28 March 1980;
  - pressure available upstream of the delivery station, in accordance with the standard delivery conditions published by the DSO;
  - first intervention at the customer's premises to ensure repairs in the event of a gas shortage;
  - diagnosis of domestic installations that have been out of service for more than six months and initiatives to raise awareness among consumers and gas industry participants of the issue of the safety of domestic installations;
  - support for consumers in situations of immediate serious danger;
- services related to measuring consumption:
  - provision of a meter when the flow rate is less than 16 m<sup>3</sup>/h;
  - periodic verification of the metrological control of meters and converters;
  - metering and pressure reduction continuity;
  - periodic meter reading, under the conditions defined in paragraph 5.1.4. below;
  - notification of the date and time of the meter reader's visit for customers with a half-yearly invoice;
  - the option of carrying out a self-reading and communicating the index for consumers with half-yearly readings;
- contract management services:
  - changes of supplier;
  - interruptions to gas deliveries (or withdrawal from service, termination);
  - mass changes to network usage charges at the request of suppliers;
- data transmission services:
  - transmission of aggregated consumption data to building owners or managers;
  - transmission of aggregated consumption data to public bodies;
  - communication of gas consumption data at a consumer's delivery point to a supplier or a third party;
- services relating to the rollout of advanced Gazpar meters:

- communication to a consumer of gas consumption data at the delivery point, PCE technical data and contractual data;
- access to the local output of Gazpar meters;
- daily transmission of consumption data;
- choice of publication date for monthly indexes;
- statement at chosen date;
- other:
  - making telephone appointments for all technical operations requiring a study;
  - using network instrumentation to carry out a detailed study for renewable and low-carbon gas producers.

### 5.1.3 Structure and choice of tariff options

The tariff includes four main options:

- three binomial options T1, T2 and T3, each comprising a subscription and a term proportional to the quantities delivered.  
A term proportional to the standardised flow rate of the meter also applies to consumers, from a threshold of 40 Nm<sup>3</sup>/h;
- a T4 quadrinomial option, comprising a subscription, two terms proportional to the daily capacity subscribed and a term proportional to the quantities delivered.

The supplier chooses which tariff option to apply for the customer concerned and for each delivery point (DP).

For all final consumers in a building or group of dwellings who do not have an individual meter, but who do have a collective meter and have signed a collective supply contract, the applicable tariff is a pair comprising:

- a subscription equal to that of the T1 tariff option applied to the number of dwellings supplied with gas;
- a proportional share equal to that of tariff option T1 applied to gas consumption measured by the collective meter.

For end consumers without individual or collective meters, the applicable tariff is a flat rate, calculated on the basis of option T1 and a consumption of 660 kWh per year.

The tariff also includes a tariff option known as the "proximity tariff", for large consumers located close to the gas transmission network and already supplied by the distribution networks. This tariff option includes a subscription, a charge proportional to the daily capacity subscribed and a charge proportional to the distance as the crow flies between the delivery point concerned and the nearest transmission network. The term proportional to distance is multiplied by a factor depending on the population density of the local authority in which the delivery point concerned is located, equal to:

- 1 if the population density of the local authority is less than 400 inhabitants per km<sup>2</sup>;
- 1.75 if the population density of the local authority is between 400 inhabitants per km<sup>2</sup> and 4,000 inhabitants per km<sup>2</sup>;
- 3 if the population density of the local authority is greater than 4,000 inhabitants per km<sup>2</sup>.

For each tariff option, the subscription includes:

- an "R<sub>i</sub>" term corresponding to the average amount of the financial consideration paid to suppliers by the DSO taken into account for the management of single-contract customers;
- a subscription component excluding "R<sub>i</sub>".

For all renewable and low-carbon gas production sites, a "capacity" term of the injection charge proportional to the maximum production capacity is allocated. This term is €50/MWh/d/year as of 1 July 2024.

For the different phases of renewable and low-carbon gas production sites, a classification by type of level is drawn up according to the connection zoning in force in the zone and is updated at the same time as the zoning is updated:

- if the zoning provides for reversion<sup>61</sup> or shared compression, the phases of the production sites in the zone are assigned level 3;
- if the zoning does not provide for rebound or mutualised compression:
  - o if the zoning includes a network<sup>62</sup> and/or a shared extension<sup>63</sup>, the phases of the production sites in the zone are assigned level 2;
  - o for other zones, the zone's production sites are assigned level 1.

The level of the "volume" term of the injection charge is allocated to each phase of a renewable and low-carbon gas production site during the D2 milestone connection study, depending on the connection zoning<sup>64</sup> in force in the zone. The level of the "volume" term associated with a phase of a production site remains constant; however, it does not prejudge the level of the "volume" term that may be allocated to subsequent phases of the same site (for example in the event of an increase in capacity) and which will be allocated to the latter when an amendment to the injection contract is signed, depending on the level of the "volume" term in force for the injection zone. The amount of the term invoiced for each level of term changes in accordance with the terms set out in 4.2.3.2 of this deliberation.

#### 5.1.4 How to read a delivery point

The recurrent meter reading is performed at the following intervals:

- 1) For a newly commissioned metering and estimation point, the standard reading frequencies for a delivery point on the public natural gas networks are as follows:
  - if the declared CAR is less than 300 MWh, the standard reading frequency is half-yearly, with the exception of consumers fitted with an advanced meter, who have a standard monthly reading frequency;
  - if the declared RAC is between 300 MWh and 5 GWh, the standard reading frequency is monthly;
  - if the declared RAC is greater than 5 GWh, the standard reading frequency is daily.
- 2) For a PCE already connected to a gas distribution network, the standard frequency for reading a natural gas public network delivery point is as follows:
  - if the CAR is less than 500 MWh, the standard reading frequency applied the previous year is retained, with the exception of PCEs fitted with an advanced meter, which have a standard monthly reading frequency;
  - if the RAC is between 500 MWh and 10 GWh, the standard reading frequency is monthly;
  - if the RAC is greater than 10 GWh, the standard reading frequency is daily.

Exceptions to these rules:

- if the PCE has a CAR of between 300 MWh and 500 MWh for the third consecutive year, the standard frequency of readings is monthly;
- if the RAC is between 1 and 10 GWh, the standard reading frequency applied in the previous year is retained, provided it was monthly or daily;
- if the PCE, whose standard reading frequency was daily the previous year, has a CAR of less than or equal to 5 GWh for the fourth consecutive year, the standard reading frequency for the delivery point is monthly;

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<sup>61</sup>Installation of compression enabling a flow of natural gas from a pre-existing section of a natural gas transmission or distribution network to a pre-existing section of a natural gas transmission or distribution network of higher pressure.

<sup>62</sup>Two distribution meshes of equivalent pressure are physically connected.

<sup>63</sup>Extension of a gas network to connect new sites, shared between several sites.

<sup>64</sup>Result of the study, performed in consultation with the network operators, determining the optimum network configuration on the basis of the technical and economic zoning criterion.



- if the PCE has a CAR of more than 5 GWh for the third consecutive year, the standard frequency for reading the delivery point is daily.

For the purposes of applying the above rules, only RACs used from 1 April 2016 will be taken into account.

- 3) In all cases, the meters of consumers with high intra-monthly modulation are read on a daily basis. Consumers who meet the following conditions for the second consecutive year are considered to have a high level of intra-monthly modulation:
  - the CAR is greater than 2 GWh;
  - the quantities transported during the 2 peak consumption months of the year are greater than 50% of the recorded annual consumption. This ratio is calculated over the annual period from 1 April to 31 March.

Consumers will not be able to change their standard invoicing frequency back to monthly if they have been considered to have a high level of intra-monthly modulation in any of the last 3 years.

- 4) Consumers who have subscribed to tariff options T4 and TP have a daily reading frequency, regardless of their CAR.

A reading frequency higher than the standard reading frequency defined by the above rules may be chosen by the supplier, for the customer concerned and for each delivery point. The tariff applied is shown in the DSO's service catalogue.

### 5.1.5 Monthly or daily subscriptions for daily capacity

The T4 tariff option includes two annual daily capacity subscription terms and the TP tariff option includes one annual daily capacity subscription term. It is also possible to subscribe daily or monthly capacity.

The monthly subscription charge for daily capacity is equal to the annual subscription charge for daily capacity corresponding to the level of annual capacity subscribed, multiplied by the following coefficients:

Month considered	Monthly instalment as a proportion of the annual instalment
January - February - December	4/12 of the annual term
March - November	2/12 of the annual term
April - May - June - September - October	1/12 of the annual term
July - August	0.5/12 of the annual term

When the smooth operation of the network allows it, daily subscriptions of daily capacity are marketed by GRDF, to meet a one-off and exceptional need of an end consumer.

The charge applicable to the daily subscription of daily capacity is equal to 1/20<sup>th</sup> of the charge applicable to the corresponding monthly subscription.

### 5.1.6 Modification of the annual subscription level for a delivery point

For a delivery point connected to a distribution network and covered by a subscription tariff option:

- a change, upwards or downwards, in the annual subscription level for a delivery point is authorised if no change to the contrary has occurred in the 12 months preceding the requested effective date;
- in the event of an increase in the annual subscription level of a delivery point occurring less than 12 months after a decrease, the daily capacity equal to the minimum between the subscription level before the decrease and that resulting from the increase is deemed to be subscribed from the date of the decrease and for the period concerned;
- a downward change in the annual subscription level of a delivery point, the requested effective date of which occurs less than 12 months after an increase in the annual subscription level, is not authorised;

- the preceding provisions apply even in the event of a change of supplier for the delivery point in question or of decommissioning followed by recommissioning if the end user does not change.

### **5.1.7 Penalties for exceeding subscribed daily capacity**

Each month, for tariff options T4 and LT, penalties are applied for exceeding the daily capacity.

The daily capacity overrun taken into account for a given month is equal to the total of the maximum daily capacity overrun for the month in question and 10% of the other daily capacity overruns for the month in excess of 5% of the subscribed daily capacity.

The penalty is payable when the overrun calculated in this way is greater than 5% of the subscribed daily capacity. For the part of the overrun between 5% and 15% of the subscribed daily capacity, the penalty is equal to the product of this part of the overrun multiplied by 2 times the monthly daily capacity charge as defined in paragraph 5.1.5.

For the part of the overrun exceeding 15% of the subscribed daily capacity, the penalty is equal to the product of this part of the overrun multiplied by 4 times the monthly daily capacity charge as defined in paragraph 5.1.5.

### **5.1.8 Grouping of delivery points**

Under option T4, the grouping of daily capacity subscriptions from several delivery points is authorised when the following conditions are simultaneously met:

- the delivery points concerned are on the distribution network of the same DSO and are supplied by the same DTIP;
- the gas delivered to each of the delivery points concerned is intended, after transformation, to satisfy the needs of the same end user on the same site. This usage leads to alternating consumption of all or part of the natural gas delivered.

The annual daily capacity subscription terms for option T4 are increased by 20% if subscriptions from several delivery points are grouped together. The annual subscription remains due for each delivery point.

### **5.1.9 Supply of a delivery point by several suppliers**

When several suppliers supply the same delivery point simultaneously, they must choose the same T4 tariff option.

The provisions linked to this T4 tariff option apply in full to each supplier as if they were two independent physical points, with the exception of the monthly subscription fee, which is divided between the two suppliers in proportion to the capacity subscribed during the month in question. When, for a given month, the total subscribed capacity is zero, the allocation is made on the basis of the previous month's capacity.

## **5.2 GRDF tariff schedule for use of the natural gas distribution networks**

The tariff for use of GRDF's public natural gas distribution networks is tiered within GRDF's service area, with the exception of the new public distribution networks mentioned in Article L. 432-6 of the Energy Code.

The tariff set out below is designed to apply for approximately four years from 1 July 2024, with a mechanical adjustment on 1 July of each year.

For consumers, the tariff applies per delivery point. The amounts due for each delivery point for a supplier's customers are added together in the monthly invoice sent to that supplier. For producers, the injection tariff term applies per injection point.

### 5.2.1 Price scale as at 1 July 2024

The price scale applicable from 1 July 2024 to 30 June 2025 is as follows:

- Main tariff options:

Tariff option	Annual subscription excluding $R_f$ (€)	Annual subscription (€)	Proportional price (€/MWh)	Annual subscription term for daily capacity (€/MWh/d)	
				Share of capacity subscribed under 500 MWh/d	Share of capacity subscribed in excess of 500 MWh/d
T1	42.72	51.96	42.37		
T2	166.68	175.92	11.39		
T3	1,127.88	1,231.08	8.19		
T4	20,366.40	20,469.60	1.11	271.56	135.72

- "Local tariff" option (TP):

Tariff option	Annual subscription excluding $R_f$ (€)	Annual subscription (€)	Annual subscription term for daily capacity (€/MWh/d)	Annual rate per distance (€/metre)
LT	48,667.44	48,770.64	135.48	88.92

A multiplying factor is applied to the annual distance term. It is equal to:

- 1 if the population density of the local authority is less than 400 inhabitants per km<sup>2</sup>;
  - 1.75 if the population density of the local authority is between 400 inhabitants per km<sup>2</sup> and 4,000 inhabitants per km<sup>2</sup>;
  - 3 if the population density of the local authority is greater than 4,000 inhabitants per km<sup>2</sup>.
- Consumers without individual meters, but with a collective meter:

For all end consumers in a building or group of dwellings who do not have an individual meter, but who do have a collective meter and have signed a collective supply contract, a subscription equal to that for tariff option T1 is charged, applied to the number of dwellings supplied with gas and a proportional share equal to that for tariff option T1 is applied to the gas consumption measured by the collective meter.

- Consumers without individual or collective meters:

For end consumers who do not have an individual or collective meter associated with a collective supply contract, the applicable tariff is an annual flat rate of €70.68 excluding the  $R_f$  term.

When a statement of gas consumption simultaneously includes consumption payable at the old and new rates, a breakdown proportional to the number of days in each period is made.

- Renewable and low-carbon gas producers:

The tariff terms for injecting renewable and low-carbon gas are based on:

- a single term, proportional to the project's maximum injection capacity;
- the definition of three levels for the "volume" term of the injection charge, in order to differentiate the amount paid by producers according to the costs generated by their choice of location.

Level	Injection charge "volume" term (€/MWh injected)	Injection charge "capacity" term (€/MWh/d/year installed)
Level 3	0.7	50
Level 2	0.4	
Level 1	0	

## 5.2.2 Tariffs applicable from 1 July 2025

### 5.2.2.1 Changes in the grid applicable to out-of-term consumers $R_f$

#### 5.2.2.1.1 Changes in tariff terms

Each year N from 2025 onwards, the tariff terms (including the tariff terms for the injection of renewable and low-carbon gas and the residual meter reading tariff component) applicable from 1 July N to 30 June N+1, with the exception of the  $R_f$  term, are equal to the tariff terms of a reference grid to which a coefficient Y proportional to the tariff change on 1 July N is applied. The coefficient Y is defined as follows, rounded to 4 decimal places (0.0001):

$$Y_N = Y_{N-1} \times (1 + Z_N)$$

Where:

- $Y_N$  is the growth coefficient in force from 1 July of year N to 30 June of year N+1, rounded to the nearest 0.0001, where  $Y_{2024} = 1$ ;
- $Z_N$  is the variation in the tariff level coefficient at 1 July of year N, expressed as a percentage and rounded to the nearest 0.01%, calculated as follows:

$$Z_N = IPC_N + X + k_N$$

Where:

- o  $IPC_N$ : the forecast rate of inflation excluding tobacco for year N taken into account in the Finance Act for year N plus the difference between actual inflation for year N-1 as calculated by INSEE<sup>65</sup> and the forecast rate of inflation excluding tobacco for year N-1 taken into account in the Finance Act for year N-1;
- o  $X$  is the annual growth factor on the tariff grid set by CRE in the present tariff deliberation, equal to + 1.91%. It corresponds to the forecast attrition of the gas consumption base during the ATRD7 tariff;
- o  $k_N$  is the percentage change in the fee schedule, capped at +/- 3%, corresponding to the clearance of the balance of the accruals account on 1 January of year N (calculated as described in paragraph 2.2.4).

Among the tariff terms thus obtained, the annual subscription terms excluding  $R_f$ , the terms proportional to the daily capacity subscribed and the terms proportional to the distance are rounded off so that they can be divided by 12 to the nearest cent. These annual terms can accordingly be broken down monthly to the nearest cent.

<sup>65</sup>Actual inflation for year N-1 is defined as the change in the average value of the consumer price index excluding tobacco for all households in France (INSEE reference 1763852) recorded over calendar year N-1, compared with the average value of the same index recorded over calendar year N-2.

### 5.2.2.1.2 Reference grid at 1 July 2025

The reference grid from 1 July 2025 to 30 June 2026 is the same as that from 1 July 2024 to 30 June 2025 presented in paragraph 5.2.1.

### 5.2.2.1.3 Reference grid at 1 July 2026 and 1 July 2027

The reference grid from 1 July 2026 to 30 June 2028 is as follows<sup>66</sup>:

- Main tariff options:

Tariff option	Annual subscription excluding R <sub>f</sub> (€)	Proportional price (€/MWh)	Annual subscription term for daily capacity (€/MWh/d)	
			Share of capacity subscribed under 500 MWh/d	Share of capacity subscribed in excess of 500 MWh/d
T1	42.72	42.37		
T2	166.68	11.39		
T3	1,560.96	6.74		
T4	20,366.40	1.11	271.56	135.72

- "Local tariff" option (TP):

Tariff option	Annual subscription excluding R <sub>f</sub> (€)	Annual subscription term for daily capacity (€/MWh/d)	Annual rate per distance (€/metre)
TP	48,667.44	135.48	88.92

- Standard flow term:

Normalised flow rate term (in €/year/Nm <sup>3</sup> /h) - applicable to consumers in tariff options T1, T2 and T3 with a normalised flow rate greater than 40 Nm <sup>3</sup> /h
5.10

- Residual meter reading term:

Processing component for residual meter reading (in € excl. VAT/month)
3.65

- Consumers without individual meters, but with a collective meter:

For all end consumers in a building or group of dwellings who do not have an individual meter but do have a collective meter and have signed a collective supply contract, a subscription equal to that for tariff option T1

<sup>66</sup>This grid, which includes a new term proportional to the standardised flow rate, is equal in level to the reference grid on 1 July 2025. The standardised flow rate is accordingly equal to €4/Nm<sup>3</sup>/h, to which has been added the 27.5% increase on 1 July 2024, i.e. €5.10/Nm<sup>3</sup>/h. This standardised flow rate will then evolve according to the terms described in 5.2.2.1.1 of this deliberation.

is charged, applied to the number of dwellings supplied with gas and a proportional share equal to that for tariff option T1 is applied to the gas consumption measured by the collective meter.

- Consumers without individual or collective meters:

For end consumers who do not have an individual or collective meter associated with a collective supply contract, the applicable tariff is an annual flat rate of €70.68 excluding the  $R_f$  term.

When a statement of gas consumption simultaneously includes consumption payable at the old and new rates, a breakdown proportional to the number of days in each period is made.

- **Renewable and low-carbon gas producers**

Level	Injection charge "volume" term (€/MWh injected)	Injection charge "capacity" term (€/MWh/d/year installed)
Level 3	0.7	50
Level 2	0.4	
Level 1	0	

### 5.2.2.2 Evolution of the $R_f$ term

CRE Deliberation no. 2017-238 of 26 October 2017 increased the fixed part (subscription) by an average amount  $R_f$  taken into account as financial compensation paid to suppliers to remunerate the customer management performed by the latter on behalf of DSOs from 1 January 2018.

The above deliberation provides for a review of the  $R_f$  term on 1 July each year, when the ATRD tariffs are revised. CRE considered it appropriate, as a transitional measure until 30 June 2022, to differentiate the financial compensation taken into account, depending on whether it is paid for the management of customers on the TRV or on the market. Since 1 July 2022, the management costs of customers on the TRV and those on the market offer have accordingly been equalised at €8.10<sub>2022</sub>. Subsequently, the TRVs ended on 30 June 2023, making this differentiation unnecessary.

In addition, deliberation ATRD6 of 23 January 2020 introduced indexation to the inflation actually recorded and accumulated between 2018 and the year preceding the tariff update of the amounts defined by Deliberation no 2017-238.

In its public consultation, CRE envisaged that, for the ATRD7 period, the amounts defined by deliberation no. 2017-238 would be indexed on an actual and cumulative basis between 2018 and the year preceding the tariff update. The majority of market participants welcomed CRE's proposal.

CRE has decided to introduce this indexation according to the procedures presented in the public consultation.

In this respect, the amount of the  $R_f$  term will be:

- for tariff options T3, T4 and LT, €103.20 per year from 1 July 2024 to 30 June 2025;
- for tariff options T1 and T2 and for delivery points without individual meters of €9.24 per year for the period from 1 July 2024 to 30 June 2025.



## **CRE Deliberation**

The Energy Regulatory Commission (CRE) sets the tariff for use of GRDF's natural gas distribution networks from 1 July 2024, in accordance with the methodology and parameters set out in this deliberation.

In particular, CRE sets:

- the tariff regulatory framework and incentivising regulation parameters applicable to GRDF for a period of approximately 4 years (part 2);
- the trajectory of operating costs, the weighted average cost of capital and the forecast change in tariffs (part 3);
- tariff structure (part 4);
- the tariff terms applicable from 1 July 2024 (part 5).

The Higher Energy Council, consulted by CRE on the draft decision, issued its opinion on 13 February 2024.

This deliberation will be published in the *Journal officiel* de la République française and on CRE website. It will be sent to the Minister for the Economy, Finance and Industrial and Digital Sovereignty.

*Resolved in Paris on 15 February 2024.*

For the Energy Regulatory Commission,  
The Chair,

Emmanuelle WARGON

## Annex 1: References for the annual update of the tariff for use of GRDF's natural gas distribution networks from 1 July 2025

### 1. Reference values for calculating definitive authorised revenue

For each year *N* from 2024 onwards, the definitive authorised revenue is equal to:

- the total of the amounts withheld for the following expense items:
  - forecast net operating expenses;
  - forecast normative "off-network" incentive capital charges;
  - normative non-incentive capital charges;
  - expenses relating to losses and differences;
  - charges relating to unpaid bills;
  - net expenses relating to the consideration paid to suppliers for the management of single-contract customers;
  - expenses relating to the "Gas Change" project;
  - Energy benefits in kind;
  - charges relating to tariff terms for the injection of renewable and low-carbon gas;
  - expenses relating to stranded costs and capital losses on disposals dealt with on a case-by-case basis, the cover of which CRE would approve;
  - the annual difference between forecast revenue and forecast authorised revenue;
  - clearing the balance of the provisional CRCP for the ATRD6 tariff;
- from which is subtracted the total of the amounts retained for the following revenue items:
  - non-incentive non-tariff revenue;
  - revenue variations linked to unforeseen changes in rates for ancillary services;
  - revenue from capital gains realised on the disposal of property assets or land;
  - revenue from the "capacity" term of the renewable and low-carbon gas injection charge collected by the TSOs as part of GRDF's indirect costs;
  - revenue from penalties levied for exceeding the capacity subscribed by consumers benefiting from tariff options T4 and LT;
- to which is added the total of the amounts withheld for financial incentives under:
  - incentivising regulation of the unit costs of network investments;
  - incentivising regulation relating to the prioritisation of investments;
  - incentivising regulation specific to the Gazpar advanced metering project;
  - incentivising regulation of research and development expenditure;
  - incentivising regulation of quality of service.

For each item, the method used to calculate the amount retained is set out in detail below.

#### 1.1 Expense items taken into account when calculating definitive authorised revenue

##### a) Forecast net incentive operating expenses

The forecast net incentive operating expenses correspond to the net operating expenses taken into account for the ATRD7 tariff, with the exception of expenses relating to unpaid bills, expenses relating to the Gas Change

project, expenses relating to losses and differences, which are subject to specific incentivising regulation and non-incentive non-tariff revenue.

The reference values for net operating expenses are as follows:

Current €M	2024	2025	2026	2027
Reference value for forecast net operating expenses	1,737.1	1,730.2	1,752.7	1,775.6

The amount used to calculate the final authorised revenue takes into account the difference between forecast inflation and actual inflation.

This amount is equal to the reference value for year *N*:

- divided by the forecast inflation between 2022 and year *N*;

	2023	2024	2025	2026	2027
Forecast inflation between 2022 and year <i>N</i>	4.80%	7.42%	9.57%	11.76%	13.77%

- multiplied by actual inflation between 2022 and year *N*. Actual inflation is defined as the change in the average value of the consumer price index excluding tobacco, as calculated by INSEE for all households throughout France (INSEE reference 1763852), recorded over calendar year *N*, compared with the average value of the same index recorded over calendar year 2022.

b) Expected normative capital charges "excluding networks"

The reference amount used to calculate the definitive authorised revenue is equal to the normative capital charges for asset groups G4B, G7 and G8. These asset groups include "Property", "Furniture", "Equipment", "Vehicles", "IT" and "PC" assets. These normative capital charges are calculated on the basis of the forecast accounting base used to calculate the ATRD7 tariff and actual inflation<sup>67</sup>.

The forecast values for normative incentive capital charges "excluding networks" are as follows:

Current €M	2024	2025	2026	2027
Reference value for normative incentive capital charges "excluding networks" for the ATRD7 period	169.3	180.0	180.8	176.0
Correction of delayed incentive expenditure <sup>68</sup>	-3.9			
<b>Total</b>	<b>165.4</b>	<b>180.0</b>	<b>180.8</b>	<b>176.0</b>

c) Non-incentive normative capital charges

The reference amount taken into account for calculating the definitive authorised revenue is equal to the normative capital costs incurred, with the exception of those taken into account in the normative "off-network" incentivised capital costs, i.e. asset groups G4B, G7 and G8.

The forecast values for these capital charges are as follows:

Current €M	2024	2025	2026	2027
Reference value for normative non-incentive capital charges	1,695.9	1,749.2	1,790.0	1,828.8

d) Expenses relating to losses and differences

An annual reference amount for losses and differences is determined for year *N* using the following formula:

$$PDD_N = V_N \times P_N + CT_N$$

<sup>67</sup>To calculate default capital charges, actual inflation is calculated over the period July *N-1* to July *N*. The index used is the INSEE 001763852 index of consumer prices excluding tobacco for the whole of France.

<sup>68</sup>This restatement corresponds to the capital charges already allocated for the ATRD6 period under the incentivising regulation mechanism for "off-network" investments and carried over to the ATRD7 period: this restatement avoids double counting.

Where:

- $V_N$  is the annual reference volume;
- $P_N$  is the annual reference price;
- $CT_N$  is the reference annual transport cost.

When calculating the final authorised revenue, the amount taken into account for losses and differences is equal to the total of:

- of the annual reference amount  $PDD_N$  ;
- 80% of the difference between the actual costs relating to losses and differences borne by GRDF for year  $N$  and this annual reference amount  $PDD_N$ .

The parameters used to calculate the annual reference  $PDD_N$  amount are defined as follows.

- Annual reference volume

The annual reference volume for losses and differences is obtained by applying theoretical loss rate to the annual quantities actually distributed, i.e.:

$$V_N = \text{taux de pertes théorique}_N \times \text{quantités réellement distribuées}_N$$

Theoretical loss rate for the 2024-2027 period is as follows:

<i>of quantities distributed</i>	2024	2025	2026	2027
Theoretical loss rate	0.44%	0.44%	0.44%	0.44%

- Annual reference price

The annual reference  $P_N$  price is equal to the average price of a basket of representative products marketed at the single gas exchange point (PEG) TRF (*Trading Region France*). This basket of products and details of the reference prices used are set out in a confidential annex to this deliberation.

- Reference annual transport cost

The reference annual transmission cost is calculated in particular on the basis of the terms of the Third-Party Access Tariff to the Transmission System (ATRT), applied to the reference volumes  $V_N$ . The details of this reference annual transport cost are set out in a confidential annex to this deliberation.

e) Charges relating to unpaid bills

The annual reference amount used to calculate the definitive authorised revenue corresponds to the cost actually borne by GRDF.

The forecast values for charges relating to arrears are as follows:

<i>Current €M</i>	2024	2025	2026	2027
Reference value for charges relating to arrears	46.8	47.4	49.4	53.6

f) Net expenses relating to the consideration paid to suppliers for managing customers under a single contract

The amount used to calculate the definitive authorised revenue is equal to the difference between the total of the compensation paid to suppliers by GRDF for managing customers under a single contract and the total of the revenues received by GRDF for the  $R_f$  term.

For the consideration paid to suppliers by GRDF in respect of year  $N$ , the amount taken into account corresponds to the consideration paid in year  $N$  up to the maximum amounts for each delivery<sup>69</sup> point set out in deliberation no. 2018-12 of 18 January 2018 in force, plus interest charges where applicable.

<sup>69</sup>Deliberation no 2018-012 of the Energy Regulatory Commission of 18 January 2018 deciding on the component of access to the public natural gas distribution networks for the management of customers under a single contract, amended by Deliberation no 2020-139 of the Energy Regulatory Commission of 18 January 2018.

g) Expenses relating to the "Gas Change" project

The reference amount for expenses relating to the "Gas Change" project in year N is the total of:

- benchmark IS-communications-management operating costs for year N, adjusted for actual inflation;
- the product of the unit cost of servicing and replacing incompatible equipment, adjusted for inflation and the volume of servicing and replacement of incompatible equipment performed in year N.

To calculate the final authorized revenue, the amount taken into account for expenses relating to the "Gas Change" project is equal to the total of:

- of the annual reference amount ;
- 80% of the difference between the actual costs incurred by GRDF in year N and this annual reference amount.
- costs associated with the conversion of inactive customers, covered at 100% by the CRCP.

The parameters used to calculate the annual reference amount are defined as follows.

- IS cost trajectory and management

€M <sub>2022</sub>	2024	2025	2026	2027
IS communication piloting operating expenses - ATRD7 period	22.6	25.0	20.0	13.3

- the unit cost of intervention at the customer's premises is €210.25<sub>2022</sub>/year/customer;
- the unit cost of replacing incompatible equipment is €4,037.71<sub>2022</sub>/device.

h) Charges relating to tariff terms for the injection of renewable and low-carbon gas

The reference amount taken into account for the tariff revenue associated with the injection of renewable and low-carbon gas, collected by GRDF and paid to the TSOs, corresponds to the part of levels 2 and 3 of the "volume" term of the renewable and low-carbon gas injection charge corresponding to the operating costs of the transmission pipelines and the return lines and to the part of the "capacity" term of the renewable and low-carbon gas injection charge corresponding to the TSOs' indirect costs. The unit amount taken into account from 1 July 2024 to 30 June 2025 is:

- 12 €/MWh/d/year for the "capacity" term of the injection charge;
- 0.05 €/MWh or 0.58 €/MWh injected by producers allocated level 2 or level 3 respectively for the "volume" term of the injection charge.

These unit amounts will change as described in section 5.2.2.1.1 from 1 July 2025.

i) Expenses relating to stranded costs and disposal losses

CRCP cover of stranded costs, other than those deemed to be recurrent or foreseeable, which are removed from the inventory before the end of their accounting life and capital losses on disposals are examined by CRE, on the basis of substantiated cases presented by GRDF.

The annual reference amount used to calculate the definitive authorised revenue corresponds to the expenses that will actually be retained following this review.

The forecast values for expenses relating to stranded costs and capital losses on disposals are as follows:

Current €M	2024	2025	2026	2027
Provisional amount for charges relating to stranded costs and capital losses on disposals	14.5	14.5	14.5	14.5

- j) Differences in the cost of energy benefits in kind linked exclusively to price differences in relation to the benchmark electricity and gas prices set by CRE

As indicated in section 2.4.2 of the ATRD7 deliberation, energy benefits in kind (EBK) are incentivised at 100% on volumes and covered at 100% for "price effects" under the conditions set out in the confidential Annex 1. The electricity and gas price benchmark is based on recurrent, target publications:

- for electricity, regulated electricity sales tariffs (excluding tariff shield effects<sup>70</sup>);
- for gas, the benchmark gas sales price, adapted to the average consumption of those on the agent tariff (excluding the effects of the tariff shield).

The price difference between the forecast trajectory and this reference, recorded retrospectively each year, will be covered 100% by the CRCP. The calculation methods are described in the confidential Annex 6 to this deliberation.

k) Annual variance between forecast revenue and forecast authorised revenue

The annual differences between forecast revenue and forecast authorised revenue are those resulting from the balance over the 2024-2027 period between forecast revenue and forecast authorised revenue used to calculate the ATRD7 tariff.

In year *N*, the annual difference taken into account to calculate the definitive authorised revenue is as follows:

<i>Current €M</i>	2024	2025	2026	2027
Annual variance between forecast revenue and authorised revenue	- 324.8	+ 67.7	+ 117.7	+ 168.1

l) Clearance of the balance of the provisional CRCP for tariff ATRD6

The reference amount taken into account to clear the balance of the CRCP for tariff ATRD6 is as follows:

<i>Current €M</i>	2024	2025	2026	2027
Clearance of the balance of the ATRD6 provisional CRCP	+ 243.0	+ 243.0	+ 243.0	+ 243.0

## 1.2 Revenue items taken into account when calculating final authorised revenue

a) Non-incentive non-tariff revenue

The reference amount used to calculate the definitive authorised revenue is equal to the non-tariff revenue actually received by GRDF for year *N* in respect of third-party contributions and revenue generated by recurrent ancillary services invoiced to suppliers (e.g. meter rentals) and ancillary services relating to the injection of renewable and low-carbon gas<sup>71</sup>.

The provisional amounts taken into account in the ATRD7 tariff are as follows:

<i>Current €M</i>	2024	2025	2026	2027
Estimated non-incentive non-tariff revenue	181.4	193.2	205.3	220.6

b) Revenue variations due to unforeseen changes in rates for ancillary services

The reference amount used to calculate the definitive authorised revenue is equal to the difference between:

- the revenue actually received by GRDF for year *N* for ancillary services for which the tariff change is different from that resulting from the application of the annual indexation formulae to the tariffs in force on 1 January 2024<sup>72</sup>, with the exception of recurrent ancillary services invoiced to suppliers;

<sup>70</sup> As long as the scope of the tariff shield does not include the agent tariff.

<sup>71</sup> The ancillary services covered by the CRCP correspond to the following expense codes: 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 420, 421, 422, 423, 431, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 701, 702, 703, 704, 705, 706, 707, 740, 741, 742, 743, 744, 761, 762, 763, 764, 765, 766, 767, 781, 782, 783, 784, 785, 786, 787, F01.

<sup>72</sup> The annual indexation formulas are defined by CRE Deliberation no. 2023-144 of 7 June 2023 on the services provided exclusively by natural gas distribution system operators.



- the revenue that GRDF would have received in year N for these same services if the tariff applied had been the one resulting from the application of the annual indexation formulae to the tariffs in force on 1 January 2024.

c) Revenue from capital gains realised on the disposal of property assets or land

The reference amount used to calculate the definitive authorised revenue corresponds to 80% of the sale proceeds net of the net book value of the asset sold.

d) Revenue from the capacity term of the injection charge collected by the TSOs as indirect costs for GRDF

The reference amount used to calculate the definitive authorised revenue is equal to the revenue from the injection charge capacity term actually collected by the TSOs and paid to GRDF as part of GRDF's indirect costs. The unit amount taken into account from 1 July 2024 to 30 June 2025 is €38/MWh/d/year and then changes in accordance with the terms set out in paragraph 5.2.2.1.1 from 1 July 2025.

e) Revenue from penalties levied for exceeding subscribed capacity for consumers benefiting from tariff options T4 and LT

The reference amount taken into account for calculating the definitive authorised revenue is equal to the amount of penalties actually collected by GRDF for exceeding subscribed capacities for consumers benefiting from options T4 and LT.

### 1.3 Financial incentives for incentivising regulation

a) Incentivising regulation of unit network investment costs

The investments concerned correspond to the following thirteen categories defined by the nature of the works concerned:

Segments	Categories of works	Inductor 1	Inductor 2
Segment 1	Connection (without extension) - 6 and 10 m <sup>3</sup> /h (C0)	Part	N/A
Segment 2	Connection - 6 and 10 m <sup>3</sup> /h - with extension < 35 m (A0)	Meter	N/A
Segment 3	Connection - 6 and 10 m <sup>3</sup> /h - with extension > 35 m (B0, G0, I0)	Meter	N/A
Segment 4	Connection of housing estates (E0, E1)	Meter	N/A
Segment 5	Connection (without extension) - 16 m <sup>3</sup> /h or more (D0, H1)	Part	N/A
Segment 6	Connection - 16 m <sup>3</sup> /h and more - with extension (H0)	Meter	N/A
Segment 7	Industrial zone (ZI) - Joint development zone (ZAC) - Business park (ZA) - (F0)	Meter	N/A
Segment 8	Relocation of works at the request of third parties (T0, U0)	Meter	Connection
Segment 9	Structural work excluding replacement of dry taps (M0, J0, K0, L0)	Meter	Connection
Segment 10	Installation of dry taps (Y3)	Meter <sup>73</sup>	N/A
Segment 11	Renewal of networks and connections (P1 to P4, Y0, Y4, Y6, Y2, S4, S6, S7, P6, S8, Y8))	Meter	Connection

<sup>73</sup>The work relating to the "Installation of dry taps" category includes the laying of pipelines (in metres) and the installation of taps (in units).By agreement, in order to calculate the annual quantities of work performed for the "Installation of dry taps" category, the installation of one piece of tap will be taken into account at a rate of one metre.

Segment 12	Renewal of structures in buildings (S0, S2, S3, S5, Q0, Q1, P5, Y7)	Part (CI/CM)	N/A
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Within each of these twelve categories, the cost of each investment is modelled by:

- one or two variable portions depending on (i) the length of the pipeline concerned or the number of rooms (Ai) and possibly (ii) the number of connections made (Bi); these variable portions do not depend on the year in which the pipeline was commissioned;
- a fixed part, which does not depend on the year of commissioning (Ci);
- an annual average unit cost trend coefficient, identical for all categories of works (CU<sub>N</sub>).

The values of these parameters are determined, in particular, on the basis of the costs of investments commissioned between 2020 and 2022. These values and the target annual coefficients for average unit cost growth over the 2024-2027 period are defined in a confidential annex to this document.

For a given year *N*, the modelled total cost of the investments is calculated on the basis of the volume of investments actually made and the annual incentive corresponds to 20% of the difference between the actual total cost of the facilities brought into service and the modelled total cost of those same facilities. This incentive is capped at +/- €9m per year.

The reference amount used to calculate the definitive authorised revenue for year *N* is equal to the amount of the annual incentive for year *N-2*, calculated on the basis of the definitive data.

Given the way the incentive is calculated on the unit costs of network investments (based on investments in years *N-2*), the calculation of the incentive for 2024 and 2025 will be based, in part, on investments made in 2022 and 2023. For these two years, the calculations of the incentives on the unit costs of the related investments will be performed on the basis of the parameters described in the ATRD6 deliberation.

As indicated in section 2.3, CRE is introducing the possibility of updating, at its own initiative, the reference level at the mid-point of the ATRD7 period, depending on the observed changes in the cost environment in incentivising regulation over 2023 and 2024.

b) Incentivising regulation specific to the Gazpar advanced metering project

The reference amount taken into account for calculating the definitive authorised revenue is equal to the sum, for the year in question, of the financial incentives relating to the "Gazpar" advanced metering project, as defined by CRE Deliberation no. 2017-286 of 21 December 2017 ruling on the implementation of the incentivising regulatory framework for GRDF's advanced metering system and in this deliberation (Annex 3).

c) Incentivising regulation of research and development (R&D) expenditure

The reference amounts for R&D expenditure (including expenditure on *smart grid* projects) used to calculate the ATRD7 tariff are as follows:

<i>Current</i> €M	2024	2025	2026	2027
Estimated amount for R&D expenditure subject to incentivising regulation	12.7	12.9	13.2	13.4

This reference trajectory may be revised at mid-period.

If the total amount of R&D expenditure (including expenditure on *smart grid* projects) over the 2024-2027 period is less than the cumulative reference amounts used to calculate the ATRD7 tariff, the difference will be taken into account in the balance of the CRCP at the end of the tariff period.

Transparency and control of the effectiveness of R&D&I expenditure are ensured, among other things, by the annual transmission to CRE of technical and financial information on all ongoing and completed projects.

This monitoring may be subject to any audit that CRE deems useful.

d) Incentivising regulation of quality of service

GRDF is monitoring quality of service in key areas of its business. This monitoring consists of indicators that GRDF regularly sends to CRE and that are made public on its Supplier and Consumer websites.

Specific indicators, relating to the most important areas for the proper functioning of the market, are subject to a financial incentive system.

The quality of service monitoring indicators sent by GRDF to CRE must be certified by an external body. In addition, the mechanism for monitoring GRDF's quality of service may be subject to any audit that CRE deems appropriate.

The list of GRDF's quality of service indicators defined for the ATRD7 tariff is appended to this document. The indicator values are calculated and reported to CRE to two decimal places.

The reference amount taken into account for calculating the definitive authorised revenue, under the quality-of-service incentivising regulation, is equal to the total of the financial incentives defined in the Annex.

**e) Incentivising regulation to prioritise investments**

An investment budget is introduced for the ATRD7 period determined at the level of GRDF's request, i.e. €4,367.1 million in current prices for the period. The total level of the envelope will be adjusted annually according to the volume of low-carbon and renewable gas actually installed.

<i>Current €M</i>	2024	2025	2026	2027
Investment cap	979.3	929.5	907.8	921.0
Renewable or low-carbon gas - excluded from the cap	153.1	120.5	133.8	222.1
Total forecast investment	1,132.3	1,050.0	1,041.6	1,143.1

Investments made by GRDF in excess of this envelope will be shared out at the end of the ATRD7 period, with GRDF bearing a penalty equal to 20% of the difference between the inflation-adjusted trajectory achieved<sup>74</sup> and the expenditure actually incurred.

The reference amount for incentivising regulation relating to investment prioritisation is calculated at the end of the tariff period.

**2. Calculating and clearing the CRCP**

The balance of the CRCP for GRDF's ATRD7 tariff, at January 1, 2024, corresponds to the difference between the definitive amount of the balance of the CRCP for the ATRD6 tariff and the provisional amount, equal to €919.8m, which corresponds to the balance at December 31, 2023 (+€904.5m) and its discounting at the ATRD6 risk-free rate (+€15.4m), taken into account for the preparation of the ATRD7 tariff.

For each year *N*, starting in 2024, the final balance of the CRCP on 31 December of year *N* is calculated as the total of:

- the forecast balance of the CRCP on 31 December of year *N*;
- and the difference, in respect of year *N*, between:
  - the difference between the definitive authorised revenue, as defined in paragraph 1 of this Annex and the forecast authorised revenue revised for inflation (forecast authorised revenue for which the incentivised CNEs are revised for inflation as defined in paragraph 1 of this Annex);
  - the difference between the revenues received by GRDF and the forecast revenue revalued on the basis of the actual changes already applied to the tariff schedule.

The provisional balance of the CRCP on 31 December of year *N* is defined as the total of the balance of the CRCP on 1 January of year *N* and the difference for year *N* between the provisional authorised revenue revised for inflation and the provisional revenue calculated on the basis of the assumptions for quantities distributed and injected and the number of consumers served and producers connected adopted in this deliberation, revalued on the basis of the actual changes already applied to the tariff schedule.

The forecast revenue and changes in tariffs set out in this deliberation are presented in the table below:

<sup>74</sup>Actual inflation is defined as the change in the average value of the consumer price index excluding tobacco, as calculated by INSEE for all households in France (INSEE reference 1763852).

	2024	2025	2026	2027
Forecast revenue (current €M)	3,502.7	3,959.4	4,045.5	4,116.5
Forecast change at 1 July of year N	27.52%	3.91%	3.91%	3.71%

Revenues collected by GRDF are defined as the total of revenues actually collected by GRDF on the proportional share of quantities transported, capacity subscriptions, the distance-related charge and subscriptions excluding the  $R_f$  charge. Revenue from the residual meter reading term is not covered by the CRCP.

The balance of the CRCP on 1 January of year  $N+1$  is obtained by discounting the final balance of the CRCP on 31 December of year  $N$  at the prevailing short-term risk-free rate, i.e. 3.8%.

The balance of the CRCP at the end of the tariff period also includes amounts for incentivising regulation of research and development (R&D) expenditure.

The change in the tariff schedule on 1 July of year  $N$  takes into account a coefficient  $k_N$ , which aims to clear, by 30 June of year  $N+1$ , the balance of the CRCP on 1 January of year  $N$ .

The  $k_N$  coefficient is capped at +/- 3%.

### 3. Reference values for tariff revenue forecasts

The reference values are as follows:

- Forecast quantities of gas delivered (in MWh):

Tariff option	2024	2025	2026	2027	2028
T1	7,923,433	7,729,273	7,585,385	7,429,457	7,306,546
T2	115,971,581	112,582,860	109,621,880	106,116,409	102,848,289
T3	71,766,749	70,716,018	70,080,690	69,106,505	68,346,683
T4	47,239,179	46,386,245	45,987,661	45,499,665	45,346,492

- Forecast average annual number of consumers connected:

Tariff option	2024	2025	2026	2027	2028
Package	3,583	3,083	2,583	2,083	1,583
T1	3,062,862	2,989,235	2,920,615	2,856,560	2,796,873
T2	7,671,280	7,589,652	7,494,825	7,384,939	7,264,444
T3	98,758	98,673	98,638	98,512	98,390
T4	2,617	2,612	2,615	2,627	2,649
TP	These values are specified in a confidential annex.				

- Forecast annual subscriptions of daily capacity (in MWh/d):

Tariff option	2024	2025	2026	2027	2028
T4	321,000	313,000	307,000	303,000	300,000
share ≤ 500 MWh/d	296,000	289,000	284,000	279,000	277,000

share > 500 MWh/d	25,000	24,000	24,000	23,000	23,000
TP	These values are specified in a confidential annex.				

- Distance forecasts for the proximity tariff (in m):

Tariff option	2024	2025	2026	2027	2028
TP	These values are specified in a confidential annex.				

- Distance forecasts weighted by local authority density coefficients for the proximity tariff (in m):

Tariff option	2024	2025	2026	2027	2028
TP	These values are specified in a confidential annex.				

For the transition from annual forecasts to half-yearly forecasts, the half-yearly breakdown for a year *N* of the quantities of gas transported by tariff option is as follows:

Tariff option	1 <sup>st</sup> half-year	2 <sup>nd</sup> half-year
T1	53%	47%
T2	57%	43%
T3	58%	42%
T4	59%	41%

Similarly, for the half-yearly breakdown for a year *N* of the number of consumers connected by tariff option:

- the average number of consumers connected in the 1<sup>st</sup> half-year is calculated as follows:

$$25 \% \times nb \text{ de consommateurs moyen annuel}_{N-1} + 75 \% \times nb \text{ de consommateurs moyen annuel}_N$$

- the average number of consumers connected in the 2<sup>nd</sup> half-year is calculated as follows:

$$75 \% \times nb \text{ de consommateurs moyen annuel}_N + 25 \% \times nb \text{ de consommateurs moyen annuel}_{N+1}$$

These two formulas also apply identically to the half-yearly breakdown by tariff option of forecast annual subscriptions of daily and distance capacity.

The half-yearly revenues for subscriptions, terms proportional to subscribed capacity and the term proportional to distance are obtained by multiplying the half-yearly forecasts by 50%.

- Forecast volumes of renewable and low-carbon gas injected and installed:

Amounts covered	2024	2025	2026	2027
Installed volumes for all operators (TWh/year)	15.44	18.26	21.92	28.28
Volumes injected by all operators (TWh/year)	11.41	13.63	16.38	20.95

– Reference amounts for the "volume" and "capacity" terms of the injection charge

Injection term	Grid selected (€/MWh injected)	Amounts paid by GRDF to TSOs (€/MWh injected)	Amounts paid by TSOs to GRDF (€/MWh injected)	Grid selected (€/MWh/d/year)	Amounts paid by GRDF to TSOs (€/MWh/d/year)	Amounts paid by TSOs to GRDF (€/MWh/d/year)
Level 3	0.7	0.58	0.00	50	12	38
Level 2	0.4	0.05	0.00 <sup>75</sup>			
Level 1	0	0.00	0.00			

The annual revenues from the "volume" and "capacity" terms of the injection charge are calculated on the basis of the forecast trajectories for volumes of renewable and low-carbon gas injected and installed, to which the reference amounts for the "volume" and "capacity" terms of the injection charge are applied.

Amounts covered	2024	2025	2026	2027
Injection charge "volume" term (k€)	2,167	2,970	4,401	6,476
Of which amounts paid to TSOs (k€)	1,087	1,447	2,291	3,365
Capacity term of the injection charge (k€) <sup>76</sup>	1,613	1,945	2,427	3,251
Forecast revenue from injection charge terms for GRDF	2,694	3,468	4,537	6,361

<sup>75</sup>By default, producers connected to the transmission networks cannot be allocated a level 2 "volume" term for the injection stamp, so the CRE is not introducing an amount to be paid by the TSOs to GRDF for this term.

<sup>76</sup>This amount corresponds to the product of the distribution part of the "capacity" term of the injection stamp and the total forecast installed capacity on the GRDF and TSO networks.



## Annex 2: Incentivising regulation of quality of service for the 2024-2027 period

The provisions of this Annex do not prevent GRDF from sending other indicators to CRE that are not explicitly indicated below.

For indicators corresponding to rates (whether or not subject to a financial incentive), CRE asks GRDF to send it details of the calculation (numerator and denominator).

### 1. Indicators associated with financial incentives

#### 1.1 1.1 Number of scheduled appointments missed by GRDF

Calculation	Value reset on 1 <sup>st</sup> of month M+2: <u>Number of scheduled appointments missed by GRDF and compensated during the month M</u> (i.e. two tracked values: - for 6M <sup>77</sup> /1M <sup>78</sup> consumers - for DD <sup>79</sup> /DM <sup>80</sup> /MM <sup>81</sup> consumers)
Perimeter	- all appointments scheduled and accordingly validated by the DSO - all appointments for work involving the presence of a DSO agent and the consumer, not kept by the DSO and systematically identified by the operator - 6M consumers and DD/MM consumers monitored separately
Follow-up	- frequency of calculation: monthly - frequency of reporting to CRE: monthly - frequency of publication: monthly - frequency of incentive calculation: monthly
Target	100% of missed appointments automatically detected by the operator are compensated
Incentives	- payment: direct to suppliers - penalties: amounts identical to those invoiced by GRDF in the event of non-performance of a scheduled service by the consumer or the supplier (failure to keep an appointment, etc.), depending on the frequency of the consumer's meter reading, for each appointment not kept
Implementation date	Already implemented since 1 July 2008

<sup>77</sup>The energy delivered is measured every six months and the index containing this measurement is read every six months by the DSO.

<sup>78</sup>The index containing the measurement of energy delivered is read monthly by the DSO for consumers fitted with a Gazpar meter.

<sup>79</sup>The energy delivered is measured daily and the index containing this measurement is read by the DSO every day.

<sup>80</sup>The energy delivered is measured daily and the index containing these measurements is read monthly by the DSO at the end of the month for every day of the month.

<sup>81</sup>The energy delivered is measured monthly and the index containing this measurement is read monthly by the DSO.

### 1.2 Rate of commissioning completed within the requested deadlines

Calculation	<p>Value reset on 1<sup>st</sup> of month M+2:  <i>(Number of MES closed during month M within the requested deadlines (if this timeframe is longer than the catalogue timeframe) or within a timeframe ≤ the catalogue timeframe (if the requested deadlines is shorter than the catalogue timeframe))/(Total number of MES closed during month M)</i></p> <p>(i.e. five monitored values:                      - all consumers combined                      - 1M consumers                      - 6M consumers                      - MM consumers                      - DD/DM consumers)</p>
Perimeter	<ul style="list-style-type: none"> <li>- all MES with displacement (with/without meter installation), excluding express MES</li> <li>- all suppliers combined</li> <li>- 1M consumers, 6M consumers, MM consumers and DD/DM consumers monitored separately</li> </ul>
Follow-up	<ul style="list-style-type: none"> <li>- frequency of calculation: monthly</li> <li>- frequency of reporting to CRE: monthly</li> <li>- frequency of publication: monthly</li> <li>- frequency of calculation of incentives: annual</li> </ul>
Target	<ul style="list-style-type: none"> <li>- the financial incentive relates to the overall value of the rate (all consumers combined) calculated on an annual basis</li> <li>- reference target: 93% per calendar year</li> </ul>
Incentives	<ul style="list-style-type: none"> <li>- calculation: based on indicator results rounded to 2 decimal places</li> <li>- penalties: 40,000 per tenth of a point if the annual rate is strictly below the reference target</li> <li>- bonus: 40,000 per tenth of a point if the annual rate is greater than or equal to the reference target</li> <li>- floor value of incentives: - €2,600,000</li> <li>- payment: through the CRCP</li> </ul>
Implementation date	<ul style="list-style-type: none"> <li>- monitored since 1 January 2011</li> <li>- implementation of incentives: 1 July 2012</li> </ul>

### 1.3 Rate of decommissionings completed within the requested deadlines

Calculation	<p>Value reset on 1<sup>st</sup> of month M+2:  <i>(Number of HSMs closed during month M within the requested deadline (if this deadline is longer than the catalogue deadline) or within a deadline ≤ the catalogue deadline (if the requested deadline is shorter than the catalogue deadline))/(Total number of HSMs closed during month M)</i></p> <p>(i.e. five monitored values:                      - all consumers combined                      - 1M consumers                      - 6M consumers                      - MM consumers                      - DD/DM consumers)</p>
Perimeter	<ul style="list-style-type: none"> <li>- HSMs following termination of the contract (except HSMs for non-payment), at the consumer's initiative</li> <li>- all suppliers combined</li> <li>- 1M consumers, 6M consumers, MM consumers and DD/DM consumers monitored separately</li> </ul>
Follow-up	<ul style="list-style-type: none"> <li>- frequency of calculation: monthly</li> <li>- frequency of reporting to CRE: monthly</li> <li>- frequency of publication: monthly</li> <li>- frequency of calculation of incentives: annual</li> </ul>

Target	<ul style="list-style-type: none"> <li>- the financial incentive relates to the overall value of the rate (all consumers combined) calculated on an annual basis</li> <li>- reference target: 96.5% per calendar year</li> </ul>
Incentives	<ul style="list-style-type: none"> <li>- calculation: based on indicator results rounded to 2 decimal places</li> <li>- penalties: 40,000 per tenth of a point if the annual rate is strictly below the reference target</li> <li>- bonus: 40,000 per tenth of a point if the annual rate is greater than or equal to the reference target</li> <li>- floor value of incentives: - €2,100,000</li> <li>- payment: through the CRCP</li> </ul>
Implementation date	<ul style="list-style-type: none"> <li>- monitored since 1 January 2011</li> <li>- implementation of incentives: 1 July 2012</li> </ul>

### 1.4 Rate of connections completed within the agreed deadlines

Calculation	<p>The ratio is updated on the 1<sup>st</sup> of month M+2:  <math display="block">\frac{\text{(Number of connections brought on stream during month M within the agreed timeframe)}}{\text{(Number of connections brought on stream during month M)}}</math>                 (i.e. two monitored values:                  - connecting the consumer market                  - business market connection)</p>
Perimeter	<ul style="list-style-type: none"> <li>- all connections</li> <li>- consumer market connections and business market connections monitored separately</li> </ul>
Follow-up	<ul style="list-style-type: none"> <li>- frequency of calculation: monthly</li> <li>- frequency of reporting to CRE: monthly</li> <li>- frequency of publication: monthly</li> <li>- frequency of calculation of incentives: annual</li> </ul>
Target	<ul style="list-style-type: none"> <li>- the financial incentive relates to the overall value of the rate (all consumers combined) calculated on an annual basis</li> <li>- reference target: 89% per calendar year</li> </ul>
Incentives	<ul style="list-style-type: none"> <li>- calculation: based on indicator results rounded to 2 decimal places</li> <li>- penalties: 25,000 per point if the annual rate is strictly below the reference target</li> <li>- floor value of incentives per type of connection: - €725,000</li> <li>- payment: through the CRCP</li> </ul>
Implementation date	<ul style="list-style-type: none"> <li>- monitored since 1 July 2010</li> <li>- implementation of incentives: 1 July 2012</li> </ul>

### 1.5 Supplier portal availability rate

Calculation	<p>The ratio is updated on the 1<sup>st</sup> of month M+2:  <math display="block">\frac{\text{(Number of hours the gate is available during the week)}}{\text{(Total number of hours the gate is scheduled to be open during the week)}}</math>                 (i.e. a monitored value)</p>
Perimeter	<ul style="list-style-type: none"> <li>- OMEGA portal only, all functionalities accessible from suppliers, excluding Webservices</li> <li>- causes of unavailability: any event that prevents, hinders or significantly slows down the use of the portal by suppliers, whether planned or not</li> </ul>
Follow-up	<ul style="list-style-type: none"> <li>- frequency of calculation: weekly</li> <li>- frequency of reporting to CRE: monthly</li> <li>- frequency of publication: monthly</li> <li>- frequency of calculation of incentives: annual</li> </ul>
Target	<ul style="list-style-type: none"> <li>- the financial incentive relates to the value of the rate calculated on an annual basis</li> <li>- reference target: 99.5% per calendar year</li> </ul>
Incentives	<ul style="list-style-type: none"> <li>- calculation: based on indicator results rounded to 2 decimal places</li> <li>- penalties: 50,000 per tenth of a point if the annual rate is strictly below the reference target</li> <li>- floor value of incentives: - €1,750,000</li> </ul>

	- payment: through the CRCP
Implementati on date	- monitored since 1 July 2008 - implementation of incentives: 1 July 2008

### 1.6 Rate of response to claims within 15 calendar days

Calculation	The ratio is updated on the 1 <sup>st</sup> of month M+2: <i>(Number of claims closed within 15 calendar days during month M)/(Total number of claims closed during month M)</i> (i.e. a monitored value)
Perimeter	- all claims to be answered by the DSO to the supplier or the consumer - all channels of claim transmission - all suppliers, all consumer types (T1/T2/T3/T4/LT) combined - closed claim: claim for which a "consistent" response (no acknowledgement of receipt) has been sent by the DSO to the supplier or consumer
Follow-up	- frequency of calculation: monthly - frequency of reporting to CRE: monthly - frequency of publication: monthly - frequency of incentive calculation: monthly
Target	- reference target: <ul style="list-style-type: none"> <li>o from 1 January 2024 to 31 December 2024: 93%</li> <li>o from 1 January 2025 to 31 December 2025: 94%</li> <li>o from 1 January 2026 to 31 December 2026: 95%</li> <li>o from 1 January 2027 to 31 December 2027: 96%</li> </ul>
Incentives	- calculation: based on indicator results rounded to 2 decimal places - penalties: 8,000 per point if the monthly rate is strictly below the reference target - bonus: 8,000 per point if the monthly rate is greater than or equal to the reference target - floor value of incentives: - €1,300,000 - payment: through the CRCP
Implementati on date	- monitored since 1 July 2008 - implementation of incentives: 1 July 2010

### 1.7 Multiple claims rate

Calculation	On the 1 <sup>st</sup> of month M+2, the: <i>(Number of multiple claims for the same PCE and claim type)/(Total number of claims)</i> (i.e. a monitored value)
Perimeter	- all claims received by the DSO (to be replied to by the DSO to the supplier or consumer) - all channels of claim transmission - all suppliers, all consumer types (T1/T2/T3/T4/LT) combined
Follow-up	- frequency of calculation: monthly - frequency of reporting to CRE: monthly - frequency of publication: monthly - frequency of incentive calculation: annual
Target	- the financial incentive relates to the value of the rate calculated on an annual basis - reference target: <ul style="list-style-type: none"> <li>o from 1 January 2024 to 31 December 2024: 12.00%</li> <li>o from 1 January 2025 to 31 December 2025: 12.00%</li> <li>o from 1 January 2026 to 31 December 2026: 10.00%</li> <li>o from 1 January 2027 to 31 December 2027: 10.00%</li> </ul>
Incentives	- calculation: based on indicator results rounded to 2 decimal places - penalties: 5,000 per tenth of a point if the annual rate is strictly below the reference target - bonus: 5,000 per tenth of a point if the annual rate is greater than or equal to the reference target

	<ul style="list-style-type: none"> <li>- floor value of incentives: - €1,000,000</li> <li>- payment: through the CRCP</li> </ul>
Implementati on date	- implementation of incentives: 1 July 2024

### 1.8 Publication rate by OMEGA for DD/MM readings

Calculation	<p>The ratio is updated on the 1<sup>st</sup> of month M+2:  <i>(Sum between the 8<sup>th</sup> working day of month M and the 7<sup>th</sup> working day of month M+1 of the number of remotely-read DD/MM PCEs for which the reading was received and published by OMEGA over this period)/(Sum of the number of remotely-read DD/MM PCEs for which the reading was received by OMEGA over this period)</i>                  (i.e. a monitored value)</p>
Perimeter	<ul style="list-style-type: none"> <li>- all existing PCE DD/DM</li> <li>- all cyclical and MHS statements (subscription statements not taken into account)</li> <li>- all suppliers combined</li> <li>- calculation on D+7</li> </ul>
Follow-up	<ul style="list-style-type: none"> <li>- frequency of calculation: monthly</li> <li>- frequency of reporting to CRE: monthly</li> <li>- frequency of publication: monthly</li> <li>- frequency of calculation of incentives: annual</li> </ul>
Target	<ul style="list-style-type: none"> <li>- the financial incentive relates to the value of the rate calculated on an annual basis</li> <li>- reference target: 99.94% per calendar year</li> </ul>
Incentives	<ul style="list-style-type: none"> <li>- calculation: based on indicator results rounded to 2 decimal places</li> <li>- penalties: 25,000 per tenth of a point if the annual rate is strictly below the reference target</li> <li>- bonus: 25,000 per tenth of a point if the annual rate is greater than or equal to the reference target</li> <li>- floor value of incentives: - €985,000</li> <li>- payment: through the CRCP</li> </ul>
Implementati on date	<ul style="list-style-type: none"> <li>- monitored since 1 July 2008</li> <li>- implementation of incentives: 1 July 2009</li> </ul>

### 1.9 Publication rate by OMEGA for MM readings

Calculation	<p>The ratio is updated on the 1<sup>st</sup> of month M+2:  <i>(Sum between the 8<sup>th</sup> working day of month M and the 7<sup>th</sup> working day of month M+1 of the number of PCE MM readings received and published by OMEGA over this period)/(Sum of the number of PCE MM readings received by OMEGA over this period)</i>                  (i.e. a monitored value)</p>
Perimeter	<ul style="list-style-type: none"> <li>- all existing MM PCEs (not just remote readings)</li> <li>- all cyclical and MHS statements (subscription statements not taken into account)</li> <li>- all suppliers combined</li> <li>- calculation on D+7</li> </ul>
Follow-up	<ul style="list-style-type: none"> <li>- frequency of calculation: monthly</li> <li>- frequency of reporting to CRE: monthly</li> <li>- frequency of publication: monthly</li> <li>- frequency of calculation of incentives: annual</li> </ul>
Target	<ul style="list-style-type: none"> <li>- the financial incentive relates to the value of the rate calculated on an annual basis</li> <li>- reference target: 99.93% per calendar year</li> </ul>
Incentives	<ul style="list-style-type: none"> <li>- calculation: based on indicator results rounded to 2 decimal places</li> <li>- penalties: 25,000 per tenth of a point if the annual rate is strictly below the reference target</li> <li>- bonus: 25,000 per tenth of a point if the annual rate is greater than or equal to the reference target</li> <li>- floor value of incentives: - €982,500</li> <li>- payment: through the CRCP</li> </ul>

Implementati on date	- monitored since 1 July 2008 - implementation of incentives: 1 July 2009
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### 1.10 Publication rate by OMEGA for 6M readings

Calculation	The ratio is updated on the 1 <sup>st</sup> of month M+2: <u><math>(\text{Sum over month } M \text{ of the number of PCE 6M readings received and published by OMEGA over this period}) / (\text{Sum of the number of PCE 6M readings received by OMEGA})</math></u> (i.e. a monitored value)
Perimeter	- all existing 6M PCEs (not just remote readings) - all cyclical and MHS statements (subscription statements not taken into account) - all suppliers combined - calculation in D+2
Follow-up	- frequency of calculation: monthly - frequency of reporting to CRE: monthly - frequency of publication: monthly - frequency of calculation of incentives: annual
Target	- the financial incentive relates to the value of the rate calculated on an annual basis - reference target: <ul style="list-style-type: none"> <li>o from 1 January 2024 to 31 December 2024: 99.70%</li> <li>o from 1 January 2025 to 31 December 2025: 99.70%</li> <li>o from 1 January 2026 to 31 December 2026: 99.50%</li> <li>o from 1 January 2027 to 31 December 2027: 99.50%</li> </ul>
Incentives	- calculation: based on indicator results rounded to 2 decimal places - penalties: 25,000 per tenth of a point if the annual rate is strictly below the reference target - bonus: 25,000 per tenth of a point if the annual rate is greater than or equal to the reference target - floor value of incentives: - €995,000 - payment: through the CRCP
Implementati on date	- monitored since 1 July 2008 - implementation of incentives: 1 July 2009

### 1.11 Alternative suppliers' contractual perimeter deviation rate

Calculation	The ratio is updated on the 1 <sup>st</sup> of month M+2: <u><math>(\text{Sum of PCEs allocated to alternative suppliers on the last working day of month } M) / (\text{Sum of PCEs effectively allocated to alternative suppliers' portfolios in OMEGA on the last working day of month } M)</math></u> (i.e. a monitored value)
Perimeter	- all existing PCEs from alternative suppliers - alternative suppliers only
Follow-up	- frequency of calculation: monthly - frequency of reporting to CRE: monthly - frequency of publication: monthly - frequency of calculation of incentives: annual
Target	- the financial incentive relates to the value of the rate calculated on an annual basis - reference target: 0.04% per calendar year
Incentives	- calculation: based on indicator results rounded to 2 decimal places - penalties: 25,000 per tenth of a point if the annual rate is strictly below the reference target - bonus: 25,000 per tenth of a point if the annual rate is greater than or equal to the reference target - floor value of incentives: - €265,000 - payment: through the CRCP



Implementati on date	- monitored since 1 July 2009 - implementation of incentives: 1 July 2009
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### 1.12 Processing rate for rejects from month M in M+1

Calculation	The ratio is updated on the 1 <sup>st</sup> of month M+2: <i>(Number of rejections corrected during month M)/(Number of rejections generated during month M-1)</i> (i.e. a monitored value)
Perimeter	- all existing PCE - all suppliers combined
Follow-up	- frequency of calculation: monthly - frequency of reporting to CRE: monthly - frequency of publication: monthly - frequency of calculation of incentives: annual
Target	- the financial incentive relates to the value of the rate calculated on an annual basis - reference target: 99.8% per calendar year
Incentives	- calculation: based on indicator results rounded to 2 decimal places - penalties: 50,000 per tenth of a point if the annual rate is strictly below the reference target - bonus: 50,000 per tenth of a point if the annual rate is greater than or equal to the reference target - floor value of incentives: - €1,900,000 - payment: through the CRCP
Implementati on date	- monitored since 1 January 2010 - implementation of incentives: 1 July 2010

### 1.13 Annual volume of distribution variance accounts (DVA)

Calculation	The ratio is updated on the 1 <sup>st</sup> of month M+2: <i>Absolute value of the annual sum of energy CEDs</i> $=  \sum_{m=1}^{12} CED_m(JJ) + CED_m(MM) + CED_m(1M) + CED_m(6M) $ (i.e. a monitored value)
Perimeter	- all existing PCE - all suppliers combined
Follow-up	- frequency of calculation: monthly - frequency of reporting to CRE: monthly - frequency of publication: monthly - frequency of calculation of incentives: annual
Target	- reference target: <ul style="list-style-type: none"> <li>○ from 1 January 2024 to 31 December 2024: 400 GWh</li> <li>○ from 1 January 2025 to 31 December 2025: 370 GWh</li> <li>○ from 1 January 2026 to 31 December 2026: 350 GWh</li> <li>○ from 1 January 2027 to 31 December 2027: 300 GWh</li> </ul>
Incentives	- penalties: 5 per MWh above the reference target - bonus: 2.5 per MWh below the reference target - floor value of incentives: - €2,250,000 - payment: through the CRCP
Implementati on date	- monitored from 1 January 2024 - implementation of incentives: 1 January 2024

### 1.14 Magnitude of distribution deviation accounts (CED) by metering frequency and supplier

Calculation	The ratio is updated on the 1 <sup>st</sup> of month M+2: <i>Sum of ERCs in energy and absolute value for each reading frequency (DD, DD/MM, 6M, 1M<sup>82</sup>) and for each supplier in month M</i> By supplier: $=\sum_{m=1}^{12}  CED_m(JJ)  +  CED_m(MM)  +  CED_m(1M)  +  CED_m(6M) $ (i.e. a monitored value)
Perimeter	- all existing PCEs - all suppliers whose customer portfolio comprises, for at least one reading frequency, at least 1% of the total of the PCEs with this reading frequency
Follow-up	- frequency of calculation: monthly - frequency of reporting to CRE: monthly - frequency of publication: monthly - frequency of calculation of incentives: annual
Target	4.85 TWh cumulated over the calendar year
Incentives	- penalties: 0.5 per MWh above the reference target - bonus: 0.25 per MWh below the reference target - floor value of incentives: - €2,250,000 - payment: through the CRCP
Implementation date	- monitored from 1 January 2024 - implementation of incentives: 1 January 2024

### 1.15 Deadline for renewable gas and low-carbon project developers to respond to detailed studies

Calculation	Value reset on 1 <sup>st</sup> of month M+2: <i>Average time between the date on which the request is received and the date on which the applicant receives the detailed studies sent to GRDF for the connection of a low-carbon renewable gas injection facility, adjusted for the average time taken by the Energy Regulation Commission to validate the connection zoning observed in year N-1.</i> (1 value monitored)
Perimeter	- requests sent by a renewable and low-carbon gas project developer to GRDF in accordance with the procedures defined in the capacity register management procedure (milestone D1) - requests initially addressed to a TSO and transferred to GRDF
Follow-up	- frequency of calculation: monthly - frequency of reporting to CRE: monthly - frequency of publication: monthly - frequency of calculation of incentives: annual
Target	- the financial incentive relates to the value of the period calculated on an annual basis - reference target: 120 days
Incentives	- calculation: based on indicator results rounded to 2 decimal places - penalties: (€12.5 x V) per calendar day above the reference target, where V corresponds to the volume of detailed studies performed during the year - bonus: (€6.25 x V) per calendar day below the reference target, where V corresponds to the volume of detailed studies performed during the year - floor value of incentives: - €450,000 - payment: through the CRCP

<sup>82</sup>The energy delivered is measured monthly and the index containing this measurement is read monthly by the DSO. This designation is used for PCEs fitted with a Gazpar meter.

### 1.16 Number of claims following connection of a renewable and low-carbon gas installation

Calculation	On the 1 <sup>st</sup> of month M+2, the value: <u>Total number of producer claims following the connection of a renewable and low-carbon gas installation closed during month M</u> (1 value monitored)
Perimeter	- all claims that GRDF must respond to a renewable and low-carbon gas producer - any written or oral means of transmitting the claim - closed claim: claim for which a "consistent" response (no acknowledgement of receipt) has been sent by GRDF to the producer
Follow-up	- frequency of calculation: monthly - frequency of reporting to CRE: monthly - frequency of publication: monthly - frequency of calculation of incentives: annual
Target	No claims following the connection of a renewable and low-carbon gas installation within one month
Incentives	- penalties: 100 per claim

## 2. Other indicators for monitoring GRDF's quality of service

### 2.1 Environmental indicators

Indicator title	Calculating the indicator	Scope of the indicator	Frequency of reporting to CRE and publication	Implementation date
Emission of greenhouse gases into the atmosphere in relation to the energy transmitted	The ratio is updated on the 1 <sup>st</sup> of March of year A+1: <u>(Tonnes of greenhouse gases (CO<sub>2</sub> equivalent) emitted into the atmosphere in year A)/(Quantities of gas transported on the DSO's network in calendar year A)</u> (i.e. a monitored value)	- linear methane leakage - methane emissions during works, maintenance or incidents, emissions due to the operation of installations - emissions from vehicles in the DSO fleet and its buildings - the result of the indicator is displayed together with the quantities of gas transported during the calendar year	Year	Already implemented
Methane leaks into the atmosphere	The ratio is updated on the 1 <sup>st</sup> of March of year A+1: <u>(Quantities of methane emitted into the atmosphere in year A)/(Quantities of gas transported on the DSO's network in calendar year A)</u> (i.e. a monitored value)	- linear methane leakage - methane emissions during works, maintenance or incidents, emissions due to the operation of installations	Year	Already implemented

## 2.2 Indicators for estimates and interventions

Indicator title	Calculating the indicator	Scope of the indicator	Frequency of reporting to CRE and publication	Implementation date
<p>Percentage of supplier changes made within the requested deadlines</p>	<p>Reporting on the 1<sup>st</sup> of month M+2, by type of consumer and by type of intervention, of the ratio:  <u>(Number of supplier changes closed during month M within the requested deadlines)/(Total number of supplier changes closed during month M)</u>                      (i.e. six monitored values:                      - changes of supplier requiring travel:                     <ul style="list-style-type: none"> <li>○ 6M consumers</li> <li>○ MM consumers</li> <li>○ DD/DM consumers</li> </ul>                     - changes of supplier that do not require travel:                     <ul style="list-style-type: none"> <li>○ 6M consumers</li> <li>○ MM consumers</li> <li>○ DD/DM consumers)</li></ul></p>	<ul style="list-style-type: none"> <li>- any change of supplier</li> <li>- all suppliers combined</li> <li>- 6M consumers, MM consumers and DD/DM consumers monitored separately</li> </ul>	<p>Month</p>	<p>Already implemented</p>

**2.3 Consumer relations indicators**

Indicator title	Calculating the indicator	Scope of the indicator	Frequency of reporting to CRE and publication	Implementation date
Accessibility rate of call centre for consumers	Report on the 1 <sup>st</sup> of month M+2, by call centre number, of the ratio: <u>(Number of calls taken in month M)/(Number of calls received in month M)</u> (i.e. two monitored values: - Home Access to Gas no (AGNRC no) - Gas safety emergency no )	<ul style="list-style-type: none"> <li>- all types of calls taken/received during the call centre's opening hours.</li> <li>- all types of contacts</li> <li>- all consumer types (T1/T2/T3/T4/LT) combined</li> </ul>	Month	Already implemented
Number of consumer claims by type	On the 1 <sup>st</sup> of month M+2, by type of claim, the value: <u>Total number of consumer claims closed during month M</u> (i.e. ten monitored values: - Total - Delivery - Production of delivery-related services - Individual gas connection - Business market gas connection - Network - Rollout of Gazpar - Other development - Delivery - Others)	<ul style="list-style-type: none"> <li>- all claims to be answered by the DSO to the consumer (claims to be answered by the supplier to the consumer are not concerned)</li> <li>- any written or oral means of transmitting the claim</li> <li>- all consumer types (T1/T2/T3/T4/LT) combined</li> <li>- closed claim: claim for which a "consistent" response (no acknowledgement of receipt) has been sent by the DSO to the consumer</li> </ul>	Quarter	Already implemented
Rate of consumer claims handled in more than 2 months	On the 1 <sup>st</sup> of month M+2, the ratio of: <u>(Number of consumer claims closed in more than 2 months during month M)/(Total number of consumer claims closed during month M)</u> (i.e. a monitored value)		Month	Already implemented

## 2.4 Supplier relations indicators

Indicator title	Calculating the indicator	Scope of the indicator	Frequency of reporting to CRE and publication	Implementation date
Response rate to supplier claims within 5 calendar days	<p>The ratio is updated on the 1<sup>st</sup> of month M+2:  <math display="block">\frac{\text{Number of supplier claims closed within 5 calendar days during month M}}{\text{Total number of supplier claims closed during month M}}</math>                     (i.e. a monitored value)</p>	<ul style="list-style-type: none"> <li>- all claims to be responded to by the DSO to the supplier (claims to be responded to by the DSO to the consumer are not concerned)</li> </ul>	Month	Already implemented
Number of supplier claims by type	<p>On the 1<sup>st</sup> of month M+2, by type of claim, the value:  <math display="block">\text{Total number of supplier claims closed during month M}</math>                     (i.e. eight monitored values: - Total                      - Home page                      - Counting data                      - Managing and delivering services                      - Quality of supply and network                      - Relaunch                      - Others                      - Rollout of Gazpar)</p>	<ul style="list-style-type: none"> <li>- all claims submitted through the supplier portal only, including claims for missed appointments</li> <li>- all suppliers, all consumer types (T1/T2/T3/T4/LT) combined</li> <li>- closed claim: claim for which a "consistent" response (no acknowledgement of receipt) has been sent by the DSO to the supplier</li> </ul>	Month	Already implemented
Rate of supplier claims handled in more than 2 months	<p>On the 1<sup>st</sup> of month M+2, the ratio of:  <math display="block">\frac{\text{Number of supplier claims closed in more than 2 months during month M}}{\text{Total number of supplier claims closed during month M}}</math>                     (i.e. a monitored value)</p>		Month	Already implemented

**2.5 Indicators for data exchanged with transmission system operators (TSOs)**

Indicator title	Calculating the indicator	Scope of the indicator	Frequency of reporting to CRE and publication	Implementation date
Transmission to TSOs of daily estimates of quantities taken off by suppliers at DTIPs within the agreed timeframe	The ratio is updated on the 1 <sup>st</sup> of month M+2: <u>Number of days in month M for which the DSO has not sent provisional allocations calculated on D+1 within the agreed deadline</u> (i.e. a monitored value)	<ul style="list-style-type: none"> <li>- all TSOs combined</li> <li>- all days with a missed deadline for one or both TSOs</li> <li>- excluding days when the deadline is not met at the request of one or both TSOs (this day is counted as a day when the deadline is met by the DSO)</li> </ul>	Month	Already implemented
Transmission of intraday DD statements to TSOs within the agreed timeframe	The ratio is updated on the 1 <sup>st</sup> of month M+2: <u>Number of dispatches of intraday readings for month M that GRDF has performed within the period agreed between the TSOs and DSOs)/(Theoretical maximum number of dispatches of intraday readings for month M</u> (i.e. a monitored value)	<ul style="list-style-type: none"> <li>- all TSOs combined</li> <li>- all shipments with a deadline respected for both TSOs</li> <li>- any day on which a deadline is not met at the request of one or both TSOs (this day is counted as a day on which the deadline is met by the DSO)</li> </ul>	Month	Already implemented
Quality of DD statements sent to TSOs for daily allocations at DTIPs	The ratio is updated on the 1 <sup>st</sup> of month M+2: <u>(Sum, for each day D of month M, of the number of consumption values of remotely-read consumers DD included in the allocation calculations on D+1)/(Sum, for each day D of month M, of the number of remotely-read consumers DD recorded in the OMEGA IS for day D)</u> (i.e. a monitored value)	<ul style="list-style-type: none"> <li>- all values actually measured</li> <li>- no fallback/replacement value taken into account</li> <li>- all suppliers, all ZETs<sup>83</sup>, all TSOs<sup>84</sup> combined</li> </ul>	Month	Already implemented

<sup>83</sup>ZET: transmission balancing zone.

<sup>84</sup>TSO: natural gas transmission system operator.



<p>Transmission to TSOs of daily estimates of quantities taken off by suppliers at DTIPs within a timeframe that allows them to be taken into account by the TSOs.</p>	<p>Value reset on 1<sup>st</sup> of month M+2:  <u>Number of days in month M for which the DSO <sup>85</sup>has not sent provisional allocations calculated on D+1 within a timeframe allowing them to be taken into account by the TSOs</u>                  (i.e. a monitored value)</p>	<ul style="list-style-type: none"> <li>- all TSOs combined</li> <li>- all days with a missed deadline for one or both TSOs (the penalty is due if at least one TSO is affected by a delay)</li> <li>- excluding days when the deadline is not met at the request of one or both TSOs (this day is counted as a day when the deadline is met by the DSO)</li> </ul>	<p>Month</p>	<p>Already implemented</p>
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### 2.6 Indicators for index corrections

Indicator title	Calculating the indicator	Scope of the indicator	Frequency of reporting to CRE and publication	Implementation date
<p>Adjusted index rates</p>	<p>The ratio is updated on the 1<sup>st</sup> of month M+2:                      - for 6M consumers:    <u>(Number of readings transmitted with rectified status in month M - Number of rectifications following MES in month M)/(Number of total readings transmitted in month M)</u>                        - for other consumers:    <u>(Number of active PCEs whose index was rectified in month M)/(Total number of active PCEs in month M)</u>                        (i.e. 2 values monitored)</p>	<ul style="list-style-type: none"> <li>- all index changes, regardless of the cause, with the exception of rectifications following MES for 6M consumers</li> <li>- all real indexes and also all indexes calculated for consumers other than 6M</li> <li>- all suppliers combined</li> </ul>	<p>Month</p>	<p>Already implemented</p>

<sup>85</sup>DSO: natural gas distribution network operator.

## 2.7 Indicators related to the injection of renewable and low-carbon gases

Indicator title	Calculating the indicator	Scope of the indicator	Frequency of reporting to CRE and publication	Implementation date
Rates for renewable and low-carbon gases capped	On the 1 <sup>st</sup> of month M+2, the value for each zoning validated by CRE: <u>Capped volumes of renewable and low-carbon gas in the zoning area/Maximum injection capacity in the zoning area</u> (1 value monitored) <sup>86</sup>	- Sum of non-injected volumes corresponding to the difference between the maximum injection capacity and the injected flow rate. - All capped volumes, even if the producer was able to make up for them in the hours or days following the saturation period, with the exception of volumes not injected due to a choice made by the producer.	Month	1 July 2025
Average start-up times for reinforcements associated with the development of renewable and low-carbon gases	Value reset on 1 <sup>st</sup> of month M+2: <u>Average time between the date of approval by CRE of the reinforcement associated with the development of renewable and low-carbon gas and the date on which the reinforcement is put into operation</u> (1 value monitored)	- Requests made by GRDF to CRE as part of the validation of investments associated with the development of renewable and low-carbon gases	Month	1 July 2024

<sup>86</sup> 
$$\frac{\sum_{\text{sur tous les producteurs du zonage } i} (\sum_{\text{durée de saturation [h]} \text{MAX}(0; C_{\text{max}}_{\text{prod},i} - \text{Débit}_{\text{prod},i} \text{ pendant la saturation}) [Nm^3/h])}{\text{durée du mois [h]} \times \sum_{\text{sur tous les producteurs du zonage } i} C_{\text{max}}_{\text{prod},i} [Nm^3/h]}$$

<p>Average connection times for renewable and low-carbon gas production sites</p>	<p>Value reset on 1<sup>st</sup> of month M+2:  <u>Average time between the date the application is received (milestone D1) and the date the production unit is commissioned (milestone D8). The authoritative date for milestone D8 is the date on which the operator signs the commissioning report (PV).</u>                  (1 value monitored)</p>	<ul style="list-style-type: none"> <li>- requests sent by a project developer to GRDF in accordance with the procedures defined in the capacity register management procedure (milestone D1)</li> <li>- requests initially addressed to a TSO and transferred to GRDF</li> </ul>	<p>Month</p>	<p>1 July 2024</p>
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### 2.8 "Gas Change" project indicator

Indicator title	Calculating the indicator	Scope of the indicator	Frequency of reporting to CRE and publication	Implementation date
<p>Number of claims associated with the "Gas Change" project</p>	<p>On the 1<sup>st</sup> of month M+2, the value:  <u>Total number of Gas Change claims closed during month M</u>                  (1 value monitored)</p>	<ul style="list-style-type: none"> <li>- all claims to be answered by GRDF to a consumer</li> <li>- any written or oral means of transmitting the claim</li> <li>- closed claim: claim for which a "consistent" response (no acknowledgement of receipt) has been sent by GRDF to the consumer</li> </ul>	<p>Month</p>	<p>Already implemented</p>

## Annex 3: Incentivising regulation of the Gazpar advanced metering project for the 2024-2027 period

The provisions of this Annex do not prevent GRDF from sending other indicators to CRE that are not explicitly indicated below.

For indicators corresponding to rates (whether or not subject to a financial incentive), CRE asks GRDF to send it details of the calculation (numerator and denominator).

As regards the indicators subject to a financial incentive, these are capped in accordance with the overall capping mechanism for incentives associated with the incentivising regulatory framework for GRDF's advanced metering system provided for in part 4 of the Deliberation of 17 July 2014<sup>87</sup>.

### 1. Indicators associated with a financial incentive

#### 1.1 Rate of publication of meter readings to suppliers within the scope of smart meters

Calculation	<p>The ratio is updated on the 1<sup>st</sup> of month M+2:</p> <p><u><i>(Number of T1/T2 PCEs in remotely-read status<sup>88</sup> whose readings were received and published by OMEGA during month M)/(Number of T1/T2 PCEs in remotely-read status whose readings were received by OMEGA during month M)</i></u></p> <p>(i.e. a monitored value)</p>
Perimeter	<ul style="list-style-type: none"> <li>- all T1/T2 PCEs with existing remote reading status</li> <li>- all cyclical and decommissioning (MHS) readings (subscription readings not taken into account)</li> <li>- all measured (including self-reading) and calculated indexes</li> <li>- all suppliers combined</li> <li>- calculation in D + 2</li> </ul>
Follow-up	<ul style="list-style-type: none"> <li>- frequency of calculation: monthly</li> <li>- frequency of reporting to CRE: monthly</li> <li>- frequency of publication: monthly</li> <li>- frequency of incentive calculation: monthly</li> </ul>
Implementation date	<ul style="list-style-type: none"> <li>- follow-up from the launch of the supplier pilot</li> <li>- implementation of incentives at the start of industrial rollout (1<sup>st</sup> May 2017)</li> </ul>
Targets and incentives from 1 January 2024 to 31 December 2027	
Target	<ul style="list-style-type: none"> <li>- reference target: 99.5%</li> </ul>
Incentives	<ul style="list-style-type: none"> <li>- calculation: based on indicator results rounded to 2 decimal places</li> <li>- penalties: 20,000 per month and per point strictly below the reference target</li> <li>- bonus: 20,000 per month if the rate is greater than or equal to the reference target</li> <li>- payment: to the CRCP</li> </ul>

<sup>87</sup>Deliberation of the Energy Regulatory Commission of 17 July 2014 ruling on the incentivising regulatory framework for GRDF's advanced metering system.

<sup>88</sup>Meters with "remote reading status" are equipped meters (integrated meters or conventional meters fitted with a module) and declared to be communicating in OMEGA/TICC.

## 1.2 Rate of cyclical meter readings measured within the scope of smart meters

Calculation	<p>The ratio is updated on the 1<sup>st</sup> of month M+2:</p> <p><u><i>(Number of cyclical indexes measured on PCE T1/T2 with remote-read status <sup>89</sup>received by OMEGA during month M)/(Number of cyclical indexes of PCE T1/T2 with remote-read status and attached to a Distribution Contract (CAD), during month M)</i></u></p> <p>(i.e. a monitored value)</p>
Perimeter	<ul style="list-style-type: none"> <li>- all T1/T2 PCEs with existing remote reading status</li> <li>- all recurrent readings</li> <li>- all suppliers combined</li> </ul>
Follow-up	<ul style="list-style-type: none"> <li>- frequency of calculation: monthly</li> <li>- frequency of reporting to CRE: monthly</li> <li>- frequency of publication: monthly</li> <li>- frequency of incentive calculation: monthly</li> </ul>
Implementation date	<ul style="list-style-type: none"> <li>- follow-up from the launch of the supplier pilot</li> <li>- implementation of incentives since the start of industrial rollout (1 May 2017)</li> </ul>
Targets and incentives from 1 January 2024 to 31 December 2027	
Target	<ul style="list-style-type: none"> <li>- reference target: 99%</li> </ul>
Incentives	<ul style="list-style-type: none"> <li>- calculation: based on indicator results rounded to 2 decimal places</li> <li>- penalties: 20,000 per month and per point strictly below the reference target</li> <li>- bonus: 20,000 per month if the rate is greater than or equal to the reference target</li> <li>- payment: to the CRCP</li> </ul>

<sup>89</sup>Received from the TICC application (index processing and consumption calculation), which receives the data from the acquisition IS and transmits it to OMEGA.

### 1.3 Rate of meter readings based on contractual requests within the scope of smart meters

Calculation	<p>The ratio is updated on the 1<sup>st</sup> of month M+2:</p> <p><u><i>(Number of contractual indexes measured on PCE T1/T2 with remote-read status received by OMEGA during month M)/(Number of contractual indexes of PCE T1/T2 with remote-read status and attached to a CED, during month M)</i></u></p> <p>(i.e. a monitored value)</p>
Perimeter	<ul style="list-style-type: none"> <li>- all T1/T2 PCEs with existing remote reading status</li> <li>- any index required as a result of a contractual request:                             <ul style="list-style-type: none"> <li>o commissioning request</li> <li>o decommissioning request</li> <li>o request to change supplier</li> <li>o tariff change request</li> </ul> </li> <li>- all measured indexes, including self-readings</li> <li>- all suppliers combined</li> </ul>
Follow-up	<ul style="list-style-type: none"> <li>- frequency of calculation: monthly</li> <li>- frequency of reporting to CRE: monthly</li> <li>- frequency of publication: monthly</li> <li>- frequency of incentive calculation: monthly</li> </ul>
Implementation date	<ul style="list-style-type: none"> <li>- follow-up from the launch of the supplier pilot</li> <li>- implementation of incentives since the start of industrial rollout (1 May 2017)</li> </ul>
Targets and incentives from 1 January 2024 to 31 December 2027	
Target	<ul style="list-style-type: none"> <li>- reference target: 98.8%</li> </ul>
Incentives	<ul style="list-style-type: none"> <li>- calculation: based on indicator results rounded to 2 decimal places</li> <li>- penalties: 20,000 per month and per point strictly below the reference target</li> <li>- bonus: 20,000 per month if the rate is greater than or equal to the reference target</li> <li>- payment: to the CRCP</li> </ul>

### 1.4 Rate of cyclical meter readings calculated 3 times or more within the scope of smart meters

Calculation	<p>The ratio is updated on the 1<sup>st</sup> of month M+2:</p> <p><i>(Number of T1/T2 PCEs in remotely-read status for which a cyclical index calculated for the 3<sup>rd</sup> consecutive time or more was received by OMEGA during month M)/(Number of cyclical indexes for T1/T2 PCEs in remotely-read status and attached to a CED, during month M)</i></p> <p>(i.e. a monitored value)</p>
Perimeter	<ul style="list-style-type: none"> <li>- all T1/T2 PCEs with existing remote reading status</li> <li>- all recurrent readings</li> <li>- all suppliers combined</li> </ul>
Follow-up	<ul style="list-style-type: none"> <li>- frequency of calculation: monthly</li> <li>- frequency of reporting to CRE: monthly</li> <li>- frequency of publication: monthly</li> <li>- frequency of incentive calculation: monthly</li> </ul>
Implementation date	<ul style="list-style-type: none"> <li>- monitoring from the start of industrial rollout (1 May 2017)</li> <li>- implementation of incentives 6 months after the start of industrial rollout (1 November 2017)</li> </ul>
Targets and incentives from 1 January 2024 to 31 December 2027	
Target	<ul style="list-style-type: none"> <li>- reference target: 0.5%</li> </ul>
Incentives	<ul style="list-style-type: none"> <li>- calculation: based on indicator results rounded to 2 decimal places</li> <li>- penalties: 40,000 per month per point above the reference target</li> <li>- bonus: 80,000 per month if the rate is less than or equal to the reference target</li> <li>- payment: to the CRCP</li> </ul>

### 1.5 Availability rate of the consumer portal

Calculation	<p>On the 1<sup>st</sup> of month M+2, weekly availability ratios up to the end of month M, based on full weeks:</p> <p><i>(Number of hours the consumer portal is available during the week)/(Total number of hours the portal is expected to be accessible during the week)</i></p> <p>(i.e. a monitored value)</p>
Perimeter	<ul style="list-style-type: none"> <li>- all the functions accessible through the consumer portal</li> <li>- all "free" access functions</li> <li>- causes of site unavailability: any event that prevents, hinders or significantly slows down use of the site, whether planned or not</li> </ul>
Follow-up	<ul style="list-style-type: none"> <li>- frequency of calculation: weekly</li> <li>- frequency of reporting to CRE: monthly</li> <li>- frequency of publication: monthly</li> <li>- frequency of benefit calculation: weekly and monthly</li> </ul>
Implementation	<ul style="list-style-type: none"> <li>- follow-up from the launch of the supplier pilot</li> </ul>



date	- implementation of incentives since the start of industrial rollout (1 May 2017)
Targets and incentives from 1 January 2024 to 31 December 2027	
Target	- reference target: 99%
Incentives	<ul style="list-style-type: none"> <li>- calculation: based on indicator results rounded to 2 decimal places</li> <li>- penalties: 20,000 per week if the rate is strictly below the reference target</li> <li>- bonus: 40,000 per month if the rate is greater than or equal to the reference target</li> <li>- payment: to the CRCP</li> </ul>

### 1.6 Rate of publication of daily consumption data

Calculation	<p>On the 1<sup>st</sup> of month M+2, the ratio of:</p> <p><u><math>(\text{Number of TJDC consumption data published each day of week S}) / (\text{Number of PCEs subscribing to the daily transmission of consumption data for each day of week S})</math></u></p> <p>(i.e. a monitored value)</p>
Perimeter	- Any user who has subscribed to the daily transmission of consumption data service (TJDC)
Follow-up	<ul style="list-style-type: none"> <li>- frequency of calculation: weekly</li> <li>- frequency of reporting to CRE: monthly</li> <li>- frequency of publication: monthly</li> <li>- frequency of benefit calculation: weekly and monthly</li> </ul>
Implementation date	<ul style="list-style-type: none"> <li>- monitoring from 1 May 2021</li> <li>- implementation of incentives on 1 January 2024</li> </ul>
Targets and incentives from 1 January 2024 to 31 December 2027	
Target	<ul style="list-style-type: none"> <li>- reference target: <ul style="list-style-type: none"> <li>o from 1 January 2024 to 31 December 2024: 98.8%</li> <li>o from 1 January 2025 to 31 December 2025: 98,9%</li> <li>o from 1 January 2026 to 31 December 2026: 99.0%</li> <li>o from 1 January 2027 to 31 December 2027: 99.0%</li> </ul> </li> </ul>
Incentives	<ul style="list-style-type: none"> <li>- calculation: based on indicator results rounded to 2 decimal places</li> <li>- penalties: 40,000 per week if the rate is strictly below the reference target</li> <li>- bonus: 40,000 per month if the rate is greater than or equal to the reference target</li> <li>- payment: to the CRCP</li> </ul>

## 2. Other indicators for monitoring the performance of GRDF's advanced metering system

### 2.1 Indicators for relations with users

Indicator title	Calculating the indicator	Scope of the indicator	Frequency of reporting to CRE and publication	Implementation date
<p>Number of claims from end customers or suppliers for consumption data, by type</p>	<p>Value reset on 1<sup>st</sup> of month M+2: <u>Total number of claims for consumption data submitted by final customers or suppliers closed during the month M</u> (i.e. 5 monitored values: - Total - Quality of data displayed - Access to the portal - Data access - Other reasons)</p>	<ul style="list-style-type: none"> <li>- all claims for consumption data from smart meters</li> <li>- all claims to be answered by the DSO to the end customer or supplier</li> <li>- all means of transmitting the claim: written, oral or Internet</li> <li>- closed claim: claim for which a "consistent" response (no acknowledgement of receipt) has been sent by the DSO to the end customer or supplier</li> <li>- all suppliers combined</li> </ul>	<p>Month</p>	<p>Already implemented</p>
<p>Rate of claims from end customers or suppliers for consumption data</p>	<p>Value reset on 1<sup>st</sup> of month M+2: <u>(Total number of claims for consumption data issued by end customers or suppliers closed in month M)/(Total number of T1/T2 PCEs with remote-reading status and attached to a CED)</u> (i.e. a monitored value)</p>	<ul style="list-style-type: none"> <li>- all claims for consumption data from smart meters</li> <li>- all claims to be answered by the DSO to the end customer or supplier</li> <li>- all means of transmitting the claim: written, oral or Internet</li> <li>- closed claim: claim for which a "consistent" response (no acknowledgement of receipt) has been sent by the DSO to the end customer or supplier</li> </ul>	<p>Month</p>	<p>Already implemented</p>

		- all suppliers combined		
Number of requests to change the monthly publication date	<p>The ratio is updated on the 1<sup>st</sup> of month M+2:</p> <p><u>(Number of T1/T2 PCEs with remote-reading status concerned by an admissible request to change the monthly publication date received by GRDF between the 1<sup>st</sup> of month M-1 and 5 working days before the end of month M-1)</u></p> <p>(i.e. a monitored value)</p>	<ul style="list-style-type: none"> <li>- all T1/T2 PCEs with existing remote reading status</li> <li>- any request deemed admissible by GRDF, within the meaning of the "Procedure for changing the monthly publication date" defined within the GWG framework</li> <li>- all suppliers combined</li> </ul>	Month	Already implemented
Percentage of changes to monthly publication dates made on time	<p>The ratio is updated on the 1<sup>st</sup> of month M+2:</p> <p><u>(Number of changes to the monthly publication date taking effect during month M following a request made between 1<sup>st</sup> of month M-1 and 5 working days before the end of month M-1)/(Number of T1/T2 PCEs with remote-reading status concerned by a valid request to change the monthly publication date received by GRDF between 1<sup>st</sup> of month M-1 and 5 working days before the end of month M-1)</u></p> <p>(i.e. a monitored value)</p>	<ul style="list-style-type: none"> <li>- all T1/T2 PCEs with existing remote reading status</li> <li>- any request deemed admissible by GRDF, within the meaning of the "Procedure for changing the monthly publication date" defined within the GWG framework</li> <li>- all suppliers combined</li> </ul>	Month	Already implemented

## 2.2 Indicators for data availability

Indicator title	Calculating the indicator	Scope of the indicator	Frequency of reporting to CRE and publication	Implementation date
Rate of provision of data to end consumers	<p>On the 1<sup>st</sup> of month M+2, weekly availability ratios up to the end of month M, based on full weeks:</p> <p><u>(Number of successful requests (=consumers having accessed all their consumption data) to view the week)/(Number of requests to view consumption data made during the week)</u></p> <p>(i.e. a monitored value)</p>	<ul style="list-style-type: none"> <li>- consumers who have created an account on the consumption data website (GRDF.fr)</li> <li>- all T1/T2 PCEs with remote reading status attached to a consumer account</li> <li>- TICC for daily and hourly data</li> <li>- OMEGA for the authentication service and cyclical and event data</li> <li>- GRDF.fr for consumer account management</li> </ul>	Month	Already implemented
Number of requests for hourly intervals	<p>The values are uploaded on the 1<sup>st</sup> of month M+2:</p> <ul style="list-style-type: none"> <li>- for switching to hourly pitch:</li> </ul> <p><u>(Number of hourly passages closed during month M)</u></p> <ul style="list-style-type: none"> <li>- to return to the daily rate:</li> </ul> <p><u>(Number of daily returns closed during month M)</u></p> <p>(i.e. two monitored values)</p>	<ul style="list-style-type: none"> <li>- all T1/T2 PCEs with existing remote reading status</li> <li>- any request deemed admissible by GRDF, in accordance with the "Hourly switching procedure" defined within the framework of the GWG</li> <li>- all suppliers combined</li> </ul>	Month	Already implemented
Rate of hourly passes completed within the requested deadlines	<p>Ratios reported on the 1<sup>st</sup> of month M+2:</p> <ul style="list-style-type: none"> <li>- for switching to hourly pitch:</li> </ul> <p><u>(Number of hourly passes completed during month M within the requested deadlines (if this timeframe is greater than the catalogue timeframe) or within a timeframe ≤ the catalogue timeframe (if the</u></p>	<ul style="list-style-type: none"> <li>- all T1/T2 PCEs with existing remote reading status</li> <li>- any request deemed admissible by GRDF, in accordance with the "Hourly switching procedure" defined within the framework of the GWG</li> <li>- all suppliers combined</li> </ul>	Month	Already implemented

	<p><u>requested deadlines is less than the catalogue timeframe)/(Number of hourly passes completed during month M)</u></p> <p>- to return to the daily rate:</p> <p><u>(Number of daily readings during month M for T1/T2 PCEs with remote reading status whose "hourly reading" service expired during month M)/(Number of daily readings closed during month M)</u></p> <p>(i.e. two monitored values)</p>			
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## Annex 4: Record of the large-scale rollout of Gazpar meters

GRDF's advanced metering project, known as the Gazpar project, was launched in 2007. In particular, these advanced meters allow remote reading and transmission of actual consumption figures to suppliers on a monthly basis or in response to contractual events. After several trials, the large-scale rollout phase began on 1 May 2017 for a period of 6 years, ending in summer 2023. The aim was to equip 95% of the total number of meters (with the remaining 5% deployed during the large-scale rollout phase). GRDF estimates that nearly 11.1 million Gazpar meters have been installed out of a total installed base of 11.6 million.

The project to roll out Gazpar meters is an exceptional one for GRDF, both in financial terms and in terms of the technical and organisational challenges involved. Given the scale of the project and the need to guard against any slippage in forecast costs and timescales, CRE's deliberation of 17 July 2014 set out the framework for incentivising regulation of the Gazpar project for the period of large-scale rollout<sup>90</sup>. This framework is organised around the project's three major challenges:

- keeping to the rollout schedule,
- cost control
- the performance of the communications chain.

CRE considers that the large-scale rollout phase has gone well and that the targets set for GRDF have been achieved. Rollout deadlines were met, despite the health crisis and tensions over the supply of specific equipment. Investment costs are around 6% lower than the initial business plan. Last but not least, the performance of the communications chain has lived up to expectations.

The ATRD7 tariff is accordingly being introduced against a backdrop of a high installed base and a slowdown in the rate of new installations.

As part of the process of drawing up GRDF's ATRD7 tariff, CRE has ensured that the expected gains in operating costs have actually materialised in GRDF's operating cost trajectory. It also defines a new incentivising regulation for the Gazpar project's operating phase, in order to meet two main challenges: ensuring a high level of performance from the communication chain and facilitating gains at public level (see Annex 4, paragraph 2.2).

Finally, the end of the large-scale rollout phase does not mean the end of Gazpar rollout. Rollout will continue over the next few years for the 5% or so of customers not yet fitted with a Gazpar meter. This deliberation also is introducing a new tariff component for residual meter reading, for consumers who have not yet installed an advanced Gazpar meter.

### 1. A project that met its cost and rollout targets

#### 1.1 On schedule

The target rollout rate was initially set at 90.6% of Gazpar meters declared to be communicating in <sup>91</sup>2023. The initial business model provided for a ramp-up phase from 2017 to 2018, followed by a sustained rollout phase from 2019 to 2021, with installation accelerating to 2.6 million meters per year.

As defined in the Deliberation of 21 December 2017<sup>92</sup>, the phase of large-scale rollout of Gazpar, which was initially scheduled for 1 January 2017, has been postponed to 1 May 2017. This explains an initial discrepancy between the reference trajectory and the actual trajectory.

<sup>90</sup> CRE Deliberation of 17 July 2014 on the incentivising regulatory framework for GRDF's advanced metering system

<sup>91</sup> Meters that have been installed are declared smart if they are capable of communicating consumption figures through remote reading.

<sup>92</sup> Deliberation of the Energy Regulatory Commission of 21 December 2017 deciding on the implementation of the incentivising regulatory framework for GRDF's advanced metering system.

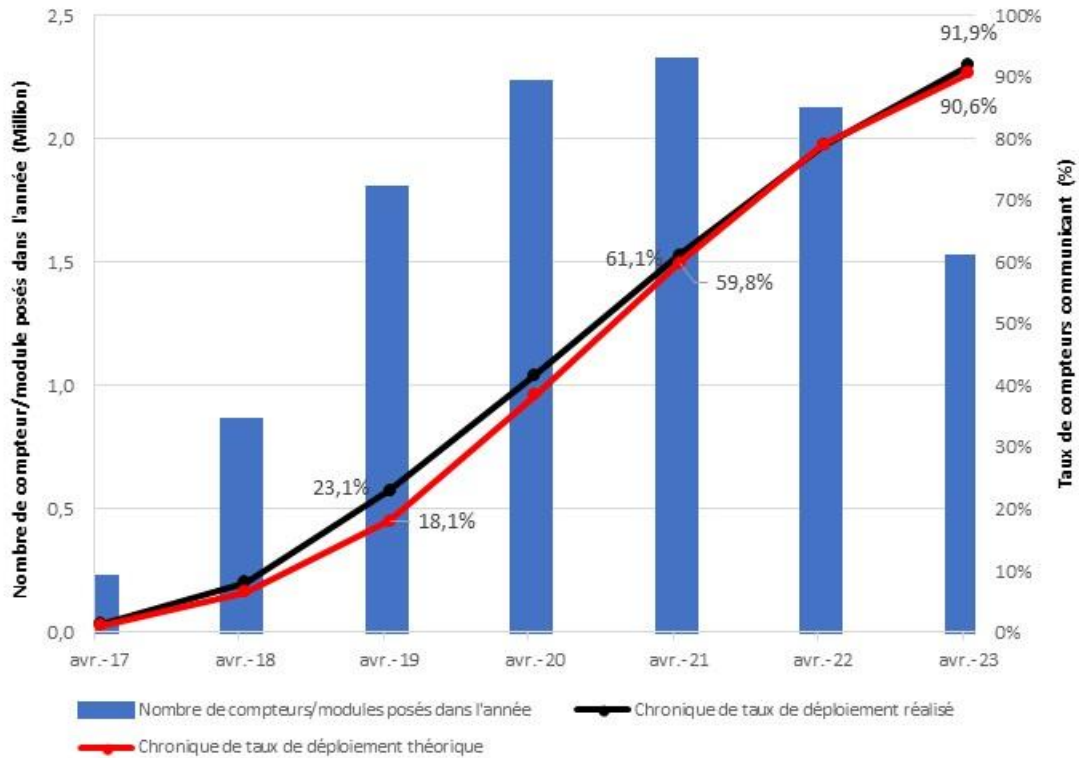


Figure 8. Gazpar rollout trajectory

From 2017 to 2019, the ramp-up phase resulted in a rollout rate of 23.1% in 2019, above the target rate of 18.1%. In 2020, the Covid-19 confinement slowed down the Gazpar programme and led to a complete halt in rollout from March to June. The following year, in 2021, rollout was again restricted due to supply difficulties caused by a shortage of materials. Despite these unforeseen events, GRDF has exceeded its target rollout rate of 90.6% of the total installed base, reaching 91.9% of meters declared as smart meters in April 2023.

Rollout rate - summer 2023	IR target	Achieved
Active + inactive declared communicating" base	90.60%	92.9% <sup>93</sup>
Assets declared to be communicating	95%	94.8%

The large-scale rollout of advanced meters is followed by a phase of large-scale rollout, characterised by a reduced volume of installations (around 100,000 per year) and the re-internalisation of installation by GRDF. This phase should enable Gazpar meters to be rolled out to the rest of the consumer base by the end of the ATRD7 period.

Every two years, CRE has checked that the planned rollout schedule has been adhered to and GRDF has accordingly not been subject to any penalty under the incentivising regulation on deadlines.

On the other hand, GRDF will have installed 100,000 fewer meters than initially forecast in its business model, due to an overestimation of the number of meters at the time of the initial forecast and failure to take account of the downward trend in the customer base (10.8 million Gazpar meters in June 2023 out of a total of 11 million, compared with 10.9 million initially forecast out of a total of 12 million). As the incentivising regulatory framework takes into account the ratio of communicating Gazpar meters to the actual number of meters, this difference has no impact on compliance with the rollout rate.

<sup>93</sup> If you add the meters that have not yet been declared to be communicating, the rollout rate rises to around 95%.



## 1.2 Costs under control

To assess financial performance during the large-scale rollout phase, the actual trajectory was compared with the 2014 business plan, adjusted for the actual number of meters installed during the large-scale rollout phase<sup>94</sup>.

### Investment costs lower than forecast

The cost of the large-scale rollout phase was initially estimated at €1.326 billion up to 2022 (for the installation of 10.9 million meters and 15,200 concentrators), broken down as follows:

- purchase and installation of meters (71%);
- purchase and installation of modules (5%);
- purchase and installation of concentrators (9%);
- communications chain excluding IS and mobility (5%);
- information system costs (10%).

Overall, during the large-scale rollout phase, GRDF will have spent less than estimated in the initial business plan. Given the lower-than-expected number of meters to be installed, the benchmark investment amount (based on the same number of meters installed) for the Gazpar project is €1.320 billion, compared with actual costs of €1.217 billion, i.e. a saving of 8%.

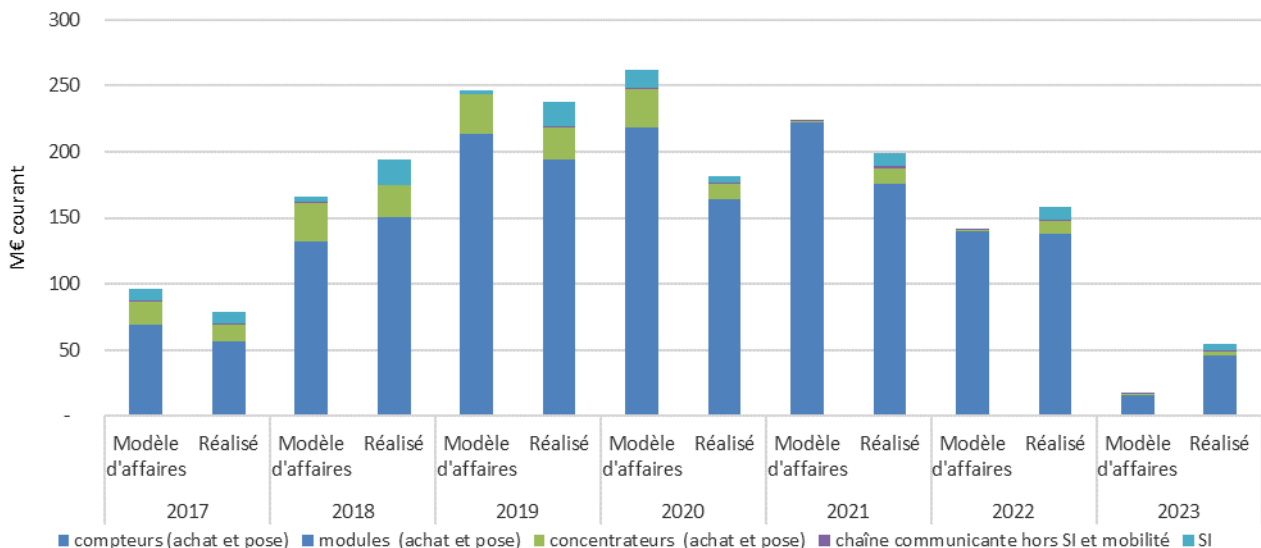


Figure 9. Gazpar investment trajectory for the large-scale rollout phase

This result is the fruit of:

- savings on the unit cost of equipment and installation (€86 million, or -9%);
- optimising the number of concentrators to be installed: GRDF installed only 9,900 concentrators instead of the 15,200 planned, which, despite an increase in the unit cost of concentrators, resulted in savings of €13 million.

These gains are partly offset by higher-than-expected information system (IS) investment costs (€250m instead of €199m).

These gains on investment costs directly benefit consumers, since the amounts not spent will not enter GRDF's regulated asset base.

<sup>94</sup> In addition, due to the shift in the start of the large-scale rollout period, the project runs from 1 May 2017 to 31 April 2023 and the business model has accordingly been adjusted to this period. Since the public consultation, the costs attributable to the large-scale rollout phase in 2023 have been specified.

Net operating expenses under control

The operating cost for the large-scale rollout phase was initially estimated at €316 million up to 2023, broken down as follows:

- information systems supervision costs (49%);
- project management and rollout management (35%);
- rent for concentrators (7%);
- maintenance of concentrators, meters and supervision (5%);
- telecoms costs (2%);
- costs of preparatory work for rollout (2%).

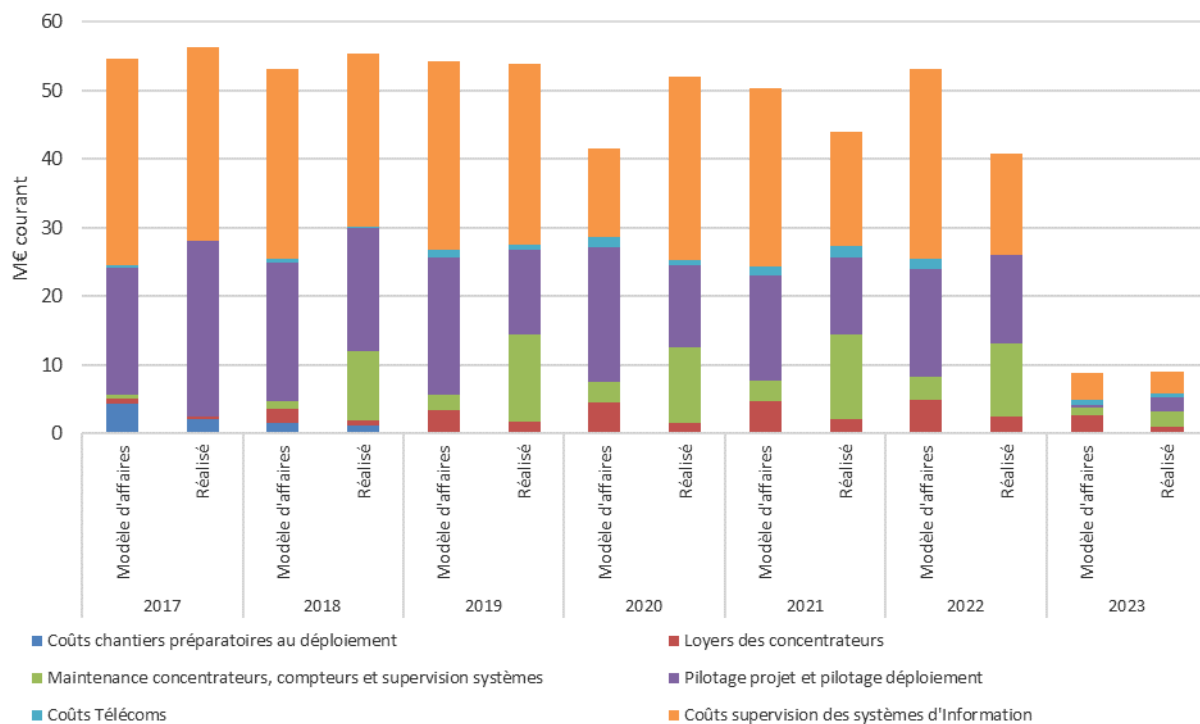


Figure 10. Gazpar operating cost trajectory for the large-scale rollout phase

Over the period 2017-2023, operating expenses were kept under control overall, with savings of €4.3 million (-1%) on the €312 million spent. GRDF achieved savings on all items, with the exception of concentrator maintenance and system supervision costs, which increased by €44.6 million over the period. These additional costs are linked to a higher-than-expected failure rate for concentrators and to the setting up of supervision teams not initially planned, dedicated to improving data publication.

GRDF has communicated its cost estimates for the forthcoming tariff period: for the ATRD7 period, forecast operating costs are approximately €10.4 million per year (€4.5 million less than the business model), broken down as follows.

- 4.7m/year for equipment maintenance and technical systems supervision. The difference of €2.7m/year compared with the business model is due to the setting up of supervision teams that were not initially planned, resources dedicated to improving data publication and higher corrective maintenance costs for concentrators;
- 3.3m/year for concentrator hosting and telecoms costs, i.e. savings of €3.5m/year due to lower rents and optimisation of the number of concentrators;
- 2.3m/year for IS supervision and rollout management, i.e. savings of €3.8m/year due to a change of IS.

GRDF has pooled the rollout phase with other operations to optimise costs.

In addition to the gains initially forecast in the business model, GRDF has identified new gains during the rollout phase linked to the pooling of costs:

- SAT3LLITE project: the aim of this project is to modernise the remote meter reading and energy calculation system for GRDF's top-tier customers. The Gazpar solution has been chosen to equip the majority of PCEs with MM/DJ frequency (read once a month and 3 times a day respectively) previously fitted with TECHNOLOG devices. This optimisation involved 92,000 PCEs, for total savings of €32 million (current) over the period of large-scale rollout.
- Customer interventions coupled with installation: where possible, GRDF has taken advantage of customer interventions to install Gazpar meters jointly. Around 710,000 PCEs will be affected, representing savings of around €10.5m.
- Regulator traceability" project (TDR): since 2021, GRDF has been checking the 7.5 million regulators or regulators on the MPB network. GRDF has optimised these operations by combining the replacement of pressure regulators with the installation of the Gazpar meter. 682,000 meters were affected, resulting in estimated savings of €8.6 million.

This pooling of costs has saved GRDF €51 million over the period of large-scale rollout.

## **2. Gains linked to Gazpar functionalities**

The Gazpar project's business model takes into account direct gains for the network operator, as well as other benefits outside GRDF's scope. The use of the Gazpar system to improve the operation of the network will generate other major benefits for society as a whole.

### **2.1 Gains for GRDF reflected in network tariffs**

While the investment avoided is a definite gain, since GRDF does not have to incur additional costs to equip new homes or replace meters that have reached the end of their useful life, CRE must ensure that the operating gains are actually achieved and that they are passed on to network users.

The operating gains forecast for GRDF's distribution business relate to:

- a reduction in meter reading costs as a result of the replacement of on-foot meter reading by remote meter reading;
- a reduction of losses and differences (PDD) in conjunction with a reduction in non-technical losses incurred by customers who have not signed a supply contract (inactive PCE);
- a reduction in the cost of special meter readings, due to more reliable metering and reduced travel costs;
- a reduction in the cost of managing adjustments, linked to the reduction in the number of manual invoicing adjustments;
- finally, a reduction in the cost of locating individual switching devices (known as "13.2 taps"), which have been shared with the rollout of smart meters.

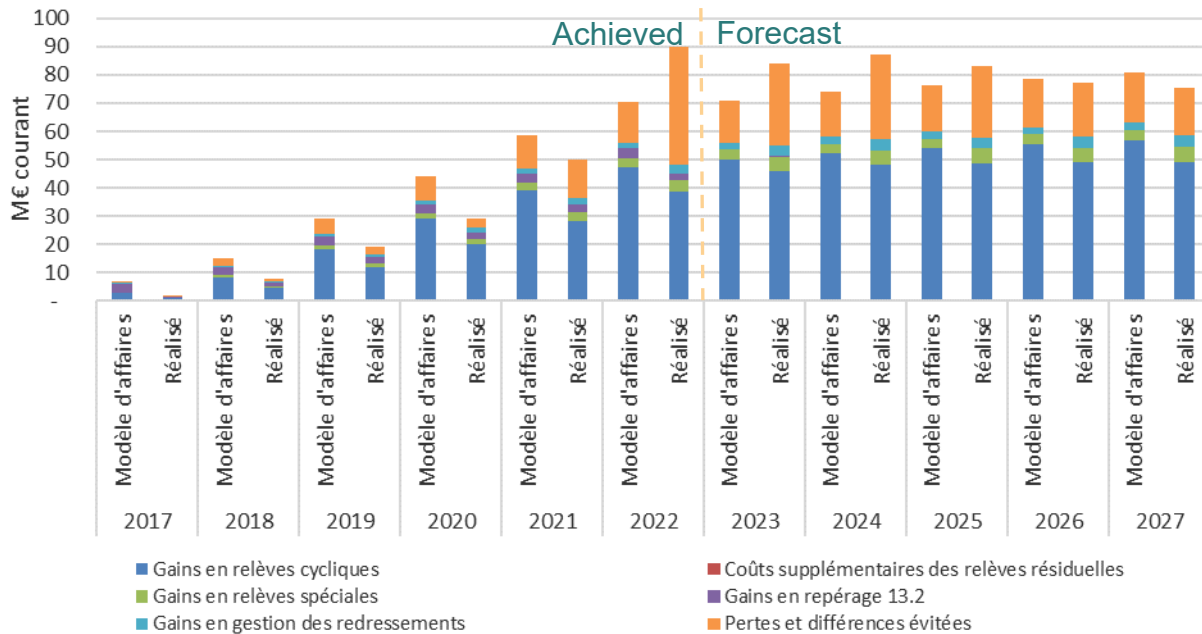


Figure 11. Gazpar OPEX gains

On average over the ARTD7 period, the project will generate savings on GRDF's operating expenses of around €80.7 million per year, close to the level forecast in the project's initial business model, of which:

- gains excluding losses, amounting to €58m/year (compared with €60.6m/year forecast in the business model): gains in terms of avoided meter reading (remote meter reading, fewer special meter reads, fewer adjustments) are lower than in the initial business model, mainly because of the forecast fall in the number of consumers. On the other hand, the cost of meter reading estimated in the initial business model included the anticipated effect of the unbundling with Enedis, which ended up being lower than expected and which was mitigated by optimisations in GRDF's procedures;
- gains for losses and differences (L&D), amounting to €22.7m/year compared with €16.9m/year in the business model: these gains are based on the assumption that non-technical losses, borne by customers who have not signed a supply contract, will fall. The deviation from the initial model is mainly due to the price of gas, which was up to 3.5 times higher than the price in the business model for the year 2022.

From 2024 to 2027, the gains gradually decline in line with the downward trend in the number of consumers.

## 2.2 Additional benefits for the public

In addition to the savings generated at DSO level, the use of the Gazpar system generates other savings at public level. As the rollout phase has just been completed, it is too early to confirm the amounts set out in the business model. Nevertheless, they represent a significant potential and CRE considers that these gains need to be monitored.

For suppliers:

- gains in customer service costs, thanks to a reduction in invoicing claims;
- gains linked to balancing costs and ERC cover thanks to more accurate metering.

For customers:

- Gains linked to better energy request management (EDM), thanks in particular to more detailed knowledge of consumption;
- the benefits generated by Gazpar's ability to carry out remote meter readings, which means that it will no longer be necessary to be present in the home when readings are taken;

- gains linked to the elimination of invoicing for specific customers (G10+ MM frequency) who will no longer have to pay a subscription, since the service will be available for all meters.

For the local authority: gains following the price of hosting concentrators.

While some gains can already be realised, such as the fact that the customer is not required to be present during meter reading operations, CRE notes that it is difficult to quantify the reduction in consumption resulting from the gains made in terms of request side management (DSM). Indeed, the order of magnitude of the reduction sought (around 1.5%) is, for example, of the same order of magnitude as the uncertainty surrounding the climate correction method for comparing volumes consumed at normal temperatures. In 2022, however, GRDF has noted a sharp increase in the number of personal spaces created on their site for consulting consumption data (+30%). The same year also saw a fall in gas consumption as a result of major energy efficiency efforts by consumers (on average -7% compared with 2021). However, it is difficult to determine how much of this reduction can be attributed to smart meters.

**Annex 5: Incentivising regulation of charges for losses and differences (confidential annex)**

This Annex is confidential.

**Annex 6: Incentivising regulation of charges for the Energy Benefit in Kind (confidential annex)**

This Annex is confidential.

**Annex 7: Incentivising regulation of unit network investment costs (confidential annex)**

This Annex is confidential.

**Annex 8: Reference values for the local tariff (confidential annex)**

This Annex is confidential.