



## EXPERIENCE OF THIRD-PARTY ACCESS TO GAS DISTRIBUTION NETWORKS IN FRANCE





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## **Background**

The introduction of third-party access (TPA) to gas distribution networks has been relatively rapid in France, like in most other European countries, as far as the first European Directive setting out the framework of gas market liberalization has been released less than ten years before the implementation of the full openness to competition of the gas market.

The primary objective pursued by the European commission and the French state was to introduce competition in the gas supply activity to bring about a drop in gas prices for the final consumers and an increase of the quality level of the services proposed by the suppliers and the distribution networks operators (DNOs).

A secondary objective was to promote the European integration by harmonizing the regulatory frameworks applied to the gas industry in a bid to strengthen the security of supply.

At the same time, the introduction of a distribution tariff set by a regulator was meant to foster the productivity efforts of the gas DNOs, constituting another factor of decline of the gas prices.

Almost eight years after the French retail market of natural gas has been totally opened to competition, it is necessary to recognize that not all objectives has been achieved at the moment.

Even if the global framework of TPA to gas distribution networks is now successfully settled, with a satisfying level of independence from their vertically-integrated mother companies reached by the DNOs, and if processes of switching and consumption reconciliation are fully operational, the genuine openness of the French retail market to competition is probably below the initial EU expectations.

The regulated gas prices have significantly increased in the recent years, mainly because of to the rise of oil price, which gives alternative suppliers the opportunity to offer competitive prices.

Residential customers are less price sensitive than non-domestic ones Besides the services proposed by the suppliers to the final residential customers remain limited (unlike in Telecom markets for example). Indeed the development of innovative services is hampered in particular by the restrictive functionalities of the current metering devices.





#### Aim

The purpose of this paper is to look how the third-party access to gas distribution networks has been introduced in France and what are the results in terms of market openness.

#### **Methods**

The introduction of the TPA to gas distribution networks in France has been organized regarding three different yet complementary fields:

- 1. The Conditions of access to natural gas distribution networks
- 2. The separation of distribution and supply activities
- 3. The principles of the distribution tariffs

## 1. Conditions of access to natural gas distribution networks

#### Right of access for customers and suppliers

The Energy Code ("Code de l'Energie") states in its article n°L111-97 that "a right of access to transmission and distribution facilities of natural gas [...] is guaranteed by the operators which operate them to the customers and to the suppliers and their representatives, in terms defined by a contract. When the operator and the user are not separate legal persons, protocols outline their relationships. These contracts and protocols are transmitted to its request to the Regulatory Commission of Energy".

In France, the opening to competition of the gas market took place between 2000 and 2007, in accordance with the European Directives and their transposition laws<sup>1</sup>.

 August 2000: customers consuming more than 237 GWh (HHV) per year (600 sites, essentially connected to the transmission grid, representing 20% of the French

<sup>&</sup>lt;sup>1</sup> All laws related to gas and electricity were compiled afterwards in the Energy Code.





- consumption) have the possibility to leave the regulated tariff and choose a market offering of the supplier of its choice (Directive 98/30/EC of 22 June 1998).
- August 2003: the eligibility threshold is lowered to 83 GWh / year, corresponding to 1200 sites and 30% of the French consumption (Law of 3 January 2003 transposing the Directive 98/30/EC)
- July 2004: Non domestic retail market 640 000 sites or 70% of French gas consumption – is fully open to competition (Directive 2003/55/EC of 26 June 2003)
- July 2007: The entire gas retail market in 2012: 11.3 million sites and 500 TWh is open to competition (Law of 7 December 2006).

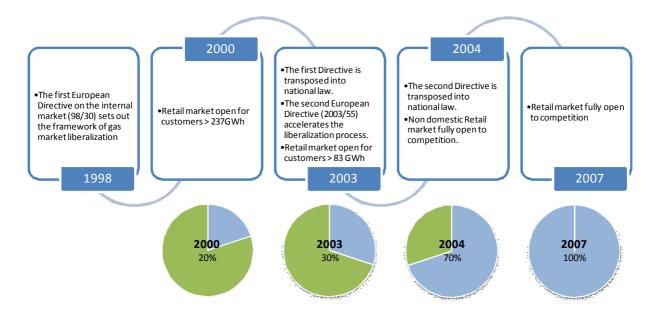


Fig. 1 - Main steps of gas market opening in France

#### Connection of a new customer

The Decree n° 2008-740 of 28 July 2008 states that "on the territory of municipalities already included in a natural gas network area, distribution networks operators have the obligation to connect to existing distribution networks every customer requesting it, if the ratio resulting





from the profitability calculation is equal or higher than the level adopted by the Energy Minister [...]".

In practice, a new customer is connected if the difference between the estimated (discounted) future tariff revenues that this customer represents for the DNO and the estimated costs induced by the connection is positive. If the difference is negative, the customer will be connected only if he pays a contribution equals to this difference. This criterion is known as "Benefit over Investment" (B/I).

This mechanism is simplified for the small customers located less than 35 meters from the grid. In this case, no economic calculation is done, and the customer only pays a lump-sum.

The average connection timeline varies from 15 days to 1 month for a connection without extension, according to the size of the meter, and is 2 months for connections implying an extension of the network.

## Extension of the natural gas networks to municipalities not yet included in a network area

The Energy Code states in its article n°L432-6 that "Municipalities [...] that do not have a natural gas network [...] can concede the public distribution of gas to all undertakings approved by the Administrative Authority".

Since 2004, the choice of a distribution network operator by a municipality not included in a network area is the result of a tender process. The municipality has the possibility to make a financial contribution to the DNOs to lower the level of their tariffs. Once it is chosen, the DNO concludes with the municipality a concession contract for a period of 30 years. At the end of this contract, a new tender process must be launched.

For the municipalities which were already included in a network area before 2004, the DNOs to which the public distribution of natural gas is conceded have a monopoly position. The distribution tariff applied by a DNO is the same for its whole historical service area (tariff equalisation).

In France, there are currently 26 DNOs for natural gas, among which:

• 1 national distribution company, GrDF (Gaz Réseau Distribution France, independent subsidiary of GDF SUEZ), which represents 96% of the distributed gas volume.





- 25 smaller distribution companies:
  - Régaz-Bordeaux and Réseau GDS, 2 historical distribution companies which represent 1,5% of the distributed gas volume each;
  - o 20 other historical distribution companies which have local monopoly positions.
- 3 new entrants: Antargaz, SICAE de la Somme et du Cambraisis and Seolis.

#### Refusal of third-party access

The Energy Code states in its article n°L111-103 that "A refusal to conclude a contract of access to the network can be based on:

- 1° A lack of capacity [...].
- 2° A priority order for the access to facilities defined by the Energy Minister in order to ensure the fulfillment of public service tasks [...].
- 3° Criteria set by a temporary derogation [...]."

In practice, no such circumstance has surfaced to date for natural gas distribution. Derogation could theoretically have been applied for the vertically integrated operators whose take-or-pay contracts could have posed significant financial difficulties, but it had not been necessary as far as the pace at which customers decided to switch from the incumbents to the alternative suppliers has been quite slow.

## 2. Separation of distribution and supply activities

The Energy Code states in its article n°L111-88 that "any undertaking carrying out, in the natural gas sector, one or more of the activities enumerated in the present article, operates [...] separate accounts for [...] the distribution [...] of natural gas".

Besides, the article n°L111-57 states that "the operation of a distribution network [...] of natural gas serving more than 100 000 customers in mainland France is ensured by legal persons that are separate from those carrying out activities of production or supply [...]".

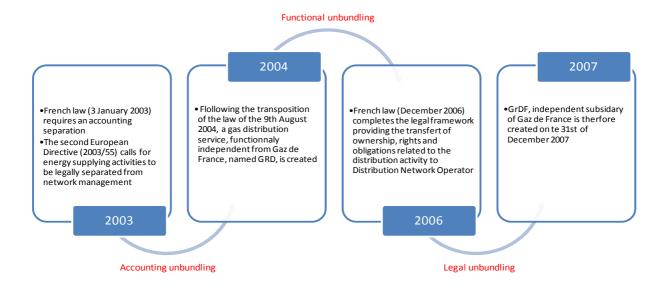
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Moreover, the article n°L111-61 states that "the company operating of a distribution network [...] of natural gas serving, in mainland France, more than 100 000 customers [...] gathers in a code of conduct, addressed to the Regulatory Commission of Energy, the internal organization measures taken to prevent any discriminatory practice regarding third-party access to the network".

## Steps followed for the creation of a distribution entity independent from Gaz de France (now GDF SUEZ):



The Regulatory Commission of Energy (CRE)<sup>2</sup> monitors the application of the code of conduct of GrDF, Réseau GDS and Régaz, the 3 only distribution companies serving more than 100 000 customers, and having implemented a legal unbundling from the supply company in which they were embedded. CRE submits its conclusions in an annual report.

This code of conduct requires system operators to remain objective in every circumstance, to adopt transparent and non-discriminatory practices, and to protect commercially sensitive information.

<sup>&</sup>lt;sup>2</sup> Independent administrative authority in charge of regulating the French electricity and gas markets. Created in 2000 for regulating the electricity sector, its power was extended to gas in 2003 by the law of the 3rd January.





## 3. Principles of the distribution tariffs

The Energy Code states in its article n°L452-1 that "tariffs for the use of transmission and distribution networks of natural gas [...] are set in a transparent and non-discriminatory manner in order to cover the overall costs of the networks operators, to the extent that these costs correspond to those of an efficient network operator."

CRE is in charge of setting the level of the equalized tariff applied by the DNOs on their historical service areas.

Rules followed by CRE to build the first TPAD tariffs (put into the 1<sup>st</sup> of July 2004) were as follows:

- For operational expenditures:
  - Imputation of the costs of customer management to the DNOs to the tune of 50% maximum, the rest being allocated to the supply activity.
  - Sales and marketing expenses could be allocated to the DNOs only for the part corresponding to the activities of connections engineering and development of the network.
  - Advertising costs, except for those corresponding to the communication for the safety of gas networks, had to be fully allocated to the supply activity.

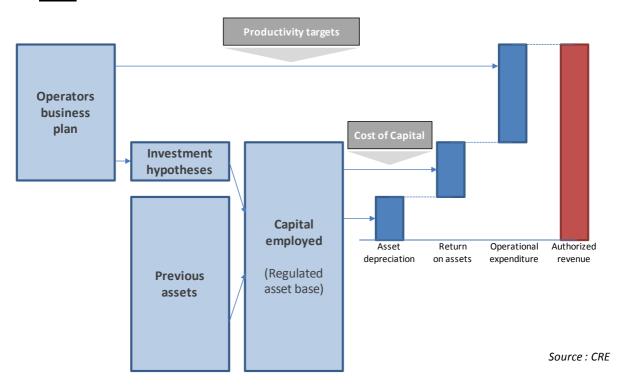
#### For capital expenditures :

- A regulated asset base has been defined as the initial value of assets, revaluated since their entry into service and amortized on a straight-line basis over a 50-years period (the future amortizations have been calculated on an estimated lifetime of 45 years due to the limited feedback on the actual lifetime of pipes in polyethylene).
- A remuneration rate has been set at 7.75% (pre-tax and in real terms) for every distribution assets.
- As regards the tariff structure, CRE has defined each tariff option so that the revenue corresponds to the level of costs allocated to the concerned customer segment, avoiding cross-subsidies between the segments.





## General principles followed for the calculation of the allowed revenue of each DNO:





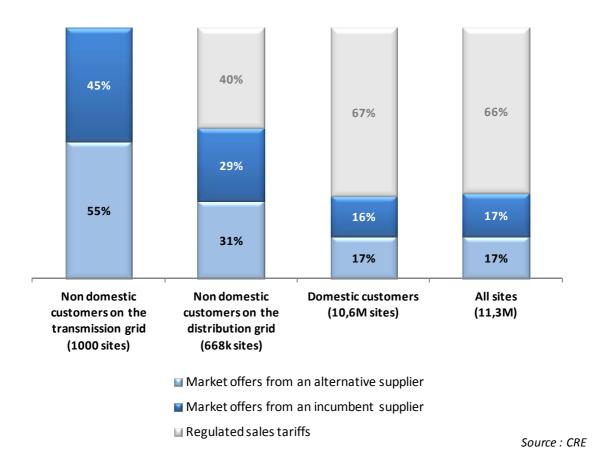


#### Results

Each Quarter, the Regulatory Commission of Energy (CRE) publish on its website an analysis of the openness of the French retail market to competition both in electricity and in gas.

#### 1. Current openness of the French retail market to competition

#### **Breakdown in number of sites**



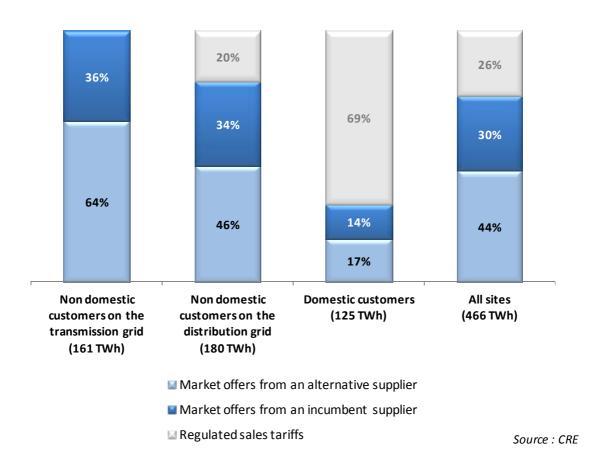
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Even if the share of market offers is overall limited to 34% in number of sites, the situation on the non domestic customer market and the domestic customers market is different. In terms of sites number, the non domestic customers on the transmission grid is completely open to competition and 60% of the non domestic customers on the distribution grid have chosen market offers. This trend is to be reinforced in the next months due to the progressive ending of the regulated sales tariffs for the biggest non domestics customers on the distribution grid started in 1st January 2015.

#### **Breakdown in consumption**



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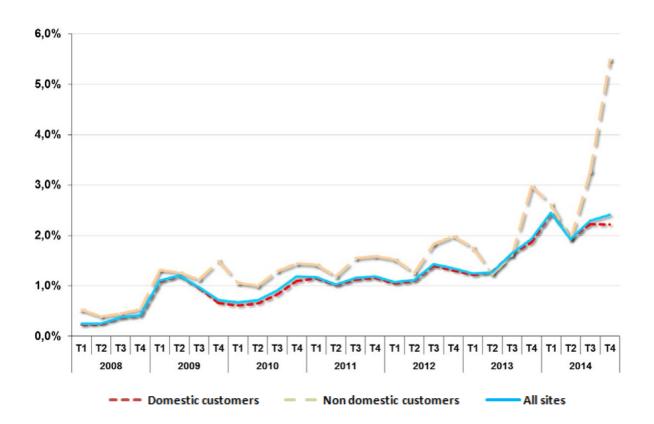


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In consumption volumes, the share of market offers go up to 74% of the gas market as the non domestic customers' unitary consumption is significantly higher than domestic customers. Along with the end of the regulated sales tariffs for biggest non domestic customer the share of market offers is likely to get even higher.

## 2. Switching rates

Since the full opening of the gas market in France in 2008, the switching rates never stopped to rise. In 2014, a demonstration of the French market higher interest in supplier switching can be seen in "UFC Que Choisir" (a French consumers group) 2013 tender offer: the tender has been won by Lampiris (an alternative supplier) and resulted for 72k domestic customers in a 15,5% cheaper supply of gas tariff in comparison to regulated sales tariff of November 2013.



Source: CRE





#### **Conclusions**

The global framework of TPA to gas distribution networks is now successfully settled, with a satisfying level of independence from their vertically-integrated mother companies reached by the DNOs, and processes of switching and consumption reconciliation are fully operational. Yet, the openness of the French gas market is extremely differentiated between non domestic and domestic markets. As reported by the Regulatory Commission of Energy in its Annual Report to EU Commission, the overall openness of the gas market is in progress and will be accelerated by the end of the regulated tariffs for the non domestic market and the massive roll-out of smart metering devices which will allow the customers to optimize their gas consumption and the suppliers to diversify their offer panel to domestic customers.

## 1. End of the regulated sales tariffs for non domestic customers

In application of the European directive (2003/55/EC), the regulated sales tariffs for non domestic customers are being progressively suppressed:

- 1. Since the 19 June 2014, all non domestic customers on the transmission grid had to switch to a market offer.
- 2. Regarding the distribution grid, the first wave occurred on the 1st January 2015 for non domestic customers with an annual consumption superior to 200 MWh (>=1000MWh for collective heating).
- 3. The next step will be on the 1st January 2016 where all non domestic customers with an annual consumption superior to 30 MWh will be concerned (>150MWh for collective heating).

## 2. Smart meter project

GAZPAR project is the French gas smart meter system project. The project has been officially launched by the French government and the French regulator during summer 2014. The deployment is to begin with a 150k customer scale pilot on 2016. Then, from 2017 to 2022 the massive roll-out will follow.

The data gathered thanks to the smart meter system will allow the domestic customer to follow is consumption more accurately and will allow the suppliers to offer differentiating services which should enhance the switching rates.





#### References

CRE Annual Report to EU Commission, July 2014 <a href="http://www.cre.fr/documents/publications/rapports-a-la-commission-europeenne/rapport-annuel-a-la-commission-europeenne-juillet-2014">http://www.cre.fr/documents/publications/rapports-a-la-commission-europeenne/rapport-annuel-a-la-commission-europeenne-juillet-2014</a>

CRE Electricity and gas retail market observatory – 4<sup>rd</sup> 2014 quarter http://www.cre.fr/marches/observatoire-et-indicateurs-des-marches

#### **Energy Code**

http://www.legifrance.gouv.fr/affichCode.do?cidTexte=LEGITEXT000023983208&dateTexte = 20150311

Lampiris "Gaz Moins Cher ensemble" analysis <a href="https://www.lampiris.fr/lampiris-tire-un-bilan-positif-de-loperation-gaz-moins-cher-ensemble-ufc-que-choisir">https://www.lampiris.fr/lampiris-tire-un-bilan-positif-de-loperation-gaz-moins-cher-ensemble-ufc-que-choisir</a>