

National Report – English summary

2013

Luxembourg, September 2014

## 1. Major developments in the electricity and gas markets

In 2013, the electricity market in Luxembourg counted 281.442 consumers who consumed 6.33 TWh of energy. These final consumers are spread across 9 different energy suppliers. The Institute has been able to report significant movements not only in the market share of suppliers active in the small professional sector but also in the segment of industrial consumers compared to 2012, where the rate of supplier change increased to 2,8 % respectively 6,3 % in terms of volume supplied. There have been no significant movements in the market share of suppliers active in residential sector.

Concerning the quality of supply, the distribution system operators reported 147 interruptions lasting longer than three minutes, 96 of which had not been scheduled. In regard to the quality of service, 12% of the residential customers' requests for connection could not be processed within the ten working days that are envisaged by the current legislation, although there has been an improvement of 14% in comparison to 2012. 21% of connections were not made within a period of 30 working days from the moment of the customer's submission of all the required licences and authorisations, which indicates an improvement of 8%, compared to 2012.

In the natural gas sector, the Grand Duchy of Luxembourg counted 84,277 consumers, representing a national consumption of 11.3 TWh, which is a decrease of 2.0 TWh compared to the year 2012. This sharp decrease is related to significant changes in the operating conditions of the CCGT (Combined Cycle Gas Turbine) plant in Esch-sur-Alzette whose working hours have decreased by about half in 2013 compared to 2012. The total capacity allocated on the transportation network was about 280,000 Nm3 / h. At present, 5 natural gas suppliers are actively operating in the market, 3 in the residential customer market and 5 in the industrial consumer market.

### 2. Competencies of the Institute

The Institute is an independent actor whose duties include overseeing and ensuring the full functioning of the energy market, as well as a basic universal service in the interest of consumers. Ensuring effective and sustainable competition by avoiding discrimination concerning access for new entrants, the Institute allows consumers to freely choose between a growing number of offers and products at fair and competitive prices.

# 2.1 UNBUNDLING OF TRANSMISSION AND DISTRIBUTION SYSTEMS

The Institute assures that non-discriminatory access to networks is provided through legal, functional and financial unbundling, particularly through the analysis of separate accounts for each activity, service delivery contracts and internal regulations within vertically integrated companies.

In 2012, the Law of August 7, 2012 introduced an additional criterion that aims to prevent an energy company from taking advantage of its vertical integration to distort competition. From that date onwards, the Institute has to monitor the practices of communication and the

branding of distribution system operators which is belonging to a vertically integrated undertaking. The distribution system operators must refrain from any confusion with the separate identity of the "supply" branch of the vertically integrated undertaking.

To avoid confusion among the general public concerning the tasks of system operators, the Institute has expanded its STROUMaGAS.lu website portal providing useful information and communication activities in order to enhance exchanges with the consumer and competition.

In addition, the Institute analysed the compliance program of the distribution system operator Creos Luxembourg SA presented in the context of Article 32 (d) of the amended Law of August 1, 2007 on the organization of the electricity market (hereinafter the 'electricity Act') and was amended on the various aspects of functional dissociation. Taking fully account the Institutes' considerations, the compliance program was amended by Creos Luxembourg SA and set up an internal information campaign based on the same compliance program. The campaign aims to remind employees of the vertically integrated distribution network operator of their obligations under section 32 of the Electricity Act and the related penalties mentioned in the compliance program in the case of non-performance of the general duty of non-discrimination.

A first annual report from their Compliance Officer, informing the Institute of measures implemented following the compliance program, was transmitted to the Institute and published by Creos Luxembourg SA on its website.

## 2.2 DETERMINATION OF NETWORK USAGE AND NETWORK CONNECTION TARIFFS

With the entry into force of the Law of 1 August 2007 on the organization of the electricity market and the Law of 1 August 2007 on the organization of the natural gas market, the Institute is responsible for establishing the method for determining tariffs for use of the networks and ancillary services.

In 2013, 706 connection requests for power generation based on renewable energy sources were sent to various network operators and 541 production facilities based on renewable energy sources have been put in service.

On tariff methodology regarding the use of networks, the E12/05/ILR Regulation of March 22, 2012 came into force. The regulation lays down the principles applicable to all system operators for determining their network costs and transposing them into a tariff structure. The new method allows decoupling between actual costs and income concerning authorized controllable operating costs and introduces an efficiency factor and a more thorough evaluation of investment projects.

Indeed, the model of incentive regulation was introduced by the Institute in order to encourage network operators to use a more reasonable and effective resource management.

#### 2.3 SUPERVISION AND MONITORING OF THE DEVELOPMENT OF COMPETITION

### Wholesale market

On the electricity market, there is no specific transmission capacity allocation required. Due to the absence of congestion on the cross-border interconnection lines, Luxembourgish market participants are integrated into the German price zone and can therefore participate in the trade of electricity on the German exchange. With the introduction of the intraday nominations in 2014, market participants will have the opportunity to participate in the intraday market EPEX SPOT and value transactions to Luxembourg consumers.

Regarding the development of competition, 2013 confirmed the presence of foreign alternative suppliers to cover the national electricity demand.

Most suppliers obtain their supply on foreign markets, competition is essentially played out around importing from neighboring countries. In 2013, nine suppliers have imported electricity from Germany, Belgium and France. Luxembourg covers 28.3% of the national consumption by domestic production, which includes 7.9% from renewable energy, while 71.7% was covered by net imports.

In 2013, trade volumes on the national wholesale market amounted to 8.60 TWh, which corresponds to an increase of 14.4% compared to 2012.

The Institute did not detect any abuse of dominant position on the wholesale market. The HHI is 2.262 and close to its value in 2012 (2.311).

In Luxembourg there is no wholesale market for natural gas itself. The wholesale supply takes place on foreign markets. Prices of representative markets are those of the adjacent markets (NCG, TTF, ZTP). Shippers have the opportunity to exchange natural gas at the entry points in Luxembourg.

### Retail market

Nine electricity companies share the retail market in Luxembourg, 7 of which were active in the residential market. All 9 are active on the non-residential market. So, it is clear that Luxembourg's electricity market has a fairly large number of actors for its size. The problem is that too few of these actors have a significant market share to date.

Five companies share the natural gas market in the Grand Duchy, three of which were active in the residential market and five in the non-residential market. The market shows a small number of players and almost a monopoly position on the segments of industrial consumers and electricity producers.

In 2013, in the electricity sector, the rate of switching was 4.6 % in volume terms and 0.18% in terms of number of customers. With a rate of 5.3% in volume terms, business customers have a higher rate of switching suppliers in comparison to residential customers (0.08 %). In the industrial sector, the rate in terms of volume was about 6.3 % in the year 2013.

In the natural gas sector, the rate remains below 0.1% with only 29 switches in all categories: 25 final customers belonging to the residential segment and 4 in the commercial and medium-industry segment.

### 2.4 MONITORING OF SUPPLY PRICES AND TARIFFS FOR USE OF THE NETWORK

The price of electricity, the distribution network tariffs approved by the Institute, as well as energy tax, VAT and contribution to public service obligations (PSOs), such as the compensation mechanism, are the tariff elements that determine pricing for consumers connected to the distribution network.

Rising electricity prices for residential customers observed in 2012 are followed by a slight decrease in 2013. While the cost of using the network, taxes and contribution to compensation mechanism remained stable compared to 2012, the decline is explained by lower energy prices on the wholesale market.

Finally, the prices of natural gas for two different categories of customers were published by Eurostat in the second half of 2013. For a residential customer consuming between 5.6-55.6 MWh/year, the price has decreased in 2013 compared to the previous year (from 53.70 €/MWh to 50.80 €/MWh), while prices for an industrial customer consuming between 2.778 − 27.778 MWh/year have decreased from 50.60 €/MWh to 44.40 €/MWh in the year 2013.

### 2.5 CONSUMER PROTECTION

In fact, the consumer becomes more and more important. The 3rd Energy Package requires the national regulators to provide more transparency, better communication and better consumer protection to be able to cope with consumer's vulnerability facing the suppliers and an increasingly complex liberalized market. During the year 2013, the Institute updated and diversified its website, which is dedicated to final consumers (www.STROUMaGAS.lu). It seeks to support consumers by clarifying their rights, opportunities and responsibilities in the context of the liberalized energy market. It assumes the role of a single point of contact for residential customers, containing information about suppliers, products, procedures for switching, alternative dispute resolution, automated price comparison tool (Calculix), labeling of electricity, the electricity bill, as well as the connection to the network.

An automated online price comparison tool for electricity supply was introduced during 2013 in order to give more transparency regarding price offers for residential consumers. It replaces manual comparison between certain rates for residential customers currently published in tabular form.

In addition, the Institute monitors information on electricity labeling, so that consumers can compare tariffs and offers of the suppliers not only regarding price, but also energy sources from which the electricity is produced.

Also, the Institute offers an alternative dispute resolution procedure to consumers. In 2013, two requests for dispute resolutions were introduced, one relating to the electricity sector and the other concerning the natural gas sector.

The Institute monitors compliance with recall procedures and disconnections made by energy suppliers and network operators, as well as consumer protection in general and the implementation of the 3rd Energy Package by the Act of August 7, 2012. The Institute has analysed the type of contracts providing integrated supply and found/concluded that substantial adjustments, specifically with regard to consumer protection, were needed.

The standard contracts adapted after the intervention of the Institute were notified by all suppliers of residential customers during the year 2013.

On the network operator side, adapting the procedure for changing suppliers within a period of three weeks was implemented, following the amendment of the framework contracts between the grid operator and the suppliers.

## A) EUROPEAN AND CROSS-BORDER COOPERATION

The Institute has contributed significantly to European projects in order to promote the creation of a single, more competitive, European market for products and services of the energy sector. The opening of the energy markets through the implementation of rules and common infrastructure ensures that energy can be sold to the final user by the most economical means.

European level

The cooperation with the Agency and the European Commission, together with the regulatory authorities of other Member States, is also introduced as one of the new missions of the Institute. This cooperation, especially regarding cross-border issues, aims to promote an internal and competitive electricity market, secure and environmentally sustainable, an effective market opening for all customers and suppliers, and electricity networks that work efficiently and reliably.

Moreover, the Regulation No 1227/2011 of the European Parliament and of the Council of 25 October 2011 (REMIT), applicable since the 28<sup>th</sup> of December 2011, provides for closer cooperation at European level between ACER and the national regulatory authorities with the goal of strengthening the integrity and transparency of the wholesale energy market (electricity and gas) and thus, to promote open competition in the interest of the end user. Different work-groups are being held in 2013 by the ACER and the CEER in order to improve and implement the regulation mentioned above.

Regional cooperation and integration of markets

The cooperation of the Institute with regulators in other Member States has the objective, especially at the regional level, to coordinate the development of all network codes for transmission system operators and other market actors, to coordinate the development of rules for congestion management and to promote the development of practical methods for optimal management of the network and an adequate level of interconnection capacity.

In 2013, the Institute has mainly followed the project of day-ahead market coupling in the Northwest region and the proposed capacity calculation based on flow-based model in the Central West region whose importance to improve market integration was highlighted in the Memorandum of Understanding signed June 7, 2013 by the five governments of the region.

Another project, the reinforcement of interconnections of the transmission system with those of neighboring countries is conducted in collaboration with neighboring transmission system operators. Solutions are focused at present on an interconnection with Belgium as described in the Memorandum of Understanding signed between Creos and Elia on June 25, 2013, on one hand through an interim solution that will have a capacity of interconnection of 400 MVA and on the other hand, through a long-term interconnection solution, with the installation of two additional cables between Luxembourg and Belgium to ensure redundancy with regard to the N-1 criterion.

On the natural gas market, transmission system operators from Luxembourg (Creos) and Belgium (Fluxys) worked together with the regulators ILR and CREG in order to study the feasibility of an integration between these two markets. The feasibility study focused on the solution's ability to implement the regulatory aspects and legal matters; it showed that the integration of markets scheduled during 2015 could be achieved without additional cost to the consumer. The cooperation agreement between Creos and Fluxys provides for the establishment of a joint entity to manage market-based balancing mechanisms.

### B) STRENGTHENING SECURITY OF SUPPLY

The Institute does not have specific competence in security of supply issues. The Government Commissioner for Energy is in charge of monitoring the balance between supply and demand, generation capacity and existing projects, as well as investments and security network operations. Finally, they provide information on their activities in a biennial report.

In addition to the need for investment in additional interconnections, investments in additional generation capacity should be studied. The balance between production and consumption is usually assessed as a criterion for security of supply. The natural gas plants of the CCGT type seem most appropriate and most capable of responding to the rapid changes in needs which result from intermittent power generation of renewable energy sources. However, at the current market conditions, there is no interest for new gas-fired generation potential.

In terms of electricity, the total generation capacity amounted to 713 MW in 2013, excluding the pump storage plant of Vianden which is directly connected to the Amprion grid. The total generation capacity of the Creos zone is about 337 MW increasing from 313 MW in 2012. This growth is due to the increase in capacity of photovoltaic plants (+20 MW) and a first

combined heat and power plant which uses waste wood as an energy source. (+ 3.75 MW). However, given the intermittent nature of wind and solar power plants, their contribution to security of supply in the country is limited.

Projects for a reinforcement of the interconnection of electricity transmission network with neighboring countries are currently ongoing in collaboration with TSOs of the neighboring countries. This approach facilitates the integration of electricity markets at the regional level on one hand and contributes to security of supply on the other hand. The Institute monitors the significant cross-border investment projects to diversify national energy sources and meet new supply challenges that will arise in the future.

The connection of the industrial network Sotel (Belval) to the French transmission network of RTE (Moulaine) commissioned in October 2013, has resulted in an increased capacity of 350 MW and contributes to the security of supply of the industries in the south of Luxembourg.

In terms of natural gas, investment projects intended to strengthen the interconnections with neighboring countries aim to increase the security of supply of natural gas for Luxembourg and to contribute to market integration. They were identified as projects of common interest within the European Union, and published on the list of the Delegated Regulation (EU) No 1391/2013 of the Commission of 14 October 2013. The Integration Project of the Belgian and Luxembourg markets also ensures the security of supply to protected customers in the medium term.