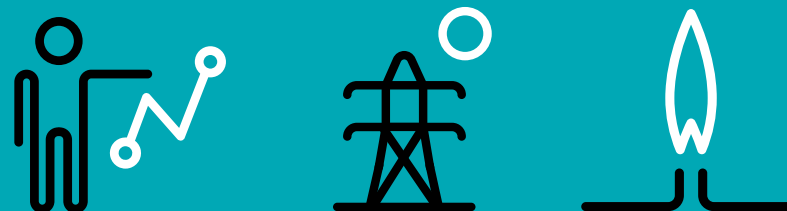


# Annual Report

2016



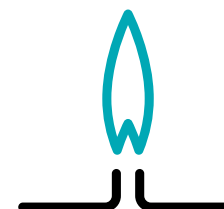
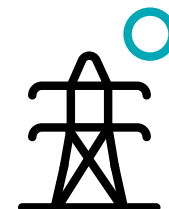
— CREG —

Commission for Electricity and Gas Regulation



# Annual Report

2016



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1

# Foreword



Energy still remains a hot topic in 2016. Therefore, it is CREG's duty, as a federal regulator, to keep providing intelligible, accessible and correct information to allow consumers to play their role in the deregulated energy market. With an updated website, CREG wants to enable consumers to inform themselves more effectively and to better understand the market in order to make informed choices. For energy professionals CREG carefully sought through its new website to provide a more user-friendly presentation of public consultations and publications. This distribution ensures intelligible, high-quality information adapted to visitors' needs.

In mid-2016 the board of directors established various action points in order to further improve the internal operation of CREG with a view to ensuring optimal service provision to consumers. There are action points aimed at, on the one hand, reinforcing the independence of the regulator and, on the other hand, improving transparency. These improvements in the area of transparency and independence will contribute to the impartiality and integrity of the regulator in the performance of its duties in the general interest.

CREG performs its regulatory duties in the consumers' interest. In the performance of its duties it always focuses on objective facts in order to gain insight into the situation and detect possible dysfunctions. In case of dysfunctions CREG proposes measures to remedy these. Each measure is accompanied by a specific analysis to determine its effect and consequences for consumers, regardless of whether it affects large consumers, SMEs or residential customers.

For instance, in its report on the participation of the flexibility of demand in the electricity markets in Belgium, CREG proposes a new market model which gives end consumers with remote measurement systems a central role in the system. In this model end consumers have control over their own flexibility and are able to choose their flexibility service provider themselves, regardless of their electricity supplier. CREG considers it important to promote the participation of demand in the various electricity markets, provided that this is done in phases.

In accordance with its mission, CREG continued to monitor the operation of the market in 2016. Regarding the retail market, in early 2016 CREG carried out a study of energy prices for residential customers, SMEs and the self-employed. This showed that Belgians switched between suppliers fairly often, but not always to a better or cheaper contract. Therefore, this study prompted CREG to develop CREG Scan. With this online tool consumers can compare their energy contract against the current market offer. CREG Scan is easy to use and goes a step further than existing price comparison websites, which only compare active energy products. CREG Scan is aimed at ensuring that consumers make informed decisions and, especially, that they have all the information.

CREG also drew up a memo in which marked trends in the Belgian wholesale electricity and gas markets in 2016 were mapped. CREG noted that the electricity demand remained more or less at the same level as in 2015 and 2014.

Nuclear electricity production rose by 67% compared to 2015. Gas consumption also increased by 2.1% in 2016. In the short-term market electricity prices experienced an 18% drop compared to last year. In the long-term electricity market, year-ahead prices dropped 23% in 2016 compared to last year. Natural gas prices also fell significantly between 2015 and 2016, both in the short and in the long-term market (31% and 25% on average, respectively).

In the area of offshore wind energy CREG analysed the recent market trends. The results of the award of the contract for Borssele I+II were studied based on the available information about the winning bid from DONG and were then transposed to the Belgian situation. Obviously, the objective differences between the Netherlands and Belgium were taken into account. The falling trend in offshore support was also illustrated with the results of the foreign tenders, e.g. Danish North Sea and Kriegers Flak. The second part of the study looks at the result of the Borssele tender III+IV. Here again, the winning bid was modelled.

Over the years, CREG has built an excellent relationship with the Parliament, more specifically with the Economic Commission. In the course of 2016 CREG presented its reports and opinions there on repeated occasions, thus contributing to the further development of Belgian energy policy. Every time CREG was invited for a presentation by the Economic Commission, it received a lot of thanks for the great expertise shown.



Finally, European regulations have become an integral part of our current energy policy. Therefore, it is extremely important for CREG to strive for the completion of the internal European energy market in the framework of the Third Energy Package and for the protection of the interests of end consumers. In 2016 CREG started a study of future regulations and directives in the area of energy which have been proposed by the European Commission. The review of the Energy Efficiency Directive, the Energy Market Design, the review of the Renewable Energy Directive and the aspects relating to consumers and the regulatory framework within ACER are being closely followed by CREG. It is CREG's duty to study the potential effects of these new proposals from the European Commission on the market and their possible consequences for all users. CREG's activities in this area are carried out in collaboration with the regional regulators for matters falling within their competence and with other competent bodies at the federal level. In particular, CREG will look at the proposals from the perspective of its key values of objectivity and independence, and with the interests of all consumers in mind.



A handwritten signature in blue ink, appearing to read 'MP Fauconnier', with a stylized flourish at the end.

**Marie-Pierre Fauconnier**

Chair of the board of directors  
March 2017



# 2

## Key developments in national legislation



## 2.1. Adaptation of the Gas and Electricity Act to the third European energy package

The Gas and Electricity Act was amended by the law of 8 January 2012 with a view to the transposition of the Third European Energy Package into Belgian legislation, in particular Directives 2009/72/EC and 2009/73/EC. The European Commission has started breach proceedings against the Belgian State because in its opinion the transposition carried out was not entirely correct. The European Commission first addressed a formal notice and then an opinion with reasons to Belgium, in which it stated, among other things, that the competences assigned to the national regulatory body (CREG) in the area of administrative sanctions were insufficient and that the release granted to Interconnector UK ('IUK') – a gas pipeline that interconnects the Belgian and the British gas transmission networks – violated Directive 2009/73/EC because interconnectors must be treated the same way as other transmission facilities.

The Gas and Electricity Act was amended by a law of 25 December 2016<sup>1</sup> taking into account these two remarks. This way, the maximum amount of an administrative fine that can be imposed by CREG under these laws can be increased to 10% of the turnover achieved by the company concerned in the gas or electricity market during the last completed financial year. Previously, this amount was determined based on the highest of the following two amounts: 3% of the turnover and 2 million euros.

In addition, the law of 25 December 2016 adds provisions to the Gas Act relating to the regulation of the operation of gas interconnectors.

First of all, it is determined that an interconnector operator can be appointed when it is certified in accordance with the provisions of the law on ownership unbundling, between system operation activities and activities carried out with competitors. Furthermore, the law defines the procedure for the approval of the tariff methodology (which must be determined by CREG) and of the tariffs (which must be determined by the interconnector operator). Both the methodology and the tariffs must be objective, transparent and non-discriminatory, and they must comply with Regulation (EC) no 715/2009 and all legally binding decisions of the European Commission and/or ACER. It needs to be pointed out that the legislator did not want to make either the extensive approval procedure or the guidelines regarding pricing in the area of the operation of transmission networks for natural gas, storage facilities and LNG facilities applicable to the tariff methodology for interconnectors. The law of 25 December 2016 also establishes the obligations of an interconnector operator, including the development, operation and maintenance of the interconnector, monitoring the security, reliability and efficacy of that interconnector, and the duty to draw up a transmission agreement which must be approved by CREG. Finally, the law makes certain competences of CREG and provisions relating to the organisation of the Dispute Resolution Chamber applicable to the operation of an interconnector.

## 2.2. Modification of the support mechanism for offshore electricity

In Article 7 of the Electricity Act provisions were included to establish a support mechanism for electricity generation from water, currents or wind in the marine areas over which Belgium has jurisdiction.

These include measures under which a part of the cost of the submarine cable that connects the offshore wind farm to the transmission network is financed, and favourable conditions for the calculation of the production deviation.

With respect to submarine cables the Electricity Act determined, before the amendment, on the one hand, that the transmission system operator would pay a maximum amount of 25 million euros – this measure has been maintained – and, on the other hand, the increase of the minimum price for the purchase of green energy certificates issued to offshore producers who have acquired the right to not connect to the transmission facilities for offshore electricity. A law of 21 July 2016<sup>2</sup> modifies this last measure and determines that the increase of the purchase price of a green energy certificate shall no longer be a fixed price (12 €/MWh), but shall be determined by CREG based on the tenders received for the supply and installation of the submarine cable. This mechanism applies to offshore wind farms with a financial close after 1 May 2016 and from now on also to wind farms that connect to a facility required for the transmission of offshore electricity.

In fact, the purpose of the mechanism of production deviation, defined in Article 7, § 3 of the Electricity Act, was to compensate for the differences between the nominations and the actual electricity production by offshore producers at preferential tariffs. As CREG had already demonstrated in its study 1462 of 15 October 2015<sup>3</sup>, this mechanism was in breach of the guidelines of the European Commission on State aid for environmental protection and energy 2014-2020. These guidelines determined that the beneficiaries of State aid for electricity generated from renewable energy sources must be subject to standard balancing

<sup>1</sup> Law of 25 December 2016 on various energy provisions (Belgian Official Journal of 29 December 2016).

<sup>2</sup> Law of 21 July 2016 amending the law of 29 April 1999 on the organisation of the electricity market regarding the modification of the system for the granting of green energy certificates for electricity produced in accordance with Article 6, the financing of the submarine cable and the production deviation (Belgian Official Journal of 26 September 2016).

<sup>3</sup> Study (F)151015-CDC-1462 on the analysis of support for offshore wind energy including the annual report on the effectiveness of the minimum price for offshore wind energy.

responsibilities, unless no liquid intraday markets exist (§ 124). Therefore, the legislator decided to abolish Article 7, § 3 of the Electricity Act.

### 2.3. The revision of the law on distribution fees

At the end of 2016 a conclusion was reached in the procedure for the extension of the Doel 1 and Doel 2 plants. This extension procedure was started with the approval of a Law, on 28 June 2015, to amend the law of 31 January 2003 on the gradual exit from nuclear energy for the purposes of industrial electricity production to ensure security of energy supply. The State was obligated to enter into an agreement with the owner of these nuclear power plants to clarify the method of calculation of the fee payable by the owner for that extension. After the signing of this agreement, a new Law, of 12 June 2016<sup>4</sup>, amended the law of 31 January 2003 once again in order to establish the annual amount of that fee and to describe what will happen when one of the nuclear power plants in question is finally closed down.

Finally, in a law of 25 December 2016<sup>5</sup> the provisions on the distribution fees for the years 2016 to 2026 were established, concretely the taxes payable by operators and companies that hold shares in the four nuclear power plants whose operation

is not extended (Doel 3, Doel 4, Tihange 2 and Tihange 3) until the last of these plants is finally closed down. This law assigns additional competences to CREG and also modifies the Electricity Act.

The amount of the distribution fee is calculated according to three periods. In a first period, i.e. the year 2016, the law sets the amount of this contribution directly. For the second period, i.e. the years 2017 to 2019, the amount equals the highest of two amounts: a minimum established by the law (177 million euros) and an amount corresponding to 38% of the profit margin of the nuclear power plant concerned. CREG must advise on this profit margin each year. The amount of the contribution is then established by the King and confirmed by law after that. For the third period, from 2020 to 2026, the same formula applies, but the minimum amount is no longer established directly by law.

CREG must determine the fixed and variable costs related to the operation of the plants in question every three years. To this end, CREG must develop a methodology, based on proposals from the operators, that defines the method for the calculation of the fixed and variable costs. CREG must also advise on the annual minimum amount of the distribution fee, which is valid for three years.

Furthermore, the distribution fees for the years 2017 to 2026 are degressive in order to take into account the capacity to contribute and the risks involved in the size of the production plant of each party liable for the contribution.

The law of 25 December 2016 modifies the Electricity Act in two respects: on the one hand, it gives CREG the competence to request from operators and companies that hold shares in these plants all additional information it needs to perform the tasks assigned to it by the law of 11 April 2003. On the other hand, it adds decisions taken by CREG in application of the law of 11 April 2003 as amended by the law of 25 December 2016 to the list of decisions of CREG against which an appeal can be lodged to the Brussels Court of Appeal<sup>6</sup>.

<sup>4</sup> Law of 12 June 2016 amending the law of 31 January 2003 on the gradual exit from nuclear energy for the purposes of industrial electricity production, with a view to establishing the annual fee payable for the extension of the Doel 1 and Doel 2 nuclear power plants (Belgian Official Journal of 22 June 2016).

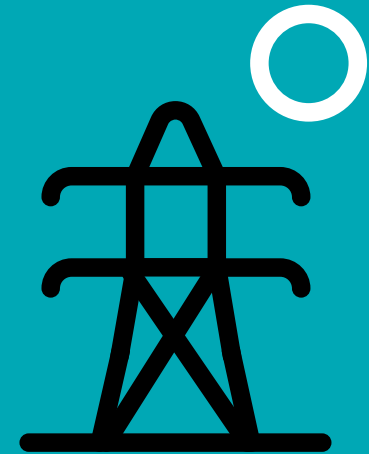
<sup>5</sup> Law of 25 December 2016 amending the law of 11 April 2003 on the facilities built for the dismantling of the nuclear power plants and for the management of irradiated fissile material from those plants and amending the law of 29 April 1999 on the organisation of the electricity market (Belgian Official Journal of 29 December 2016).

<sup>6</sup> It must be remarked that the law of 25 December 2016 modifying the legal status of detainees and the monitoring of prisons and containing various justice-related provisions (Belgian Official Journal of 30 December 2016) created a division at the Brussels Court of Appeal – the so-called 'Market Court' – that is specifically competent for market matters. This Court is competent to supervise decisions of CREG in application of the Gas and Electricity Act.



# 3

## The electricity market



### 3.1. Regulation

#### 3.1.1. Electricity generation

##### 3.1.1.1. Electricity generation licences

Following the entry into force of the law of 8 January 2012 amending the Electricity Act, the Royal Decree of 11 October 2000 on the granting of individual licences for the construction of electricity generation facilities is still to be reviewed. In the intervening period, the Directorate-General of Energy is investigating new applications and CREG is issuing opinions on the basis of the Royal Decree of 11 October 2000 in force.

In 2016 CREG issued two opinions regarding licences for electricity production.

The first opinion referred to the need for an extension of an individual licence for the Estinnes wind farm following a change in control resulting from the takeover of Windvision Windfarm Estinnes nv by CGN Europe Energy Belgium Holding Limited. CREG issued a favourable opinion<sup>7</sup> on the extension of the individual licence granted to Windvision Windfarm Estinnes nv.

The second opinion referred to the need for an extension of an individual licence for the steam and gas turbine power plant at Marcinelle following a change in control resulting from the takeover of Marcinelle Energie nv by Direct Energie nv. CREG issued a favourable opinion<sup>8</sup> on the extension of the individual licence granted to Marcinelle Energie nv.

By Ministerial Decree of 4 March 2016 (Belgian Official Journal of 14 April 2016) EDF Luminus nv was granted an individual licence for the construction of an electricity production facility, concretely a wind farm with a capacity of 41.6 MWe, on the territory of the municipalities of Villers-le-Bouillet, Wanze and Verlaine (CREG had issued an opinion on this to the Minister on 17 July 2015).

By Ministerial Decree of 15 March 2016 (Belgian Official Journal of 29 March 2016) Bee Power Gent nv was granted an individual licence for the construction of an electricity production facility, concretely a biomass power plant with a capacity of 200 MWe, on the territory of the city of Ghent, more specifically on the premises of Ghent Coal Terminal (CREG had issued an opinion on this to the Minister on 22 October 2015).

By Ministerial Decree of 13 April 2016 (Belgian Official Journal of 26 April 2016) Dils-Energie nv was granted an individual licence for the construction of an electricity production facility, concretely two combined-cycle gas/steam turbines (GST) with a capacity of 460 MWe each, on the territory of the municipality of Dilsen-Stokkem (CREG had issued an opinion on this to the Minister on 20 November 2015).

The establishment of new Belgian production facilities with a net developable capacity of less than or equal to 25 MWe is exempt from the individual prior authorisation provided for by the Royal Decree of 11 October 2000, cited above, but it is subject to an obligation of prior notification to CREG and to the federal Energy Minister or his delegate. In 2016 CREG received 35 such notifications.

#### 3.1.1.2. Electricity generation in the North Sea

##### A. Domain concessions for offshore wind energy

CREG formulated two opinions in this context in 2016.

On 7 July 2016 it issued an opinion<sup>9</sup> on a draft Royal Decree on the conditions and the procedure for the granting of domain concessions to the transmission system operator for the construction and operation of electricity production facilities in the marine areas over which Belgium has jurisdiction under international maritime law.

On 27 October 2016 CREG formulated an opinion<sup>10</sup> in the framework of an application from C-Power regarding amendments to the draft of the decommissioning provision.

##### B. Green certificates

##### • Regulatory framework

On 15 January 2016 CREG, at the request of the Minister for Energy, formulated a proposal for a Royal Decree<sup>11</sup> amending the Royal Decree of 16 July 2002 on the establishment of mechanisms for the promotion of electricity produced from renewable energy sources, taking into account the decision of the Council of Ministers of 20 November 2015 on the reform of support for offshore wind energy.

7 Opinion (A)161125-CDC-1587 on the granting of an extension of an individual licence for the Estinnes wind farm following a change in control resulting from the takeover of Windvision Windfarm Estinnes SA by CGN Europe Energy Belgium Holding Limited. 8 Opinion (A)161202-CDC-1590 on the granting of an extension of an individual licence for the steam and gas turbine power plant at Marcinelle following a change in control resulting from the takeover of Marcinelle Energie SA by Direct Energie SA.

9 Opinion (A)160707-CDC-1543 on a draft Royal Decree amending the Royal Decree of 20 December 2000 on the conditions and the procedure for the granting of domain concessions for the construction and operation of facilities for electricity production from water, currents or wind in the marine areas over which Belgium has jurisdiction under international maritime law.

10 Opinion (A)161027-CDC-1579 on the application for amendment to the domain concession for the construction and operation of wind power generation plants in marine areas (Thornton Bank) granted to public limited company C-Power by Ministerial Decree of 27 June 2003 and amended by Ministerial Decrees of 3 February 2010 and 6 May 2013.

11 Proposal (C) 160115-CDC-1505 for a Royal Decree amending the Royal Decree of 16 July 2002 on the establishment of mechanisms for the promotion of electricity produced from renewable energy sources.



On 17 June 2016 CREG submitted a second proposal for a Royal Decree<sup>12</sup> amending the Royal Decree of 16 July 2002. The aim of this proposal is to transpose the decision of the Council of Ministers of 9 June 2016 on the review of the mechanism for support to offshore wind energy into the regulations. CREG's proposal reviews the formula to determine the minimum price for the purchase of green certificates and also establishes, in accordance with the decision of the Council of Ministers, the amount of the LCOE ('levelised cost of energy') for the Rentel and Norther offshore wind farms, and charges the Minister for Energy with the task of determining, at CREG's proposal, the level of the LCOE for the domain concessions that have not yet performed their financial close. The proposal reduces the period during which the support mechanism applies from twenty to nineteen years.

On 20 October 2016 CREG submitted a third proposal for a Royal Decree<sup>13</sup> amending the Royal Decree of 16 July 2002. In the framework of the notification of the support mechanism that will be applied to electricity produced by offshore wind farms, the Belgian Government and the European Commission have reached an agreement on the mechanism that is applied to energy production when the market price for electricity is negative. The Minister for Energy asked CREG to submit a proposal for amendment of the Royal Decree of 16 July 2002, so that this agreement can be transposed into a Belgian regulation. CREG's proposal transposes this agreement. CREG also proposes to modify the period over which the minimum price is to be calculated, as well as the notification of this minimum price, taking account of the upcoming modification of the formula for the minimum price, which now also comprises the level of losses.

#### • Applications submitted to CREG

With the decisions of 19 July 2016<sup>14</sup> and 1 September 2016<sup>15</sup> CREG defined the elements to determine the minimum price for green energy certificates issued for electricity produced by the facilities in the domain concession of Rentel, on the one hand, and Norther, on the other. It studied the estimate of the operating costs submitted by both companies and looked at whether there is a difference between the price of electricity in the contract and an average nominal price equal to 90% of the reference price for electricity. Based on this analysis, CREG established the LCOE and the adjustment factor that apply to the setting of the minimum price of green certificates for electricity produced by offshore wind farms in the domain concessions in question.

With the decisions of 16 September 2016<sup>16</sup> and 22 September 2016<sup>17</sup> CREG approved the proposal for a contract for the purchase of green certificates between Elia and Rentel on the one hand and between Elia and Norther on the other hand. The obligation to purchase green certificates for electricity produced by offshore wind energy is the object of a contract between the domain concession holder and the system operator.

#### • Change in installed capacity in generated offshore wind and green energy

The total installed capacity in generated offshore wind energy remained unchanged in 2016 (713.1 MW). The construction of the Nobelwind wind farm (165 MW) was started in April 2016 but the plant will only become operational in the first half of 2017.

Table 1: Rated output of offshore wind farms, existing and under construction in 2016 (Source: CREG)

Wind farm name	Capacity at the end of 2016
BELWIND	171.0 MW
C-POWER	326.1 MW
NORTHWIND	216.0 MW
<b>Total</b>	<b>713.1 MW</b>

<sup>12</sup> Proposal (A) 160617-CDC-1539 for a Royal Decree amending the Royal Decree of 16 July 2002 on the establishment of mechanisms for the promotion of electricity produced from renewable energy sources.

<sup>13</sup> Proposal (C) 161020-CDC-1577 for a Royal Decree amending the Royal Decree of 16 July 2002 on the establishment of mechanisms for the promotion of electricity produced from renewable energy sources.

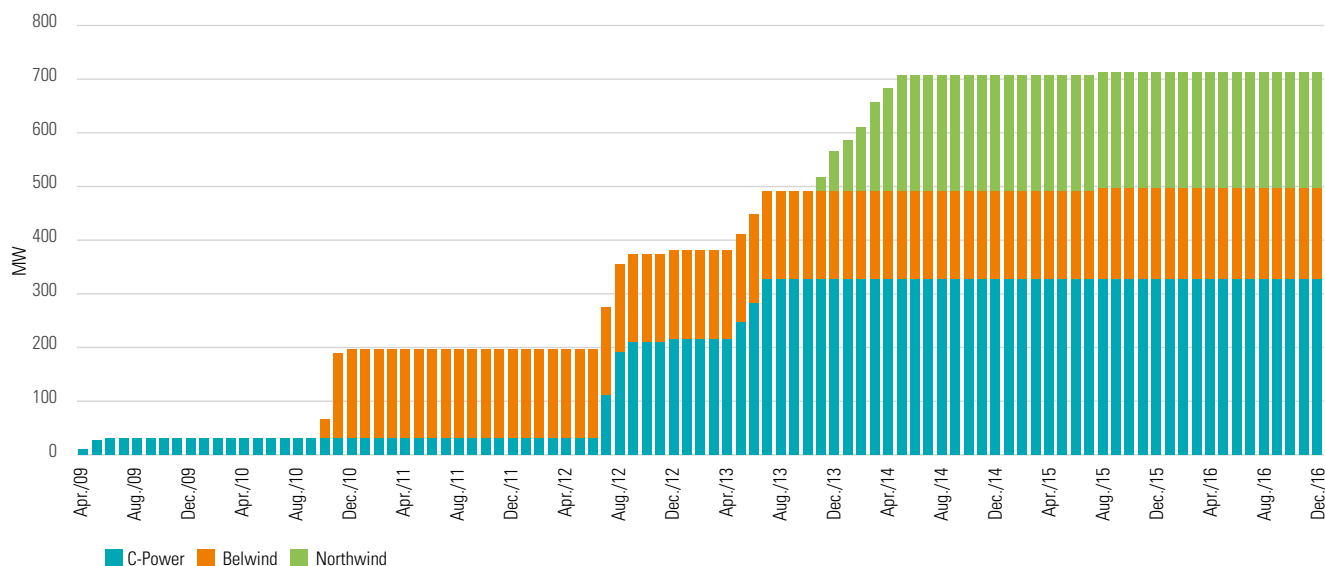
<sup>14</sup> Decision (B)160719-CDC-1541 on the definition of the elements to determine the minimum price for green energy certificates issued for electricity produced by the facilities in the domain concession of Rentel.

<sup>15</sup> Decision (B)160901-CDC-1550 on the definition of the elements to determine the minimum price for green energy certificates issued for electricity produced by the facilities in the domain concession of Norther.

<sup>16</sup> Decision (B)160916-CDC-1560 on the application for approval of the proposal for a contract for the purchase of green certificates between plc Elia System Operator and plc Rentel.

<sup>17</sup> Decision (B)160922-CDC-1563 on the application for approval of the proposal for a contract for the purchase of green certificates between plc Elia System Operator and plc Norther.

Figure 1: Development of offshore wind power installed capacity per wind farm between April 2009 and December 2016 (Source: CREG)



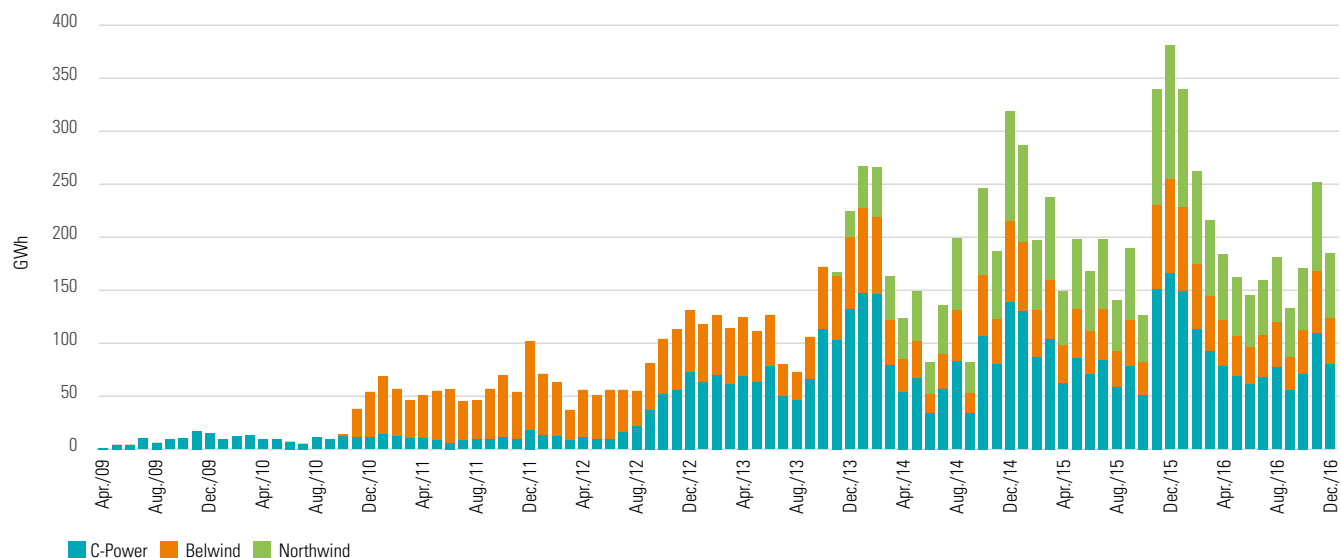
In 2016 all offshore wind farms together injected 2,315 GWh into the transmission network.

Net electricity production (prior to transformation) from all certified offshore wind farms reached 2,388 GWh in 2016, a decrease of almost 8.6% compared to net production in 2015 (2,612 GWh).

Net monthly production per domain concession holder is shown in figure 2. The average load factor in 2016 (production divided by installed capacity) varies from a minimum of 26% in September to a maximum of 64% in January. The load factor also varies significantly between wind farms (36% for C-Power, 38% for Belwind and 42% for Northwind).

CREG grants one green certificate per net MWh produced. In 2016 CREG granted green certificates to the three operational offshore wind farms for an amount of 249,684,311 €.

Figure 2: Net production of offshore green electricity per wind farm between April 2009 and December 2016 (Source: CREG)



### C. Guarantees of Origin

CREG continued to manage the Guarantees of Origin database in 2016. Via this database producers of offshore wind energy are issued Guarantees of Origin, which they can then export to other European markets. To this end, CREG has remained an active member of the Association of Issuing Bodies (AIB), an association that manages the hub through which most European databases are connected to each other. More specifically, CREG took part in general meetings and working groups, as well as in an assessment panel tasked with investigating a possible breach of EECS (European Energy Certificate System) rules. The technical monitoring of the systems was also a focus point, including e.g. the switch to a new hub.

### 3.1.1.3. Analysis of support of offshore wind energy

At the request of the Energy Minister, CREG analysed the recent market trends in the area of support for offshore wind energy<sup>18</sup>.

In Part I of this study CREG analyses the results of the award of the Borssele I+II contract. To this end, the available information about the winning tender from DONG for Borssele I and II was modelled. After that, support for the Borssele project was adjusted to the Belgian situation.

As a result, the methodology of CREG's 2016 study is different from that of study (F)151015-CDC-1462. The 2016 study is based on the winning tender from DONG, which was adjusted based on objective facts (such as density, tax aspects, etc.). In the aforementioned study 1462, among other things, CREG calculated the LCOE for the Rentel and Norther wind farms based on the information available at that time, which was supplied by the domain concession holders concerned.

Part I of the study also provides a brief explanation, without a detailed analysis, of the support for the German Merkur project, which reached its financial close in August 2016, and the falling trend in offshore support, with for example the results of the Danish North Sea and Kriegers Flak tenders. At the end of Part I the result of the Borssele III + IV tender and the modelling of the winning tender are discussed.

In Part II of the study CREG tried to adapt the result of the Borssele III + IV tender into representative support for the last three domain concessions (Northwester 2, Seastar and Mermaid). In this exercise account was taken of the objective differences between the Netherlands and Belgium.

### 3.1.1.4. Study on the profitability of local, controllable generating plants

In June 2016 CREG received the report of a study on the calculation of the profitability of local, controllable generating plants. This study was commissioned by CREG and performed by PwC.

The report showed that combined heat and power is clearly profitable for four customer profiles with a base load profile and an electricity consumption between 2 and 6 GWh. For gas engines the results are less clear.

Following this report CREG carried out a study<sup>19</sup> to determine the profitability of gas engines more accurately. The conclusion is that if gas engines are used for arbitrage in the daily market and in the balancing market, the investment is considered positive.

This way, this study offers a basis for end customers to determine for themselves, based on the four profiles studied, whether investing in local generating plants is profitable

## 3.1.2. Electricity supply

### 3.1.2.1. Supplying customers connected to the transmission network

The following table shows the market share of Electrabel and other suppliers regarding net electricity supply<sup>20</sup> to major industrial customers connected to the federal transmission system (voltage above 70 kV).

Compared to 2015, the total volume of energy offtake in 2016 by final customers of the transmission system decreased by 14.58% (10,920 GWh), the lowest level of the period studied.

According to an initial estimate, Electrabel's market share stood at 37.8% in 2016, its lowest level in the past ten years and 36.07% lower than in 2015. The number of Electrabel access points in 2016 was lower than for other suppliers.

Table 2: Energy offtake by customers connected to the federal transmission system, 2007 to 2016 (Sources: Elia, CREG)

Suppliers	Electrabel SA		Other suppliers		Total
Access points at	1/01/2016	37	47		80*
	31/12/2016	38	48		82*
Energy offtake (GWh)	2007	12,469 (87.7%)	1,743 (12.3%)		<b>14,211</b>
	2008	11,470 (84.0%)	2,183 (16.0%)		<b>13,654</b>
	2009	10,807 (87.6%)	1,526 (12.4%)		<b>12,333</b>
	2010	12,163 (88.7%)	1,551 (11.3%)		<b>13,714</b>
	2011	11,693 (90.2%)	1,265 (9.8%)		<b>12,958</b>
	2012	8,247 (67.0%)	4,069 (33.0%)		<b>12,316</b>
	2013	7,484 (57.6%)	5,519 (42.4%)		<b>13,004</b>
	2014	8,598 (62.6%)	5,130 (37.4%)		<b>13,728</b>
	2015	6,465 (50.6%)	6,318 (49.4%)		<b>12,783</b>
	<b>2016</b>	4,133 (37.8%)	6,787 (62.2%)		<b>10,920</b>

(\*) Since four access points were simultaneously supplied by two suppliers during 2016, the total number of access points is generally lower by four units than the total number of access points for all suppliers.

18 Study (F)1568 of 19 December 2016 on the analysis of support for offshore wind energy including the annual report on the effectiveness of the minimum price for offshore wind energy.

19 Study (F)161027-CDC-1583 on the profitability of local, controllable generating plants.

20 These figures do not take account of the energy supplied directly by local production or customers located in the Grand Duchy of Luxembourg.

Federal permits for electricity supply to customers connected directly to the transmission system are granted by the Minister for Energy at the proposal of CREG for a period of five years.

In 2016 CREG submitted seven proposals to the Minister for the granting of electricity supply licences to Enovos Luxembourg, Essent Belgium, Axpo Benelux, Uniper Global Commodities, Next Kraftwerke Belgium, Vlaams Energiebedrijf and Eneco.<sup>21</sup>

In 2016 the Minister for Energy granted an individual licence for the supply of electricity to Enovos Luxembourg SA<sup>22</sup>, Essent Belgium NV<sup>23</sup>, Uniper Global Commodities SE<sup>24</sup>, Axpo Benelux SA<sup>25</sup>, Next Kraftwerke Belgium<sup>26</sup> and Vlaams Energie Bedrijf NV<sup>27</sup>.

### 3.1.2.2. Price caps

#### • For unprotected customers whose supply contract has been terminated

The maximum prices applicable by the distribution system operators to unprotected customers whose supply contract has been terminated (also termed 'dropped customers') are calculated every six months by the distribution system operators and verified by CREG. They are calculated as follows: price of energy + transmission + distribution + margin.

CREG is responsible for monitoring the terms of the margin calculation.

#### • For protected household customers on low incomes or in precarious situations

In accordance with current legislation, CREG calculated and published the social tariffs and the reference tariffs applicable from 1 February 2016 to 31 July 2016 (Belgian Official Journal of 2 February 2016) and from 1 August 2016 to 31 January 2017 (Belgian Official Journal of 14 September 2016) for the supply of electricity to protected household customers on low incomes or in precarious situations.

The maximum social tariff (excl. VAT and other taxes) for the supply of electricity from 1 February 2016 to 31 July 2016 was 13.142 c€/kWh (0.13142 €/kWh) for the single-rate tariff, 14.796 c€/kWh (0.14796 €/kWh) for the dual-rate tariff (peak hours), 9.921 c€/kWh (0.09921 €/kWh) for the dual-rate tariff (off-peak hours) and 7.073 c€/kWh (0.07073 €/kWh) for the night-only tariff.

The maximum social tariff (excl. VAT and other taxes) for the supply of electricity from 1 August 2016 to 31 January 2017 was 13.221 c€/kWh (0.13221 €/kWh) for the single-rate tariff, 14.022 c€/kWh (0.14022 €/kWh) for the dual-rate tariff (peak hours),

10.622 c€/kWh (0.10622 €/kWh) for the dual-rate tariff (off-peak hours) and 7.186 c€/kWh (0.07186 €/kWh) for the night-only tariff.

These tariffs are expressed without the federal contribution, the connection fee (Wallonia) and the contribution to the energy fund (Flanders). Other taxes relating to system tariffs (transmission and/or distribution) are included.

CREG also evaluated the amount necessary to feed the protected customers' electricity fund, which is the basis of calculation of the protected customer component of the federal contribution (see section 5.9.2. hereof). To this end, and as part of protected customer reimbursements, CREG publishes the 'reference energy' components for electricity and natural gas twice a year for the attention of suppliers and distribution system operators.

#### • CREG proposal

On 20 October 2016 CREG, in answer to a question from the Minister for Energy following observations by FEBEG, proposed amendments<sup>28</sup> to the Royal Decree of 29 March 2012 establishing the rules for the calculation of the cost of the application of the social tariffs by electricity companies and the rules for the financing thereof.

21 Proposal (E)160114-CDC-1504 on the renewal of the electricity supply licence of Enovos Luxembourg, Proposal (E)160204-CDC-1511 on the renewal of the electricity supply licence of Essent Belgium NV, Proposal (E)160512-CDC-1529 on the renewal of the electricity supply licence of Axpo Benelux NV, Proposal (E)160526-CDC-1533 on the renewal of the electricity supply licence of UNIPER Global Commodities SE, Proposal (E)161027-CDC-1582 on the renewal of the electricity supply licence of Next Kraftwerke, Proposal (E)161110-CDC-1585 on the renewal of the electricity supply licence of Vlaams Energiebedrijf NV (VEB) and Proposal (E)1599 of 22 December 2016 on the granting of an electricity supply licence to Eneco.

22 Ministerial Decree of 24 February 2016 (Belgian Official Journal of 3 March 2016).

23 Ministerial Decree of 24 February 2016 (Belgian Official Journal of 7 March 2016).

24 Ministerial Decree of 20 June 2016 (Belgian Official Journal of 30 June 2016).

25 Ministerial Decree of 17 June 2016 (Belgian Official Journal of 30 June 2016).

26 Ministerial Decree of 2 December 2016.

27 Ministerial Decree of 16 December 2016.

28 Proposal (C)161020-CDC-1576 for a Royal Decree amending the Royal Decree of 29 March 2012 establishing the rules for the calculation of the cost of the application of the social tariffs by electricity companies and the rules for the financing thereof, and Proposal (C)161020-CDC-1578 for a Royal Decree amending the Royal Decree of 29 March 2012 establishing the rules for the calculation of the cost of the application of the social tariffs by natural gas companies and the rules for the financing thereof.

### 3.1.2.3. Trends in and fundamentals of electricity prices

In 2016 CREG continued with the monthly publication of a dashboard to inform all stakeholders of the important developments in the factors influencing the electricity price.

In the wholesale market CREG mainly follows changes in a number of key parameters in the formation of the price of electricity and natural gas in the Belgian and neighbouring stock markets (Germany, France and the Netherlands).

For the retail market CREG shows trends of the all-in price of electricity and natural gas in Belgium by region:

- residential DC electricity customers (3,500 kWh/year, single-rate meter)
- residential T2 natural gas customers (23,260 kWh/year)
- social customers
- dropped customers
- SMEs electricity (50,000 kWh/year, single-rate meter) and
- SMEs natural gas (100,000 kWh/year)

CREG also compares the average all-in price of electricity and natural gas charged in Belgium and the neighbouring countries (Germany, France, the Netherlands and the United Kingdom) to residential DC electricity customers, T2 natural gas customers and SMEs for electricity and natural gas.

Furthermore, every six months CREG publishes a separate memorandum with the results of the international comparison of energy prices between Belgium and the neighbouring countries (Germany, France, the Netherlands and the United Kingdom). The graphs published by CREG in the framework of this memorandum provide an overview of the various components of the average annual energy bill in the five countries, both for residential customers and for SMEs.

The following are some trends observed in 2016:

Electricity:

- Since 2016 Flanders has no longer granted residential electricity customers 100 kWh for free.
- In March 2016 the Flemish energy fund contribution was changed. From now on, it is calculated based on an annual surcharge per offtake point without applying VAT.
- At the beginning of 2016 the distribution tariffs and the transmission tariffs were modified (since 2016 a new methodology has been used for the calculation).
- In the neighbouring countries no new surcharge was introduced in 2016; existing network tariffs and surcharges, however, were adjusted, as is the case every year.

Natural gas:

- At the beginning of 2016 the distribution tariffs and the transmission tariffs were modified.
- In the neighbouring countries no new surcharge was introduced in 2016; existing network tariffs and surcharges, however, were adjusted, as is the case every year.

## 3.1.3. Transmission and distribution

### 3.1.3.1. Unbundling and certification of the transmission system operator

In the framework of its competence in the area of monitoring permanent compliance with the unbundling requirements by the transmission system operator, in 2016 CREG examined the appointments of two new members of the Boards of Directors of Elia System Operator and Elia Asset, namely a non-independent Director and an independent Director (see also section 3.1.3.2 below).

In addition, it also examined the appointment of two new members of the board of directors of Elia System Operator and Elia Asset.

### 3.1.3.2. Corporate governance

CREG examined the 2015 activity report of the Corporate Governance Committee of Elia System Operator and Elia Asset in the framework of the monitoring of the application of Articles 9 and 9ter of the Electricity Act and the evaluation of its effectiveness in relation to the objectives of independence and impartiality of the transmission system operator.

CREG also examined the report of the compliance officer on compliance with the programme of commitments by Elia System Operator and Elia Asset employees in 2015. The purpose of this programme of commitments is to prevent any discrimination between system users and/or categories of system users.

CREG talked to the Governance Committee of the company, the compliance officer and Elia departments in order to obtain additional explanations regarding these reports. This way it verified whether and how Elia's legal duties were being performed.

On 22 June 2016 CREG, in its uniformly favourable opinion<sup>29</sup>, found that Mr Michel Allé complies with the definition of 'independent Director' when it comes to his role on the Boards of Directors of Elia System Operator NV and Elia Asset NV. Furthermore, analysis of documents and additional information shows that his appointment is compatible with compliance by Elia System Operator NV with the rules on ownership unbundling.

29 Opinion (A)160622-CDC-1542 on the independence of Mr Michel Allé as an independent Director on the Boards of Directors of ELIA SYSTEM OPERATOR NV and ELIA ASSET NV.

### 3.1.3.3. Closed industrial networks

On the proposal of the Directorate-General of Energy, and after receiving the opinion from CREG and the system operator, the Minister for Energy may confer the title of closed industrial network operator, for the part operated at a rated voltage exceeding 70kV, to a natural or legal person owning a network or having right of use thereof and who has requested that title in accordance with the Electricity Act. Under the same procedure, the Minister may recognize the network as a closed industrial network provided that the regions involved have an opportunity to issue an opinion within sixty days.

In this context CREG issued an opinion in 2016 regarding a request from Essent Energie België nv<sup>30</sup>.

### 3.1.3.4. Technical operation

#### A. Connection and access

In February 2016 Elia submitted an application to CREG for approval of amendments to the general terms of the access-responsible party contract ('ARP contract') in order for this to include all technical functionalities of Elia's proposal on intraday capacity allocation on the France-Belgium and the Netherlands-Belgium connections. In its decision of 18 February 2016 CREG<sup>31</sup> approved Elia's proposal.

On 27 May 2016 CREG received a second application from Elia for approval of amendments to the general terms of the ARP contract, on the one hand, and the access contract, on the other hand.

The proposed amendments to the ARP contract refer to the abolition of the perimeter correction for primary reserve products, the further adaptation of the contract to specific points defined in the CACM Regulation, and the introduction of the electronic signature and electronic invoicing. The proposed amendments to the access contract referred exclusively to the introduction of the electronic signature and electronic invoicing. CREG decided to approve the proposed amendments in two Decisions of 22 June 2016<sup>32</sup>.

In both cases, the amendments were subjected to public consultation by Elia.

#### B. Ancillary and balancing services

##### • Reserve capacity

Elia must evaluate and determine the primary, secondary and tertiary reserve capacity that contributes to ensuring the security, reliability and efficacy of the transmission system in the control area. To this end, Elia must send its assessment methodology and its result to CREG for approval.

On 19 July 2016 CREG decided<sup>33</sup>, after public consultation with the market participants, to give its approval to Elia's proposal regarding the method of evaluation and determination of the primary, secondary and tertiary reserve capacity for 2017.

However, CREG's decision is accompanied by considerations relating to, among other matters, market information made available by Elia, prior knowledge of the availability and pricing of the inter-TSO reserve, the participation of the demand for different types of reserves, and the evolution of products towards greater technological neutrality, of which the discontinuation of product R3 ICH on 31 December 2017 is an example.

##### • Price bids and volumes for ancillary services

In order to guarantee the security, reliability and efficacy of the transmission system, Elia needs to be able to permanently count on a number of ancillary services, the conditions of which are included in the technical regulation of 19 December 2002 for transmission system operation and access thereto.

However, the procurement of these services in the required volume and at a reasonable price has been difficult since the entry into force of the regulation, as there is only one buyer in Belgium (Elia) and a limited number of sellers. Hence, pursuant to Article 12quinquies of the Electricity Act, it has been necessary on several occasions to issue Royal Decrees imposing price and volume conditions (see in particular the 2015 Annual Report, page 22).

Encouraged by CREG, Elia has made significant efforts in recent years to develop the ancillary services market, especially for reserve capacity, in such a way as to reduce their price, including by enabling more market participants to participate in auction procedures.

<sup>30</sup> Opinion (A)160324-CDC-1519 on the application submitted by plc Essent Energie België for recognition of its network at the Ineos site as an industrial closed network and of its appointment as operator for the part operated at a rated voltage above 70 kV.

<sup>31</sup> Decision (B)160218-CDC-1512 on amendments to the terms and conditions of access managers' contracts, proposed by the network operator.

<sup>32</sup> Decision (B)160622-CDC-1537 on amendments to the terms and conditions of access managers' contracts, proposed by the network operator, and Decision (B)160622-CDC-1538 on amendments to the terms and conditions of access managers' contracts, proposed by the network operator.

<sup>33</sup> Decision (B)160719-CDC-1526 on the request for approval of the method of evaluation and determination of the primary, secondary and tertiary reserve capacity for 2017.

Accordingly, following the 2015 success of the shift in the time horizon for the primary and secondary control capacity tenders (FCR and aFRR in European terminology) from an annual to a monthly basis, CREG approved Elia's proposal<sup>34</sup> to acquire all volumes on a weekly basis from 1 August 2016 onwards. With this decision CREG also approved Elia's proposal to acquire primary control capacities via a regional auction platform that is also accessible in Germany, Austria, the Netherlands and Switzerland.

The tertiary reserves for 2016 were largely acquired by Elia via annual requests for tenders. Only a volume of 70 MW was purchased via monthly requests for tenders, which were limited to the products 'R3 Production' and 'R3 Dynamic Profiles'. In 2016 CREG approved Elia's proposal<sup>35</sup> to enter into contracts on a monthly basis for all volumes of tertiary reserves (mFRR), with the exception of the volume related to interruptible offtakes (R3 ICH), for which an annual call for tenders has been published for the volumes for 2017. This product will no longer be offered from 1 January 2018.

Finally, on 13 October 2016 CREG approved Elia's proposal<sup>36</sup> to discontinue the products 'R3 Production' and 'R3 Dynamic Profiles' and replace them with the products 'R3 Standard' and 'R3 Flex', both of which are open to all sources (production/demand, CIPU/non-CIPU, transmission/distribution), but each with its own characteristics and conditions.

Furthermore, in order to maintain increases in the costs of ancillary services at a reasonable level, the Electricity Act of 29 April 1999 requires Elia to submit annual reports to CREG on

proposed prices for the supply of ancillary services. CREG then states and explains the manifestly reasonable or unreasonable nature of the proposed prices.

In 2016 CREG received reports from Elia on tertiary control services via the product R3 ICH, and on control of voltage and reactive power. In its report<sup>37</sup> on the R3 ICH product offered, CREG found that none of the prices offered were manifestly unreasonable. However, in its report<sup>38</sup> on the prices offered for control of voltage and reactive power, some prices were found to be manifestly unreasonable. Consequently, at the proposal of the Minister for Energy and following CREG's recommendations, a draft Royal Decree was drawn up to impose price and volume conditions on the producers involved.

Based on assumptions about the availability and use of services for the control of voltage and reactive power in 2017, the cost difference between the tenders initially selected by Elia and the final selection following the above-mentioned Royal Decree, reached an amount of about six million euros.

The primary and secondary control services are subject to weekly reports produced by Elia. CREG found that the costs of these reserves, at a constant volume, have globally decreased (-12%). This is thanks to the purchase of 100% of the volume via monthly, and later weekly, requests for tenders, and thanks to the access to a common regional platform.

However, this development hides certain differences between the services: a sharp drop in the price of primary control capacities (-43%), but a slight increase (+12%) in the price of secondary control capacities.

#### • Balancing (balance of the system)

The TSO is responsible for monitoring, maintaining and, if needs be, re-establishing the balance between supply and demand for electrical power in the control area, amongst other things following possible individual imbalances caused by the various access-responsible parties. Elia is required to submit a proposal for the operating rules of the market for offsetting 15-minute imbalances to CREG for approval.

In April 2016 Elia submitted a proposal for amendment to the market's operating rules regarding the offsetting of 15-minute imbalances. The proposed developments are related to the introduction of Belgian participation in international collaboration for the reservation of primary control capacity from 1 August 2016 onwards, to the operation of the secondary intraday market in case of failure, and to the developments relating to the IGCC (International Grid Control Cooperation). With its final decision, and after public consultation with the market players, CREG approved Elia's proposal<sup>39</sup>. The new rules are fully applicable from 1 January 2017.

In August 2016 Elia submitted another proposal for amendment to the market's operating rules regarding the offsetting of 15-minute imbalances.

The proposed developments are related to the amendment of the definition of two products of the tertiary reserve in order to make them more technology-neutral, to the impact of the modifications of the products of the contracted tertiary reserve on the order of activation of these reserves, and to the adjustment of the penalties following the switch from

34 Decision (B)160609-CDC-1525 on the proposal of plc Elia System Operator on the adaptation of the operating rules of the market in relation to offsetting quarter hourly imbalances – Partial entry into force on 1 August 2016 and full entry into force on 1 January 2017. 35 Ibidem.

36 Decision (B)161013-CDC-1556 on the proposal of plc Elia System Operator on the adaptation of the operating rules of the market in relation to offsetting quarter hourly imbalances – Entry into force on 1 January 2017.

37 Report (RA)161110-CDC-1586 on the manifestly unreasonable or reasonable nature of the prices offered to Elia System Operator for the supply of tertiary reserve capacity for interruptible offtakes R3 ICH for operating year 2017. 38 Report (RA)161013-CDC-1572 on the manifestly unreasonable or reasonable nature of the prices offered to Elia System Operator for the supply of the voltage control system in 2017.

39 Decision (B)160609-CDC-1525 on the proposal of plc Elia System Operator on the adaptation of the operating rules of the market in relation to offsetting quarter hourly imbalances – Partial entry into force on 1 August 2016 and full entry into force on 1 January 2017.



short-term purchase to reserve products. With this final decision, and after public consultation with the market players, CREG approved Elia's proposal<sup>40</sup>. The new rules are fully applicable from 1 January 2017.

#### • Valuation of the production reserves necessary for the security of the system

The production of electricity from renewable energy is characterised by high investment costs, low fixed costs and near-to-zero variable costs. The massive imports of renewable energy may lead to overcapacity, which could worsen the problem of payment for marginal producers in a system where generating plants only receive payment based on the energy supplied. In this context, CREG asked the Center for Operations Research and Econometrics (CORE) of the Université catholique de Louvain to investigate whether the ORDC (Operating Reserve Demand Curves) method can be applied. This method values the production reserves necessary for the security of the system based on a price adder for the imbalance tariff. This surcharge is based on the scarcity of reserve resources and on the price consumers are willing to pay in order not to suffer power cuts.

A note<sup>41</sup> contains the main results of this study, as well as the context and a general description of the method.

#### • Activated volumes and concentration of tenders

In 2016 activations to offset imbalances in the control area amounted to 1,052 GWh, a 4.0% increase compared to 2015.<sup>42</sup> The share of secondary reserves in these activations was 46.1% in 2016, compared to 57.4% in 2015 and 52.7% in 2014. This drop is mainly due to the sharp increase in the offset of imbalances in the framework of the IGCC, which increased by 40.7% (428 GWh) in 2016 compared to 2015 (255 GWh).

In 2016 there was a 200 MWh downward activation of reserves located abroad by the transmission system operators, while these activations amounted to 250 MWh in 2015 (Source: Elia data).

The HHI index relating to secondary and tertiary reserves offered at the generating plants amounted to 4,107 in 2016, compared to 4,299 in 2014 and 4,251 in 2014. Activations relating to these resources account for 99.8% of the total power activated in 2016 to offset imbalances in the control area (excl. IGCC), just as in 2015, whereas they accounted for 99.9% in 2014. The decrease in the HHI rate, though small, is explained by the increase in the relative participation of EDF Luminus on the market for production reserves, combined with the decrease, although to a lesser extent, in Electrabel's share.

#### • Price of offsetting individual imbalances

The imbalance tariff is based on the principle of a single marginal price and takes account of the imbalance of the access-responsible party and the direction of the imbalance in the control area.

Table 3: Average unweighted imbalance tariff during the period 2007-2016 (Source: Elia data)

€/MWh	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Injection > offtake	22.09	43.24	19.86	27.76	29.22	51.84	47.91	40.33	43.48	<b>34.91</b>
Injection < offtake	48.64	77.92	44.25	57.24	62.70	54.05	49.36	41.07	44.18	<b>35.73</b>

<sup>40</sup> Decision (B)161013-CDC-1556 on the proposal of plc Elia System Operator on the adaptation of the operating rules of the market in relation to offsetting quarter hourly imbalances – Entry into force on 1 January 2017.

<sup>41</sup> Note (Z)160512-CDC-1527 on scarcity pricing applied to Belgium.

<sup>42</sup> By synthesising the activations in the opposite direction of the secondary reserves within the same quarter hour, consistent with data from previous years.



Figure 3: Average unweighted imbalance tariff and Belpex DAM price during the period 2007-2016 (Sources: Elia and Belpex data)

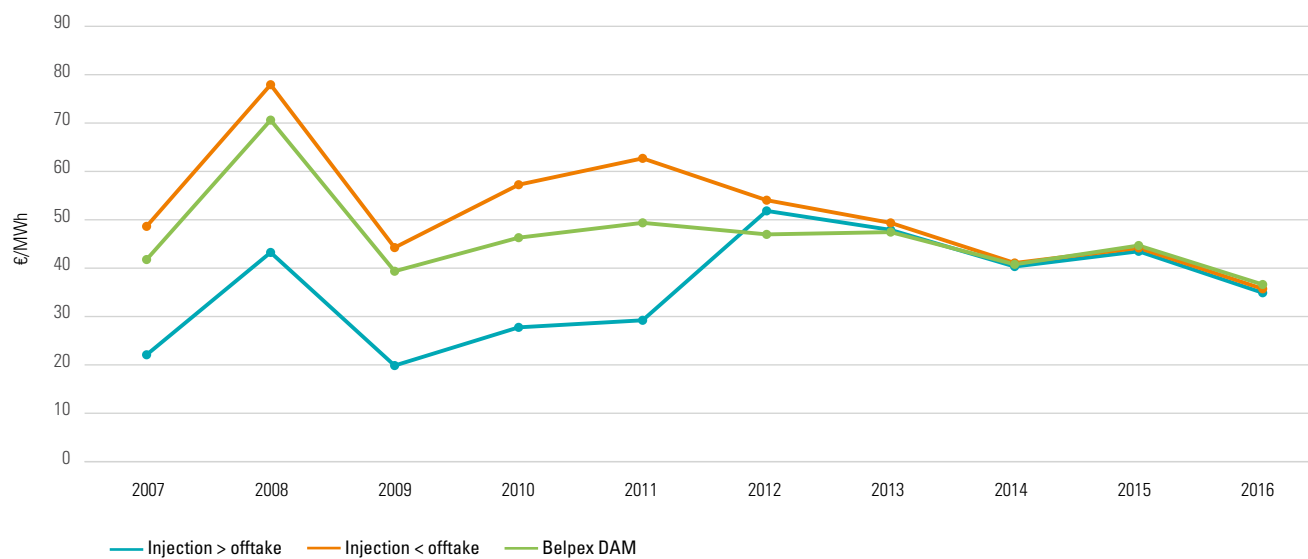


Table 3 provides an overview of the trend in the average tariff (unweighted) for positive imbalances (injection > offtake) and for negative imbalances (injection < offtake) of the access-responsible parties for the period 2007-2016.

Using Figure 3 these average prices can be compared to the trend in average prices on the Belpex day-ahead market over the same period.

#### C. Rules on grid security and reliability and standards for quality of service and supply

In 2016 CREG took various initiatives concerning the security and reliability of the electricity grid. In particular, CREG discussed with Elia possible improvements to the black-start contracts when these had to be renewed, and it set out a course of action for their future development.

#### D. Time taken by the transmission system operator to carry out connections and repairs

In 2016 the AIT (Average Interruption Time) on the federal transmission system was 3 minutes 33 seconds (compared to 4 minutes 58 seconds in 2015) and the AID (Average Interruption Duration) was 20 minutes 56 seconds (compared to 27 minutes 55 seconds in 2015).

There were 56 incidents on the transmission system in 2016 (61 in 2015). As the network is configured as a grid or mesh, such incidents do not usually result in customer supply interruptions. In 71% of cases, automatic reconnection is attempted. These attempts were successful in 71% of cases on the 380 kV and 220 kV systems, and in 77% of cases on the 150 kV network.

In twelve cases a connection to the federal transmission network was unavailable for more than 24 hours. The periods of unavailability for these connections lasted between 26 hours and 3,498 hours (this long period of unavailability was due to exceptionally strong winds that blew down four pylons).

### 3.1.3.5. Network tariffs

#### A. The transmission system

##### a) Tariff methodology

As detailed in its Annual Report of 2014, on 18 December 2014 CREG approved its tariff methodology for the operation of the transmission system and for the electricity networks with a transmission function<sup>43</sup>, with a view to its application during the regulatory period 2016-2019.

On 30 June 2016 CREG established the objectives<sup>44</sup> to be reached by Elia in 2017 in the framework of the incentive subject to CREG's decision, as referred to in the tariff methodology 2016-2019, especially with a view to improving the adequacy of supply and demand.

CREG also modified the objective to be reached by Elia in 2016 regarding the design of a market model for energy transmission, as this task was performed by CREG itself in the course of the first semester of 2016.

In addition, in July 2016, after consultation with the market participants, CREG established the methodology and criteria for the assessment of investments in electricity and gas infrastructure and the major risks involved<sup>45</sup>. This new methodology applies to new projects for which no final investment decision had been taken on 15 July 2016.

Finally, on 22 December 2016 CREG defined the objectives to be reached by Elia in 2017 in the framework of the incentive for market integration as referred to in the tariff methodology 2016-2019, by means of a measured increase in the interconnection capacity made available on the market in the Belgian control area<sup>46</sup>.

##### b) Tariff trends

As detailed in the Annual Report of 2015, on 3 December 2015 CREG approved Elia's tariff proposal for the regulatory period 2016-2019.

On 8 December 2016 CREG approved the amendments<sup>47</sup> to certain tariffs for public service obligations and surcharges

proposed by transmission system operator Elia. With its decision of 17 November 2016<sup>48</sup> CREG had already approved Elia's proposal relating to the tariff for the financing of the strategic reserve. These new tariffs enter into force on 1 January 2017.

However, the tariff for public service obligations for the financing of support measures for renewable energy sources in Wallonia, which enters into force from 1 January 2017, is dealt with in a later decision.

Furthermore, on 30 June 2016 and on 25 August 2016 CREG adopted two decisions<sup>49</sup> relating to the control of the total costs to be taken into account by the system operator for the financing of the purchase, supply and installation of the submarine cable as well as the connection facilities, the equipment and the connections of the Rentel and Norther offshore wind farms.

The trend in the tariff burden (not including connection, PSO tariffs and surcharges) for users of the transmission system is illustrated in the table below.

<sup>43</sup> The concept of 'networks having a transmission function' refers, on the one hand, to the transmission system and, on the other hand, to distribution systems or local or regional transmission systems with a voltage level between 30kV and 70kV, which are used primarily for the transmission of energy to non-residential customers and other networks in Belgium, and the interaction between power generation facilities and electrical networks that have a transmission function.

<sup>44</sup> Decision (B)160630-CDC-658E/38 on the objectives to be achieved by Elia in 2017 in the framework of the incentive subject to CREG's decision as referred to in Article 27 of the tariff methodology.

<sup>45</sup> Decision (A)160707-CDC-1480 establishing the methodology and criteria for the evaluation of investments in electricity and gas infrastructure and the major risks involved.

<sup>46</sup> Decision (B)161222-CDC-658E/39 on the objectives to be achieved by Elia in 2017 in the framework of the incentive for market integration as referred to in Article 24, §1, 2) and §3 of the tariff methodology.

<sup>47</sup> Decision (B)161208-CDC-658E/42 regarding the ex-ante report on the tariffs for 'public service obligations' (sic) and 'taxes and surcharges', excepting the information on the strategic reserve, to be applied from 1 January 2017.

<sup>48</sup> Decision (B)161117-CDC-658E/40 on the request for approval of the adaptation from 1 January 2017 of the tariffs for the financing of the public service obligations (sic) of the Strategic Reserve, submitted by Elia System Operator.

<sup>49</sup> Decision (B)160630-CDC-1528 on the control of the total costs to be taken into account by the system operator for the purchase, supply and installation of the submarine cable as well as the connection facilities, the equipment and the connections of the production plants of the Rentel offshore wind turbine farm with a view to financing; Decision (B)160825-CDC-1544 on the control of the total costs to be taken into account by the system operator for the purchase, supply and installation of the submarine cable as well as the connection facilities, the equipment and the connections of the production plants of the Norther offshore wind turbine farm with a view to financing.

Table 4: Trends in the tariff burden (not including connection, PSO tariffs and surcharges and VAT) for users of the transmission system during the period 2013-2019 (Source: CREG)

COST OF NETWORK (USE AND ANCILLARY SERVICES) Standard customers (in €/MWh)	Tariffs 2013 (1)	Tariffs 2014-2015 (2)	Tariffs 2016 (3)	Tariffs 2017 (4)	Tariffs 2018 (5)	Tariffs 2019 (6)	Average tariffs 2016-2019 (7)	2016-2019 compared to 2014-2015 (8) = (7)/(2)%
By CREG decision of	658E/26 16/05/2013	658E/26 16/05/2013	658E/36 3/12/2015	658E/36 3/12/2015	658E/36 3/12/2015	658E/36 3/12/2015		
<b>STANDARD CUSTOMER ON 150220380 kV NETWORK (45 MVA; 30 MW/year; 35 MW/month; 155 GWh)</b>								
NETWORK USE	n.a.	n.a.	3.5643	3.4807	3.5120	3.6228	3.5450	
CAPACITY RESERVES AND BLACK START	n.a.	n.a.	0.9165	1.1189	1.3710	1.5626	1.2423	
MARKET INTEGRATION	n.a.	n.a.	0.3492	0.3604	0.3870	0.3946	0.3728	
<b>TOTAL</b>	<b>4.8400</b>	<b>5.4200</b>	<b>4.8300</b>	<b>4.9600</b>	<b>5.2700</b>	<b>5.5800</b>	<b>5.1600</b>	<b>95%</b>
<b>STANDARD CUSTOMER ON 703630 kV NETWORK (12 MVA; 6 MW/year; 7 MW/month; 32 GWh)</b>								
NETWORK USE	n.a.	n.a.	6.6343	6.5607	6.5420	6.7028	6.6100	
CAPACITY RESERVES AND BLACK START	n.a.	n.a.	0.9165	1.1189	1.3710	1.5626	1.2423	
MARKET INTEGRATION	n.a.	n.a.	0.3492	0.3604	0.3870	0.3946	0.3728	
<b>TOTAL</b>	<b>7.9000</b>	<b>9.0050</b>	<b>7.9000</b>	<b>8.0400</b>	<b>8.3000</b>	<b>8.6600</b>	<b>8.2250</b>	<b>91%</b>
<b>STANDARD CUSTOMER TRANSFORMATION TO AVERAGE VOLTAGE (50 MVA; 20 MW/year; 17 MW/month; 90 GWh)</b>								
NETWORK USE	n.a.	n.a.	10.1343	10.0707	9.9620	10.0828	10.0625	
CAPACITY RESERVES AND BLACK START	n.a.	n.a.	0.9165	1.1189	1.3710	1.5626	1.2423	
MARKET INTEGRATION	n.a.	n.a.	0.3492	0.3604	0.3870	0.3946	0.3728	
<b>TOTAL</b>	<b>9.9900</b>	<b>11.4000</b>	<b>11.4000</b>	<b>11.5500</b>	<b>11.7200</b>	<b>12.0400</b>	<b>11.6775</b>	<b>102%</b>
Injection tariff Capacity reserves and black start	0.9111	0.9111	0.9644	0.9644	0.9644	0.9644	0.9644	106%

#### •The offshore surcharge

In application of Article 14sexies of the Royal Decree of 16 July 2002 on the establishment of mechanisms for the promotion of electricity produced from renewable energy sources, a Ministerial Decree of 2 December 2016 (Belgian Official Journal of 13 December 2016), at CREG's proposal<sup>50</sup>, sets the amount of the offshore surcharge (or the 'tariff for public service obligations with a view to the financing of federal green energy certificates') for 2017 at 4.3759 €/MWh. This amount means a 14.3% increase in the offshore surplus compared to 2016.

#### c) Balances

With its decision of 22 June 2016<sup>51</sup> CREG approved Elia's amended tariff report including the operating balances for 2015. To this end, CREG studied the amended tariff report and checked, on the one hand, total revenue, and, on the other hand, the operating balances. These balances are the result of the differences between tariff estimates and the actual amounts and volumes.

<sup>50</sup> Proposal (C)161020-CDC-1574 on the calculation of the surcharge for offsetting the real net cost of the system for the operator resulting from the obligation to purchase and sell green certificates in 2017, amended on 10 November 2016.

<sup>51</sup> Decision (B)160622-CDC-658E/37 on the tariff report including the balances introduced by Elia System Operator for operating year 2015 as modified by the appropriate tariff report.

## B. Distribution networks

Although following the sixth State reform competence in electricity and natural gas distribution network tariffs was transferred to the regions, (see Annual Report of 2014, section 2.1), CREG continues to analyse the distribution tariffs in its annual study on electricity and natural gas price components<sup>52</sup> (see also section 3.2.1.1 of this report).

Regarding electricity, the study concludes that for residential customers the distribution network tariff between January 2007 and December 2015 increased, on average, by 219.98 €/period (+147.41%) in Flanders, 59.50 €/period (+39.08%) in Wallonia and 54.04 €/period (+38.28%) in Brussels. This is partly due to the higher costs of public service obligations, higher energy costs to offset network losses, and the introduction of multi-year tariffs. In Flanders the impact of the application of corporate tax on network activities of distribution system operators has also been felt since 2015. For low voltage business customers the distribution network tariff increased, on average, by 1,813.03 €/period (+50.49%) in Flanders, by 1,711.63 €/period (+40.77%) in Wallonia and decreased, on average, by 604.74 €/period (-11.15%) in Brussels. This is partly due to the higher costs of public service obligations, higher energy costs to offset network losses, and the introduction of multi-year tariffs. In Flanders the impact of the application of corporate tax on network activities of distribution system operators has also been felt since 2015.

Regarding natural gas, the study concludes that for residential customers the distribution network tariff between January 2007 and December 2015 increased, on average, by 68.11 €/period (+29.41%) in Flanders, 163.09 €/period (+67.70%) in Wallonia and 29.26 €/period (+11.45%) in Brussels.

This is due to deficits of past years being carried forward, the increase in public service obligations and the introduction of multi-year tariffs. In Flanders the impact of the application of corporate tax on network activities of distribution system operators has also been felt since 2015. However, for low voltage business customers the increase in the distribution network tariff (+1,218.46 €/period in Flanders, +3,322.93 €/period in Wallonia and +3,368.00 €/period in Brussels) is smaller because the costs of public service obligations are attributed mainly to residential customers, as they are more applicable to the latter.

### 3.1.4. Cross-border issues

#### 3.1.4.1. Access to cross-border infrastructure

Gross physical imports to Belgium amounted to 14.7 TWh in 2016, which is a 38.2% decrease compared to 2015 (23.7 TWh). Gross physical exports amounted to 8.5 TWh, which means they tripled compared to 2015 (2.7 TWh). The combination of a fall in imports and a rise in exports has resulted in a sharp decrease in net imports from 21.0 TWh in 2015 to 6.2 TWh in 2016. This makes 2016 a turning point compared to the previous five years, when imports gradually increased. The main reason for this change in trend is the restart on 14 and 20 December 2015 of Tihange 2 and Doel 3, which had not been in operation since 25 March 2014. In the past, CREG already observed, on various occasions, a negative relationship between the availability of nuclear reactors and the import nominations of the interconnection capacity.

The following figure shows the trends in the import and export capacity (monthly average) made available to the day-ahead

market, and their total net use. This figure shows, once again, that in 2016 the increase in the use (nominations) of the interconnection capacity for imports observed in 2012-2015 came to an end. The figure also shows that since May 2015 there are no values for the available interconnection capacity for imports and exports. On 20 May 2015 Available Transmission Capacity (ATC) was replaced as a method for the calculation and allocation of interconnection capacity by Flow Based Market Coupling (FBMC). With the ATC method, in a first step, the available interconnection capacity for imports and exports was calculated by the TSOs. After that, a certain portion of that capacity was used ('nominated') by the market. With FBMC, the calculation and allocation (nomination) of the interconnection capacity takes place in the same step, via optimisation. This optimisation combines the information about the transmission system, supplied by the various CWE TSOs, with the demand curves offered in the different CWE bidding zones, supplied by the market players. Hence, as there is no prior calculation of available capacity for imports and exports, from May 2015 we only have the interconnection capacity actually allocated and used.

The following table summarises these findings. The average net export nomination<sup>53</sup> dropped significantly in 2016 compared to 2015. This constitutes a turning point compared to the previous five years, during which net imports continued to increase. There are no separate figures on available import and export capacity from the introduction of FBMC onwards, as the calculation and allocation (nomination) of interconnection capacity take place implicitly in a single optimisation step.

<sup>52</sup> Study (F)160309-CDC-1516 on electricity and natural gas price components.

<sup>53</sup> By convention, CREG uses a negative value for imports and a positive value for exports. Hence, a drop in average net imports must be interpreted as a rise in net exports or a drop in the negative value of net exports in the table.

Figure 4: Availability and use of interconnection capacity from 2007 to 2016 (Source: CREG)

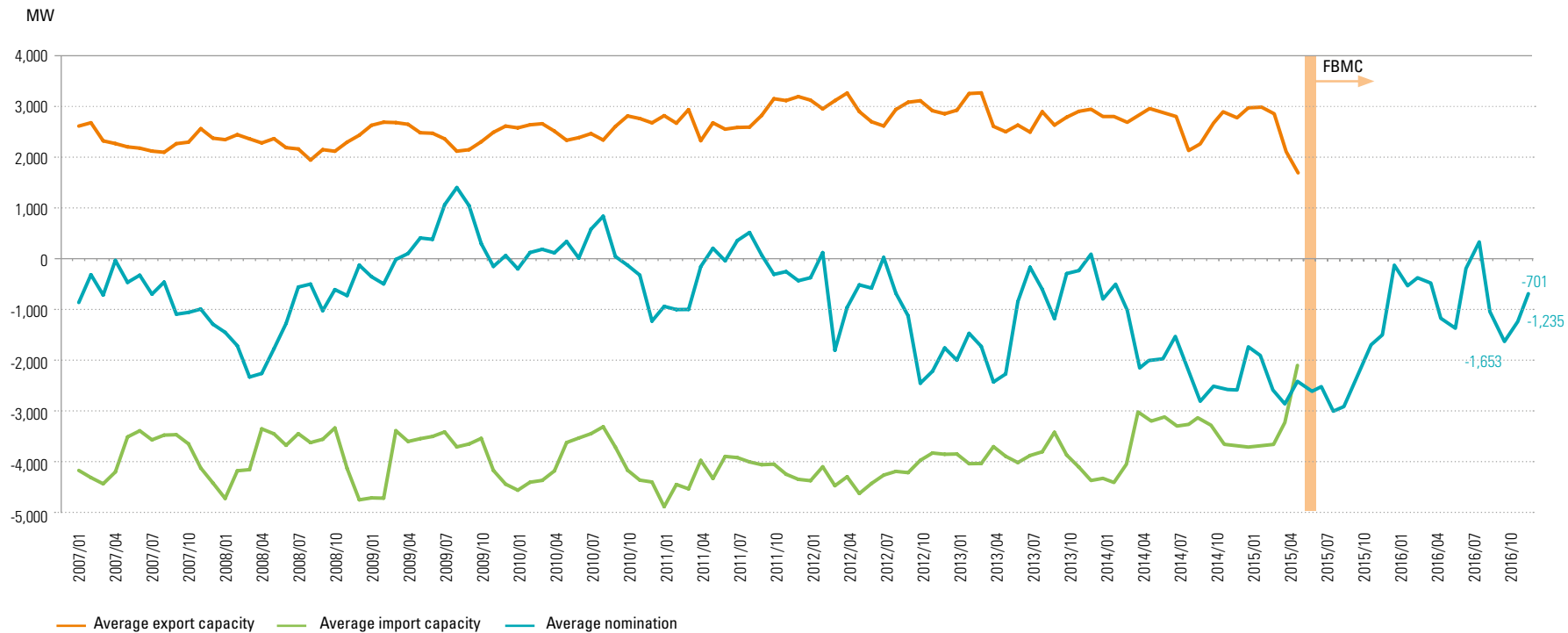


Table 5: Average export and import capacity and average nomination per year (MW) (Sources: Elia data, CREG calculations)

Year	Average export capacity	Average import capacity	Net average export nomination
2007	2.317	-3.908	-711
2008	2.242	-3.882	-1,212
2009	2.460	-3.877	316
2010	2.558	-4,023	23
2011	2.791	-4,250	-253
2012	2.971	-4,245	-1,050
2013	2.821	-3,933	-1,109
2014	2.697	-3,562	-1,910
2015	3.213	-3,492	-2,379
<b>2016</b>	-	-	<b>-732</b>
<b>Average</b>	-	-	<b>-902</b>

Taking into account the relatively high price differences between the CWE countries during the period October-December 2016, the flows exchanged between the CWE countries remained relatively limited. During that period, France and Belgium together were able to import an average of 3,750 MW despite an average price difference with Germany and the Netherlands of 26 €/MWh. Hence, an explanation of the limited volumes exchanged must be found at network level. In fact, a price difference between two zones within the CWE region indicates congestion on a network element. Without such congestion, more energy could have been exchanged until a price balance (price convergence) between both zones was reached.

Since the introduction of FBMC in May 2015, for each hour when there was no price convergence, it is possible to verify where the congestion occurred. Data analysis carried out by the CWE transmission system operators, national regulators and independent consultants shows that a significant share of congestion in 2016 occurred on internal transmission lines in the control area of Amprion, one of the four German TSOs. These lines were characterised by high internal loads. In addition, internal lines in other control areas – including Elia's – and interconnection lines between areas have also limited the so-called flow-based domain. Generally speaking, in 2016 many transmission lines limited trade between areas because they only made a small fraction of their maximum capacity available to the market. A low available capacity on a transmission line can be due to a combination of factors, including high taxes on internal exchanges within the area, or loop flows generated by internal exchanges in another zone, and/or high safety margins. A relatively small volume of trade between areas can be sufficient to trigger congestion on these lines with a low available capacity.

In 2016, in 80% of all congestion situations on the critical network element (critical branch) less than 30% of the maximum capacity was available (taking into account the N-1 safety criterion). In part as a result of this, the domain within which the market solution can be found, the so-called flow-based domain, was often smaller than the domain needed to guarantee the long-term exchanges (Long Term Allocations) without additional remedial action by the TSOs. The number of hours for which the long-term allocations could only be guaranteed thanks to the so-called LTA inclusions was remarkably high in 2016. During the summer months, LTA inclusion was necessary in more than 30% of all hours with congestion. In November and December this share increased to more than 70% of the hours. These figures lead to questions as to the justification of the current criteria for the selection of critical branches in market coupling. Furthermore, the results

indicate that in the current context, with small or even 'empty' flow-based domains, LTA inclusion played a crucial role in ensuring a minimal import volume for Belgium during the winter months.

The following table shows the evolution of annual revenues from import and export capacities purchased by market actors in explicit auctions, valid for the following year or the following month. The table shows that in 2016 market actors were able to procure annual and monthly capacity for an amount of 64.1 million euros. This is nearly half of the amount auctioned in 2015 (102.1 million euros), but similar to the amounts recorded in 2013 and 2014. The difference between 2016 and 2015 is mainly present in the annual auctions. The main reason for this is the significant price drop for the annual interconnection capacity from France to Belgium and from the Netherlands to Belgium. In the direction from France to Belgium the capacity price dropped from 2.86 €/MW in 2015 to 0.96 €/MW in 2016. For the direction from the Netherlands to Belgium the price dropped from 5.44 €/MW to 3.22 €/MW. In those directions, the auctioned volumes remained the same as those of the previous years. For the opposite direction, i.e. from Belgium to France and from Belgium to the Netherlands, there was a slight price increase: from 1.4 €/MW in 2015 to 2.2 €/MW in 2016 in the direction Belgium-France and from 5.1 €/MW in 2015 to 5.7 €/MW in 2016 in the direction Belgium-the Netherlands.

At the end of 2015, after the restart of the Doel 2 and Tihange 3 nuclear power plants in December 2015, the market players expected imports to Belgium from France and from the Netherlands to fall in 2016 compared to 2015, which was indeed the case. At the end of 2015 the market players also expected an increase in the level of imports from Belgium to France.

Table 6: Annual revenues from capacities offered for auction (in millions of euros) (Sources: Elia data, CREG calculations)

Year	Yearly auctions	Monthly auctions	Total
2007	38.9	16.0	54.9
2008	27.1	11.6	38.7
2009	30.9	12.3	43.2
2010	25.5	8.1	33.6
2011	10.1	5.2	15.3
2012	15.6	8.5	24.1
2013	36.7	20.7	57.4
2014	42.6	24.1	66.6
2015	65.1	37.1	102.1
<b>2016</b>	<b>33.4</b>	<b>30.7</b>	<b>64.1</b>

Despite the establishment of market coupling in November 2010 between five countries of the CWE region (Luxembourg, Belgium, the Netherlands, France and Germany), considerable price discrepancies between day-ahead exchanges can still be observed. These discrepancies indicate saturation of the commercial interconnection capacity between two markets. The price gap is a reflection of the severity of the observed congestion. In flow-based market coupling, commercial congestion in the CWE market is caused by congestion on major CWE network elements, the so-called critical branches. This congestion limits Belgium's import and export opportunities on D-1. The daily market congestion charges depend on the price differential and additional flows on critical branches, generated by flow-based market coupling.

Changes in commercial congestion charges on D-1 for the Belgian market from 1 January 2007 to 20 May 2015 are illustrated in Figure 5. The figure shows the total revenues of the daily market by border. In practice, this amount is shared by the holders of long-term rights and transmission system operators on both sides of the border.

Until 21 May 2015 (the parts of Figure 5 without borders) the congestion charges could be calculated per border and per direction.

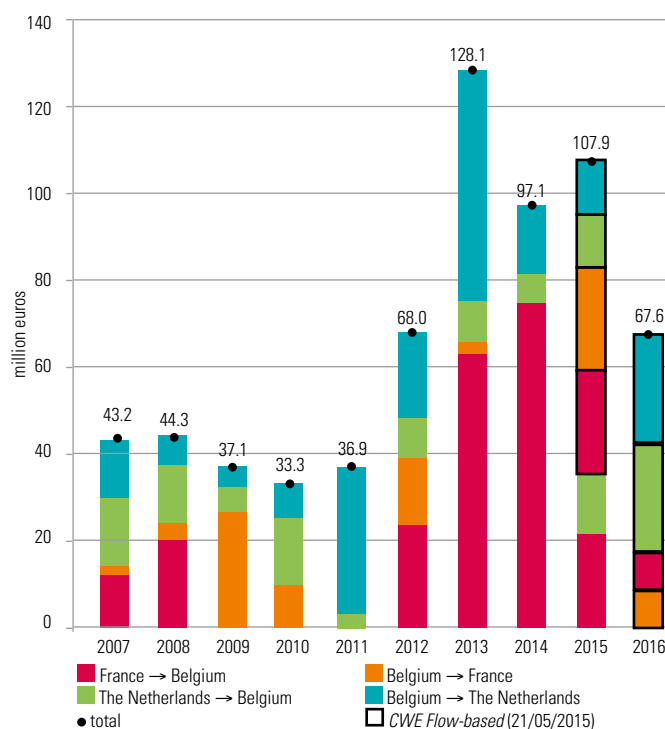
This is no longer the case. Since the introduction of flow-based market coupling between five countries of the CWE region, congestion charges are determined based on the results of the flow-based market coupling, and then allocated to a bidding zone border by means of a distribution formula. The revenues on a border are distributed evenly over both directions. Next, these amounts are divided between the holders of long-term rights and transmission system operators.

In 2016 congestion charges on the Belgian borders dropped by 37% compared to 2015. On the French-Belgian border congestion charges decreased by 52.1 million euros. In 2015 they amounted to a total of 69.2 million euros, and in 2016 to only 17 million euros. This reflects the decrease in the price difference on the Belgian and French daily markets. The congestion charges on the Dutch-Belgian border, on the other hand, rose by 11.8 million euros in 2016: from 38.7 million euros in 2015 to 50.5 million euros in 2016. In turn, this rise reflects the increase in the price difference between Belgium and the Netherlands in 2016. 80% of all congestion charges on the Belgian-Dutch border were generated during the last 3 months of 2016, i.e. October (38%), November (28%) and December (14%). Nearly half of the congestion charges on the French-Belgian side (48%) were generated in that period.

The current allocation of congestion charges in the CWE region was accepted by the region's regulators provided that they were regularly monitored. The allocation method may be reviewed at the request of the CWE regulators. Moreover, all European transmission system operators have jointly proposed an allocation method under Commission Regulation

(EU) 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management. This joint proposal is currently subject to a joint approval process by all European regulatory bodies.

Figure 5: Daily congestion charges from market coupling  
(Sources: Elia data, CREG calculations)



### 3.1.4.2. Analysis of the investment plan of the transmission system operator for its compliance with the development plan for the network in the entire European Union

See section 3.4.2. of this report.

### 3.1.4.3. Auction rules

On 13 October 2016 CREG approved Elia's proposals regarding the European Harmonized Auction Rules and the rules for capacity allocation by means of fictitious auctions (Shadow Auction Rules)<sup>54</sup>. The Harmonized Auction Rules allow for new allocations of long-term capacity (monthly and annual products) in the form of FTR Options on the Belgian-Dutch and the Belgian-French borders. The Shadow Auction Rules refer to the rules for the allocation of daily capacity across areas, which act as reserve procedures for day-ahead flow-based market coupling in the CWE region.

### 3.1.4.4. Configurations of the bidding zones for the exchange of electricity

Under a public contract CREG commissioned the University of Duisburg-Essen to study the consequences of the different configurations of the bidding zones for electricity exchange in the CWE region. The study analyses the methodology to define the bidding zones in order to optimise the welfare created in the CWE region.

This study<sup>55</sup> shows that the configuration of bidding zones has a powerful impact on the welfare created by flow-based market coupling.

The results of the study indicate that the welfare created and the costs of the system that are saved by a different configuration

<sup>54</sup> Decision (B)161013-CDC-1569 on the proposal submitted by Elia System Operator on the method for allocation to access managers of annual and monthly available capacities for energy exchanges with other bidding zones and the rules for allocation of capacity through shadow auctions.

<sup>55</sup> Note (F)160519-CDC-1530 on the study of the impact of price zones in different configurations in Europe.



of the bidding zones to the current one were much higher than estimated before flow-based market coupling was actually being applied (see section 5.9.8 of CREG's 2015 Annual Report).

## 3.2. Competition

### 3.2.1. Monitoring of wholesale and retail prices

#### 3.2.1.1. CREG studies performed in 2016

##### • Use of electricity meters for low voltage

In its May 2016 study on the use of electricity meters for low voltage in Belgium<sup>56</sup> CREG formulated recommendations to help households and SMEs choose between a single-rate, dual-rate or night-only meter. Generally speaking, consumers are not very aware of the importance of an electricity meter and do not always have the type of meter that best fits their consumption or profile. However, it is in their interest to choose the most suitable meter type or to modify their behaviour. Finally, they should compare suppliers' prices, for instance via one of the price comparison websites that carry the CREG label.

##### • Monitoring duty in the framework of the extension of the operation of the Tihange 1 power plant

On 22 June 2016 CREG, in its report 1534, reported on the monitoring of the real revenues and costs of nuclear power plant Tihange 1 for the period from 1 October 2015 to 31 December 2015 in accordance with the Convention on the extension of the operation of the Tihange 1 power plant of 12 March 2014.

##### • Nuclear distribution fee

On 25 October 2016 CREG received a request from the Economic Commission of the Chamber of Representatives to 'issue a written opinion on the issues of the draft law that have not been dealt with in the Commission and on which CREG considers it useful to issue an opinion' by 28 November 2016. The draft law refers to the amendment of the law of 11 April 2003 on the facilities built for the dismantling of the nuclear power plants and for the management of irradiated fissile material from those plants. This draft law concerns a distribution fee for the years 2016 to 2026 imposed on the operators of the Doel 3, Doel 4, Tihange 2 and Tihange 3 power plants and on the companies referred to in Article 24, §1 of the aforementioned law of 11 April 2003. CREG wrote this opinion<sup>57</sup> with a view to guaranteeing to the State that it will be able to impose the distribution fee described in this draft law during the coming eleven years (see also section 2.3 of this report).

##### • Composition of prices

Since 2007 CREG has followed the evolution of electricity and gas prices charged to the end customer. The annual study<sup>58</sup> reports on the development of electricity and natural gas price components. Besides the evolution of the pure energy price, which follows the market, a number of changes occurred in 2015 that affect the price charged to the end user. For instance, new distribution network tariffs were set by the regional regulators. Furthermore, a surcharge was introduced to finance the strategic reserve.

Finally, from now on, the distribution system operators' network activities are subject to corporate tax, and the reduced VAT rate no longer applies.

For electricity, the average price for residential customers increased by 44.09% between January 2007 and December 2015. Concretely, this means an average increase of 87.21 €/MWh in Flanders, 60.98 €/MWh in Wallonia and 31.45 €/MWh in Brussels. For business customers in Belgium the average price dropped slightly, by 0.84%. However, this trend varies from one region to another. In Flanders the price charged to business end users decreased, on average, by 6.15 €/MWh and in Brussels by 21.49 €/MWh. In Wallonia, on average, this price increased by 16.53 €/MWh.

For natural gas, the average price for residential customers increased by 12.74% between January 2007 and December 2015. This means an average increase of 3.24 €/MWh in Flanders, 12.51 €/MWh in Wallonia and 2.77 €/MWh in Brussels. For business customers in Belgium the average price dropped by 1.29%. Here again, there are differences by region. On average, business customers in Flanders pay 1.28 €/MWh less for natural gas, whereas they pay 0.71 €/MWh and 0.11 €/MWh more, respectively, in Wallonia and Brussels.

##### • Functioning of and price trends on the wholesale electricity markets in 2015

As it has done every year since 2007, CREG examined the functioning of and price trends on the Belgian wholesale electricity market in the past year<sup>59</sup>. The objective of the study is to inform about certain important aspects of the Belgian electricity market, including the generation, consumption and exchange of electricity on power exchanges, interconnections with other countries and balancing.

<sup>56</sup> Study (F)160526-CDC-1540 on the use of electricity meters for low voltage in Belgium.

<sup>57</sup> Opinion (A)161128-CDC-1589 on draft law no 54-2070/001 amending the law of 11 April 2003 on the facilities built for the dismantling of the nuclear power plants and for the management of irradiated fissile material from those plants and amending the law of 29 April 1999 on the organisation of the electricity market.

<sup>58</sup> Study (F)160309-CDC-1516 on electricity and natural gas price components.

<sup>59</sup> Study (F)160526-CDC-1513 on the functioning of and price trends on the Belgian wholesale electricity market – monitoring report 2015. On 14 January 2016 CREG already drew up an initial concise note (Note (Z)160114-CDC-1506) containing an overview of the main price and consumption trends on the Belgian wholesale electricity and natural gas markets in 2015. This note preceded the more detailed studies conducted annually by CREG and referred to in this report.



As in 2014, the shutdown of several Belgian nuclear power plants had a clear impact on wholesale electricity prices in 2015 as well. As a result, gas plants started increasing their production from the fourth quarter of 2014 onwards, a trend that continued in 2015. On the other hand, net imports exceeded 21 TWh, the highest level in recent years.

The introduction of the flow-based market coupling mechanism between the countries of the CWE region on 20 May 2015 was an important moment for the Belgian electricity system and interconnections with the neighbouring countries. Since 21 May the available interconnection capacity has been used increasingly effectively.

Finally, 2015 was characterised by an increase in average prices on the day-ahead markets in Belgium and France, while prices in the Netherlands and Germany decreased. As a result of the restart of various nuclear power plants at the end of 2015, day-ahead prices for Belgium have dropped significantly.

- **CREG report on the relationship between costs and prices on the Belgian natural gas market in 2015**

As part of its permanent gas market monitoring task, on 16 August 2016 CREG issued a report on the relationship between costs and prices on the Belgian natural gas market in 2015<sup>60</sup>. It submitted this report to the Belgian Competition Authority.

- **European comparison of prices for large industrial customers**

In 2015 PwC conducted a study on behalf of CREG entitled 'A European comparison of electricity and gas prices for large industrial consumers'. This showed that the situation of Belgian industrial consumers was complex and that further research was necessary.

The follow-up study<sup>61</sup> conducted in June 2016 once again compares energy prices for six industrial consumers (four for electricity and two for natural gas, selected in consultation with the relevant sector organisations) in Belgium and the four neighbouring countries.

This follow-up study shows that Belgian industrial consumers that compete with industrial consumers that are considered 'electro-intensive' in the neighbouring countries are clearly at a competitive disadvantage where their energy bill is concerned. On the other hand, Belgian industrial consumers that compete with industrial consumers that are not considered 'electro-intensive' in the neighbouring countries clearly have a competitive advantage where their energy bill is concerned.

This study also shows that the criteria used in the neighbouring countries to define the term 'electro-intensive customer' differ between countries and even within countries, based on the degressivity mechanism. However, in the neighbouring countries the term 'electro-intensive customer' is never defined exclusively by the amount of electricity they take from the grid, which is currently the criterion used in Belgium for the degressivity mechanism applied to certain taxes and surcharges.

- **Supply of major industrial customers in Belgium**

In December 2016 CREG, on its own initiative, performed a study<sup>62</sup> on electricity supply to major industrial customers in Belgium in 2015 with the aim of improving the transparency of the supply of electricity to this customer group.

Analysis of industrial customers' supply contracts showed that it mainly concerns short-term contracts (1 or 2 years). In 2015 the energy prices charged were between 15 €/MWh and 79 €/MWh, with 50% of customers being charged between 52 €/MWh and 63 €/MWh. The annual electricity offtake on Elia's network dropped to 17.50 TWh in 2015, and this drop is explained by the five largest industrial customers. A comparison of energy exchanges between access-responsible parties (ARPs) in 2015 to those in 2011 leads to the conclusion that, besides increased exchanges via public marketplaces and the increase in energy procured through industrial ARPs via the Belpex daily market, competition in the over-the-counter market for the supply of industrial ARPs increased as well.

Concretely, this study is based on two studies performed in September 2016 on price-setting mechanisms governing energy prices applicable in 2015 in electricity supply contracts of large industrial customers of EDF Luminus<sup>63</sup> and Electrabel<sup>64</sup>. In these studies CREG compiled a detailed inventory of the mechanisms for setting the different energy price components based on which major Belgian industrial customers were billed. These studies aim to identify the main factors that influenced and will still influence in the future the energy prices charged to major Belgian industrial customers.

60 Report (F)160825-CDC-1553 on the relationship between costs and prices on the Belgian natural gas market in 2015. 61 'A European comparison of electricity and gas prices for large industrial consumers', 29 June 2016.

62 Study (F)161222-CDC-1600 on the supply of major industrial customers in Belgium in 2015.

63 Study (F)160916-CDC-1555 on price-setting mechanisms governing energy prices applicable in 2015 in electricity supply contracts of large industrial customers of EDF Luminus nv.

64 Study (F)160916-CDC-1554 on price-setting mechanisms governing energy prices applicable in 2015 in electricity supply contracts of large industrial customers of Electrabel nv.

### • Measures for improved operation of the wholesale market

At the end of June, the Minister for Energy asked CREG seven questions about the operation of the wholesale electricity market. In its Note<sup>65</sup>, CREG proposes twenty-five measures to improve the operation of this market. It also indicates which measures need to be taken at the national level and which ones at the European level.

#### 3.2.1.2. Safety net

The main objective of the safety net mechanism is to bring the energy prices offered by suppliers to both residential and business customers closer to the average of our neighbouring countries (Germany, France, the Netherlands).

The safety net mechanism is in operation, in principle, until 31 December 2017. The Belgian King may, however, decide at any time to end the mechanism if it appears to result in significantly disruptive effects on the market; CREG and the National Bank of Belgium are tasked with continuous monitoring of the mechanism to this end.

In the framework of this permanent monitoring, CREG published its third annual report<sup>66</sup> on the safety net mechanism in October 2016. In this report the focus is on identifying possible disruptive effects on the energy market caused by the safety net mechanism. The development of market shares, the number of changes of suppliers and the market concentration indexes show that there is a growing real competition which is not hindered by the safety net mechanism.

Over the period from December 2012 to June 2016 Belgian energy prices followed a falling trend. Over this period the

average Belgian electricity price – for household customers – fell by 45.8% and the gas price fell by 46.3%. In June 2016 the Belgian electricity price was 16.47% lower for household customers and 13.74% for SMEs compared to the average price in the neighbouring countries. The Belgian gas price for household customers was 10.11% lower than the average in the neighbouring countries, and 7.01% lower for SMEs. There was no stable trend in Belgian energy prices compared to the average in the neighbouring countries over the period from December 2012 to June 2016. This trend is closely connected to the development of the wholesale markets. In any case, to CREG these findings show that it is necessary to continue to monitor prices in the future.

### • Databases of energy prices

Since 2012, CREG has established, for each supplier operating in Belgium, for any variable type of contract and for any new standard contract, by consultation with them, a database to record the methodology for calculation of variable energy prices, including indexation formulas and the parameters that they use. To this end, and in order to keep the database up-to-date, CREG makes use of publicly available data (suppliers' websites) and the data that suppliers are obliged to submit to CREG every month.

In addition to the variable components, the database also includes all the products that have a fixed energy component.

All the elements included in the price formula of the energy component (subscription, indexation parameters and related coefficients, renewable energy and combined heat and power contributions) are included separately in the database. The energy component of the annual energy bill is then calculated

for certain standard customers<sup>67</sup> using relevant annual consumption levels.

The results are compared by sampling with those from the suppliers' calculation modules and the existing price comparison modules.

CREG also continuously compares the energy component for the supply of electricity and natural gas to household and SME end customers with the average energy component of neighbouring countries.

In the context of its general monitoring duties and, in particular, as part of the safety net mechanism, in 2012 CREG also established a permanent database of energy prices in the neighbouring countries (Germany, France, the Netherlands) and in the United Kingdom.

This way, in addition to the energy component, CREG monitors the all-in prices (total bill) in Belgium and in the neighbouring countries on a monthly basis.

The results obtained by CREG are, furthermore, checked by country by comparing them with the results obtained using the price simulators of neighbouring countries.

In an effort to improve both the content and clarity of its communication, CREG publishes infographics that provide a clear overview of the number of active suppliers and their product offer, as well as potential savings. The first infographic relates to the residential sector, and the second to businesses (SMEs and the self-employed).

<sup>65</sup> Note (Z)160711-CDC-1546 on measures aimed at improved market operation.

<sup>66</sup> Report (Z)161013-CDC-1566 on the monitoring of disruptive effects on the market as part of the safety net mechanism introduced by Article 20bis, §§1 to 5 of the Electricity Act and Article 15/10bis, §§1 to 5 of the Gas Act.

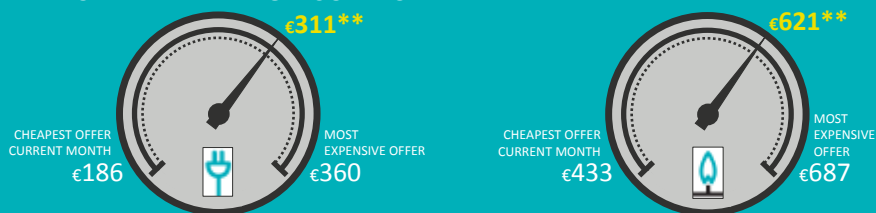
<sup>67</sup> Residential electricity: 3,500 kWh/year, single-rate meter and SME electricity: 50,000 kWh/year, single-rate meter; Residential natural gas: 23,260 kWh/year and SME natural gas: 100,000 kWh/year.

# INFOGRAPHIC RESIDENTIAL ENERGY MARKET DECEMBER 2016

—CREG—



## PRICE BAROMETER ENERGY COMPONENT



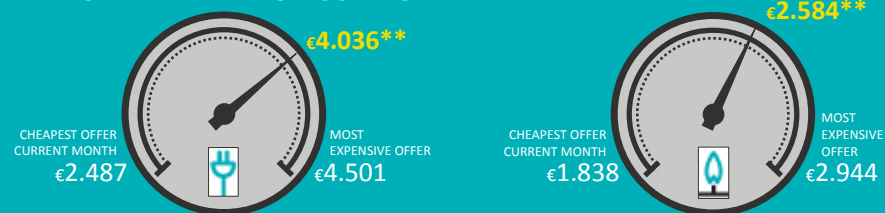
\*\* = AVERAGE PRICE PAID BY CONSUMER (weighted average based on number of contracts per product at the Belgian level)

# INFOGRAPHIC ENERGY MARKET SMES AND SELF-EMPLOYED DECEMBER 2016

—CREG—



## PRICE BAROMETER ENERGY COMPONENT



\*\* = AVERAGE PRICE PAID BY CONSUMER (weighted average based on number of contracts per product at the Belgian level)

Analysis of the energy component of prices and the continuous price comparison between Belgium and the neighbouring countries shows, as illustrated in the four figures below, that implementation of the safety net mechanism has brought about convergence between Belgian energy prices and those in the neighbouring countries. Monitoring nonetheless remains necessary.

#### • Scrutiny of price indexation criteria

Every three months, CREG takes a decision on the establishment of the correct application of the indexation formula and conformity with the exhaustive list of permitted criteria for the contract types with a variable energy price offered to residential end customers and SMEs by suppliers.

CREG's analysis found that the aforementioned indexation parameters and the resulting indexation formulas were stated in the tariff schedules in accordance with the full list of permitted criteria. CREG analysed the developments in the indexation parameters and examined data accuracy. The values as calculated by CREG matched the values used by suppliers on their tariff cards.

CREG used these values in the relevant price formulas and compared them with the prices stated on the tariff schedules. CREG found that the prices stated on the tariff schedules for the energy component accurately reflected application of the price formulas with the relevant indexation parameters.

Figure 6: Monthly change in electricity prices in 2016 for a residential customer = 3,500 kWh/year (energy component) (Source: CREG)

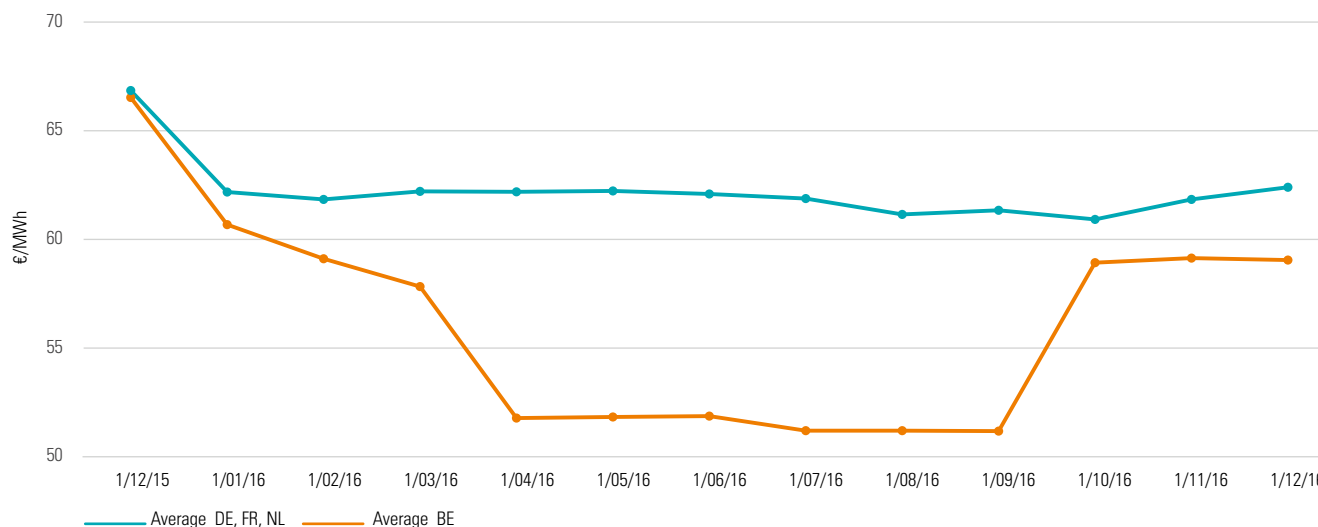


Figure 7: Monthly change in natural gas prices in 2016 for a residential customer = 23,260 kWh/year (energy component) (Source: CREG)

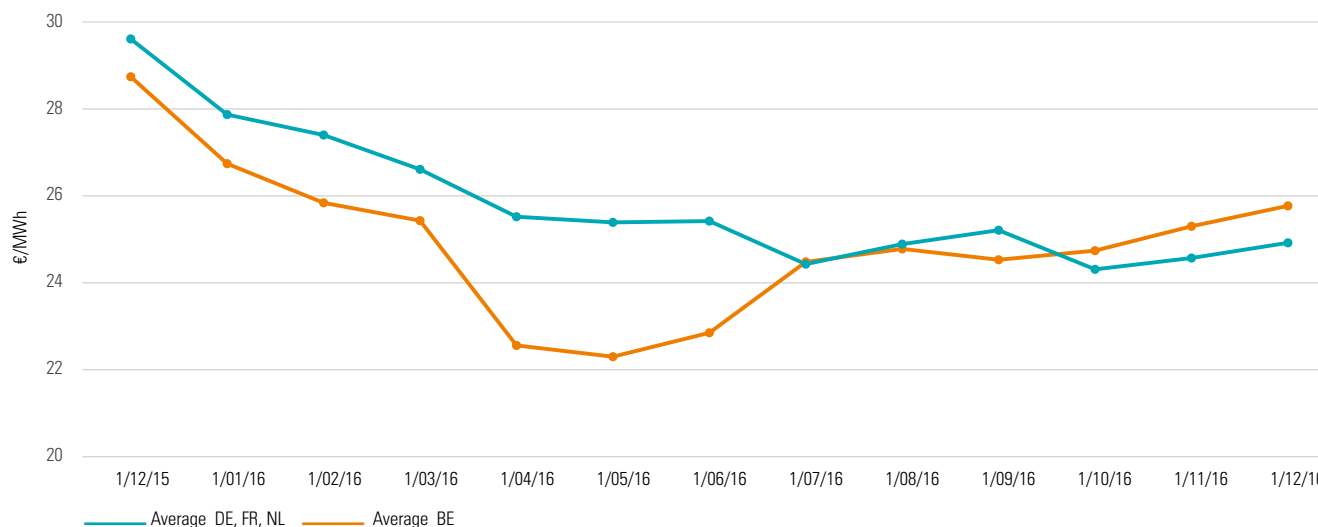


Figure 8: Monthly trends in the price of electricity in 2016 for SMEs and the self-employed = 50,000 kWh/year (energy component)  
(Source: CREG)

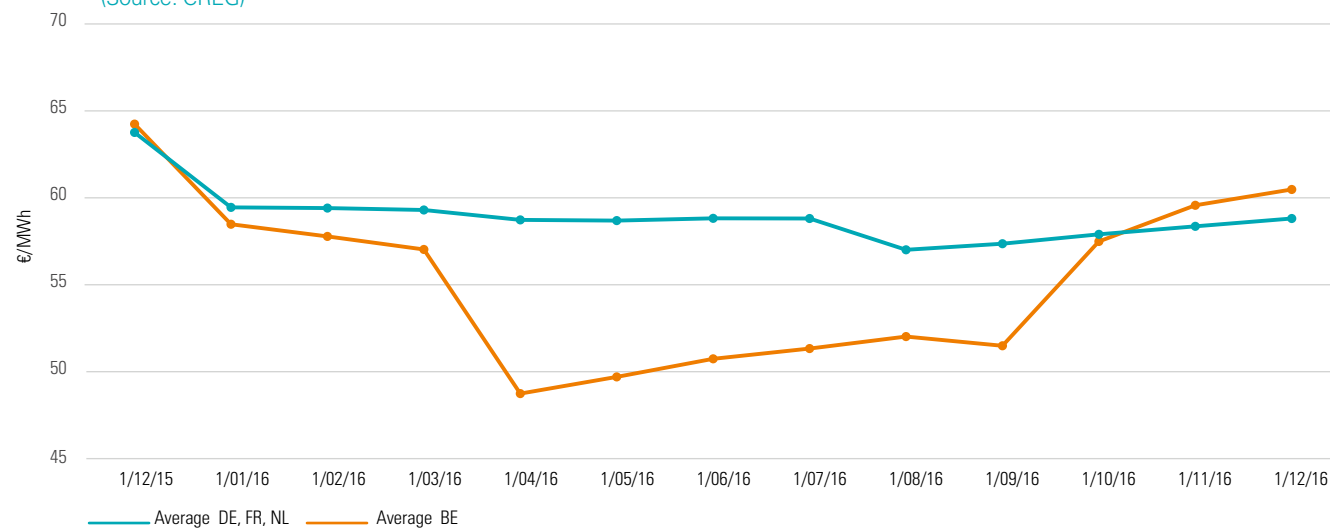
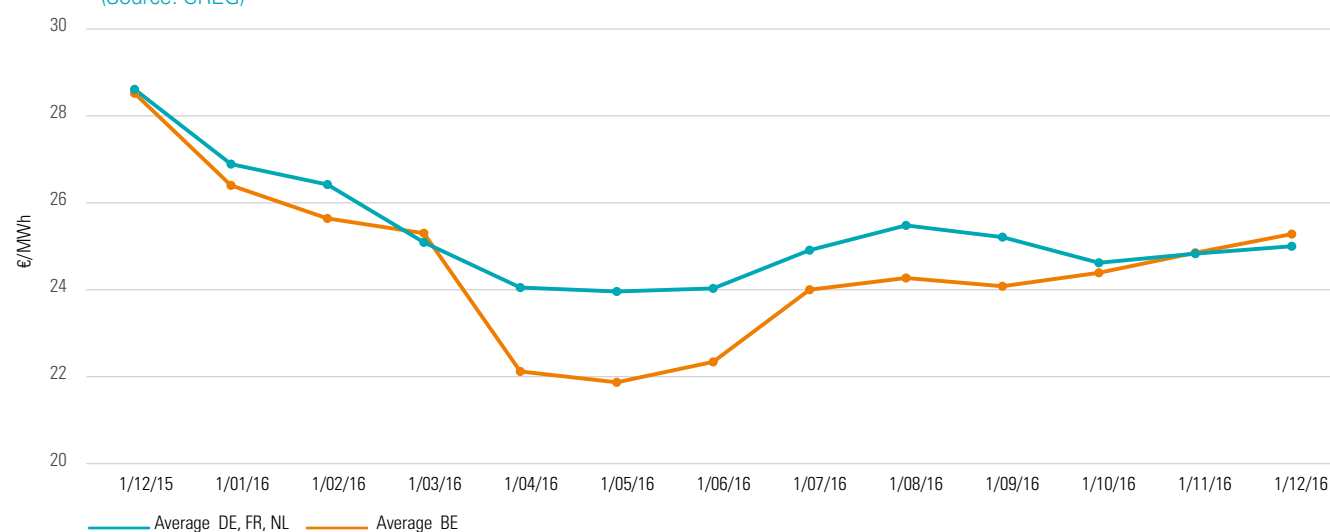


Figure 9: Monthly change in natural gas prices in 2016 for SMEs and the self-employed = 100,000 kWh/year (energy component)  
(Source: CREG)



Suppliers had therefore correctly applied their standard contract indexation formulas to the variable energy component.

As part of its legal monitoring duties with respect to the safety net mechanism, each year CREG undertakes an analysis of the parameters used by energy suppliers to calculate their prices. The 2015 analysis shows<sup>68</sup> that all parameters used demonstrate a clear link with the energy exchanges and that the elements on which their calculation is based are indicated. Market players can thus access clear and transparent information.

On 31 December 2015 suppliers were using 11 different indexation parameters for electricity and 7 for natural gas. These indexation parameters were used in the contract types with a variable price of 14 electricity suppliers and 14 natural gas suppliers.

68 Report (Z)160309-CDC-1517 on trends in indexation parameters of gas and electricity suppliers.

### 3.2.2. Monitoring market transparency and openness

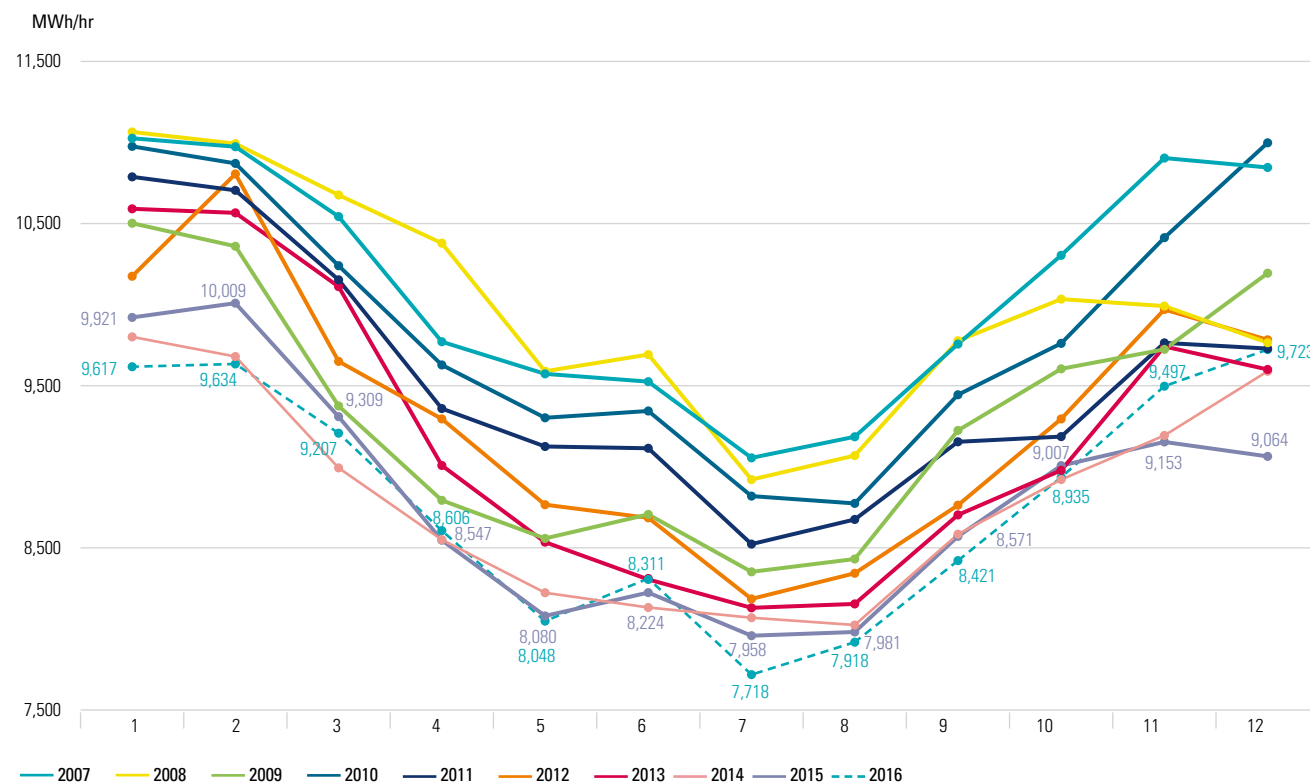
#### 3.2.2.1. Electrical power demand

According to the data submitted to CREG, the load<sup>69</sup> of Elia's network<sup>70</sup>, excluding power used by pumping power plants, in other words net consumption plus grid losses, was estimated at 77,295 GWh in 2016, compared with 77,184 GWh in 2015, i.e. almost identical to the year before; in the last three years of the period under review the lowest level of the last ten years was recorded. The peak 15-minute load in 2016 was estimated at 12,690 MW, compared with 12,584 MW in 2015 (Source: Elia, for 2016: provisional data, February 2017).

Figure 10 shows the average monthly load on the Elia network per year for the years 2007 to 2016. After a steep reduction in the load from October 2008 following the economic crisis, which also continued into 2009, levels recovered in early 2010. The recovery did not last, however, as the decline in load recommenced the following year to reach its lowest average levels in 2014, 2015 and 2016. Compared to 2007, the decrease in the average load was 13.0% in 2016. These figures have not been weighted for meteorological factors.

Local power generation by sites connected to the Elia network is not fully taken into account in these figures. Synergrid estimated this local production at 10.1 TWh in 2016 (9.5 TWh in 2015), i.e. a 6.6% increase compared to 2015.

Figure 10: Average monthly load on the Elia network from 2007 to 2016. (Sources: Elia data, CREG calculations)



#### 3.2.2.2. Market share of wholesale generation

The table below provides an estimate, in both absolute value (in GW) and in relative value, of the Belgian market shares in electricity generation capacity at the end of each year.

The table shows that Electrabel still has a substantial market share (66.8%) of total generation. The second player in order of size is EDF Luminus, which has a market share of 14.8% in terms of generation capacity.

The third player in terms of size in Belgium is E.ON, which has 3.3% of generation capacity. Its share has been experiencing a strong decline since the progressive end of the Electrabel/E.ON agreements. The fourth and fifth players are T-Power and POWEO (acquisition of ENEL's CCGT), each of which has a combined-cycle gas turbine (CCGT) with a capacity of just over 400 MW. A gas-steam turbine of this size represents just under 3% of generation capacity in Belgium.

<sup>69</sup> The Elia network load is based on the injections of electrical power into Elia's grid. It includes net generation from (local) plants injecting a voltage of at least 30 kV and the net balance of imports and exports. Power generating facilities connected to distribution systems at a voltage under 30 kV are only included if their net injection into the Elia grid is measured. The power needed to pump water into storage tanks in pumping stations connected to the Elia network is subtracted. Injections by decentralised power generating plants connected to distribution systems at a voltage under 30 kV are not included in the Elia grid load.

<sup>70</sup> The Elia network includes grids at a voltage of at least 30 kV in Belgium as well as the Sotel/Twinerg system in the south of the Grand Duchy of Luxembourg.

Table 7: Wholesale market shares in electricity generation capacity (Sources: Elia data, CREG calculations)

	Production capacity (GW)										Market share (%)										
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Electrabel	13.1	13.6	12.0	11.5	11.2	10.9	9.9	9.4	9.5	9.5	85%	85%	74%	70%	68%	67%	66%	66%	67%	67%	
EDF-Luminus <sup>(1)</sup>	1.9	2.0	2.3	2.4	2.4	2.3	2.2	1.8	1.7	2.1	12%	13%	14%	14%	14%	14%	15%	13%	12%	15%	
E.ON	0.0	0.0	1.4	1.4	1.4	1.4	1.0	1.0	0.8	0.5	0%	0%	8%	8%	8%	8%	7%	7%	6%	3%	
T-Power	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0%	0%	0%	3%	3%	3%	3%	3%	3%	3%	
POWEO (ENEL)	0.0	0.0	0.0	0.0	0.4	0.4	0.4	0.4	0.4	0.4	0%	0%	0%	0%	2%	2%	3%	3%	3%	3%	
Others (<2%)	0.4	0.4	0.5	0.7	0.7	0.9	1.1	1.3	1.3	1.3	3%	3%	3%	4%	4%	6%	7%	9%	9%	9%	
Total	15.3	16.0	16.1	16.3	16.4	16.3	15.0	14.3	14.2	14.2	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
(1) The shares of SPE and EDF Luminus have been combined since 2010, given the takeover of SPE by EDF											HHI	7,440	7,350	5,820	5,220	4,900	4,740	4,660	4,540	4,690	4,730

Table 8: Wholesale market shares in power generated (Sources: Elia data, CREG calculations)

	Power generated (TWh)										Market share (%)										
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	
Electrabel	71.2	65.8	69.4	62.4	58.0	49.8	48.9	39.8	36.2	54.0	86%	85%	81%	72%	72%	70%	69%	67%	65%	78%	
EDF-Luminus <sup>(1)</sup>	9.3	9.4	12.2	12.2	9.3	8.5	8.8	7.8	6.9	6.8	11%	12%	14%	14%	12%	12%	13%	13%	12%	10%	
T-Power	0.0	0.0	0.0	0.0	1.0	0.5	0.4	1.4	2.2	2.6	0%	0%	0%	0%	1%	1%	1%	2%	4%	4%	
Others (<2%)	2.1	2.2	3.9	11.9	11.8	12.7	12.2	10.6	10.1	6.1	3%	3%	5%	14%	15%	18%	17%	18%	18%	9%	
Total	82.6	77.4	85.5	86.5	80.1	71.5	70.3	59.6	55.4	69.5	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	
(1) The shares of SPE and EDF Luminus have been combined since 2010, given the takeover of SPE by EDF.											HHI	7,570	7,370	6,800	5,520	5,490	5,120	5,090	4,750	4,530	6,160

The HHI, a widely used concentration index, rose slightly in 2016. With a value of 4,730, it remains very high. By way of comparison, a market is considered to be highly concentrated if the HHI is equal to or higher than 2,000.

Table 8 provides the same estimate, but in terms of the power actually generated. Globally speaking, the units connected to Elia's network generated nearly 69.5 TWh in 2016, which means a significant increase (25.4%) compared to the previous year. This development is the consequence of the restart of nuclear production, which was 66.9% higher than in 2015, the year with the lowest nuclear production in the decade. 2011 was the last year nuclear production was higher than 2016.

Electrabel was the only of the four major electricity producers whose market share increased, to 77.7% of total production, as a result of a higher availability of the Belgian nuclear capacity.

Electrabel reinforced its dominant position in 2016 to a level it had not experienced since 2010. This recent development explains the severe deterioration of the HHI, from 4,530 in 2015 to 6,160 in 2016.

### 3.2.2.3. Energy exchange

#### • The Belpex market regulations

Belpex was appointed in January 2006 to set up the Belgian electricity exchange, a platform where transactions are concluded relating to the trade of electricity in order to ensure supplies in the Belgian control zone by means of injections and/or offtakes. The creation of Belpex coincided with the first start of the coupling of the Dutch, Belgian and French markets.

In the framework of the integration of the activities of APX and Belpex into EPEX Spot, Belpex proposed some changes to its market regulations.

In 2016 CREG formulated three opinions on applications for amendments to the Belpex market regulations.

On 16 December 2015 CREG received the first request from the Minister for Energy to issue an opinion on the proposed amendments to the Belpex market regulations. This proposal was submitted, among other things, to adapt the market regulations to the clearing model that is applied by European Commodity Clearing AG. CREG assessed the dossier presented by Belpex and recommended that the proposed amendments to the regulations be explained<sup>71</sup>. This opinion led to the Ministerial Decree of 25 January 2016 on the approval of the amendments to the market regulations for the exchange of energy blocks (Belgian Official Journal of 30 March 2016).

On 19 July 2016 CREG issued an opinion<sup>72</sup> following the application for approval of the amendments to the Belpex market regulations proposed by Belpex with a view to the replacement of the transaction platform Eurolight. CREG reiterated that the general principles of non-discrimination, objectivity and a level playing field must be observed in the market regulations. The opinion issued by CREG on 22 September 2016<sup>73</sup> refers to a modified proposal for amendment of the Belpex market regulations following the remarks formulated by CREG on 19 July 2016. In its opinion, CREG urges the Minister once more to have the proposal for amendment of the Belpex market regulations modified in light of the remarks formulated in this opinion or, if necessary, to ask Belpex why these modifications cannot be made. CREG's opinion led to the Ministerial Decree of 28 September 2016 on the approval of the amendments to the market regulations for the exchange of energy blocks (Belgian Official Journal of 17 November 2016).

#### • Designation of NEMOs

On 14 January 2016 CREG, at the request of the Minister for Energy, issued two opinions<sup>74</sup> in the framework of the respective requests from Belpex and Nord Pool Spot AS (Nord Pool) to be designated as a Nominated Electricity Market Operator (NEMO).

In these two opinions CREG reached the conclusion that Belpex and Nord Pool Spot had demonstrated that they fulfilled the designation criteria of Article 6 of Commission Regulation (EU) no 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management.

By Ministerial Decree of 28 January 2016 (Belgian Official Journal of 5 February 2016) Belpex nv was designated as 'Nominated Electricity Market Operator (NEMO)' to perform tasks relating to uniform day-ahead or uniform intraday coupling in accordance with Commission Regulation (EU) no 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management.

By Ministerial Decree of 28 January 2016 (Belgian Official Journal of 5 February 2016) Nord Pool AS was designated as 'Nominated Electricity Market Operator (NEMO)' to perform tasks relating to uniform day-ahead or uniform intraday coupling in accordance with Commission Regulation (EU) no 2015/1222 of 24 July 2015 establishing a guideline on capacity allocation and congestion management.

At the end of October 2016 Elia submitted an application to CREG for approval of Multiple NEMO Arrangements for the Belgian bidding zone. CREG decided to approve the proposed regulations<sup>75</sup>.

<sup>71</sup> Opinion (A)160107-CDC-1502 on the application for approval of the amendments to the Belpex market regulations proposed by Belpex.

<sup>72</sup> Opinion (A)160719-CDC-1549 on the application for approval of the amendments to the Belpex market regulations proposed by Belpex.

<sup>73</sup> Opinion (A)160922-CDC-1567 on the application for approval of the amendments to the Belpex market regulations proposed by Belpex.

<sup>74</sup> Opinion (A)160114-CDC-1501 on the request from BELPEX NV/SA to be designated as Nominated Electricity Market Operator (NEMO); Opinion (A)160114-CDC-1503 on the request from Nord Pool Spot AS to be designated as Nominated Electricity Market Operator (NEMO).

<sup>75</sup> Decision (B)1575 of 22 December 2016 on the proposal of plc Elia System Operator for Multiple NEMO Arrangements (MNA) for the Belgian bidding zone.



### • CWE market coupling

Despite the progressive coupling of markets, price convergence in the CWE (Central Western Europe) region has still not materialised. This can be explained by various factors, such as the consecutive shutdown of several Belgian nuclear power plants over the past years (see section 3.2.2.2 of this report) and the presence of loop flows (see CREG study no 1520 on the price peaks recorded on 22 September and 16 October 2015 on the Belgian day-ahead electricity exchange Belpex).

In general terms, the highest average prices over the period studied (2007-2016) were seen in the CWE region in 2008, a year not only of tariff inflation but also the first year of the financial and economic crisis. Then, average prices fell and reached their lowest level in 2016.

In 2016 the average price in France and Belgium was approximately 36.6 €/MWh, i.e. a level 14% and 26% higher, respectively, than that in the Netherlands and Germany.

With the exception of February 2012 – an extremely cold month – Belgian and French prices converged strongly over two years from July 2010. However, from August 2012, tariff convergence lessened each month, particularly due to the closure of several Belgian nuclear power plants. This trend was accentuated and even accelerated in 2014. By contrast, in 2015 price convergence between the markets deteriorated between Belgium and France, on the one hand, and between the Netherlands and Germany, on the other. In 2016 the average price in Belgium was equal to that in France. The trend towards greater convergence between the average price in the Netherlands and that in Germany continued in 2016.

The lack of greater price convergence in the CWE region in 2016 is mainly due to the tense situation on the markets from September to December.

Among the four countries, price convergence between Belgium and Germany is by far the weakest. This drop in price convergence is probably due in large part to the unavailability of a large part of Belgian nuclear capacity from August 2012.

The February 2012 price peak, resulting from the cold snap, was not observed to the same extent thereafter, despite the unavailability of several Belgian nuclear power plants. Thanks to coupling with foreign markets, Belgian short-term prices continued their general downward trend but to a much lesser extent.

Figure 11: Monthly average prices of the daily market for the supply of electricity in the countries of the CWE region for the period 2007-2016 (Sources: Belpex, EPEX Spot, EEX, CREG calculations)

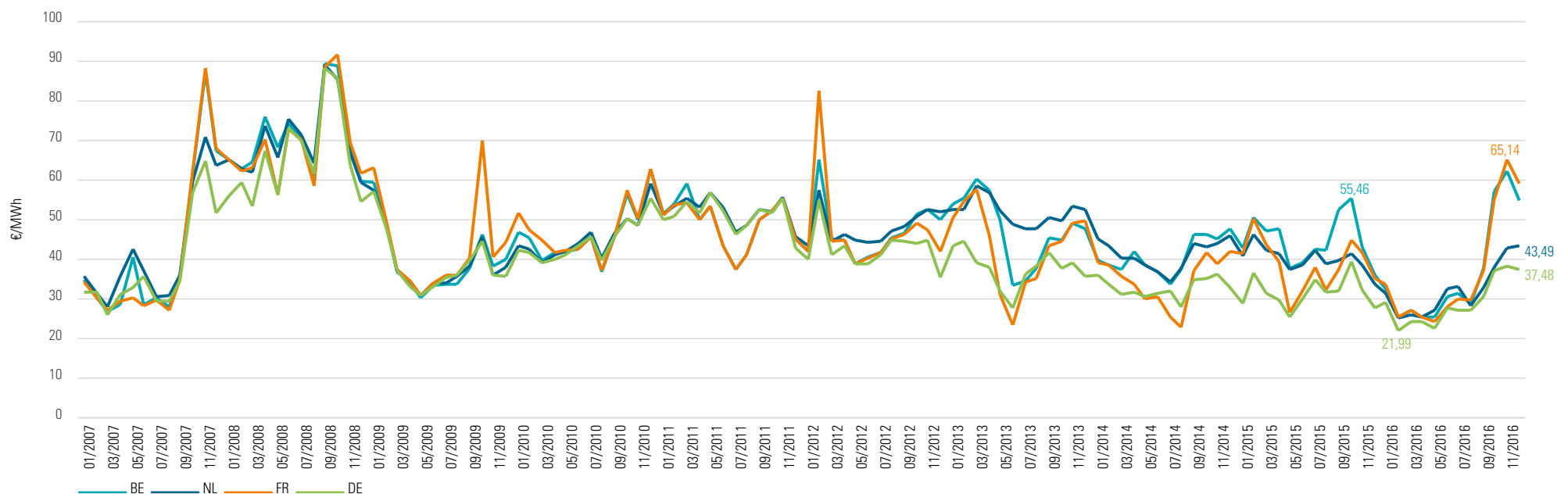
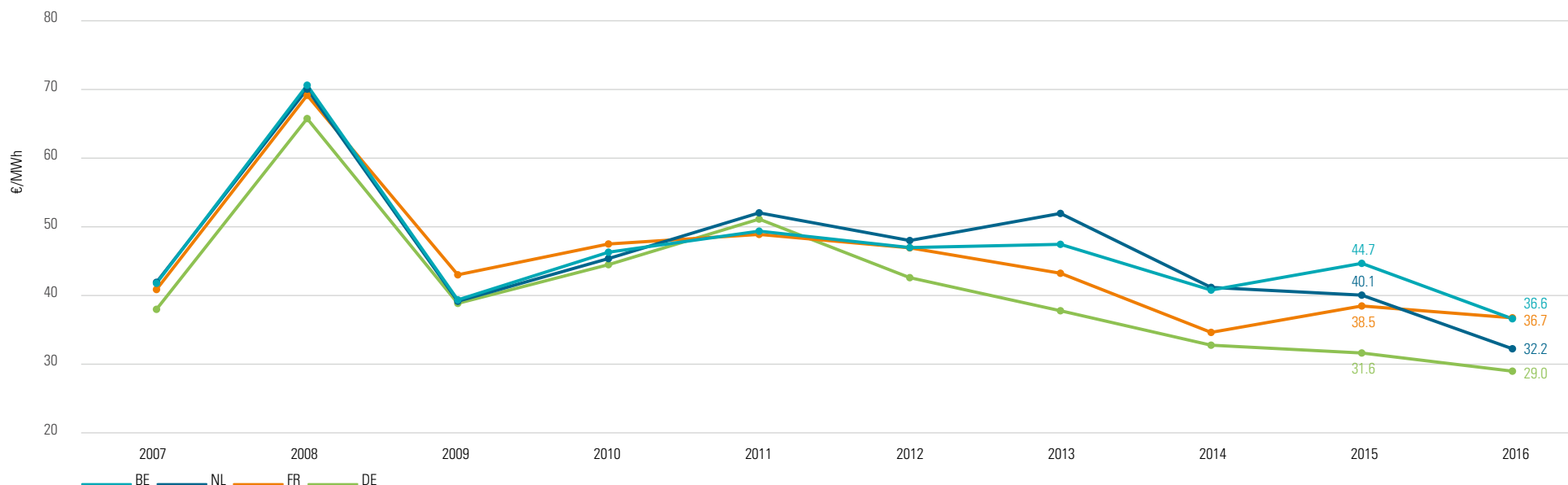


Figure 12: Monthly annual prices for the supply of electricity in the countries of the CWE region for the period 2007-2016 (Sources: Belpex, EPEX Spot, EEX, CREG calculations)



The total volume traded on the Belpex DAM was 19.6 TWh in 2016, compared to 23.7 TWh in 2015 and 19.8 TWh in 2014. The volume traded on Belpex accounts for approximately 25.4% of the total offtake from the Elia grid. The traded volume decreased, whereas the volume produced by the Belgian nuclear power plants increased sharply.

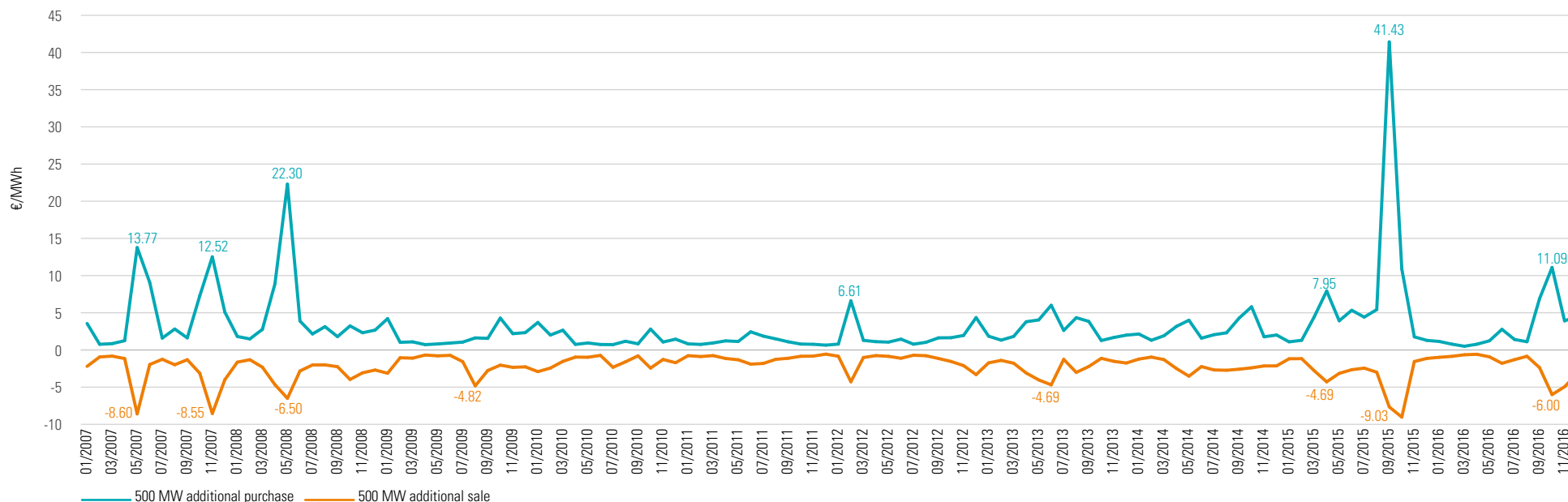
At the end of 2016 Belpex DAM comprised forty-three market participants, eleven less than in 2015.

The sensitivity of the electricity price to additional purchase volumes (market depth) is an important factor.

Figure 13 illustrates this sensitivity of the Belpex DAM price, i.e. the relative average monthly rise or fall in the price if an additional 500 MW were to be bought or sold. The greater the price sensitivity, the more easily the price can be manipulated. The high sensitivity of the price in 2007 and early 2008 diminished significantly until the end of 2012 (except in February), indicating that the market was becoming more robust in coping with additional supply and demand. From 2013, the trend reversed, reaching a climax in September 2015 for the period under review. 2015 ended as it began, with renewed strength.

The volatility in September can be explained by high prices (peak on 22 September 2015 at 448.70 €/MWh) in low volumes. During the last quarter of 2016 sensitivity was higher than during the rest of the year. Sensitivity increased especially in October, with an average increase of 11.09 €/MWh with an additional purchase of 500 MW.

Figure 13: Monthly average strength of the Belpex market between 2007 and 2016 (Sources: Belpex, CREG calculations)



Since March 2008 Belpex has been organising an intraday stock exchange on which market participants can exchange energy on an intraday basis. The intraday market provides market participants with the possibility to manage their unexpected changes in expected injection or offtake after the closure of the day-ahead market via a public market. Unexpected changes include, for instance, the unexpected unavailability of a plant, but also changes resulting from updated forecasts of wind and solar energy injections. The figure below shows that the volume traded increased year on year until 2014.

The fact that the Belpex intraday exchange was implicitly coupled with the Dutch exchange in 2011 may have had a positive influence on the volumes traded. However, 2015 put an end to this steady progression. In 2015 the volumes decreased, but in 2016 they started to increase again and reached a volume of more than 1 TWh for the first time since the organisation of the intraday exchange. In 2016 a traded volume of 1,028 GWh was reached.

The figure below also shows that the average price in 2016 on the intraday market dropped to 37.97 €/MWh, the lowest level since 2009. The intraday prices are higher than the day-ahead prices, mainly owing to the fact that there are more intraday transactions during peak hours, when prices are inevitably higher.

Figure 14: Energy exchanged and average price on the intraday exchange (Source: Belpex data, CREG calculations)

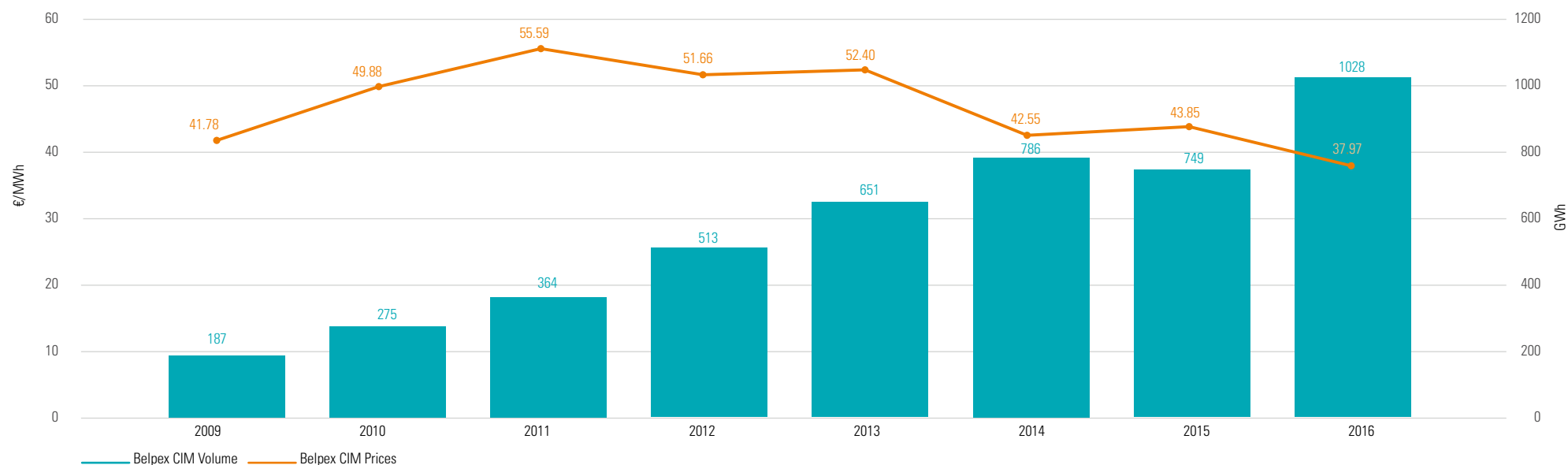
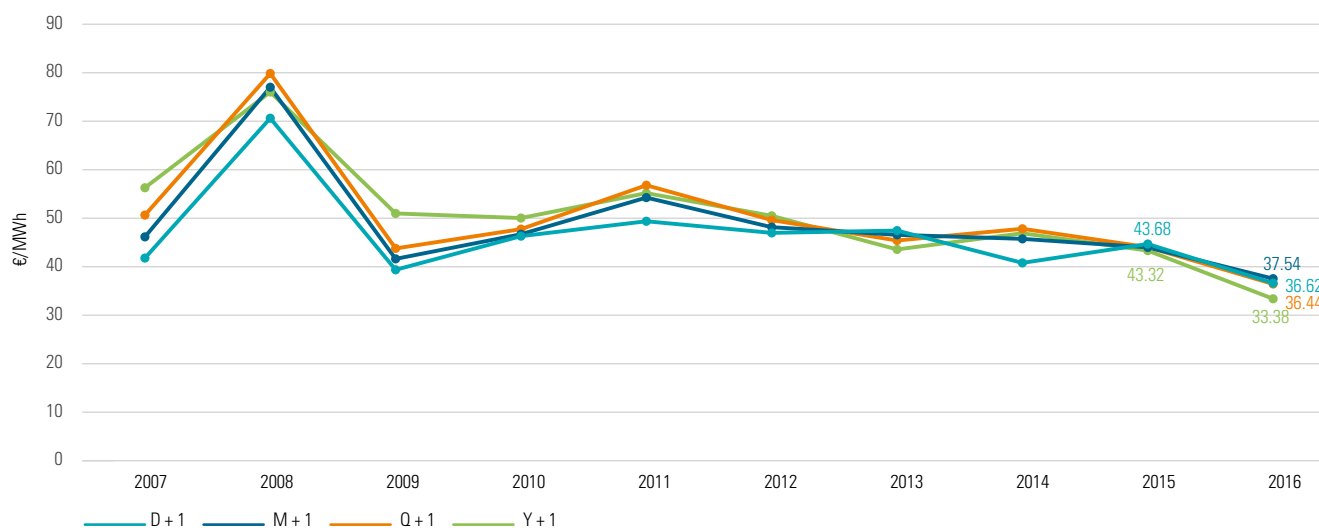


Figure 15 compares wholesale prices for short-term and long-term contracts. The long-term contracts concluded are contracts for the following month (M+1), the following quarter (Q+1) and the following year (Y+1). The figure shows the average transaction price per calendar year per product. While in 2014 the trend in long-term prices was different to that of short-term prices (D+1), 2015 shows, by contrast, high average price convergence, regardless of deadline. This convergence continues in 2016 for the day-ahead, month-ahead and quarter-ahead products, while the year-ahead product experienced a stronger decrease compared to the other prices, with a difference of around 3.5 €/MWh.

Figure 15: Comparison of wholesale prices for short-term and long-term contracts (Sources: Belpex, EEX, APX, CREG calculations)



### 3.2.2.4. REMIT

The REMIT regulation (Regulation on wholesale Energy Market Integrity and Transparency) sets out a series of instructions aimed at preventing and punishing market abuse in the wholesale energy sector. Since 28 December 2011, market players have had to comply with REMIT's basic rules, but the creation of coordinated monitoring structures (registering market players, data collection, monitoring, sanctions) did not become operational until 2015.

In the framework of REMIT the market players involved in the second phase of data collection had to register by 7 April 2016 at the latest. This phase refers to standard contracts outside the organised marketplaces, non-standard contracts, large consumers (> 600 GWh/year) and fundamental data.

Before 7 July 2016 the market players registered in the framework of REMIT had to provide information on all contracts falling under REMIT and entered into prior to 7 April 2016.

In 2016 CREG performed analyses of seven potential cases of breach of the REMIT Regulation.

### 3.2.2.5. Charter of best practices for electricity and gas price comparison websites

In 2016 CREG also continued to monitor compliance with the charter of best practices for electricity and gas price comparison websites by the service providers that signed it. This monitoring takes place by means of random checks (see also section 3.3 below).

On 31 December 2016 five price comparison websites carried the label of the charter. These are VREG V-test (Flanders), CWaPE COMPACWaPE (Wallonia), Brugel BruSim (Brussels), Mijn Energie (Belgium) and Energie-Vergelijker (Belgium).

## 3.3. Consumer protection

CREG continued to stress the consumer protection aspect of its work in 2016.

During a press lunch organised on 5 January 2016 CREG placed the emphasis on the savings consumers can achieve by comparing suppliers' offers. CREG also pointed out once more that hundreds of thousands of customers have 'sleeping' contracts that are no longer actively offered on the market. As a result, it is impossible for these customers to compare the prices offered by the suppliers.

In February 2016 CREG, at the request of the Minister for Energy and the Minister for the Economy and Consumers, carried out an assessment of the consumer agreement. On 31 December 2016 this work was still ongoing.

In March 2016 CREG published its annual study on the development of electricity and natural gas price components (see section 3.2.1.1 of this report).

In its May 2016 study on the use of electricity meters for low voltage in Belgium CREG formulated recommendations to help households and SMEs choose between a single-rate, dual-rate or night-only meter (see section 3.2.1.1 of this report).

In October 2016 CREG published its annual report on the safety net mechanism. In this report the focus is on identifying possible disruptive effects on the energy market caused by the safety net mechanism (see section 3.2.1.2 of this report).

In December 2016 CREG carried out a study on the supply of major industrial customers in Belgium. The aim of this study is to improve the transparency of the supply of electricity to major industrial customers (see section 3.2.1.1 of this report).

In addition, CREG continued with the publication of infographics and the monthly dashboard for electricity and natural gas on its website (see section 3.1.2.3 of this report).

CREG also continuously compares the energy component for the supply of electricity and natural gas to household and SME end customers with the average energy component in the neighbouring countries (see section 3.2.1.2 of this report).

CREG also publishes the gas contributions TTF101 and TTF103 each month. Every three months it publishes the indexation parameters for the variable products that are used by each supplier and monitored by CREG.

The charter of best practices for electricity and gas price comparison websites aims to assign a label to price comparison websites in order to enable customers who compare prices to be sure they are receiving impartial and accurate information about the products offered by the suppliers. In the framework of its duty of consumer protection, CREG continued to monitor compliance with the provisions of the charter in 2016. It also checks that legitimate use is made of the label assigned under the charter (see section 3.2.2.5 of this report). At the end of 2016 CREG made an assessment of the charter with a view to consultation with stakeholders on a revised version of the charter of best practices. Finally, CREG took part in a CEER study on the creation of guidelines on best practices for price comparison tools for the retail energy market.

All these studies and publications are intended to provide consumers with better information on the prices in force in the retail market as well as their evolution.

Furthermore, readers are referred to sections 5.8.2 and 5.8.3 of this report on the work carried out by CREG within the working groups of ACER, CEER and the European Commission dealing with aspects relating to consumer protection in the field of energy.

CREG has continued, on a voluntary basis, to deal with questions and complaints addressed to it and to cooperate with the federal and regional mediation services for energy-related complaints (see 5.5 hereof).

In addition, the CREG website was updated in December 2016 (see section 5.6 of this report).

### 3.4. Security of supply

#### 3.4.1. Monitoring the balance between supply and demand

##### • Demand<sup>76</sup>

The load on the Elia network was 77.30 TWh in 2016, compared with 77.18 TWh in 2015, which means a 0.1% decrease between 2015 and 2016.

Table 9: Elia network load (power and peak capacity) for the period 2007-2016 (Source: Elia, 2016: provisional data)

	Energy (GWh)	Peak capacity (MW)
2007	86,619	14,033
2008	87,760	13,431
2009	81,575	13,513
2010	86,501	13,845
2011	83,350	13,201
2012	81,717	13,369
2013	80,534	13,446
2014	77,161	12,736
2015	77,184	12,634
<b>2016</b>	<b>77,295</b>	<b>12,734</b>

##### • Installed capacity and generated power

During the year 2016, the installed production capacity connected to the Elia grid in Belgium that is not part of the strategic reserve declined compared with 2015, from 14,502 MW to 13,978 MW. This decline is mainly due to the shutdown of the last Belgian coal-fired power plant at Langerlo. At the end of 2016 the total production capacity that is part of the strategic reserve was 750 MW (units at Seraing and Vilvoorde).

Table 10: Breakdown by plant type of installed capacity connected to the Elia network as at 31 December 2016 (Source: Elia)

Power plant type	Installed capacity	
	MW	%
Nuclear plants	5,919	42.3
CCGT and gas turbines	3,793	27.1
Conventional power plants	315	2.3
Cogeneration	837	6.0
Incinerators	230	1.6
Diesel engines	5	0.0
Turbojets	201	1.4
Hydro (excluding pumping power plants)	86	0.6
Pumping power plants	1,308	9.4
Onshore wind turbines	186	1.3
Offshore wind turbines	713	5.1
Biomass	385	2.8
<b>Total</b>	<b>13,978</b>	<b>100.0</b>

Table 11: Breakdown by primary energy type of electricity produced in 2016 by plants located on sites connected to the Elia network

Primary energy	Power generated	
	GWh	%
Nuclear <sup>1</sup>	41,430	57.7
Gas <sup>1</sup>	17,503	25.3
Coal <sup>1</sup>	1,814	2.5
Fuel <sup>1</sup>	0	0.0
Other self-generated power used locally <sup>3</sup>	2,325	3.2
Hydro (including pumping power plants) <sup>1</sup>	1,334	1.9
Other <sup>1</sup>	7,393	10.3
<b>Total<sup>2</sup></b>	<b>71,800</b>	<b>100.0</b>

1 Source: Elia, provisional data

2 Source: Synergrid, provisional data

3 Source: CREG calculations (values not supplied by Elia)

#### 3.4.2. Monitoring TSO investment plans

Based on the development plan for the electricity transmission system, CREG continued to monitor the planned investments in the system infrastructure in 2016. This plan is drawn up by electricity transmission system operator Elia in conjunction with the Directorate-General for Energy and the Federal Planning Bureau.

#### 3.4.3. Operational security of the grid

The graph below illustrates the changes in the maximum physical load for the interconnectors with France and the Netherlands. This physical load is a combination of flows resulting from commercial imports to and exports from Belgium and of flows resulting from transit through the Belgian

<sup>76</sup> The demand under consideration here is the Elia network load, calculated as the balance of net power generation injected into the Elia network, imports and exports, minus the energy pumped by pumping power plants. It is therefore the sum of net offtake plus network losses.

network. In 2016 the highest peak flows in the past 10 years were recorded, both on the interconnectors with France and the Netherlands, and in both directions.

The maximum peak flow of 3,341 MW at the Dutch border in the direction of the Netherlands (export) was recorded in the month of August, the only month with a net export for Belgium and a net import for the Netherlands. The maximum peak flow of 3,982 MW at the Dutch border in the direction of Belgium (import) was recorded in December 2016, when both Belgium and France imported from Germany and the Netherlands. In October and November peak flows of more than 3,800 MW were recorded in that direction as well.

The maximum peak flow of 3,218 MW at the French border in the direction of France (export) was recorded in January 2016, when France was importing. In December 2016 there was a peak flow of 3,009 MW (export). The value of the peak flow in the direction of France was lower in December than in January because Belgium was also a net importer of electricity in December. The peak flows at the French border in the direction of Belgium (import) were recorded in March, May, June and July; with a maximum of 3,962 MW in June.

To be able to cope with difficult situations, coordination with neighbouring TSOs once again proved essential.

Coreso, the first regional technical coordination centre shared by several TSOs, created on 19 December 2008 by the Belgian and French TSOs (Elia and RTE), plays a major role here. REE (the Spanish TSO) became a member of Coreso in 2016, after National Grid, Terna, 50 Hertz and REN.

### 3.4.4. Investment in cross-border interconnections

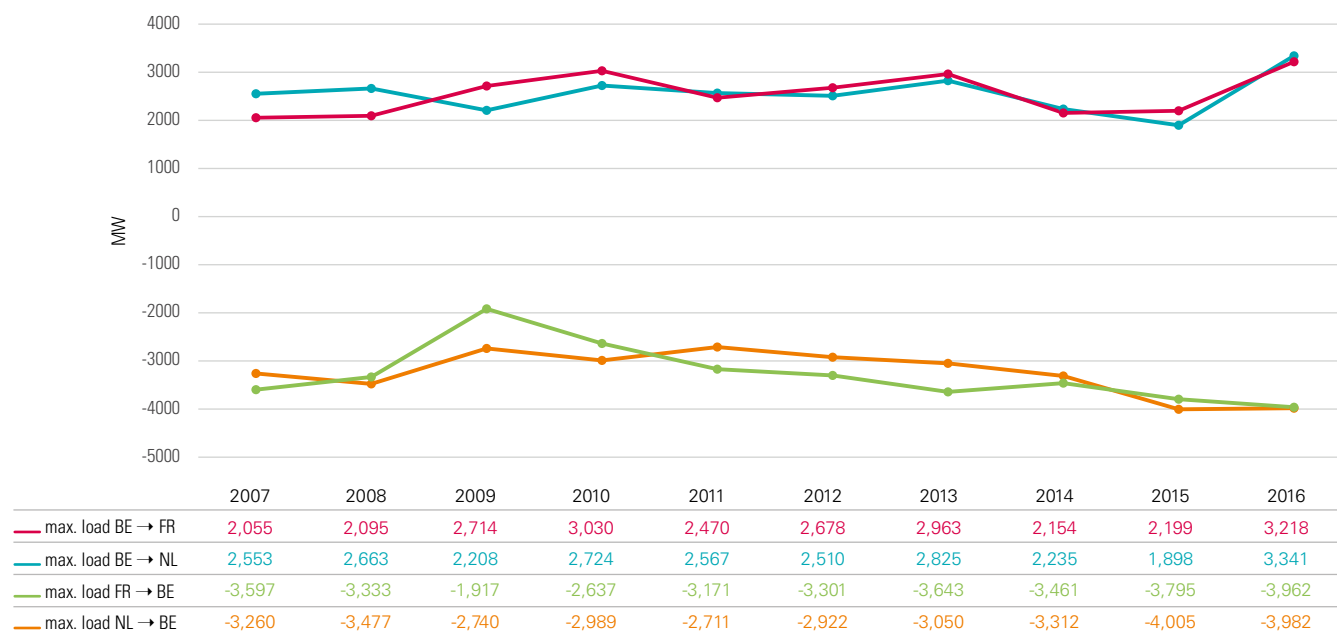
Elia's short and medium-term ambition is to strengthen existing interconnections with the Netherlands and France and to develop new interconnections with the United Kingdom, Germany and the Grand Duchy of Luxembourg.

Most of these projects have been included in the European Commission's list of 'Projects of Common Interest (PCI)'<sup>77</sup>, confirming their general importance in the context of European energy policy and the need to strengthen the electrical infrastructure derived from it.

#### • Planned strengthening of the northern border (BRABO project)

During 2016, the second Zandvliet phase shifter<sup>78</sup> was erected in a configuration in parallel with an upgrade of the second Doel-Zandvliet circuit from 150 to 380 kV. In the scenarios studied with a maximum output of 2,000 MW at Doel, these investments will increase interconnection capacity at the northern border from the Netherlands by about 1,000 MW. Elia estimates that if Doel's production exceeds 2,000 MW, the additional northern border interconnection capacity of 1,000 MW will only be fully used after the completion of the second and third phases of the BRABO project.

Figure 16: Changes between 2007 and 2016 in the maximum physical load for the interconnections with France and the Netherlands  
(Source: CREG, based on Elia data)



<sup>77</sup> Commission Delegated Regulation (EU) 2016/89 of 18 November 2015 amending Regulation (EU) No 347/2013 of the European Parliament and of the Council as regards the Union list of projects of common interest.

<sup>78</sup> The fourth on the northern border: two in Zandvliet and two at the Van Eyck substation in Kinrooi.

The second phase provides for the installation of a new 380 kV high-voltage line between the existing high-voltage substations at Zandvliet and Lillo and the Scheldt crossing at Liefkenshoek. According to the current schedule, the works of the second phase will take place between 2017 and 2020.

In the third phase the existing 150 kV connection from Liefkenshoek will be modernised and upgraded to 380 kV. This line runs from Liefkenshoek (municipality of Beveren) via the Kallo high-voltage station (municipality of Beveren) to the Mercator high-voltage station (municipality of Kruibeke). According to the current schedule, these works will be completed in 2023.

#### • Planned strengthening of the southern border

To respond to the current context of security of supply, Ampacimon modules were installed on existing links with France. These allow Elia to use these links to the full, up to their actual limit.

Nevertheless, in the medium term the links with France will require more structural reinforcements to continue to facilitate the operation of the market. The planned reinforcement involves replacing, by 2022, the existing conductors between Avelin/Mastaine (FR) and Avelgem (BE) and then up to Horta in Zomergem with so-called 'high-performance' conductors<sup>79</sup>, in order to increase the south border capacity by about 1,000 MW.

#### • Planned interconnection between Belgium and the United Kingdom (NEMO project)

The NEMO project involves the construction of a 1,000 MW direct current submarine cable about 140 km long.

This project will connect Richborough in the UK to the 'Gezelle' substation, which is part of the Stevin project erected in Bruges.

For Belgium, this means that energy can be exchanged directly with the UK, which should lead to greater security of supply in view of the diversification engendered by a new interconnection.

The final investment decision was taken in spring 2015 and the transformer station and cable connection contracts were allocated in mid-2015. Construction started in mid-2016. The technical completion of the new connection is planned for January 2019, after which its commercial operation can start.

#### • Planned interconnection between Belgium and Germany (ALEGrO project)

In this project, named ALEGrO (Aachen Liège Electric Grid Overlay), a DC cable with a capacity of about 1,000 MW will be installed over a distance of about 90 km between the substations of Lixhe (Visé) in Belgium and Oberzier in Germany.

This new interconnection will contribute, mainly through the market diversification offered through direct energy exchange between Belgium and Germany, to an increase in security of supply and will also facilitate further market integration, which will result in price convergence within the CWE region. Moreover, ALEGrO can play an important role in the integration of an increasing number of renewable energy sources.

The contracts for the transformer stations and the cable connection were awarded in the second half of 2016. Elia and Amprion (the German network operator) plan to obtain, by the end of 2017, all licences needed to start the works with a view to their technical completion by the end of 2019 and their commercial operation from 2020 onwards.

#### • Interconnector BeDeLux

Elia, Creos (the Luxembourg TSO) and Amprion are working on the interconnection of their networks. This project was named Interconnector BeDeLux. Its aim is to improve the security of supply of the Grand Duchy of Luxembourg and to create a commercial interconnection between the Belgian and the German markets.

In a first phase, Creos installed a 400MVA/220kV phase shifter at the Schiffange high voltage station (Luxembourg). Thanks to a better management of energy flows in the current network, this phase shifter will mainly contribute to the security of supply of the Grand Duchy of Luxembourg. In 2017 Creos will make additional investments in the Luxembourg transmission system in order to improve the coupling of the three countries.

After a thorough study and analysis of detailed data on the expected impact of the implementation of a new phase shifter of Creos on the day-ahead market, the project group (comprising Elia, Creos and Amprion) decided to postpone the commercial operation of the new BeDeLux interconnector. The current simulations from the impact analysis indicate that the impact on welfare in Central Western Europe would be neutral, while the operational processes would become much more complex. Additional analyses are required to guarantee that the necessary safety margins within the day-ahead period are not put at risk.

<sup>79</sup> High-performance or HTLS (high-temperature low-sag) conductors expand less than conventional conductors when operating at higher temperatures. A higher power flow can therefore be conveyed in the conductors and connection capacity is thereby increased.



The decision regarding the commercial operation of the new Creos phase shifter will be assessed after a one-year test phase, which will start immediately after the technical completion of the system (planned for early 2017). This will be based on a thorough assessment of the impact analysis and the technical parameters, and the lessons from the actual real-time use will be taken into account.

### 3.4.5. Measures to cover peak demand and deal with shortfalls

#### 3.4.5.1. Strategic reserve: winter period 2016-2017

On 15 January 2016 the Minister for Energy decided that no additional strategic reserve would be necessary for the 2016-2017 winter period. 750 MW of strategic reserve (a CCGT unit and an open-cycle gas turbine unit) was contracted in 2014 for a period of three years: this production capacity remains available as a strategic reserve during the 2016-2017 winter period.

In January 2016 CREG gave its comments on the terms of the process for the constitution of strategic reserves proposed by Elia for the winter period 2016-2017.<sup>80</sup>

In October 2016 CREG rendered a decision<sup>81</sup> on the operating rules of the strategic reserve proposed by Elia and applicable from 1 November 2016.

Before this decision was taken, a first consultation was organised in January 2016 on the proposal for operating rules for the strategic reserve and CREG's draft decision on this proposal, and a second consultation was organised in September 2016 on the changes CREG had made to its draft

decision taking into account an addendum to the proposal for operating rules it had received from Elia and taking into account its own findings regarding the operation of the strategic reserve during the 2015-2016 winter period.

The tariff for the 'strategic reserve' public service obligation, defined by CREG in January 2015, was 0.6110 €/MWh of net offtake in 2016. In addition, by its Decision of 17 November 2016<sup>82</sup>, CREG approved Elia's proposal regarding the tariff for the financing of the strategic reserve in force on 1 January 2017. This tariff is 0.1902 €/MWh.

#### 3.4.5.2. Access to demand management

##### • Participation of the flexibility of demand in the electricity markets in Belgium

In its report on the participation of the flexibility of demand in the electricity markets in Belgium<sup>83</sup> CREG proposes a new market model which gives end consumers with remote measurement systems a central role in the system. In this model end consumers have control over their own flexibility and are able to choose their flexibility service provider themselves, regardless of their electricity supplier. At this stage the report discusses the flexibility of demand at the level of end consumers with remote measurement systems (these are mainly industrial customers). According to CREG it is important to promote the participation of demand in the various electricity markets, but it advocates a phased approach. It is certainly not in favour of introducing smart meters everywhere.

As a result of the increase in intermittent renewable energy production, the electricity system has a growing need for flexibility. With a view to the country's security of supply, the

federal Government asked CREG to study 'the measures to be applied in order to facilitate access to the market for demand management'. The market model developed by CREG aims to allow end consumers with remote measurement systems (mainly industrial customers) to valorise the flexibility of their demand. This way, they will contribute to a safe operation of the system and to security of supply, and price peaks will be levelled out, which will have a positive effect for all end consumers.

The new market model proposed by CREG gives end consumers with remote measurement systems a central role in the system. In this model end consumers have control over their own flexibility and are entitled to valorise this flexibility without intervention by their supplier or its balancing manager. Furthermore, end consumers are entitled to choose their flexibility service provider, regardless of their electricity supplier. They remain the owners of their measurement and count data, and are entitled to pass it on. The model also guarantees the confidentiality of commercially-sensitive data.

The proposed market model is based on ten basic principles and provides for two new market roles: that of flexibility service provider and that of flexibility data manager. End consumers sell their flexibility to the service provider without intervention by the supplier. The service provider pays the supplier a financial compensation in the form of a negotiated price, or vice versa, depending on whether it concerns an increase or decrease in demand. In the absence of a negotiated agreement between the parties, a bilateral standard solution would be applied, based on a price formula, to ensure that the flexibility offer can be commercialised.

<sup>80</sup> Note (Z)160121-CDC-1507 on proposed methods for the establishment of strategic reserves – 2016-2017 winter period.

<sup>81</sup> Decision (B)161020-CDC-1494 on the proposal of Elia System Operator on the operating rules of the strategic reserve applicable from 1 November 2016.

<sup>82</sup> Decision (B)161117-CDC-658E/40 on the request for approval of the adaptation from 1 January 2017 of the tariffs for the financing of the public service obligations of the Strategic Reserve, submitted by Elia System Operator.

<sup>83</sup> Study (F)160503-CDC-1459 on the measures to be taken to facilitate the participation of the flexibility of demand in the electricity markets in Belgium – Final report.

Thanks to the central management of flexibility volumes, balancing responsibility can be transferred between the balancing managers involved in the activation of flexibility.

In its report, CREG further proposes to improve ancillary services (which guarantee the balance of the transmission system) as well as the access to the electricity markets. Today, these markets are also mainly aimed at electricity generation and could be opened up more to demand management.

At this stage the report discusses the flexibility of demand at the level of end consumers with remote measurement systems. These are end consumers equipped with meters on a 15-minute basis, mainly industrial customers. Participation by small consumers is a longer-term objective, taking into account the specific aspects connected to this.

This report was drawn up via an interactive approach, which started in September 2015. First, CREG consulted with the market players on the question as to what, according to them, were the main obstacles to the development of demand management. Then, CREG proposed a number of solutions. The final options were selected based on a workshop and bilateral contacts with these market players.

In order to apply the model proposed by CREG in practice, the Electricity Act will first need to be amended. The right of end consumers with remote measurement systems to valorise their flexibility will need to be included in this law, and a legal framework will need to be provided for the new market roles and data transfer. After that, Royal Decrees will need to be issued to implement the law.

#### •The need for adequacy and flexibility in the Belgian electricity system for the period 2017-2027

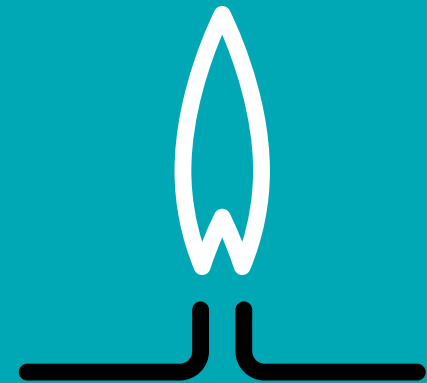
At the end of April Elia published its study on the need for adequacy and flexibility in the Belgian electricity system for the period 2017-2027. In its analysis<sup>84</sup> carried out by CREG at the request of the Minister for Energy, CREG considers this study a good basis for further study. However, Elia's estimate of the interconnection capacity used (6,500 MW) is too limited. The hypotheses regarding demand participation are also very conservative. CREG asks Elia to carry out a two-yearly update of the study to see how the situation develops.

CREG also proposes a number of measures itself to further improve market operation and security of supply. For instance, it advocates assigning responsibility to the balancing managers via the possibility of selective shedding, and improving liquidity on the intraday and forward markets. A possibility that requires further study is the introduction of scarcity pricing, a method to offset peak capacity in accordance with market conditions.

<sup>84</sup> Note (Z)160527-CDC-1532 on Elia's study on the need for 'adequacy' and flexibility in the Belgian electricity system for the period 2017-2027.

# 4

## The natural gas market



## 4.1. Regulation

### 4.1.1. Natural gas supply

#### 4.1.1.1. Federal natural gas supply licences

The supply of natural gas to customers (distribution companies or end customers whose gas offtake at each supply point permanently amounts to a minimum of one million m<sup>3</sup> per year) established in Belgium is subject to the prior granting of an individual licence issued by the Minister for Energy (except when it is carried out by a distribution company on its own distribution system).

The application dossiers for federal natural gas supply licences are sent to CREG, which examines the criteria and then sends its opinion to the Minister for Energy.

In 2016 CREG provided the Minister with four opinions concerning applications for natural gas supply licences from Gas Natural Europe, RWE Supply & Trading, Société Européenne de Gestion de l'Energie and Lampiris.<sup>85</sup>

In the course of 2016 the Minister for Energy issued an individual natural gas supply licence to Essent Belgium NV<sup>86</sup>, Enovos Luxembourg SA<sup>87</sup> (dossiers on which CREG submitted its opinion in December 2015) and RWE Supply & Trading GmbH<sup>88</sup>, Lampiris NV<sup>89</sup>, Gas Natural Europe SAS<sup>90</sup> and Société Européenne de Gestion de l'Energie NV<sup>91</sup>.

Furthermore, the natural gas supply licence of Electrabel Customer Solutions automatically expired in 2016 following its integration into Electrabel.

In 2016, total natural gas consumption<sup>92</sup> amounted to 179.4 TWh, which represents an increase of 2.1% compared with consumption in 2015 (175.8 TWh). We observe a far greater consumption for end customers connected to the distribution systems (+5.6%), a practically stable consumption for the generation of electricity (possibly combined with heat production) (+0.1%) and a slight decrease in consumption by industrial customers (-3.1%).

The number of companies carrying out supply services on the wholesale natural gas market remained stable in 2016. If we take into account the merging of transmission operations within a business of the same group, 23 companies were active on the Belgian transmission market last year.

The top 3 supply companies were also the same in 2016, as well as their respective positions. Electrabel Engie retained first place and saw its market share grow once more, from 31.4% to 34.6% (+3.2%). This makes Electrabel Engie the strongest riser in the market. Eni Gas & Power held on to second place but saw its market share reduced by 1.7% to 22.8%. Eni Gas & Power experienced the sharpest drop in market share. EDF Luminus grew by 0.4% and just reached the 10% threshold (10.0%).

RWE Supply & Trading retained fourth place and was able once more to increase its market share slightly (+0.3%) to 5.5%. Only these four market participants had a market share higher than 5%.

Wingas occupied fifth place despite a slight fall (0.17%) to 4.2%. Lampiris was sixth, but again suffered a small loss (-0.4%) and saw its market share drop below 4% (3.8%). Statoil, with 1.4%, experienced the second largest drop (3.6% market share) and went from fifth to seventh position. Vattenfall Energy Trading Netherlands's market share fell slightly (-0.4%) to 3.1%. Gas Natural Fenosa grew by 0.6% and crossed the 2% threshold again (2.5%). ArcelorMittal Energy S.C.A. maintained its 2.4% market share (+0.06%). Eneco België BV suffered a slight loss and ended up with 1.3%. Total Gas & Power maintained 1.1%. Enel Trade dropped by 0.2% to 1.1%. SEGE (Société européenne de Gestion de l'Energie) saw a relatively sharp drop in its market share (-0.6%) and was the last player with a market share above 1% (1.1%).

The other active system users were Antargaz, Belgian Eco Energy, Direct Energie Belgium, UNIPER Global Commodities, Enovos Luxembourg, European Energy Pooling, GETEC Energie, natGas and Progress Energy Services. All of these companies each had a market share of less than 1%. Together, these nine companies held a market share of 3.0%.

85 Opinion (A)160324-CDC-1518 on the granting of an individual natural gas supply licence to Gas Natural Europe SAS; Opinion (A)160413-CDC-1523 on the granting of an individual natural gas supply licence to RWE Supply & Trading GmbH; Opinion (A)160825-CDC-1558 on the granting of an individual natural gas supply licence to Société Européenne de Gestion de l'Energie S.A.; Opinion (A)160908-CDC-1561 on the extension of the individual natural gas supply licence of Lampiris N.V.

86 Ministerial Decree of 8 January 2016 (Belgian Official Journal of 18 January 2016).

87 Ministerial Decree of 25 January 2016 (Belgian Official Journal of 5 February 2016).

88 Ministerial Decree of 25 May 2016 (Belgian Official Journal of 13 June 2016).

89 Ministerial Decree of 22 September 2016.

90 Ministerial Decree of 28 October 2016.

91 Ministerial Decree of 18 November 2016.

92 In this respect, it should be noted that the assessment is based on figures related to shipping activities on the transmission system as communicated by the transmission system operator.

The global situation in 2016 compared to that in 2015 shows a market in which neither the activities nor the positions of the different market parties have changed much.

On 31 December 2015, thirty-three system users held a supply licence. During 2016, twenty-three (23) of them carried out activities on the transmission system for the shipping of natural gas destined for Belgian end customers. By way of comparison, at the end of 2007, just six system users were operating on the Fluxys Belgium transmission system for supplies to Belgian end customers.

Table 12: Companies active in gas shipping on the Belgian market in 2016 – Change compared to 2015 (Source: CREG)

VOLUME SHIPPED IN BELGIUM (INTWH)* MARKET SHARE IN BELGIUM (IN %)	2015		2016		Δ2016/2015	
	TWh	%	TWh	%	(%)**	(%-point)***
ANTARGAZ SA	0.26	0.15	0.98	0.54	279	0.40
ARCELORMITTAL ENERGY SCA	4.25	2.42	4.44	2.47	4.4	0.06
BELGIAN ECO ENERGY NV	0.09	0.05	0.10	0.06	17.8	0.01
DIRECT ENERGIE	0.06	0.03	0.37	0.20	521	0.17
EDF LUMINUS	16.94	9.64	17.97	10.02	6.1	0.38
ELECTRABEL ENGIE	55.23	31.42	62.04	34.57	12.3	3.16
ENECO BELGIË BV	2.45	1.40	2.31	1.29	-5.8	-0.11
ENEL TRADE SpA	2.33	1.33	1.96	1.09	-16.0	-0.23
ENI SpA	43.00	24.46	40.86	22.77	-5.0	-1.69
ENOVOS LUXEMBOURG SA	0.45	0.25	0.15	0.09	-65.2	-0.17
EUROPEAN ENERGY POOLING	0.44	0.25	0.67	0.37	54	0.13
GAS NATURAL EUROPE	3.27	1.86	4.51	2.51	37.9	0.65
GETEC ENERGIE AG	0.26	0.15	0.30	0.17	12.3	0.02
LAMPIRIS SA	7.43	4.22	6.75	3.76	-9.1	-0.46
NATGAS AKTIENGESELLSCHAFT	1.55	0.88	1.42	0.79	-8.2	-0.09
PROGRESS ENERGY SERVICES	0.24	0.14	0.75	0.42	210	0.28
RWE SUPPLY & TRADING GmbH	9.09	5.17	9.84	5.48	8.3	0.31
SOC. EUROP. DE GESTION DE L'ENERGIE SA	2.88	1.64	1.88	1.05	-34.8	-0.59
STATOIL ASA	8.78	4.99	6.47	3.61	-26.2	-1.38
TOTAL GAS & POWER Ltd	1.95	1.11	1.99	1.11	2.0	0.00
UNIPER GLOBAL COMMODITIES SE	0.90	0.51	0.56	0.31	-38.1	-0.20
VATTENFALL ENERGY TRADING NETHERLANDS NV	6.28	3.57	5.62	3.13	-10.6	-0.44
WINGAS GmbH	7.67	4.36	7.52	4.19	-2.0	-0.17
<b>Final total</b>	<b>175.8</b>	<b>100.0</b>	<b>179.4</b>	<b>100.0</b>	<b>2.1</b>	

- \* These figures only concern supplies to customers connected to the natural gas transmission system and to the offtake points on the distribution systems.  
For separate statistics on supplies to customers connected to the natural gas transmission and distribution systems, please consult the joint publication of the four energy regulators on the CREG website ([www.creg.be](http://www.creg.be)).
- \*\* Relative change in 2016 compared with 2015 (2015 is the baseline).
- \*\*\* Absolute change in market share.

#### 4.1.1.2. Price caps

The social price cap (excluding VAT and other taxes) for the supply of natural gas for the period of 1 February 2016 to 31 July 2016 inclusive was 2,924 €/kWh (0.02924 €/kWh).

The social price cap (excluding VAT and other taxes) for the supply of natural gas for the period of 1 August 2016 to 31 January 2017 inclusive was 2,252 €/kWh (0.02252 €/kWh).

These tariffs are expressed without the federal contribution, the connection fee (Wallonia) and the contribution to the energy fund (Flanders). Other taxes relating to system tariffs (transmission and/or distribution) are included.

Readers are referred to section 3.1.2.2 hereof which applies mutatis mutandis to natural gas.

#### 4.1.1.3. Trends in and fundamentals of the natural gas price

Readers are referred to section 3.1.2.3 hereof, which also applies to natural gas.

### 4.1.2. Transmission and distribution

#### 4.1.2.1. Corporate governance

In the framework of the monitoring of the application of Article 8/3 of the Gas Act and the assessment of its effectiveness with regards to the requirements of independence and impartiality of operators, CREG examined the activity reports of the corporate governance committees of Fluxys Belgium and Fluxys LNG for the year 2015.

It also examined the report from the Compliance Officer on observance of the programme of commitments by employees of Fluxys Belgium and Fluxys LNG in 2015. This programme must ensure that there is no discriminatory treatment of system users and/or categories of system users. CREG addressed questions to the Compliance Officer and the departments of Fluxys Belgium and Fluxys LNG in order to obtain additional explanations regarding these reports so as to be able to verify that they fulfil their legal duties.

#### 4.1.2.2. Technical operation

##### A. Natural gas transmission licences

To build and operate its transmission facilities, the natural gas TSO, Fluxys Belgium, first has to submit an application for a transmission licence to the Directorate-General for Energy. CREG has the power to issue opinions on such applications.

In 2016 CREG issued fourteen favourable opinions<sup>93</sup> regarding transmission licence applications or extensions of existing licences.

In addition, on 7 July 2016 CREG, at the request of the Energy Minister, issued an opinion on the draft of a Royal Decree amending the Royal Decree of 14 May 2002 on the licence for transmission of gaseous and other products by pipelines<sup>94</sup>.

##### B. Balancing model and balancing zone

The developments relating to the new market-based balancing model in effect from 1 October 2012, summarised in the 2013 Annual Report (pp. 55-56), are still applicable in 2016.

In accordance with Commission Regulation (EU) No 312/2014 of 26 March 2014 establishing a Network Code on Gas Balancing of Transmission Networks, Fluxys Belgium asked CREG to be appointed as the forecasting party in a balancing zone. More specifically, it concerns the non-daily metered offtakes from the natural gas transmission system by a system user and the resulting allocations. Since the introduction of the new transmission model on 1 October 2012 Fluxys Belgium had already been implicitly accepted as the responsible party. After consultation with the operators and distribution system operators, CREG decided on 28 January 2016<sup>95</sup> to approve this application.

##### C. Regulations governing security and reliability of the natural gas transmission system, and standards and requirements for quality of service and supply

To comply with Article 133 of the Code of Conduct, the natural gas transmission system operator applies a monitoring system that tracks the quality and reliability of its natural gas transmission system and the transmission services provided.

<sup>93</sup> Opinions 1514, 1522, 1535, 1536, 1557, 1559, 1564, 1565, 1580, 1581, 1592: the full titles are mentioned in section 5.10 of this report.

<sup>94</sup> Opinion (A)160707-CDC-1545 on a draft Royal Decree amending the Royal Decree of 11 March 1966 on the declaration as a public utility service of the construction of gas transmission facilities, of the Royal Decree of 11 March 1966 on the safety measures to be taken in the construction and operation of gas transmission facilities using pipelines, and of the Royal Decree of 14 May 2002 on the licence for transmission of gaseous and other products by pipelines, establishing the entry into force of various provisions of the law of 8 May 2014 on various energy provisions and defining the rules for the assumption of public utility, as referred to in Article 8/7 of the law of 12 April 1965 on the transmission of gaseous and other products by pipelines.

<sup>95</sup> Decision (B)160128-CDC-1487 on the application of NV Fluxys Belgium to be appointed as forecasting party for gas balancing of the natural gas transmission system.

This care system allows us to, among other things, determine the quality parameters in the areas of:

- frequency of service interruptions and/or reductions;
- average duration of service interruptions and/or reductions;
- causes and remedies for these service interruptions and/or reductions;
- the portfolio of natural gas transmission services provided.

In 2016 there were no interruptions or reductions in any of the transmission services.

#### D. Time taken by the natural gas transmission system operator to carry out connections and repairs

In accordance with the Gas Act, CREG is responsible for monitoring the time taken by the natural gas transmission system operator to carry out connections and repairs.

In 2016 four new connections were created for end customers and five for public distribution. The building of these nine new connections took 22, 23, 39 and 57 months, respectively, for end customers, and 117, 117, 46, 97 and 9 months, respectively, for public distribution.

In 2016 four repairs were carried out following accidents or incidents, and twenty repairs in the context of maintenance periods. All unplanned repairs (except one) were carried out within the same day, after consultation with – and without any impact on – the shippers and the end customers. The twenty repairs under scheduled maintenance periods were carried out to avoid any impact on service delivery. All scheduled operations lasted for a limited time (usually one day and a maximum of eight days) and were conducted in collaboration with the end customer and/or the shippers concerned.

#### E. Code of Conduct

##### • Natural gas transmission

In 2016 CREG issued two decisions relating to amendments proposed by Fluxys Belgium to the standard contract for natural gas transmission, the natural gas transmission programme and the access rules for natural gas transmission:

##### *Decision 1531 of 19 May 2016 on the application for approval of the proposal for the natural gas transmission programme adapted by Fluxys Belgium and Annexes A, B, C1, E and G of the access rules for natural gas transmission:*

In April 2016 Fluxys Belgium submitted an application to CREG for approval of amendments to the natural gas transmission programme and the access rules for natural gas transmission. Fluxys Belgium wanted to adapt these documents to the provisions of the European network codes relating to interoperability and data exchange. Furthermore, the general conditions for access to the PRISMA platform are no longer included in the access rules for natural gas transmission. Finally, some material errors have been corrected, and the description of certain services at domestic offtake points has been improved.

In March 2016 Fluxys Belgium itself set up a public consultation on these amendments. In the meantime, CREG has approved these amendments.

Where the Zeebrugge Beach interconnection point is concerned, CREG has asked Fluxys Belgium to prepare a new proposal and present this to the market in order to make the intraday capacities available to the network users. Where the allocation of natural gas to interconnection points is concerned, CREG has asked Fluxys Belgium to prepare an improved formulation and present this to the market.

##### *Decision 1571 of 20 October 2016 on the application of NV Fluxys Belgium for approval of the amended standard contract for natural gas transmission, the natural gas transmission programme and the access rules for natural gas transmission:*

In August 2016, Fluxys Belgium submitted an application to CREG for approval of amendments to the standard contract for natural gas transmission, the natural gas transmission programme and the access rules for natural gas transmission. With these amendments Fluxys Belgium wants to integrate the hub services into its service offer. Furthermore, a new intraday service will be offered at Zeebrugge Beach, the secondary market on the PRISMA platform will be expanded, and a number of material errors have been corrected.

In June 2016 Fluxys Belgium itself set up a public consultation on these amendments. CREG has approved these amendments. However, CREG has formulated a number of remarks and asked Fluxys Belgium to include these into the documents it will present during the next public consultation.

##### • Connection of distribution system operators to the natural gas transmission system

At the end of 2015 Fluxys Belgium submitted a proposal to CREG for approval of the standard connection contract for distribution system operators. This contract is to replace the existing 2006 collaboration agreement between Fluxys Belgium and the distribution system operators. In order to bring the proposal in line with the code of conduct, Fluxys Belgium first consulted the regional regulators, CREG and the distribution system operators, and organised a public consultation.

On 8 September 2016 CREG decided<sup>96</sup> to approve Fluxys Belgium's proposal, taking into account the reactions of

<sup>96</sup> Decision (B)160908-CDC-1508 on the standard DSO connection contract (i.e. for the connection of the distribution system operators to the natural gas transmission system) proposed by NV Fluxys Belgium.



the market actors following its draft decision, which it had previously presented to the market.

#### F. Measures to safeguard security of supply

The European Commission's Gas Coordination Group coordinates the application of Regulation (EU) No 994/2010, which aims to safeguard security of natural gas supply in Europe. CREG represents Belgium in the European Coordination Group, alongside the designated competent authority, namely the Directorate-General for Energy. In 2016 attention was paid mainly to the amendment of Regulation (EU) No 994/2010, in addition to the biennial update of the risk analyses, the preventative action plans and emergency plans of the European Member States. In 2016 CREG worked together with the Directorate-General for Energy with a view to the drafting of the requested updates of the plans for Belgium. In addition, CREG assists the competent authority in the application of Regulation (EU) No 994/2010 in Belgium. In this context, CREG primarily focuses on the optimisation of market instruments that aim to safeguard security of supply. Residual risks require appropriate intervention on the part of the authorities, which can be integrated within the operation of the market. CREG was able to work in close conjunction with the Directorate-General for Energy, thereby assuming its responsibility as competent authority. Among other things, CREG provided assistance with the preparation of the annual monitoring report on security of supply.

In 2014 the European Commission took the initiative to revise Regulation (EU) No 994/2010.

In this context, and in close collaboration with the European Commission, CEER set up a task force on 26 November 2014

in order to help the European Commission with this revision and to publish their opinion with regards to security of supply on behalf of the European energy regulators. CREG acts as Vice-Chair of this task force.

At the beginning of 2016 the European Commission published a proposal for a new Regulation. The subsequent debates in both the European Council and the European Parliament were followed closely and the heads of the CEER taskforce met with the chairman of the ITRE Commission of the European Parliament, Mr J. Buzek, on 10 May 2016 to clarify CEER's views. In the legislative process conducted in 2016, attention was paid mainly to the new principles of regional cooperation and cross-border solidarity between Member States during emergency situations in natural gas supply. In 2017 this process will lead to the publication of a new Regulation which will become directly applicable in the European Member States.

As part of its remit to monitor and check the application of the Code of Conduct (see also section 4.1.2.2.E hereof), CREG monitored balancing on the transmission system for H gas and L gas. In 2016 CREG did not detect any problems that posed a threat to preserving the balance of the system. The current system balancing model puts a heavy responsibility on system users, and the natural gas transmission system operator now has only to provide residual balancing, if necessary. The market-based balancing mechanism is closely monitored and CREG believes it to be a successful and important mechanism that also contributes to ensuring the continuity of natural gas supplies for all end users.

The Belgian balancing zone for H gas was expanded on 1 October 2015 through the merger with the Luxembourg natural gas market. Ever since this date, the same balancing

rules apply to both markets that have merged into a single balancing zone with just one trading platform (the existing Zeebrugge Trading Platform ZTP) and a single entry/exit area. Market-based balancing in the single area is organised by Fluxys Belgium pending the allocation of this responsibility to the separate company (Balansys) created by Fluxys Belgium and the Luxembourg transmission system operator Creos (see section 4.1.3.3 hereof).

#### 4.1.2.3. System and LNG tariffs

##### A. Transmission system, storage and LNG

##### a) Tariff methodology

##### ■ Transmission, storage and LNG

As indicated in its 2014 Annual Report, CREG approved its tariff methodology on 18 December 2014. This serves as a basis for the approval of the tariffs for the natural gas transmission system, the natural gas storage facility and the LNG facility, with a view to their application during the regulatory period 2016-2019 with regards to the natural gas transmission system and the natural gas storage facility<sup>97</sup>.

Moreover, in 2016 CREG, after consultation with the market players, established the methodology and criteria<sup>98</sup> for the evaluation of investments in electricity and gas infrastructure and the major risks involved. This methodology applies to new projects for which no final investment decision had been taken on 15 July 2016.

<sup>97</sup> Regarding LNG infrastructures, CREG had already made a decision on the matter on 30 September 2004, based on the Royal Decree of 15 December 2003, in which it approved Fluxys LNG's multi-annual tariff proposal used for the capacities of the LNG terminal in Zeebrugge after 2006 and valid until the year 2026. On 29 November 2012, CREG adopted Decision (B) 121129-CDC-657G/06 relating to the tariff proposal updated by Fluxys LNG, thereby prolonging the duration of the application of the tariffs until 1 April 2027. The new decree in no way infringes upon this decision and, on the contrary, it gives it a new legal basis.

<sup>98</sup> Decision (A)160707-CDC-1480 establishing the methodology and criteria for the evaluation of investments in electricity and gas infrastructure and the major risks involved.



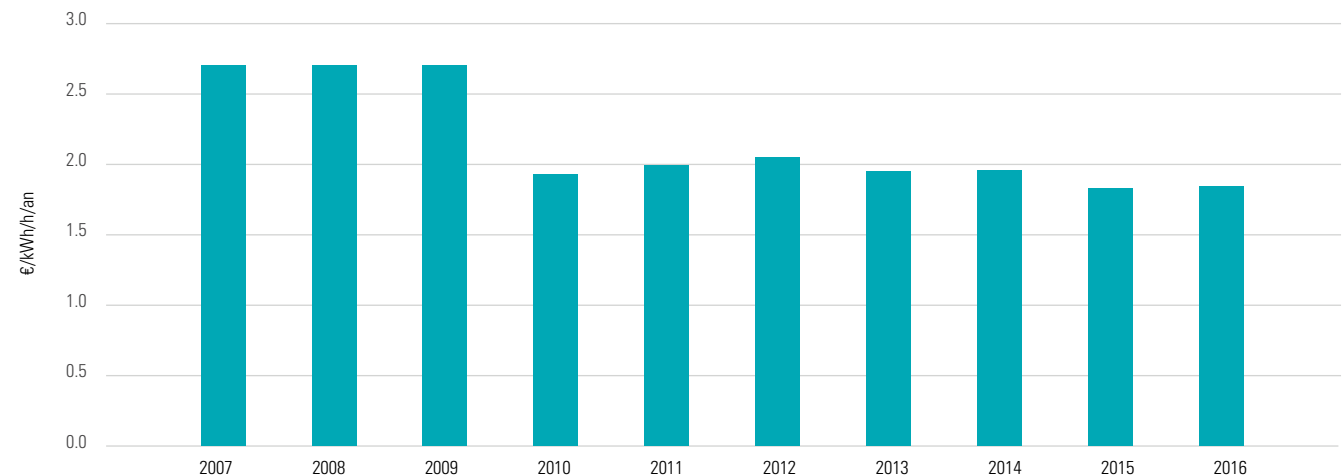
### ■ Interconnector (UK)

On 28 January 2016 CREG decided<sup>99</sup>, on the one hand, to extend its approval of Interconnector (UK)'s tariff methodology (excluding differential pricing) relating to the transmission services that were sold until 31 December 2016 for use starting from gas day 1 October 2018, and in accordance with the conditions of the access contract concluded with Interconnector (UK) and the Interconnector (UK) access rules, and, on the other hand, to commit Interconnector (UK) to providing CREG with a detailed report of the tariffs applied, actual costs, revenue and profit, on a yearly basis.

On 22 December 2016 CREG decided<sup>100</sup>:

- to extend its approval of Interconnector (UK)'s current tariff methodology (excluding differential pricing) relating to the transmission services that were sold until 31 December 2017 for use starting from gas day 1 October 2018, and in accordance with the conditions of the access contract concluded with Interconnector (UK) and the Interconnector (UK) access rules;
- to approve the modified tariff methodology for the profile review service and the simplified conversion service on condition that these services are approved by the respective regulators, without prejudice to these last approvals; and
- to commit Interconnector (UK) to providing CREG with a detailed report of the tariffs applied, actual costs, revenue and profit, on a yearly basis.

Figure 17: Change in Fluxys Belgium's natural gas transmission tariffs (entry and exit tariffs for H gas) between 2007 and 2016  
(Source: CREG)



### b) Tariff trends

#### ■ Transmission and storage tariffs

On 29 October 2015 CREG approved the revised tariff proposal<sup>101</sup> from Fluxys Belgium relating to the tariffs for connection to and use of the natural gas transmission system, as well as storage services and ancillary services for the years 2016-2019.

The European regulation establishing a network code for the balancing of gas transmission systems came into effect on 1 October 2015. This date also marked a significant event in the integration process of the Belgian and Luxembourg gas markets. In this respect, CREG approved, following a proposal from Fluxys Belgium, the tariffs<sup>102</sup> relating to the natural gas transmission system balancing.

This way, the daily and intra-daily unbalancing charges are maintained at the current level, and a neutrality charge is introduced. These tariffs apply from 1 January 2017 to 31 December 2017.

#### ■ Tariffs for LNG facilities

Fluxys LNG's tariffs for the year 2016 for the operation of the facilities at the LNG terminal in Zeebrugge are the same as those for 2015, excluding the rate of inflation. By Decision of 29 November 2012 (see Annual Report 2013, pp. 18-19), CREG had already approved an updated version of the tariffs, valid from 1 January 2013 until 31 March 2027, confirming the real tariff level of the tariffs approved by its Decision of 30 September 2004.

99 Decision (B)160128-CDC-1442/2 relating to the extension of the validity of the tariff methodology relating to the access contract concluded with Interconnector (UK) and the Interconnector (UK) access rules to the 2016 calendar year.

100 Decision (B)1442/3 of 22 December 2016 relating to the extension of the validity of the tariff methodology relating to the access contract concluded with Interconnector (UK) and the Interconnector (UK) access rules to the 2017 calendar year.

101 Decision (B)151029-CDC-656G/31 relating to the tariff proposal from FLUXYS BELGIUM NV relating to the tariffs for connection to and use of the transmission system as well as storage services and ancillary services for the years 2016-2019.

102 Decision (B)161208-CDC-656G/33 on the balancing fees for the purposes of neutrality and the value of small adjustments.

Fluxys LNG's tariffs for the year 2016 for transshipment services are the same as those for 2015, excluding the rate of inflation. CREG had approved these new tariffs for a period of 20 years in its decision of 2 October 2014 (see the Annual Report 2014, p. 65).

### c) Balances

In June 2016 CREG approved the operating balances of Fluxys Belgium<sup>103</sup> and Fluxys LNG<sup>104</sup> for the financial year 2015. To this end, CREG studied the amended tariff reports of both companies and checked, on the one hand, total revenue, and, on the other hand, the operating balances. These balances are the result of the differences between tariff estimates and the actual amounts and volumes.

## B. Distribution networks

Readers are referred to section 3.1.3.5.B hereof.

### 4.1.3. Cross-border issues and market integration

#### 4.1.3.1. Access to cross-border infrastructure

Under the new European TEN-E Regulation (Regulation No 347/2013)<sup>105</sup>, which was published on 25 April 2013 and entered into force on 15 May 2013, project promoters may, during a biennial selection process, submit investment projects to the European Commission with a view to securing Project of Common Interest status (hereafter: PCI Project of Common Interest). Only projects spanning at least one national border within the European Union can be considered.

PCI status enables a project to benefit from faster and more efficient licence-granting procedures and revised regulatory conditions. In addition, a cost-benefit analysis is made of the PCI projects for the different countries to which these projects apply. This is done with a view to possible cross-border compensation of costs if projects would otherwise not be carried out. There can be no subsidies from the European Commission to help finance the necessary work other than as a last resort, i.e. if the market is unable to finance the cost of the investment and if significant positive externalities are nonetheless linked to the project, such as market integration, competition, security of natural gas supplies and sustainability.

In 2016 the PCI projects published by the European Commission on 18 November 2015 were followed up<sup>106</sup>. This list is the result of an evaluation of the existing PCIs and potential new PCI projects in the so-called 'Regional Groups' led by the European Commission. This second PCI list does not comprise any infrastructure projects on Belgian territory, but it does comprise a series of projects in the surrounding countries, concretely in Germany, which can have an influence on the future use of the Belgian natural gas infrastructure and therefore require close monitoring. At the end of 2016 the biennial update of the PCI list was started within the 'Regional Groups' in order to draw up a new list of PCI projects by the end of 2017. In the period from 21 December 2016 to 22 January 2017 project promoters were invited by the European Commission to resubmit existing PCI projects and/or submit new PCI projects for the selection of the third PCI list.

The list of European PCI projects is updated every two years and checked by the respective European regional working groups. CREG follows these activities within the working group for the region NSI Gas West<sup>107</sup>. In addition to CREG's involvement in

the selection process and the monitoring of PCIs, CREG takes part in regular consultations with other regulators and ACER in order to contribute to the correct implementation of the TEN-E Regulation (Regulation No 347/2013). This includes, amongst other things, the assessment of costs and benefits for Belgium possibly included in the PCI projects abroad and a possible cost compensation resulting from these foreign projects. Until now, Belgium has not been in receipt of any possible cross-border cost compensation for the completion of PCI.

#### 4.1.3.2. Analysis of the natural gas TSO's investment plan as regards consistency with the network development plan across the European Union

Readers are referred to section 4.4.2 hereof.

#### 4.1.3.3. Market integration

Belgium and the surrounding countries represent 58% of the European natural gas market. Belgium is located at the centre of important natural gas corridors in North West Europe and is characterised by intensive cross-border trade in natural gas. The Dutch TTF is the main border market for trade in natural gas (H gas and L gas) for the Belgian market. In 2016 net natural gas transactions from TTF to ZTP amounted to 140.1 TWh. The British NBP continues to show a positive net balance for natural gas transactions to ZTP (51.5 TWh in 2016). Natural gas transactions with both German natural gas markets change direction fast between exit to Germany and entry into Belgium.

With northern German Gaspool net natural gas transactions to ZTP amounted to 11.9 TWh in 2016, while net natural gas transactions from ZTP with southern German NCG amounted

<sup>103</sup> Decision (B)160622-CDC-656G/32 on the revised tariff report including the balance sheets sent by FLUXYS BELGIUM concerning the operations for the financial year 2015.

<sup>104</sup> Decision (B)160622-CDC-657G/12 on the revised tariff report including the balance sheets sent by FLUXYS LNG concerning the operations for the financial year 2015.

<sup>105</sup> Regulation (EU) No 347/2013 of the European Parliament and of the Council of 17 April 2013 on guidelines for trans-European energy infrastructure and repealing Decision No 1364/2006/EC and amending Regulations (EC) No 713/2009, (EC) No 714/2009 and (EC) No 715/2009. Published on 25 April 2013 and in application since 15 May 2013.

<sup>106</sup> [https://ec.europa.eu/energy/sites/ener/files/documents/5\\_2%20PCI%20annex.pdf](https://ec.europa.eu/energy/sites/ener/files/documents/5_2%20PCI%20annex.pdf)

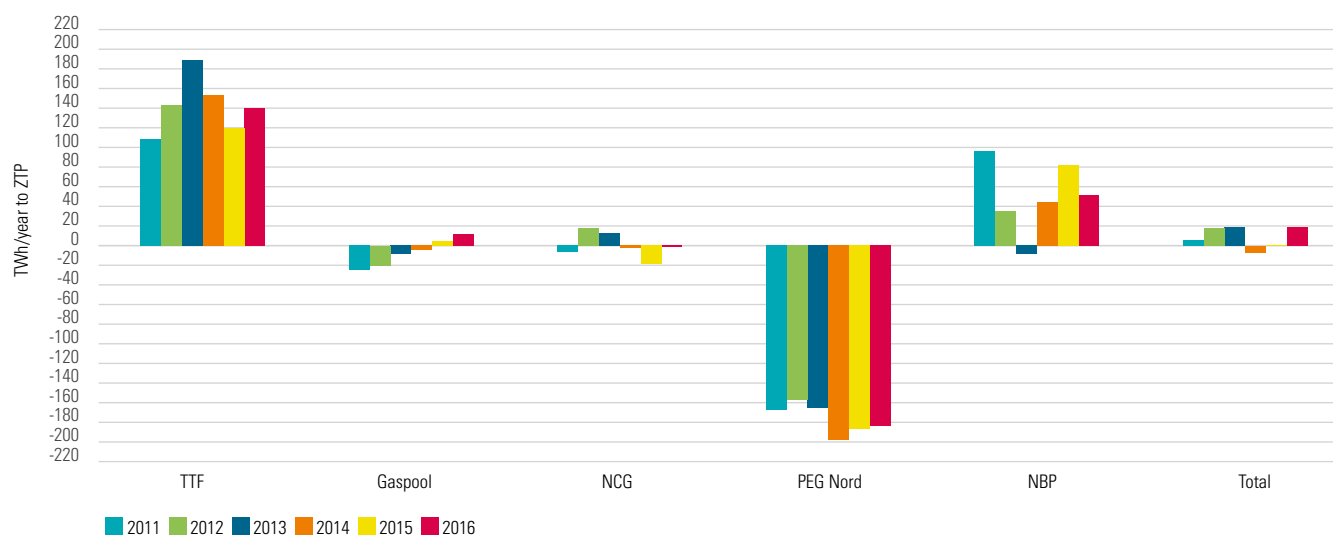
<sup>107</sup> North-South gas interconnections in Western Europe.

to 1.6 TWh in 2016. France is highly dependent on natural gas transactions between ZTP and PEG Nord (183.4 TWh in 2016).

The price curves in Figure 19 show the annual average day-ahead (DAM) price of natural gas for the Belgian natural gas market ZTP (since 1 October 2015 ZTP also comprises the Luxembourg natural gas market), the Dutch TTF and both German markets Gaspool and NCG. These price curves converge, which indicates that smooth cross-border trade in natural gas is possible between these markets. The annual average year-ahead price of natural gas (Y+1) is also shown. Given the price convergence and correlation on the short-term market, the long-term price in the Netherlands and Germany can also be used as a reference price for the Belgian-Luxembourg market.

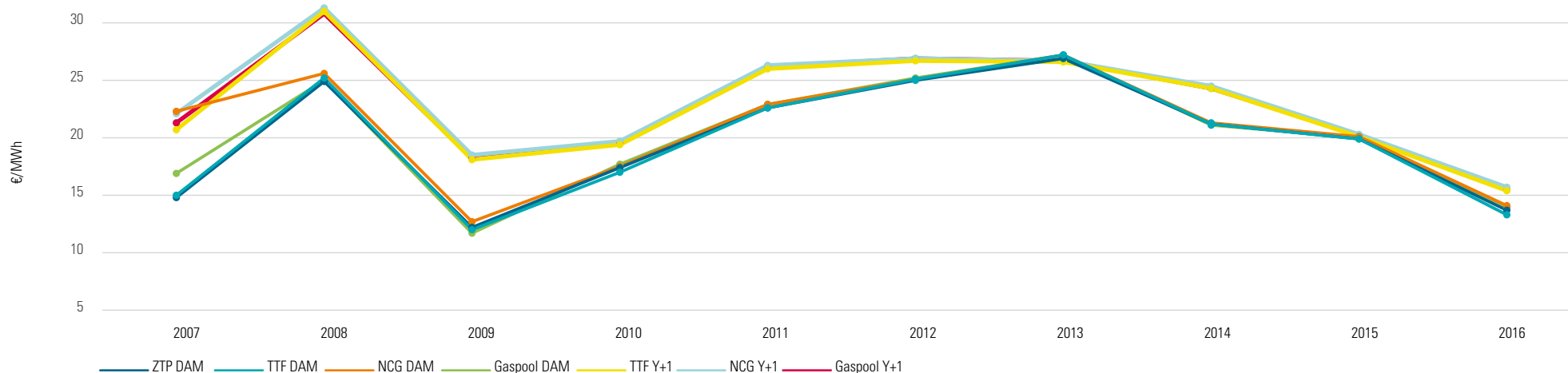
The fall in natural gas prices continues. The price of natural gas on ZTP is at its lowest average level at 13.3 €/MWh. This is considerably lower than the price recorded in 2015 (19.9 €/MWh) and in 2013 (27.2 €/MWh).

Figure 18: Net natural gas transactions between the ZTP\* Belgian natural gas market and the markets in the neighbouring countries during the period 2011-2016 (in TWh/year, H gas and L gas) (Sources: CREG, gasdata.fluxys.com data)



\* Since 1 October 2015 ZTP also encompasses the Luxembourg natural gas market.

Figure 19: Average annual natural gas price on the day-ahead and year-ahead markets (Sources: CREG, data taken from icis.com, ice.com, eex.com and powernext.com)



## Integration of the Belgian and Luxembourg H gas markets

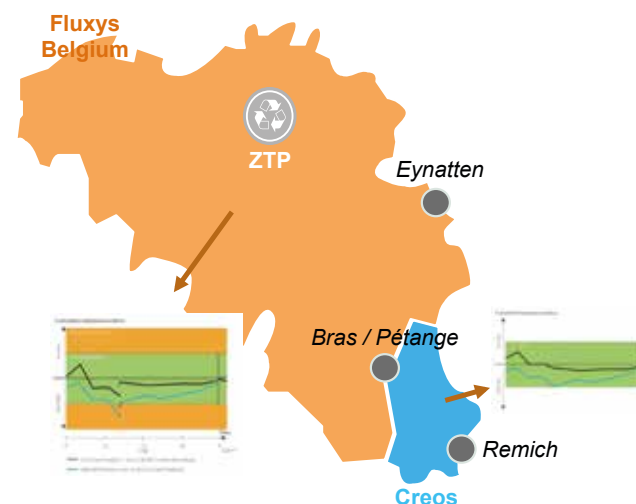
Since 1 October 2015 the Belgian and Luxembourg markets for H gas have been integrated into a single BeLux market. There is one balancing zone for H gas that covers both countries via the creation of a unique entry-exit system with a common balancing regime and a single trade platform (hub), the existing Zeebrugge Trading Platform (ZTP). This is the first market integration project between two European Member States. This project is entirely in line with the European ambition to further integrate the natural gas markets; on 13 July 2016 it was presented as a pilot project during a workshop on the implementation of the Gas Target Model<sup>108</sup> organised by the Austrian energy regulator E-Control. The following figure provides an overview of the project.

Prior to 1 October 2015 both markets for H gas were independent national entry-exit systems between which interconnection capacity (Bras/Pétange) had to be bought by system users for trade between Belgium and Luxembourg. After the integration, capacity reservation and entry-exit tariffs no longer applied, and the ZTP became the only trade platform for natural gas for the BeLux market. In addition, the same balancing rules apply and a shared entity has been created by both transmission system operators to manage the commercial balancing of the integrated H gas market<sup>109</sup>. At the same time, both transmission system operators have retained their own separate identity and organisational structure.

The integration of the markets offers extra efficiency and flexibility to suppliers and large consumers who are active in both countries. Above all, it brings about a notable change in the operation of the natural gas market in Luxembourg, as security of supply of natural gas in Luxembourg is affected

Figure 20: Integration of cross-border Belgian-Luxembourg markets (Sources: coordination of Fluxys Belgium, CREOS, ILR, CREG)

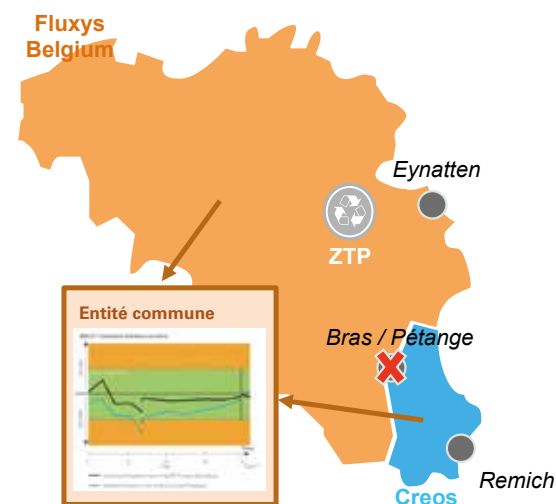
### Belgium-Luxembourg: separate natural gas markets before 1 October 2015



- Two entry/exit markets with capacity fees between them
- Separate gas trading point in Belgium
- Two separate sets of regulations

positively, and Luxembourg customers can easily access a more competitive natural gas market. Luxembourg suppliers now have simplified supply options thanks to direct access to the ZTP and the Belgian storage and LNG facilities.

### Belgium-Luxembourg: integrated natural gas markets after 1 October 2015



- Single entry/exit market making use of existing means of the transmission system operators
- Single gas trading point at BeLux ZTP
- Set of harmonised balancing regulations; a shared balancing contract

Additionally, they can now manage their coupled portfolios according to the consumption of their customers in both countries together.

<sup>108</sup> See ACER, European Gas Target Model Review and Update. [www.acer.europa.eu](http://www.acer.europa.eu)

<sup>109</sup> On 7 May 2015 Balansys nv, the common balancing manager (see [www.balansys.eu](http://www.balansys.eu)), was created in Luxembourg. This new company is not yet active in the integrated balancing zone, as a number of regulatory procedures and approvals are still being processed in order to comply with the Belgian Gas Act. In the meantime, Fluxys Belgium is carrying out Balansys's balancing tasks. This approach does not have any impact on the market integration, which has been in effect since 1 October 2015.

## 4.2. Competition

### 4.2.1. Monitoring of wholesale and retail prices

#### 4.2.1.1. CREG studies performed in 2016

- **Study on the prices used on the Belgian natural gas market in 2015**

The study on the prices in force on the Belgian natural gas market in 2015<sup>110</sup>, conducted by CREG in August 2016, analyses market shares, price formation, price levels, price breakdown and billing in the different segments (import, resale, supply of residential customers, industrial customers and power plants) of the Belgian natural gas market in 2015.

The Belgian natural gas market is becoming increasingly more open to competition each year with the continued arrival of new suppliers.

In particular, the study covers the gross sales margins on the different market sectors and on the types of indexing. Gas prices were the main vector of the prices charged to end customers in all segments. Oil prices are only used, on average, in 5% of industrial contracts. For residential customers and SMEs, 2015 was a transition year where the invoicing of the transmission component is concerned. From now on, it is separated from the energy component. In order to encourage transparency, this separate invoicing is also recommended for the other segments.

- **Study of natural gas supply to large industrial customers**

At the end of September 2016 CREG conducted a study<sup>111</sup> of natural gas supply to large industrial customers in Belgium in 2015. These customers, connected directly to the Fluxys Belgium network, represented 28% of consumption by Belgian end customers in 2015. Analysis of the supply contracts shows that they mainly enter into short-term contracts (with a duration of 1 or 2 years). They also increasingly use natural gas prices, both upstream (supply contracts) and downstream (sales contracts). Furthermore, CREG found that there are significant differences between the energy prices charged to large industrial customers. In 2015 contract prices were between 18 and 31 €/MWh. Analysis of average offtake behaviour shows a strong decrease in the annual natural gas offtake from 2009 onwards. The economic crisis that started in September 2008 is at the basis of this. In addition, the aggregate annual natural gas offtake is seasonal in nature. 2010 and 2012 saw the greatest number of changes in suppliers. Between 17% and 25% of all industrial customers change suppliers at least once a year. In conclusion, we can say that the market of large industrial customers (combined heat and power included) is a dynamic market with a lot of competition.

- **Other studies**

Readers are referred to section 3.2.1.1 hereof.

#### 4.2.1.2. Safety net

Readers are referred to section 3.2.1.2 hereof.

### 4.2.2. Monitoring of market transparency and openness

- **The REMIT Regulation**

Readers are referred to section 3.2.2.4 hereof.

- **Charter of best practices for electricity and gas price comparison websites**

Readers are referred to section 3.2.2.5 hereof.

## 4.3. Consumer protection

Readers are referred to section 3.3 hereof.

<sup>110</sup> Study (F)160825-CDC-1548 on the prices used on the Belgian natural gas market in 2015.

<sup>111</sup> Study (F)160929-CDC-1570 of natural gas supply to large industrial customers in Belgium.

## 4.4. Security of supply

### 4.4.1. Monitoring the balance between supply and demand

#### A. Natural gas demand

In 2016 total natural gas consumption amounted to 179.4 TWh. This means a 2.1% increase compared to consumption in 2015 (175.8 TWh). The lower temperatures in 2016 compared to 2015, though not very different from normal values, led to a more than 10% increase in demand for heating, according to the estimates. This finding partly explains the 5.6% increase in the natural gas demand on the distribution networks. Under these conditions, the share of the natural gas offtake on the distribution networks was 51.8% in 2016 (compared to 50.1% in 2015). Despite the sharp drop in natural gas prices on the wholesale market, which went from 19.9 €/MWh in 2015 to 13.8 €/MWh in 2016 (-31%), there was no new revival of demand from large consumers like there had been in 2015. Industrial natural gas consumption fell by 3.2%, while natural gas consumption for electricity generation rose by barely 0.2%.

Figure 21: Distribution of Belgian H gas and L gas demand by user segment in 2015 and 2016 (Source: CREG)

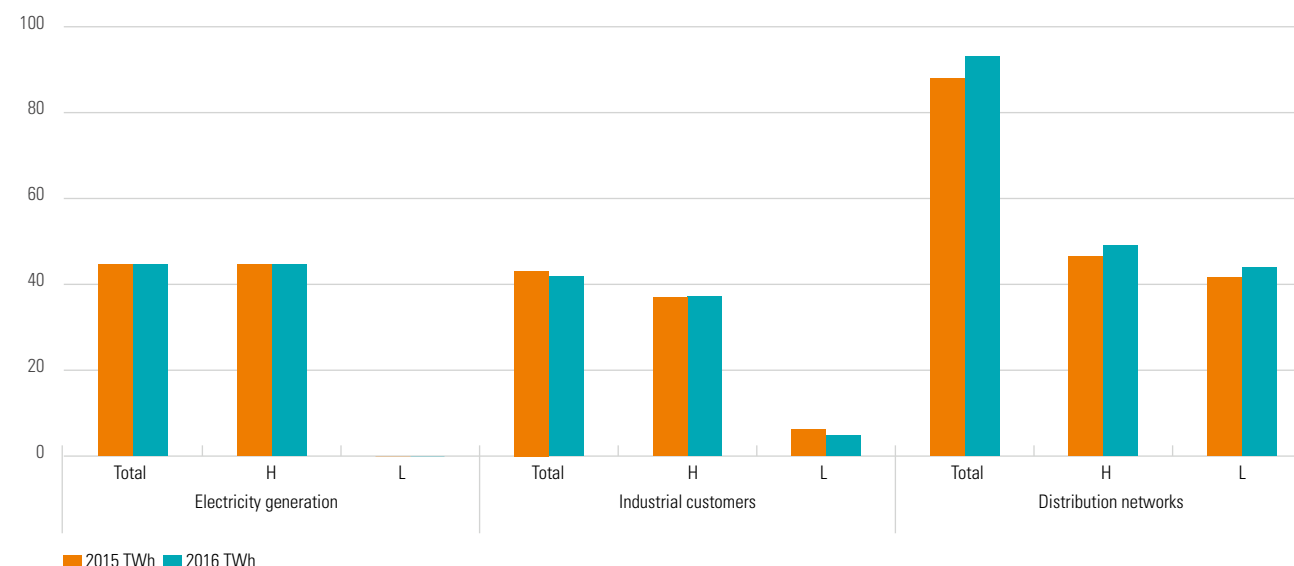
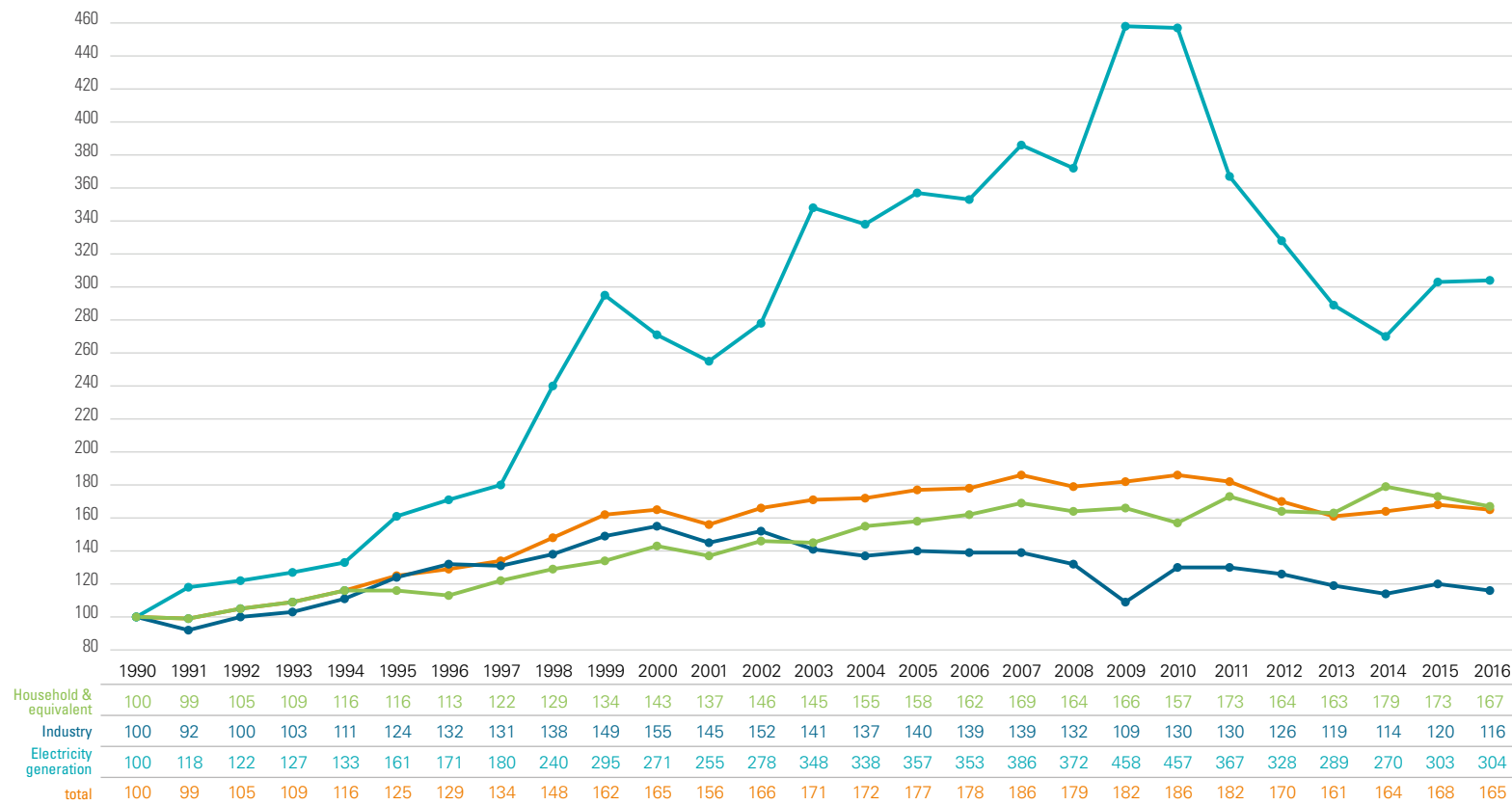


Table 13: Breakdown of Belgian natural gas demand by user segment between 2002 and 2016 (in TWh) (Source: CREG)

Sectors	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2016/2015
Distribution	78.3	83.1	88.3	87.2	88.3	82.6	88.5	87.6	101.2	82.5	91.9	97.9	79.6	88.1	93.0	+5.6%
Industry (direct customers)	54.7	50.7	49.3	50.2	50.2	50.0	47.8	39.2	46.9	47.0	45.5	42.8	41.1	43.1	41.8	-3.2%
Electricity generation (centralised facilities)	40.9	51.1	49.7	52.5	51.9	56.7	54.6	67.3	67.1	53.9	48.1	42.5	39.7	44.6	44.7	+0.2%
<b>Total</b>	173.9	184.9	187.3	189.9	190.4	189.3	190.9	194.2	215.3	183.4	185.6	183.2	160.4	175.8	179.4	+2.1%

Figure 22: Development of natural gas consumption per user segment during the 1990-2016 period (1990=100), corrected for climate variations (Source: CREG)



## B. Natural gas supply

Natural gas suppliers can choose from a series of entry points on the natural gas transmission system to both carry out national and international natural gas transactions and to supply their Belgian customers with H gas. Natural gas customers who use L gas are supplied directly from the Netherlands or indirectly, against the flow, via the Blaregnies interconnection point with France.

LNG imports, mainly from Qatar via the Zeebrugge terminal, accounted for a share of 3.9% of the average import portfolio in 2016 for the Belgian market. Zeebrugge is the main supply point for Belgian natural gas consumers and, in 2016, had a share of 36.6%. On a virtual level, there are imports via the interconnection point with France at Blaregnies, both for H gas and for L gas, via nominations against the flow of border-to-border natural gas flows that are initially destined for the French market.

The supply portfolios of the individual natural gas suppliers resulted, globally, in a differentiated supply depending on the type of contract. The share of long-term contracts concluded directly with natural gas producers with a remaining duration in excess of five years continued to drop (43.7% in 2016 compared to 48.2% in 2015, 51.1% in 2014 and 55.5% in 2013) but still constituted the main component. The total supply provided through supply contracts concluded directly with natural gas producers was at 57.9% (59.9% in 2015).

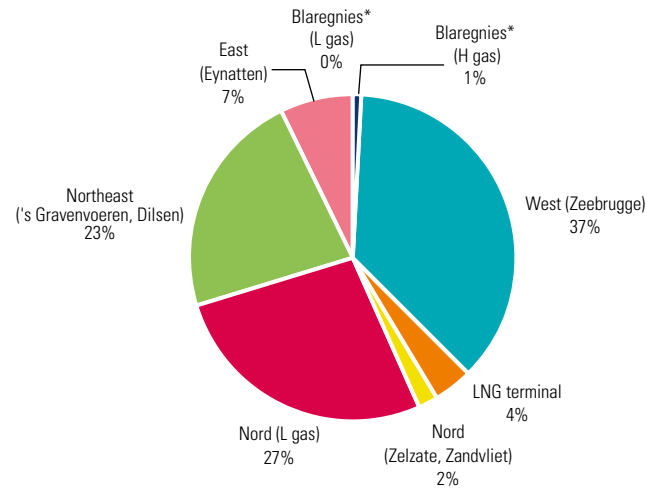
Net supply on the wholesale market recorded an increase in 2016 to 42.1% (40.1% in 2015).

Long-term contracts signed with natural gas producers remain the basis of the portfolios of the major suppliers on the Belgian market, but an increasing number of suppliers are taking supplies from the wholesale markets (hubs).

In 2016 a total of 23 supply companies were operating on the Belgian market (the same number as in 2015). Electrabel (Engie), 35% (31% in 2015), and ENU S.p.A., 23% (24% in 2015), together cover 58% (55% in 2015 and 60% in 2014) of natural gas supply to wholesale consumers directly connected to the transmission system and the distribution systems.

The third largest supplier was EDF Luminus, which held a stable market share of 10% in 2016. The remaining 20 supply companies (together accounting for a market share of 32%) each held a market share of a maximum of 5%, and 9 of these supply companies did not even reach 1%. Market concentration remained stable in 2016 compared to 2015.

Figure 23: Breakdown of incoming natural gas by entry zone in 2016 (Source: CREG)



\* The Blaregnies entry points are used 'against the flow' of the actual flows ('reverse flow'), making use of the predominant transit flows at these points.

Figure 24: Composition of the average supply portfolio of suppliers operating in Belgium in 2016 (Source: CREG)

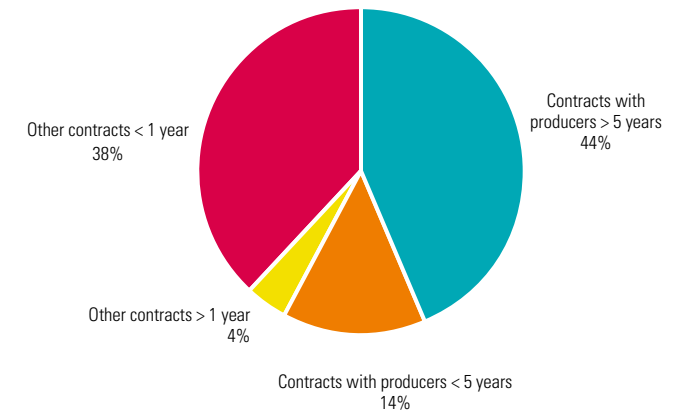


Figure 25: Composition of the average supply portfolio for the Belgian natural gas market between 2000 and 2016 (shares in %) (Source: CREG)

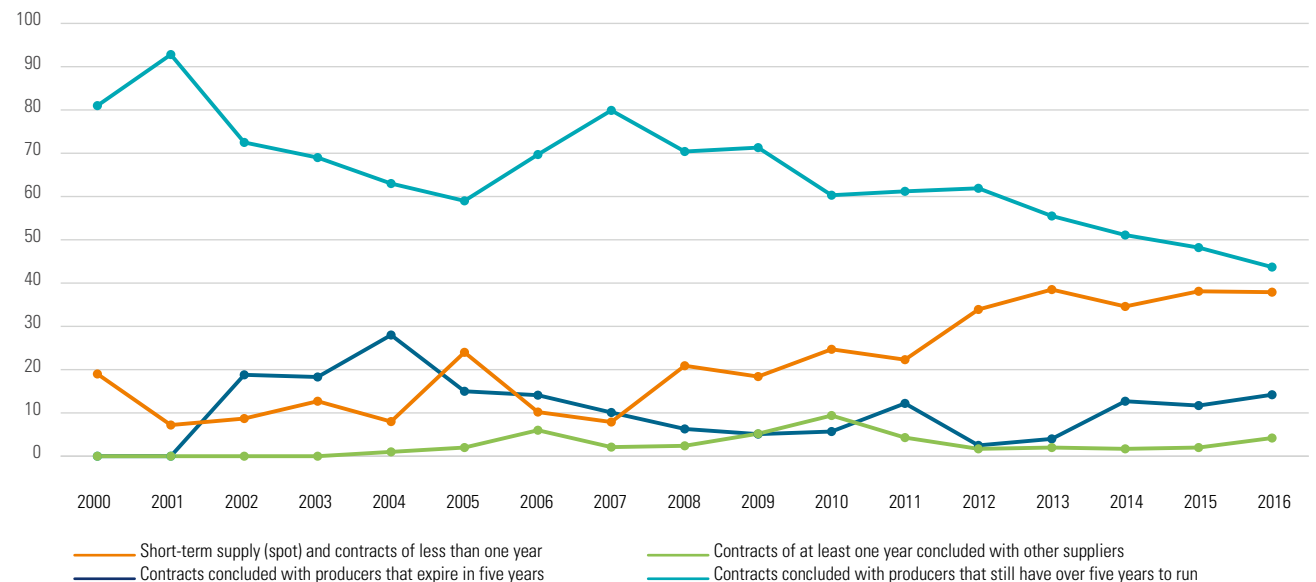
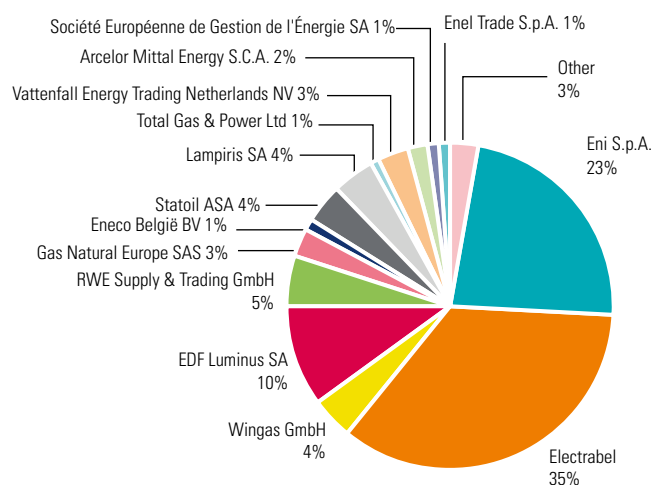




Figure 26: Market shares of supply companies in the transmission network in 2016. (Source: CREG)



\*Supply companies that each have a market share of less than 1%: Progress Energy Services BVBA, E.ON Global Commodities SE, natGAS Aktiengesellschaft, Total Gas & Power Ltd, Vattenfall Energy Trading Netherlands NV, Belgian Eco Energy NV, Enovos Luxembourg SA, European Energy Pooling BVBA, Antargaz SA, Getec Energy AG, Direct Energie, Enel Trade S.p.A.

#### 4.4.2. Monitoring the investment plans of the natural gas transmission system operator

The natural gas transmission system, operated by Fluxys Belgium, has developed in such a way that it has become an important intersection for transmission pipelines in North-West Europe, reporting a record level in terms of coupling with neighbouring transmission systems. Import capacity increased to more than ten million cubic metres of natural gas per hour

(100 GWh/hour) with natural gas flowing in both directions and no congestion problems.

This maturity explains why no immediate significant investments in extensions are planned. The need to replace some elements of some facilities will however increase.

There are some unfavourable developments that make decisions to invest further in extensions less clear-cut. Demand for natural gas is generally stagnating or even shrinking, and is also showing increased volatility. Short-term transmission capacity orders continue to increase without, however, showing any commitments in long-term transmission contracts with the natural gas transmission system operator. Furthermore, there is uncertainty about the use of natural gas-fired plants for future electricity generation.

In 2016 Fluxys Belgium drafted a ten-year plan concerning the development of the system (2017-2026)<sup>112</sup>, in accordance with Article 15/1, paragraph 5 of the Gas Act. CREG evaluated this plan in parallel with ENTSG's 10-year European investment plan (TYNDP 2015) and the North-West Europe transmission system operators' regional investment plan (GRIP). No issues were found. The current major challenge is the conversion of the separate L gas transmission system with the aim of evolving towards a Belgian natural gas market supplied exclusively with H gas. This conversion is necessary because no new long-term contracts will be concluded with the Netherlands for the supply of L gas, given the way in which the Netherlands is managing the remaining stocks of L gas. Furthermore, the Dutch government has taken drastic measures to limit the extraction of L gas in Groningenvelde because of the risk of earthquakes in the north of the Netherlands. In 2016 CREG continued its collaboration with Fluxys Belgium in view of developing an effective L/H conversion plan for the natural

gas transmission system that ensures the necessary capacity for the supply of L gas to France, which will also start a conversion plan. The aim is to supply the entire Belgian natural gas system with H gas by 2029. Fluxys Belgium then tested and further refined this indicative conversion plan with the distribution system operators within Synergrid<sup>113</sup> with a view to the presentation of an indicative L/H conversion plan by Synergrid during an information session on 1 July 2016. In the meantime, this indicative L/H conversion plan has been included in the indicative ten-year plan for the development of the network, and Fluxys Belgium is ready to start the systematic implementation of the proposed conversion from L gas to H gas in 2018 and complete it in 2029.

Stimulated by new LNG flows and market developments for LNG as ship fuel, a significant expansion took place at the Zeebrugge LNG terminal. A second landing station for LNG ships was put into operation at the end of December 2016. Large and small LNG ships can be loaded and unloaded at this new landing station. Small LNG ships are increasingly used to supply other ships fuelled by LNG or to supply small bunkering terminals. Furthermore, the Zeebrugge LNG terminal is being expanded with the construction of a fifth reservoir with a capacity of 180,000 m<sup>3</sup> of LNG (2015-2018). This investment is needed to moor LNG ice-breaker ships from northeast Siberia (Yamal LNG) from 2018. The LNG terminal will be used to unload LNG cargo and transfer it to traditional LNG ships so they can continue the journey.

Limited annual growth of around 1% on the distribution systems and the expected development for industrial customers and power stations have given rise to some (local) reinforcement, but much less than in previous years. Moreover, carrying out this investment continues to depend on adequate payment for the capacity by end users.

<sup>112</sup> <http://www.fluxys.com/belgium/en/About%20Fluxys/Investment/Investment>.

<sup>113</sup> Federation of transmission and distribution system operators for electricity and natural gas in Belgium.

The European investment context is shifting. Firstly, there are changes in the demand-side behaviour. Secondly, European regulations are focusing more on building trans-European gas corridors (see 4.1.3.1), not only helping with the need for physical supply, but also with a view to encouraging market integration, competition, security of supply and sustainability. Cost issues remain of crucial importance to CREG, and it is obvious that greater attention will be paid to alternative solutions to avoid wasted investment and safeguard the competitiveness of natural gas. Cross-border investment decisions are increasingly subject to new factors beyond the national interest.

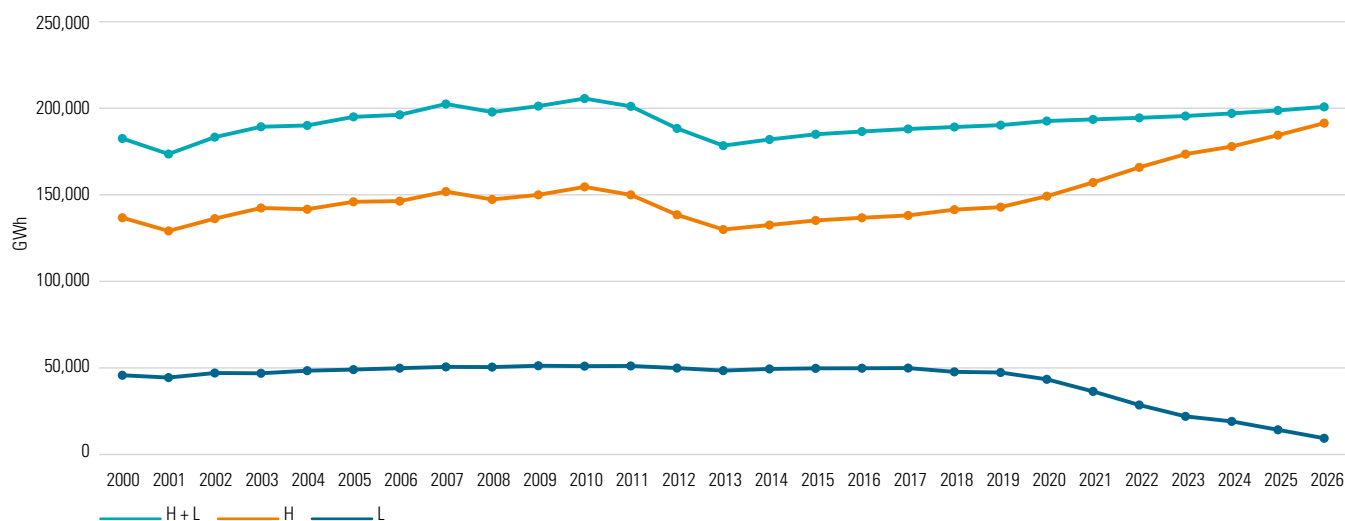
#### 4.4.3. Forecasts of future demand, available reserves and additional capacity

##### • Demand

Figure 27 shows the outlook for total natural gas demand in Belgium according to the CREG reference scenario used to follow up the necessary investments made on the Fluxys Belgium system.

This total natural gas demand is determined by adding together the expected consumption of the household sector, the tertiary sector, industry and electricity generation. In this case, it involves the normalised trend that takes account of temperature. Taking into account the numerous uncertainties existing at this moment, these forecasts are highly hypothetical and may change in the short term as market conditions change. Above all, there is a great deal of sensitivity regarding the use of existing power plants and the construction of new power plants that run on natural gas, the competitive position of natural gas in the energy mix (especially for wholesale users), the economic forecasts and the role of natural gas in the transition to a low-carbon economy. The forecasts include an estimate of the growth in H gas demand to replace L gas demand, according to the L/H conversion plan included in the

Figure 27: Forecast for demand for natural gas in Belgium until 2026 (GWh, normalised t°, H+L) (Source: CREG)



indicative ten-year plan for the development of the Fluxys Belgium network (see section 4.4.2 of the current report).

A situation of gradual convergence to a single integrated H gas market is described within a context of stagnating natural gas demand, except for changes in trends or events that cannot currently be predicted.

##### • Supply

The number of importers of H gas for the Belgian market is growing and is currently 23 (the same as in 2015). Among all importers there is a high degree of diversification, both in terms of supply sources and in terms of supply routes. The trends that are emerging on the natural gas market, in part due to European market organisation, include a rise in the number of short-term natural gas transactions, a greater volume of

business, increased volatility, more international arbitrage and price coupling between European markets.

In Belgium the conditions for the attraction and distribution of natural gas flows are favourable and this can be further enhanced by the gradual transition to a single integrated H gas market in 2029. Maintaining the liquidity of the market in Belgium is essential both for Belgium's security of supply and for 'exporting' security of supply to other markets in north-western Europe.

As for L gas suppliers, there are currently 17 suppliers (19 in 2015), which are also active on the Belgian H gas market and depend almost exclusively on the Poppel/Hilvarenbeek interconnection point for supplies from the Netherlands. Trends on the Belgian L gas market will be defined to a great extent by the gradual conversion of L gas customers to H gas.

#### 4.4.4. Covering peak offtake

The peak offtake day for natural gas in 2016 was recorded on Monday 18 January. At that time, Belgian natural gas consumption was 957 GWh (933 GWh in 2015), which is 1.95 times the average daily consumption. Distribution systems accounted for 65% of the peak offtake, 21% was used in generating electricity, and the remaining 14% was used by industry.

The peak daily consumption of 957 GWh on Monday 18 January 2016 was covered by a range of natural gas sources. There was a net natural gas supply via the Netherlands that covered 54% of peak demand (27% H gas and 27% L gas). 33% came directly from the Norwegian natural gas fields in the North Sea via the Zeepipe in Zeebrugge. The gas flows that went through Germany covered 3% of peak demand.

In addition, 8% came from the Loenhout underground storage facility, 1% from the Zeebrugge LNG terminal and 1% from converting H gas into L gas by adding nitrogen at the quality conversion facility run by the system operator, Fluxys Belgium.

Figure 28: Breakdown of the peak offtake by user segment in 2016  
(Source: CREG)

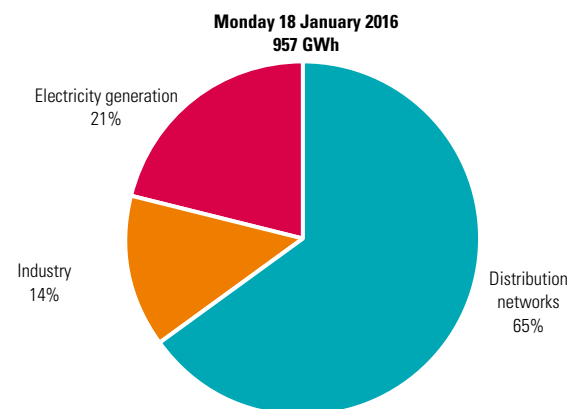
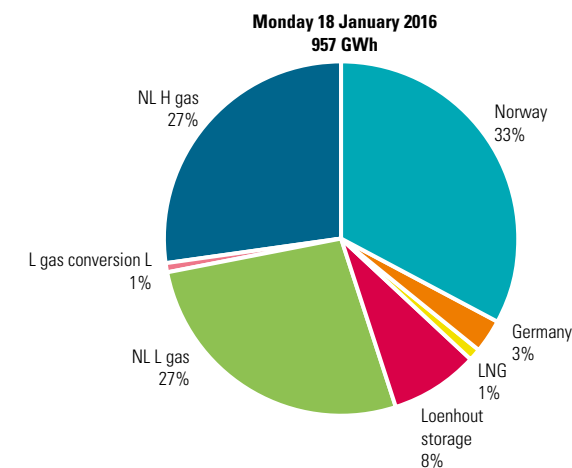


Figure 29: Breakdown of the sources of natural gas to cover the peak offtake in 2016 (Source: CREG)





5

CREG



## 5.1. CREG's board of directors and staff

The board of directors is responsible for the operational management of CREG and undertakes everything that is necessary or useful for the fulfilment of the duties assigned to it by the Electricity Act and the Gas Act.

The Chair and the three Directors who make up the board of directors are appointed by Royal Decree after consideration by the Council of Ministers for a six-year term of office, which can be renewed once. They deliberate as a board in accordance with the usual rules on deliberating meetings.

Since 1 September 2013, Ms Marie-Pierre Fauconnier has acted as Chair of the board of directors, a role which includes responsibility for managing CREG. The three Directors are Mr Laurent Jacquet, who is in charge of price and accounts monitoring, Mr Koen Locquet, who heads up the administrative directorate, and Mr Andreas Tirez, who is in charge of the technical operation of the electricity and natural gas markets.

On 31 December 2016 CREG, in addition to the board of directors, employed 70 members of staff.



Table 14: Directorates and staff of CREG as at 31 December 2016

**CHAIR OF THE BOARD OF DIRECTORS**

FAUCONNIER Marie-Pierre	Chair of the board of directors
DEVACHT Christiane	Executive Assistant
FIERS Jan	Secretary of the board of directors
DE VREESE Annemarie	Communications Manager
VAN HAUWERMEIREN Geert	European Strategic Advisor
CASTELEYN Isabel	Senior Advisors
DE PEUTER Caroline	
COZIGOU Liana	
	Advisor

**DIRECTORATE FOR THE TECHNICAL OPERATION OF THE MARKETS**

TIREZ Andreas	Director
GOOVAERTS Wendy	Executive Assistant
VAN KELECOM Inge	Secretary
GHEURY Jacques	Chief Advisors
MARIEN Alain	
MEES Emmeric	
VAN ISTERDAEL Ivo	
WILBERZ Eric	
CLAUWAERT Geert	Senior Advisors
CUJJPERS Christian	
DE WAELE Bart	
FONTAINE Christian	
PONCELET Yves	
FILS Jean-François	Advisors
MAENHOUDT Marijn	
SCHOUTTEET Nico	
VERHELST Clara	

**DIRECTORATE FOR PRICE AND ACCOUNTS MONITORING**

JACQUET Laurent	Director
FELIX Kim	Executive Assistant
CORNELIS Natalie	Chief Advisers
LAERMANS Jan	
ALLONSIUS Johan	Senior Advisors
BARZEELE Elke	
DEBRIGODE Patricia	
DUBOIS Frédéric	
HERNOT Kurt	
JOOS Benedikt	
MAES Tom	
SOFIAS Anastasio	
COBUT Christine	
LIBERT Brice	
MAY Kristof	Advisors
PIECK An	
WILMART Gilles	

**DIRECTORATE FOR GENERAL AFFAIRS**

DIRECTORATE FOR GENERAL AFFAIRS	
LOCQUET Koen	Director
SELLESLAGH Arlette	Executive Assistant
Gas and Electricity Advisory Board	
DE LEEUW Han	Advisors
HERREZEEL Marianne	
General Administration	
BAUWENS Evi	Translators
SAMYN Emilie	
VAN ZANDYCKE Benjamin	
LOI Sofia	Administration and logistics coordinator
JUNCO Daniel	Logistics staff member
DE DONCKER Nadine	Multi-purpose office staff
HAMELRIJCKX Maryse	
WYNS Evelyne	
HR Service	
SMEDTS Hilde	Senior Legal Advisor
QUERTINMONT Carole	Assistant Advisor
VAN MAELE Nele	Administrative Assistant
IT Service	
DAELEMEN Kurt	Systems and Networks Manager
GORTS-HORLAY Pierre-Emmanuel	Assistant IT staff
Finances	
SCIMAR Paul	Head of Finance
LECOCQ Nathalie	Accountant
CROMBEZ Thomas	Accounting and Administrative Assistant
PINZAN Laurent	Administrative Assistant
Research, Documentation and Archives	
BOUCQUEY Pascal	Chief Advisor
CHICHAH Chorok	Senior Advisors
DETAND Maria-Isabella	
GODDERIS Philip	
HEREMANS Barbara	
ROOBROUCK Myriam	
STEELANDT Laurence	
ZEGERS Laetitia	
HENGESCH Luc	Documentalist



## 5.2. Gas and Electricity Advisory Board

The Gas and Electricity Advisory Board provides advice and acts as a discussion forum, created within CREG and the Federal Energy Ministry.

Its role is:

- to set guidelines for the application of the Electricity and Gas Acts and their implementation decrees, on its own initiative or at the Minister's request;
- to draft opinions on any issue submitted to it by CREG's board of directors;
- to be a forum for discussion of energy policy objectives and strategies.

The Advisory Board held six plenary meetings in 2016.

Mr Peter Claes acted as Chairman and Mr François Tamellini as Vice Chairman.

Regular participation by a representative of the federal Energy Minister has enabled the Advisory Board to focus its work on the most urgent aspects and to be kept informed periodically of the Government's concerns regarding gas and electricity. The many questions members asked the Minister's representative made it possible to inform her of the concerns of the Advisory Board.

The Advisory Board issued four opinions in 2016. The 'electricity market operation', 'price components', 'SoS' (security of supply) and 'renewable energy' working groups respectively worked on their preparation.

Opinion no 65 on CREG study 1520 entitled 'Study on the price spikes observed on the Belgian day-ahead spot exchange on 22 September and 16 October 2015' (the full opinion is produced below):

1. The Advisory Board thanks CREG for the clear, in-depth analysis of the causes of the price spikes on the days concerned. It supports this analysis and the recommendations of the board of directors.
2. The Advisory Board sees a number of possibilities for further analysis, e.g. of the following aspects:
  - Evolution of available production capacities in the Elia control area between 22 and 23 September;
  - Further analysis of the importance of 'LTA coverage' (cf. p. 59 of the study), also with a view to the implementation of the Forward Capacity Allocation code.

It therefore invites CREG to carry out further analysis of these aspects.

3. It is essential to the Advisory Board that the available interconnection capacities are optimally used in all situations. Therefore, it is concerned about their apparently sub-optimal use on the days under review and the impact of this on users' electricity costs in the different countries involved. It asks all relevant authorities, regulators, TSOs and exchanges to further study whether this is due to structural causes, and to make improvements to the calculation and allocation method where necessary:
  - To limit the effect of loop flows on the available interconnection capacities for the market and map the causes of these;
  - To map the phenomenon of 'flow factor competition' based on the current study; in any case it must be avoided that smaller control areas systematically fall victim to congestion due to the built-in maximisation of 'social welfare' in the entire price zone.

The Advisory Board invites CREG to explain the results of the study to the working group.

4. The Advisory Board supports proposals by CREG to reach solutions and insists on the importance of implementing these as soon as possible, e.g. by including them in the capacity calculation methodology.

Opinion no 66 on CREG study 1540 on the use of electricity meters for low voltage in Belgium (the full opinion is produced below):

The Advisory Board thanks the board of directors for study 1540 of 26 May 2016 on the use of electricity meters for low voltage in Belgium.

The aim of this study is to provide a register of current electricity meters (single-rate, dual-rate & night-only) for low voltage in Belgium, and to make recommendations to household consumers, prosumers and SMEs regarding the choice between meter types, in accordance with their consumer profiles.

This study refers to low voltage meters with single-rate, dual-rate and night-only tariffs. Smart meters are not analysed here because they currently have only a limited market share.

The Advisory Board finds that in this study CREG chose to provide a snapshot of the current situation to illustrate development since 2010. Hence, in the Advisory Board's view, this study offers an important insight into the situation of the currently available meters.

The Advisory Board shares the recommendation formulated by the board of directors in this study for household consumers, prosumers and SMEs to compare prices offered by various electricity suppliers, in particular via the regulators' own simulation websites or sites that have been assigned a label



by CREG, the principles of which have been discussed in consultation with the Advisory Board.

In addition, the Advisory Board wishes to formulate the following recommendations/considerations:

1. In the conclusion of this study CREG recommends that household consumers, prosumers and SMEs accurately define their consumer profile in order to determine which meter is most suitable (single-rate/dual-rate/night-only) based on this, and change if necessary. Such a change can result in savings of up to 100 € per year.

Without wishing to enter into the debate on smart meters, in the Advisory Board's opinion it is undeniable that in the coming years the introduction of smart meters will play a role in the future of the Belgian energy landscape.

As a reminder: the Commission recommends that the Member States – depending on the cost/benefit analysis per Member State – consider installing smart meters in 80% of cases by 2020. The aforementioned cost/benefit analyses led to negative results for a full rollout in the 3 regions. However, according to the Advisory Board it is important that CREG mentions this development in these recommendations, knowing that, as is apparent from the study, the write-off period for a meter change (single-rate/dual-rate/night-only) – depending on the current meter type, the current meter tariffs and the historical meter investment policy of each distribution system operator – is between 3 and 8 years.

Besides this study, according to the Advisory Board, account must be taken of the opportunities offered by smart meters for the further development of smart networks, for the improvement of market operation, and to contribute to the security of supply. In fact, the Advisory Board asks that the competent bodies establish a regulatory framework for so-called 'smart' measurement activities.

2. The rising trend in local energy production by means of solar panels has a significant influence on the consumer profile of the 'prosumers' concerned.

As mentioned in §1, the Advisory Board is well aware that smart meters were not the object of this study.

However, the Advisory Board is of the opinion that this type of meter seems suitable for prosumers. Hence, in the Advisory Board's view, the recommendations of study 1540 cannot be applied to them as such.

The Advisory Board asks CREG to take this expected trend into account in its future recommendations, as soon as the regulatory framework has been established.

3. In the coming years the Belgian energy landscape will further evolve towards a decentralised energy system, with a growing market share of renewable energies.

This development will undeniably affect production and pricing.

4. In its recommendations CREG encourages consumers (household, prosumers and SMEs) to choose their meters well, in accordance with their consumer profile.

The Advisory Board points out that it is sometimes not easy for consumers to know their 'energy profile' exactly.

They need to take into account the time blocks (day/night), which are different from one distribution system operator to another. In addition, they need to be aware of operators' policies regarding meters (offer, rates).

5. Where the write-off period for the installation of a new meter is concerned (estimated by CREG between 3 and 8 years), the Advisory Board asks CREG for a more detailed analysis of the currently available meters per distribution

system operator, and of the conditions of installation and replacement of these meters.

In summary and conclusion, the Advisory Board thanks the board of directors for this extremely interesting study, but asks it to take the above suggestions into account in its recommendations.

Opinion no 67 on Elia's study on the need for 'adequacy' and flexibility in the Belgian electricity system for the period 2017-2027 (the full opinion is produced below):

#### • Context

At the request of Minister Marghem, Elia, in its study on the need for 'adequacy' and flexibility in the Belgian electricity system for the period 2017-2027, mapped two essential aspects of the electricity system, namely the need for 'adequacy', i.e. bringing electricity generation and consumption in line with each other, and the need for flexibility in the electricity system.

In relation to this study, the Minister requested a sensitivity analysis, which was published on 29/9/2016.

The Advisory Board approved this opinion on 19 October 2016, with the abstention of ABVV.

#### • Findings and recommendations

1. The Advisory Board thanks Elia for the study and welcomes the methodology used as a contribution to a framework for the future. The Advisory Board recommends using this information and information from additional research with a view to possible policy options reflecting an energy vision and/or pact for the future in which the most efficient solutions from a techno-economic point of view can be offered and the necessary investments can take place with a view to ensuring security of supply and reaching climate and renewable energy objectives at an affordable cost.

To be able to ensure security of supply, we learn from the results of the study that, according to the hypotheses from the study (import capacity, development of biomass, availability of nuclear units, availability of foreign and domestic production, etc.), in the short term there is no need for a structural block for adequacy in the base case. However, from 2023-2025 onwards, according to the hypotheses from the study (import capacity, availability of nuclear units, availability of foreign and domestic production, etc.), the structural block is expected to increase to 4,000 MW in 2027. These hypotheses are based on the closure of the nuclear power plants by 2025, as provided for in the legislation. The Advisory Board emphasises that uncertainty created with respect to the closure of these power plants is extremely negative for a well-functioning electricity market that is to ensure the necessary investments in the future.

2. We recognise the finding of the study that import from other countries plays an important role in Belgian security of supply. Sufficient interconnections with our neighbouring countries could significantly reduce the size of the structural block and create greater synergy with the neighbouring countries. In this context, the optimal balance must be determined between domestic production and import with the lowest possible cost for society and taking into account security of supply and macro-economic elements such as the impact of electricity generation and of the resulting costs and profits of gas transmission and electricity (including the impact of prices that show greater convergence with the neighbouring countries) for the Belgian economy (including the resulting impact on employment in all sectors). It seems advisable to the Board to call in the expertise of e.g. the Federal Planning Bureau, the National Bank of Belgium, etc. for the performance of such a cost-benefit analysis.

a. Interconnections and exchanges between countries are positive in the European framework, within which a single

market and optimal dispatching are strived for. An important note here is that the structural, guaranteed and predictable availability of these interconnections to all market actors over all periods is an essential condition in order to be able to make such a positive contribution. Today, no guarantee is provided for an exact available capacity in the future.

b. The responsibility for, for instance, procuring production capacity to comply with supply contracts falls to the suppliers and balancing managers. The Advisory Board emphasises that in this context the availability of production capacity abroad is also a crucial condition for a positive contribution from interconnections. Hence, the size of the structural block in Belgium strongly depends on the situation in the other countries considered. The study shows that the size of the structural block can increase to 8,000 MW in a scenario in which more foreign generating plants cease operation. Therefore, it is advisable to also perform this study at a European/regional scale, as recommended in the interim report of the European Commission on capacity mechanisms.

Security of supply currently falls under the competence of each Member State, although electricity supply has evolved to a regional scale between interconnected countries. The Advisory Board asks the Minister to, within a European framework, enter into consultations and work on a solid implementation of the regional approach of security of supply, in which transparency on domestic and foreign capacity is offered.

This must lead to agreements on maintaining the availability of the necessary capacity in the different regions and Member States (including Belgium) and offer certainty on the availability of the interconnections. Only in this way can security of supply be guaranteed in an efficient way in an

interconnected market and can market players and investors be offered a clear framework and a level playing field.

3. The Advisory Board wishes to point out that the study does not provide an estimate of the costs and benefits of a number of possible configurations of the structural block, nor of the impact of the possible configurations of the structural block on Belgian electricity prices. For instance, the study shows that by 2027 a large part of the structural block will have a low number of hours of operation, which will be necessary specifically for the Belgian security of supply. In the case of generating plants and storage this can have an effect on the profitability of these capacities if they are not competitive on the electricity market during the remaining hours. Furthermore, the following aspects of the study stand out:

a. The study analyses two scenarios with respect to the development of renewable energy production: a scenario in which the renewable energy objectives are reached, and an additional scenario with a higher rate of development. We learn from the study that the ever growing share of production capacity based on renewable energy sources in controllable capacity has a limited influence on the size of the structural block given that production from wind and solar energy is less present at peak times and its impact during the hours of structural deficit is therefore smaller, but that the hours of use of the block are nevertheless reduced. The results of the study show that the reduced need for structural block capacity as a result of additional capacity of renewable production is largely offset by a higher need for balancing facilities as a result of the higher share of intermittent sources (mainly offshore). The answer to this need for flexibility can be a part of the structural block.

b. The study looks at the extent to which flexibility, storage and demand management have an influence on the size of the structural block. From this we can see that a higher degree of flexibility at the disaggregation level of the study contributes relatively little to the reduction of the size of the structural block, but that the number of hours of operation of the structural block is reduced.

c. The study shows that a stronger growth in electricity demand can increase the size of the structural block by 1,000 MW. This indicates, on the one hand, the impact of electrification (an increase in demand) and, on the other hand, the impact of energy efficiency (a decrease in demand) in the framework of security of supply.

The Advisory Board asks to make a broad system cost-benefit analysis on a more disaggregated level with an open interpretation of the structural block (production and demand, existing and new production capacity, innovations such as demand response, storage, etc.). Among other things, account should be taken of different technology choices, including projections based on possible technological developments which can have an impact, of combinations of measures which can contribute to the structural block, and of the different degrees of use of the parts of the structural block.

4. The study concentrates on the aspect of a possible energy deficit as a risk that may reduce security of supply. Therefore, the Advisory Board is in favour of having an additional study performed by Elia in which the evolution of the risk of reduced security of supply as a result of a possible energy surplus is described. This involves an analysis at system

level, including the evolution of the share and the risk of loop flows. This information is not only important in the framework of flexibility needs. It is also valuable with a view to the preparation of a policy framework for 2020-2030 and the future governance systems for the electricity market.

The Advisory Board asks all relevant authorities, regulators, transmission system operators and exchanges to carry out further research:

- to determine the effect of loop flows on current and future interconnection capacities available to the market, identify the causes and possible future developments, and take measures to limit these loop flows which are discussed at the regional level;
- to map the phenomenon of 'flow factor competition' based on the current study; in any case it must be avoided that smaller control areas systematically fall victim to congestion due to the built-in maximisation of 'social welfare' in the entire price zone.

5. It seems important to the Board that Belgium is prepared to take on the challenge of the nuclear phase-out and the energy transition. The Advisory Board therefore urges the Minister to set up broad stakeholder consultations as soon as possible in order to look for efficient solutions and a broad base of support for the implementation of the structural block.

Opinion no 68 regarding the studies on renewable energy (1) 'Assessment of the impact of renewable generation on Central-Western Europe electricity markets' by FTI-CL and (2) 'Determining the impact of renewable energy on balancing costs, back-up costs, grid costs and subsidies' by KULeuven (the full opinion is produced below):

On 16/11/2015 the Gas and Electricity Advisory Board commissioned FTI-CL and KULeuven to perform a study of the impact of renewable energy generation on, respectively, electricity markets and prices in Central-Western Europe (FTI-CL study) and on the costs of integration (back-up, balancing and grid costs) and subsidies in Belgium (KULeuven study).

The 'renewable energy' working group of the Gas and Electricity Advisory Board was responsible for following up the studies. They were approved at the Board meeting of 19 October 2016 and can be found on the website of the Gas and Electricity Advisory Board.

The studies provide an interesting overview of the order of magnitude of the impact, as estimated by the researchers, of more renewable energy on electricity prices in the CWE region and in Belgium, and of the system impact in terms of integration costs.

#### Effect on electricity prices

The FTI-CL study looked into the impact of the generation of intermittent renewable energy (IRE) on electricity prices in 2012, 2020 and 2030. The lowering effect on average spot prices in Belgium amounts to, respectively, -3 €/MWh in 2012, -1.4 €/MWh in 2020 and -2.9 €/MWh in 2030 compared to a scenario without renewable energy production (situation in 2008). The lowering effect on the price is more significant in the other CWE countries.

For 2030 the study compares 3 scenarios. This comparison shows that the price-lowering effect on peak prices (prices during peak hours) increases substantially in proportion to the share of IRE. This

effect does not apply to off-peak prices, for which the result can be either an increase or a decrease.

The study also looked into the impact of IRE generation on price volatility. In 2012 a slightly decreasing effect was found in Belgium. For 2020 and 2030 there is an increase in the volatility<sup>114</sup> of electricity prices on the spot market with a higher IRE capacity. This situation occurs, for instance, during the winter periods when a high demand is combined with a low amount of IRE, causing an effect on price peaks.

For Belgium volatility in 2030 rises from 15% to 25% (there is no load shedding of IRE). In Germany volatility in 2030 rises further to 45%. In 2020 in Germany load shedding for wind production amounts to 300 GWh in order to maintain the balance of the system, and in 2030 to 4,500 GWh for wind and 200 GWh for solar energy.

The impact of CO<sub>2</sub> emissions in the CWE countries is also explained. For instance, in 2030 the scenario with most renewable energy could lead to a reduction in CO<sub>2</sub> emissions in the electricity sector in the CWE region by 130 million tonnes in comparison with a scenario with a smaller growth of renewable energy. In the case of Belgium a scenario with more renewable energy can prevent the increase of emissions connected to Belgian electricity demand and achieve a reduction of up to 3 to 4 million tonnes of CO<sub>2</sub> compared to emission levels in the reference year, 2012.

The scenarios with more renewable energy also have an impact on the import/export situation and the production balance. For instance, in Belgium dependence on imports more than doubles in the scenario with most renewable energy. The result of the study is a production balance for which the starting point is not the adequacy (security of supply) of the system but the economic

optimisation of the (profitable) production plants. Given the mark-up of producers' bids in the spot market, as applied in the FTI-CL model, no conclusions can be drawn from the results of the study as to the profitability of power plants in the current market model.

Finally, the FTI-CL researchers state that the econometric model used indicates that – due to the increased volatility and hence uncertainty on the spot market – a higher capacity of renewable energy seems to lead to an increase in forward prices. However, according to the researchers, this effect must be interpreted with caution as there is no conclusive proof due to the limited amount of data available.

#### Integration costs for renewable energy

KULeuven studied a series of costs connected to the integration of more IRE, namely integration costs (back-up, balancing and network costs) and subsidies in Belgium, for 2020 and 2030. The study shows that the cost connected to the variability of IRE generation, concretely the back-up cost, is an important factor, which can increase from 3.2 to 8.2 €/MWh IRE. In the calculation of the back-up cost, the cost of investment in additional capacity was based on the use of new CCGTs, but according to the study this can be lower if e.g. existing plants are kept open for this. The back-up costs for Belgium are often lower in the scenario with a strong European framework with

a view to achieving the renewable energy objectives (scenario V4) compared to an approach per country (scenario V3).

The balancing costs connected to the partly unpredictable nature of IRE amount to 2-5 €/MWh IRE. The effect of flexibility in Belgian electricity generation, as modelled in the study, has already been included here. It concerns the highly developed transmission network, the growing share of gas plants, the higher share of DSM, the phasing-out of nuclear power plants, and the higher capacity of pumping power plants. This Belgian flexibility is higher than the situation today. However, the balancing costs are higher for Belgium than for the CWE as a whole (due to the smaller geographical scale of Belgium, which make it harder for meteorological phenomena to be averaged out).

The network costs connected to the integration of IRE into the transmission network amount to 2.4-3.1 €/MWh IRE; a large share of these is the result of the connection of offshore wind energy (1.5-2.2 €/MWh IRE). The remaining costs on the transmission network are the result of interconnections and network reinforcements. However, the latter cannot be exclusively attributed to IRE, which is why a range is used. A cost estimate was made as well in the amount of 2.5-9 €/MWh IRE for distribution network reinforcements based on foreign literature data<sup>115</sup>.

#### **System integration costs: Belgium**

€/MWh IRE		Scenario V1	Scenario V3	Scenario V4
Back-up costs		5.5	8.2	3.2
Balancing costs		4.1	2.1	2.8
Network integration costs	transmission level excluding interconnections and internal network reinforcements	1.6	2.1	2.2
	total network integration costs at transmission level	2.4	2.8	3.1
	distribution level	2.5-9	2.5-9	2.5-9

<sup>114</sup> Volatility is expressed as the ratio of the standard deviation compared to the average electricity price.

<sup>115</sup> The main reason for the considerable margin in the costs is the use of different assumptions and scenarios in the studies consulted.

Finally, the study indicates that, depending on the type of RE, subsidy costs (connected to the system of green energy certificates) for both locked-in subsidies and new capacity can be (considerably) higher than integration costs, as a result of which the subsidy costs per MWh consumed in 2030 can increase from 10 € to 19 €/MWh for a scenario without additional capacity after 2020 (scenario V1) versus considerable additional capacity of renewable energy (scenario V3)<sup>116</sup>. In the calculation of subsidies a plant life of 20-25 years was taken into account, while subsidies are typically granted during the first 10-15 years.

#### Recommendations from the Board

The need for more RE has been established in European agreements with objectives of 20% at the European level and 13% at the Belgian level for 2020 (13% share of RE in primary energy consumption)<sup>117</sup> and at least 27% at the European level for 2030 (for which no objective was set per country)<sup>118</sup>. The long-term objective is determined by the commitment to reduce CO<sub>2</sub> emissions by 80 to 95% by 2050<sup>119</sup> and the objective of reducing global warming to a maximum of 2 °C and striving for a maximum warming of 1.5 °C, as established in the Paris climate agreement<sup>120</sup>.

There is a cost involved in the transition of the electricity system with the rollout and integration of renewable energy. On the other hand, there are also potential benefits, such as a reduction in CO<sub>2</sub> emissions, a better trade balance, employment, health, local production and active involvement of consumers.

We need to study what policy measures are able to ensure that the cost to society is kept as low and manageable as possible, while achieving and maximising the benefits.

The Board points out that increasing the share of IRE will contribute to lower prices on the wholesale market, which means a negative effect on market revenues from renewable energy technologies and on the profitability of the conventional production technologies. With the current renewable energy technologies, system costs (integration costs and especially subsidy costs) amount to a multiple of the price reductions on the spot market.

In the development of IRE more attention needs to be paid to the balance between rollout and innovation in order to increase the cost-efficiency of technologies and develop solutions. An insufficient use of IRE plants due to load shedding must be avoided in order to keep system costs under control and not hamper IRE production. Solutions must be developed to better adapt production to demand.

The Board also emphasises the importance of flexibility of the energy system and cooperation with the neighbouring countries in order to reduce integration costs. Interconnections and the presence of flexible units play a significant role in this. The proportion of the (future) share of non-flexible production to the base load is relevant. The recent study by ELIA (Adequacy 2017-2027) also provides interesting insights in this respect. Taking into account the increasing importance of flexibility and a lower number of hours of operation for the complementary technologies, the use of technologies with high technical flexibility and low operational costs is important.

Flexibility can be a factor at all voltage levels, with all types of technologies and for all periods, and be integrated into the market in different ways.

Another recommendation from the Board is to work on a more cost-efficient back-up capacity than the use of new CCGTs that was assumed in the study. Other flexible solutions with lower investment and operational costs can be part of the solution here.

#### Conclusion

The Board is of the opinion that the information from the studies needs to be taken into account by policymakers in order to organise the integration of renewable energy into our energy system with a view to a low-carbon society in a way that is as cost-efficient as possible, and optimal for society. This means that, at the same time, the objectives relating to climate change, sustainability, security of supply and competitive prices for the different consumer groups must be strived for in the entire energy system of which renewable energy is a part. Only a vision that encompasses the various aspects of energy policy via a joint approach by the different competence levels leads to the most efficient and coherent transition to a low-carbon economy. Transparency in the policy pursued is important. A vision on these interconnected aspects that is supported by society is an essential condition in order to achieve an efficient and effective energy system and a matching investment policy in our country.

<sup>116</sup> AR-CC's own calculation based on the data for the different ENTSOE scenarios used in the study.

<sup>117</sup> [http://ec.europa.eu/clima/policies/strategies/2020\\_en](http://ec.europa.eu/clima/policies/strategies/2020_en)

<sup>118</sup> <https://ec.europa.eu/energy/en/topics/energy-strategy/2030-energy-strategy>

<sup>119</sup> [http://ec.europa.eu/clima/policies/strategies/2050\\_en](http://ec.europa.eu/clima/policies/strategies/2050_en)

<sup>120</sup> [http://unfccc.int/paris\\_agreement/items/9485.php](http://unfccc.int/paris_agreement/items/9485.php)

Table 15: Members of the Gas and Electricity Advisory Board as at 31 December 2016 (Source: Belgian Official Journal)

	MEMBERS	REPLACEMENT MEMBERS
Federal Government	VANEYCKEN Sven ROOBROUCK Nele CHAHID Ridouane ANNANE Jihane DORREKENS François DASGUPTA Jivan	JUSTAERT Arnout WAEYAERT Nicolas JOURDAIN Sigrid NIKOLIC Diana NICOLAS Stéphane DEMEYERE Frank
Regional Governments	BIESEMAN Wilfried AUTRIQUE Henri JACQUET Annabelle	TANGHE Martine BOHET Maurice DECROP Jehan
Representative employees' organisations sitting on the National Labour Council	VERJANS Mathieu VERHUE Maureen VAN DAELE Daniel DE CROCK Bart	NICAISE Didier VAN WIJNGAERDEN Jan VAN MOL Christiaan SKA Marie-Hélène JONCKHEERE Caroline
Representative employees' organisations sitting on the Council for Consumption	DE WEL Bert STORME Sébastien	QUINTARD Christophe SPIESSENS Eric
Organisations for the promotion and protection of the general interests of small-scale users	ADRIAENSSENS Claude DOCHY Stéphane	RENSON Marie-Christine MOERS Jan
Representative organisations of the industry and the banking and insurance sector sitting on the Central Economic Council	VANCRONENBURG Geert BROUWERS Els VAN der MAREN Olivier	VANDERMARLIERE Frank CALOZET Michel AERTS Kristin
Representative organisations of the crafts, small and medium-sized trading companies and small-scale industry sitting on the Central Economic Council	DE BUYSER Capucine VANDEN ABEELE Piet	DEPLAE Arnaud VAN GORP Michel
Major electricity consumers	CLAES Peter	EELENS Claire
Major natural gas consumers	BRAET Luc	de MUNCK Laurent
Electricity producers that are members of FEBEG (the Belgian federation of electricity and gas companies)	VAN DEN BOSCH Marc SCHOONACKER Frank	DE GROOF Christiaan de VILLENFAGNE Aude
Electricity producers using renewable energy sources	LAUMONT Noémie	BODE Bart
Electricity producers using cogeneration plants	BOYDENS Jean-Pierre	MARENNE Yves
Industries that generate electricity for their own needs	BÉCRET Jean-Pierre	ZADORA Peter
Distribution system operators - INTERMIXT	GRIFNEE Fernand HUJOEL Luc DE BRUYCKER Luc	DECLERCQ Christine DEBATISSE Jennifer VERSHELDE Martin
- INTER-REGIES	DE BLOCK Gert	HOUGARDY Carine
Transmission System Operator for Electricity	DAMILOT Julien	MERTENS Steven
Transmission System Operator for Natural Gas	GOSSUIN Luc	DESCHUYTENEER Thierry
Holders of a supply licence for natural gas that are members of FEBEG	VANDEN BORRE Tom VAN NUNEN Carlos	DE BUCK Hilde DEDECKER Gunnar
Environmental associations	VAN DYCK Sara VANDE PUTTE Jan	TURF Jan DE SCHOUTHEETE Cécile
Holders of a supply licence for electricity that are members of FEBEG	HEYVAERT Griet WYVERKENS Herman	GODTS Annemie VAN BOXELAER Kathleen
Market operator for the exchange of energy blocks proposed by BELPEX	MATTHYS-DONNADIEU James	PIERREUX Nicolas

### 5.3. General policy plan and comparative report on the objectives and achievements of CREG

In accordance with the Electricity Act, on 27 October 2016 the board of directors drew up CREG's policy plan for the year 2017<sup>121</sup>. This general policy plan is a continuation of what has been undertaken by the board of directors since September 2013, and especially of CREG's strategic plan for 2013-2019. This policy plan sets out the objectives CREG will be pursuing in 2017 in the framework of its legal duties and its strategy with respect to energy as defined by the federal Parliament and the federal Government. In fact, the new presentation of the policy plan in themes, objectives, activities and results to be delivered has a double objective. This new structure is intended, on the one hand, to make it more readable, and, on the other hand, to increase the visibility of the results to be delivered by CREG during the coming year. Each specific objective pursued is explained in detail, as well as the resulting activities for the year 2017, together with a list of results to be delivered and the indicative deadlines for reaching them.

The policy plan accompanies CREG's draft budget for the year 2017. Both documents have been submitted to the President of the Chamber of Representatives and to the Chair of the Chamber's Commission for Economy, Scientific Policy, Education, National Scientific and Cultural Institutions, the Self-employed and Agriculture (hereafter: the Economic Commission) and the Minister for Energy, and presented during a CREG hearing before the Economic Commission on 22 November 2016.

A comparative report<sup>122</sup> has also been drafted on the objectives formulated in the 2014 policy plan and their completion.

This report, accompanied by CREG's Annual Report 2015, was submitted to the Energy Minister, the President of the Chamber of Representatives and the members of the Economic Commission on 29 April 2016. In its policy plan for 2015, CREG identified 35 objectives to be achieved. These objectives can be broken down into 436 actions corresponding to individual tasks to be completed. The comparative report shows, for each action, the degree of completion achieved and provides a reason in the case of partial or non-completion. It is provided as an annex to CREG's Annual Report.

### 5.4. The Court of Auditors' audit report

After the functional audit of CREG carried out by the Court of Auditors (see CREG's Annual Report 2015, section 5.5), the Chamber of Representatives heard CREG on 12 April 2016.

In mid-2016 the board of directors took various measures in order to further improve the internal operation of CREG with a view to optimal service provision to consumers. These measures can be divided into two large groups: measures to further strengthen independence, and measures to improve transparency.

At the end of 2016 an ethical code was created in this context. This text is the result of talks between the personnel of all CREG directorates. The text has an important signalling function and applies to all personnel and directors of CREG.

The text has been formulated in a concise, general way, and is intended to stimulate behaviour and practices that are in line with CREG's values. Under the same philosophy, since the end of 2016 CREG personnel have been asked to sign an sworn statement.

CREG is also studying to what extent the recurring meetings with the sector can be published via an agenda on its website, and since mid-2016 it has been working on an intranet that allows for improved internal communication.

Every week, the Chair of the board of directors and the directors hold a short debriefing on their contacts with the sector in the framework of the performance of their duties. This information is included in the meeting minutes.

In order to continuously improve the operation of CREG, the bylaws of the board of directors are evaluated on a regular basis and amended when necessary. Consultations were held with the market players from the end of August until mid-September 2016 on the way in which CREG's board of directors treats possible confidential information in the context of publications and public consultations. In this way, CREG wants to continue to clarify and improve the transparency and efficacy of its working method.

For transparency reasons all new cooperation agreements are also published on CREG's website.

These improvements in the area of transparency and independence will contribute to the reinforcement of the independence, impartiality and integrity of the regulator in the performance of its duties in the general interest.

<sup>121</sup> Policy plan (Z)161027-CDC-1573 for the year 2017.

<sup>122</sup> Comparative report (Z)160424-CDC-1515 of the objectives formulated in CREG's general policy note and the accomplishments of the year 2015.



## 5.5. Handling questions and complaints

CREG continued to handle the questions and complaints raised by consumers, businesses in the sector, lawyers, consultants, researchers, students, administrations, federal and regional mediation services or international bodies on a voluntary basis in 2016.

In addition, CREG also continued to cooperate with the Federal Energy Mediation Service, the three regional energy regulators (BRUGEL, CWaPE and VREG) and the FPS Economy, SMEs, the Self-employed and Energy (Directorate-General for Economic Inspection and Directorate-General for Energy). This cooperation is the result of an agreement signed in 2011 in which the services involved agreed on the procedure for the handling of complaints and questions that do not fall under the competence of the service that receives the complaint or question.

Additionally, in March 2016 CREG sent the Federal Energy Mediation Service its complaints statistics for 2015, as part of its annual duty to report to DG SANCO of the European Commission. Of the 411 requests received between 1 January and 31 December 2015, CREG dealt with 77 complaints directly. CREG defines a complaint as any form of discontent. Most complaints were about energy bills.

Finally, in 2016 no use was made of the possibility for anyone who considers that they have been harmed by a CREG decision to ask CREG to review their case.

On the other hand, the Dispute Resolution Chamber<sup>123</sup>, which is a CREG body, was unable to operate in 2016 due to a failure to appoint its members.

## 5.6. CREG website

CREG updated its website in December 2016.

The update had a double purpose: on the one hand, CREG, as energy regulator and as a service-providing organisation, wants to make clear and understandable information available to end consumers. On the other hand, CREG wants to continue to increase transparency to professionals in the energy sector.

The website was updated based on user tests and questionnaires among consumers and market actors.

The site is now divided into two sections: one addressed to consumers, and one to cater for the needs of the sector. The consumer section is intended to encourage consumers to play an active role in the free energy market via information on prices and tariffs, the composition of their energy bill and the operation of the energy market. The section dedicated to sector professionals offers an improved overview of public consultations and publications.

<sup>123</sup> The Dispute Resolution Chamber is called upon to resolve disputes between system operators and users as regards the obligations imposed on TSOs, DSOs and the operators of closed industrial systems, with the exception of disputes over contractual rights and obligations.



## 5.7. Presentations made by CREG

Table 16: Overview of presentations made by CREG in 2016

ORGANIZING BODY	EVENT	TITLE OF THE PRESENTATION	DATE
CREG	Déjeuner de presse	Comparez en connaissance de cause	05/01
Energie Facteur 4 asbl	Séminaire : Les actualités 2016 du solaire photovoltaïque et du stockage d'électricité	Stockage électricité en Belgique : technologies, rentabilité et futur développement	20/01
IUK-CREG	Seminar IUK-CREG	Regulating an interconnector - operational perspective / Tariffs	25/01
Febeliec	Energy Forum 2016	Security of Supply Belgium ? / Liberalisation : looking back to jump into a (better ?) future / Grid tariffs: recent decisions and expected developments	26/01
FSMA	Réunion Bilatérale CREG-FSMA sur REMIT	Interaction du monde financier avec le monde énergétique	26/01
Synergrid	Marktwerking Gas - Werking Belgische gasmarkt	Market Model Gas - Networkcodes	2/02
CREG	Session d'information interne	Les nouveaux tarifs de transport pour l'électricité et le gaz / De nieuwe transporttarieven elektriciteit en gas	5/02
CIGRE 2016	CIGRE Session 2016	Market coupling, facing a glorious past?	15/02
CEER	REMIT workshop	CREG's experience on data reporting and case management	16/02
Conseil Consultatif Gaz et Electricité	Groupe de travail Fonctionnement marché électricité	Évolutions marquantes sur les marchés de gros de l'électricité et du gaz en 2015 / Opvallen-de evoluties op de Belgische groothandelsmarkten elektriciteit en gas in 2015	19/02
MR	Groupe de travail Énergie du MR	Étude sur les mesures à prendre afin de disposer du volume adéquat de moyens de production conventionnels pour assurer la sécurité d'approvisionnement en électricité de la Belgique	22/02
Conseil Consultatif Gaz et Electricité	Groupe de travail Composants des prix	Études 1496 et 1485	23/02
ECOCIR	Colloque Énergie de l'économie circulaire	Évolution du marché et des prix du gaz naturel	25/02
Institut de l'Économie Circulaire	Table ronde	L'Économie circulaire, nouveau modèle de prospérité	26/02
CREG	Formation pour un stagiaire	Market Model Gas - Networkcodes	1/03
Comité économique et social européen	Audition publique sur le thème L'état de l'union de l'énergie 2015 – sa gouvernance et ses implications pour la société civile	State of the Energy Union 2015 - Governance and its Implications for Civil Society	2/03
Fluxys	Shippers day	Gas & Electricity : united in competition	3/03
Florence Forum	Florence Forum	Upgrading the market - Acer Position	3-4/03
FORBEG	GWG	LNG in a Nutshell	9/03
MR	Groupe de travail Énergie du MR	Codes réseau - network codes	21/03
CREG	Workshop relatif aux réactions reçues par la CREG sur ses propositions relatives aux moyens à mettre en œuvre pour faciliter l'accès à la gestion de la demande (demand side flexibility) en Belgique / Workshop over de reacties die de CREG heeft ontvangen op haar voorstellen in verband met de middelen die moeten toegepast worden om de toegang tot het vraagbeheer (demand side flexibility) in België te faciliteren	Étude sur les moyens à mettre en œuvre pour faciliter l'accès à la gestion de la demande en Belgique : Workshop 21 mars 2016 / Studie over de middelen die moeten worden toegepast om de toegang tot het vraagbeheer in België te faciliteren : Workshop 21 maart 2016	21/03
ULB	Cours	Regulation in a world of asymmetric information	22/03
CWE	Consultative Group meeting Amsterdam Schiphol	Price spikes on Belpex DAM - 22 September 2015	30/03
IEEE	EnergyCon 2016 Leuven	Flow-based market coupling - One year and beyond	7/04
Chambre des représentants – Commission de l'Économie	Audition - Hoorzitting	Rapport de la Cour des Comptes sur l'audit fonctionnel de la CREG / Verslag van het Rekenhof over de functionele audit van de CREG	12/04
ULg –Montefiore Institute	Energy markets - Lesson 9	Étude sur les moyens à mettre en œuvre pour faciliter l'accès à la gestion de la demande en Belgique	15/04
Conseil Consultatif Gaz et Electricité	Groupe de travail Composants des prix	Étude 1516	27/04
Febeliec	Informative meeting	CREG study 1520 on the price spikes on Belpex DAM 22 September and 16 October 2015	28/04
Conseil Consultatif Gaz et Electricité	Groupe de travail Fonctionnement marché électricité	CREG study 1520 on the price spikes on Belpex DAM 22 September and 16 October 2015	2/05
CREG	Session d'information interne	Market Model Gas - Networkcodes	25/05

ORGANIZING BODY	EVENT	TITLE OF THE PRESENTATION	DATE
Elia	Expert working group Bid Ladder	Étude 1459 sur les moyens à mettre en œuvre pour faciliter la participation de la flexibilité de la demande aux marchés de l'électricité en Belgique	25/05
Conseil consultatif du Gaz et de l'Electricité	Groupe de travail Fonctionnement marché électricité	Étude 1459 sur les moyens à mettre en œuvre pour faciliter la participation de la flexibilité de la demande aux marchés de l'électricité en Belgique	31/05
Fluxys Belgium	Séminaire 2016 CREG/Fluxys Belgium	Shaping the market transition L>H / CEER European TSO benchmark	31/05-1/06
EEM16	International Conference on the European Energy market	Non-convexities in European day-ahead electricity markets with Belgium as a case study	6-9/06
Statoil	Marktwerking Gas - Promotie Belgische gasmarkt	Market Model Gas - Networkcodes	9/06
FORBEG	Groupe de travail Gaz	Revision EU SoS Regulation : are you happy ? Migration L-gas -> H-gas: are you ready ?	16/06
CREG	CREG workshop	Scarcity pricing mechanism	17/06
IAEE International Conference	Energy : Expectations and Uncertainty : Challenges for Analysis, Decisions and Policy	Market Design to Provide Secure Gas Supplies before Shifting to State Measures	19-22/6
Conseil Consultatif Gaz et Electricité	Groupe de travail Fonctionnement marché électricité	Étude 1513 - rapport de monitoring - fonctionnement du marché de gros de l'électricité 2015 / Studie 1513 - monitoringrapport - werking van de groothandelsmarkt voor elektriciteit 2015	20/06
Conseil consultatif du Gaz et de l'Electricité	Groupe de travail Énergies renouvelables	Étude 1462	20/06
Conseil consultatif du Gaz et de l'Electricité	Groupe de travail Fonctionnement marché électricité	Note 1527	27/06
Elia	Regulatory Day	Intraday auctions / Scarcity pricing mechanism / CREG study 1520 on the price spikes on Belpex DAM 22 September and 16 October 2015 – Precongested cases and LTA inclusion	28/06
NAFTOGAZ	Session d'information sur le fonctionnement du marché du gaz pour le futur régulateur ukrainien et le gestionnaire de réseau de transports ukrainien	Market Based Balancing	5/07
Ministère des Affaires Etrangères	Session d'information pour les opérateurs gaziers ukrainiens	Pricing Structures	6/07
CREG	Workshop avec les stakeholders sur le prix de transfert	Étude 1459	7/07
ENEL	Werking balanceringsmarkt gas voor powerplants	Market Based Balancing	12/07
E-Control - AGWG Task Force	Internal Workshop on the implementation of the Gas Target Model: Experiences and challenges	Belux Market Merger	13/07
ECA	Meeting IUK, OFGEM, ACM, CREG	Market Based Balancing	19/07
Conseil Consultatif Gaz et Electricité	Groupes de travail Fonctionnement marché électricité et Composants des prix	Présentation de l'étude 1540 sur l'utilisation des compteurs électriques en basse tension en Belgique	31/08
Commission européenne (TAIEX)	Soutien en matière tarifaire de la Commission Nationale de Régulation de l'Energie Ukrainienne	Principles of Modern Tariff Methodologies For Gas Storage Operators	12-15/09
Conseil Consultatif Gaz et Electricité	Groupe de travail Fonctionnement marché électricité	Note 1546 Mesures tendant à améliorer le fonctionnement du marché de l'électricité / Nota 1546 Maatregelen voor een verbeterde marktwerking elektriciteit	12/09
Conseil Consultatif Gaz et Electricité	Groupe de travail SOS	Note 1532 Avis sur l'étude d'Elia relative à la sécurité d'approvisionnement et la flexibilité pour la période 2017-2027 / Nota 1532 Advies over studie Elia betreffende de bevoorradingszekerheid en flexibiliteit 2017-2027	15/09
Gouvernement wallon	Audition	Le rôle de la CREG en matière de tarifs pour OSP pour le soutien aux énergies renouvelables en Wallonie / Comparaison des prix de l'électricité et du gaz pour les industriels en Wallonie, en Belgique et dans les pays voisins	15/09
ERRA	Educational workshop : Implementation of the European network codes and target models	Flow-Based capacity allocation & congestion management / Bidding zone review and Capacity calculation regions - Regulatory perspective	19/09
CEER	Sharing regulatory experience with other European regulators	Tariff setting methodologies for Gas Transmission Operators	21/09
BIEE 11th Oxford Research Conference	Innovation and Disruption: the energy sector in transition	Drivers and hurdles for gas market integration in Europe : Evidence from Belgium-Luxembourg Pilot Market Merger Project	21-22/9
Conseil Consultatif Gaz et Electricité	Groupe de travail Fonctionnement marché gaz	Studie 1548 betreffende de prijzen op de Belgische aardgasmarkt in 2015	23/09
Conseil Consultatif Gaz et Electricité	Groupe de travail Fonctionnement marché électricité : workshop	Scarcity pricing and impact on Belgium	30/09
EPEX SPOT	European Market Power Summit	La mise en œuvre du CACM et la dynamique changeante du marché européen de l'électricité	6/10

ORGANIZING BODY	EVENT	TITLE OF THE PRESENTATION	DATE
SRBE	Marchés de l'électricité... quoi de neuf ? / Elektriciteitsmarkten ... Het Nieuws?	Flow Based Market Coupling : CREG concerns / Long term market evolutions	12/10
IEADSM 2016	The Role of DSM to provide Flexibility in Electricity Systems	Reflections on an improved market design	13/10
Ecole Royale Militaire	Cours	Energy : A strategic factor in international relations	15/10
CEER	Specialised training on Projects of Common Interest	Experiences from projects in the 2nd PCI list	18/10
Chambre des représentants – Commission de l'Economie	Audition - Hoorzitting	Missions de la CREG dans le cadre de la contribution de répartition nucléaire pour les années 2016-2026 / Opdrachten van de CREG in het kader van de nucleaire repartitiebijdrage voor de periode 2016-2026	25/10
FEBELIEC/VOKA WORKSHOP	Industriële gebruikers distributienetten in Vlaanderen	Studie 1583 - De winstgevendheid van lokale, stuurbare productie-eenheden	15/11
Chambre des représentants- Commission de l'Économie	Audition - Hoorzitting	Budget - Note de politique générale 2017 Begroting - Beleidsnota 2017	22/11
Réseau francophone des régulateurs de l'énergie	Inauguration	Un modèle de coopération entre régulateurs : le CEER	28/11
Conseil Consultatif Gaz et Électricité	Groupe de travail Fonctionnement marché gaz	Étude 1570 sur la fourniture en gaz naturel des grands clients industriels en Belgique en 2015 / Studie 1570 over de aardgaslevering aan grote industriële klanten in België in 2015	29/11
1st AIEE Energy Symposium	Current and future challenges to Energy Security	Hub-Based Gas Sourcing for Market Liquidity and Continuity of Supply	1/12

## 5.8. CREG and other bodies

### 5.8.1. CREG and the European Commission

CREG participated either directly or indirectly in the activities of the European Commission, e.g. via the Smart Grids Task Force (Expert Group 3: Workshop on Demand Response and Self Consumption Expert), the Workshop on Experiences and conditions for successful implementation of storage and the second Stakeholder's workshop on energy prices and costs.

CREG also participated in the European Consumer and Competition Day, organised by the Presidency of the Council of the European Union.

In order to expand on these activities, CREG also actively took part in the Madrid (for gas), Florence (for electricity), London (for citizens) and Copenhagen (for infrastructure) forums (see sections 5.8.4. to 5.8.7. below).

In its role as a CEER member, CREG also, as in previous years, provided assistance in numerous consultations and reports for the benefit of the European Commission (see section 5.8.3. hereof).

CREG fulfilled its advisory duties by assisting the authorities during the various comitology meetings presided by the European Commission aimed at the approval of European network codes (see section 5.8.2 hereof).

Finally, the 2015 National Report from Belgium<sup>124</sup> was submitted to the European Commission and ACER by CREG on 8 July 2016. It was written in close collaboration with the regional regulators (BRUGEL, CWaPE and VREG) and the Federal Energy Mediation Service, and includes the measures taken and the results obtained within the framework of the legal missions of these bodies.

Finally, CREG responded to several questionnaires within the framework of the harmonisation and integration of the European gas and electricity markets. In 2016 these referred to the following topics, among others (original titles):

- 1) Request for information Reminder Case HT.4624 Capacity mechanisms Sector Inquiry on Capacity Mechanisms Public Bodies follow-up questionnaire;
- 2) Survey on the implementation of Article 15.8 of the Energy Efficiency Directive on Demand Response in MSs;
- 3) EU study Security of Electricity Supply stakeholder questionnaire;
- 4) Survey on the implementation of Demand response provisions in Member States (in the frame of the Energy Efficiency Directive).

<sup>124</sup> 2016 Belgian national report to the European Commission and ACER, 7 July 2016.

### 5.8.2. CREG within ACER

ACER (the Agency for the Cooperation of Energy Regulators) was created by the third energy package in order to encourage the completion of the interior energy market, both for electricity and for natural gas.

The three objectives that it formulated based on the drawn-up legislation concern:

- a more competitive integrated market offering more choice to consumers;
- an efficient energy infrastructure in which the free movement of energy beyond borders and the transmission of new energy sources are guaranteed, thereby improving security of supply for the companies of the European Union and consumers;
- a controlled and transparent energy market in which consumers pay a price which is guaranteed to be honest and reflect costs, and in which abuse is prevented.

2016 can be considered the year in which the first, reviewed and improved steps towards the further development of the single energy market were taken. While in the previous two years work was focused mainly on the development of previous initiatives and existing legislation, in 2016 attention was concentrated on experience gained in order to provide a basis for the development of remedies in response to defects identified in the future.

In this context a brainstorming session was also held on the future role of ACER, not only as a European Agency, but also as a coordinating body of all European energy regulators. The key role of ACER for the future was central in its fifth annual conference. The further strengthening of the agency is widely supported, but emphasis was placed on the fact that increased responsibilities should be accompanied by increased resources. In this context CREG supports ACER's recommendation 01-2016 (ACER recommendation on ensuring the independence of the Agency for the cooperation of energy regulators and of national regulatory authorities), which

advocates better monitoring by the European Commission of compliance within the Member States with the principle of independence of the national energy regulators. Regulators' financial health is crucial for their proper functioning and the fulfilment of their legal duties. New resources are needed in order for regulators to continue to fulfil their role as facilitators in this fast-changing flexible energy market with a view to the creation of a free, common internal energy market for all.

The first objective mentioned above, i.e. a more competitive integrated market with a wider choice for consumers, therefore acquires a different meaning. The list of ACER publications became longer again in 2016, but the main difference compared to the previous monitoring, implementation and activity reports is the fact that recommendations were provided for the further development of a single electricity and natural gas market. In this way, the regulators, including CREG, are preparing the transition, based on European coordination, to an increasingly flexible energy system which reflects the integration of a growing share of renewable production in the energy mix.

In addition to these future-oriented administrative and structural reforms, in 2016 work on the creation of the integrated energy market continued. Within the Agency, CREG collaborated in the preparation and implementation of the technical documents necessary to this end.

With regards to natural gas, the following points can be cited:

- a) The implementation and evaluation reports in which CREG collaborated (including an implementation report referring to the procedures for congestion management, the first edition of the implementation monitoring report of capacity allocation mechanisms – including booking platforms – and the first report on the implementation of the Balancing Network Code) were published by ACER. They give a clear idea of the situation in Belgium compared to that in each European Member State. Each time, implementation in Belgium appears to meet the requirements. In the specific case of the booking platforms,

CREG has contributed, as Co-Chair of the Regulatory Advisory Group, to the monitoring of the PRISMA-platform. In the future, it will continue to work on this.

- b) In 2016 the discussion about the adaptation of the network code for capacity allocation mechanisms in respect of new incremental capacity and the rules on the harmonisation of transmission tariff structures was started within the Gas Committee of the European Commission Member States. CREG, in its role as advisory body to the Government, provided the necessary support in this respect. Both documents have been approved and will be published during 2017.

With regards to electricity, the following points can be cited:

- a) Following the recommendations formulated in 2015, in the course of 2016 the Electricity Committee of the Member States discussed various connections and operational network codes. CREG followed these discussions closely and is ensuring that ongoing pilot projects, which were already started in a preliminary implementation phase, are actually carried out during the coming implementation phase. In this way, CREG hopes to make the internal energy market a reality faster than is legally required.
- b) At the same time, the implementation of the network codes that had already been published was started. Concretely, this concerns the network code of 14 April 2016 referring to requirements for the connection of electricity producers to the network, the network code of 17 August 2016 for the connection of consumers and the network code of 26 August 2016 referring to requirements for the connection of high voltage DC systems and DC-connected power park modules to the network. These codes entered into force on 17 May, 7 September and 28 September 2016, respectively. In this respect, CREG, in collaboration with the regional regulators, has taken steps to allow for the established 2017 deadlines to be respected.

c) As a result of the implementation of the first published guideline on capacity allocation and congestion management of 24 July 2015 (NC CACM), CREG, together with other national regulators in Europe, created the ERF (European Regulators' Forum) in order to be able to adopt joint unanimous decisions, as specified in the NC CACM. In 2016 this forum met nine times. It is also in the framework of this guideline that ACER adopted its second recommendation in 2016 on common capacity calculations and a cost-sharing methodology for redispatching compensation trade. For Belgium, this position is important given that, due to its binding nature, it can influence the cross-border capacity available in the Central Western European region, of which it is a part.

Through the development and monitoring of the network codes, CREG, together with its counterpart regulators via ACER, encourages the European Commission to implement and improve the rules imposed by the third energy package. Consultations, workshops and discussion platforms have strengthened the commitment of the market players. Consequently, many of the views taken by the regulators have been taken into account by the European Commission in its search for a new model for the European electricity market.

CREG is committed to shaping the integrated European energy system, together with all relevant market players. Energy must be able to flow freely across national borders, via competitive markets, making use of the best possible available resources, with the necessary support for efficient regulation. As it does every year, CREG provided a written contribution to the Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets (market monitoring report drawn up jointly by ACER and CEER).

Besides following the markets, CREG, via ACER continues to closely follow the development of infrastructure in application of ACER's second objective, i.e. an efficient energy infrastructure able to guarantee the free movement of energy across borders and the transmission of new energy sources, with an improvement in security of supply for companies in the European Union and consumers, and supporting this security of supply. In this context, 2016 is a transition year between two publications of a list of projects of common interest (PCI) by the European Commission. CREG, within ACER, collaborated in the consolidation report on this process, published on 30 June 2016. The necessary recommendations were formulated, including the suggestion for a legislative initiative to streamline the process with a view to 2017.

Additional monitoring tasks were performed in 2016 within ACER's third objective, namely the implementation of the REMIT Regulation<sup>125</sup>. 7 October 2016 was the date on which one-year data were collected in accordance with this Regulation. On this occasion, ACER published its first REMIT annual report, in which it explains its activities. Initiatives were taken to inform and advise the entire energy sector via handbooks, guidelines, Q&A documents and workshops, in order for the reporting to take place in as streamlined a manner as possible. Furthermore, no dossier transfer to CREG via ACER needs to be notified in 2016 in the framework of REMIT (the cases handled by CREG in this context were notified by market players via the REMIT notification platform, see section 3.2.2.4 hereof).

#### ■ Questionnaires

Finally, CREG actively contributed to the creation of ACER questionnaires and responded to them within the framework of the harmonisation and integration of the European gas and electricity markets. In 2016 these referred to the following topics, among others (original titles):

- 1) ACER questionnaire on Dynamic Pricing
- 2) ACER questionnaire on Research & Innovation activities
- 3) ACER questionnaire on assistance with stakeholder contacts (electricity tariffs)
- 4) ACER questionnaire on monitoring the appropriateness of the ranges of annual average transmission charges paid by producers in 2014
- 5) ACER questionnaire on Unit Investment cost (gas & electricity)
- 6) ACER questionnaire on criteria for the valuation of losses at national level and the value of losses for ITC mechanism 2014
- 7) ACER questionnaire on Congestion Revenues
- 8) ACER-ENTSOG survey on network code Capacity Allocation Mechanism implementation (NRA part)
- 9) ACER-ENTSOG questionnaire on On-line Survey on Balancing Network Code implementation
- 10) ACER questionnaire Belgian Balancing Market
- 11) ACER questionnaire on ENTSOG summer supply outlook
- 12) ACER questionnaire on the implementation of the network code for grid connection of generators (RfG)
- 13) BoR summit (September 2015) preparatory questionnaire
- 14) ACER questionnaire on JAO performance
- 15) Questionnaire with regard to a 2nd ACER recommendation on Cross-Border Cost Allocation (CBCA) of projects of common interest
- 16) Questions regarding financial legislation
- 17) Electricity & gas indicators National Report 2016
- 18) Questionnaire market monitoring rapport ACER.

All these questionnaires were used as a basis to write reports, status reviews, position papers and other documents issued by ACER. They not only give a detailed description of the differences and similarities between the Member States, but also provide information on the degree of application of European legislation in each Member State. The European Commission, for its part, uses these documents as the basis for the creation of legal initiatives.

<sup>125</sup> Regulation (EU) No 1227/2011 of the European Parliament and of the Council of 25 October 2011 on wholesale energy market integrity and transparency.

### 5.8.3. CREG within CEER

In its role as a founding member of CEER (Council of European Energy Regulators), in 2016 CREG also played an active part in the discussions, deliberations and decisions of the CEER's General Assembly, which met nine times in 2016.

Since May 2015 the Chair of the board of directors of CREG, Ms Marie-Pierre FAUCONNIER, has acted as Vice-Chair of CEER.

CREG actively took part in the working group meetings of the CEER (and of the taskforces and work streams set up within these different working groups) as a member, Chair or Co-Chair.

#### ■ *The Electricity Working Group*

The Electricity Working Group (EWG) focuses on questions related to the European electricity systems, security of supply and sustainable development.

In order to deal with the challenges involved in the implementation of the CACM Regulation, in the context of which a large number of coordinated decisions of the regulators need to be drawn up, and in order to be able to reply to proposals for the improvement and optimisation of the legislative texts submitted by the European Commission in the context of the 'Winter Package'<sup>126</sup>, the EWG has reviewed its structure by creating two new working groups: one is in charge of the implementation of the CACM Regulation, while the other is responsible for designing the future development of the electricity market and the reply at the level of the EWG to the 'Winter package'. CREG played an active role in these two structures by sharing leadership. A specific working group has also been created for activities relating to balancing.

In 2016 the EWG placed the emphasis on the following:

- the implementation of the CACM Regulation via the working group of the same name, including the drawing up of an ACER recommendation on the method for calculation of interconnection capacity;
- the completion of the work relating to the drawing up of a balancing guideline by the Commission;
- the completion of the work relating to flexibility and the challenges involved in the energy transition; and
- the drawing up of the reply to the Commission relating to the 'Winter Package' and the reply to the Commission's research on capacity mechanisms.

#### ■ *The Gas Working Group*

The Gas Working Group (GWG) of the European energy regulators is dedicated to dealing with questions linked to the European gas transmission systems and the European Union's gas market. CREG acts as Vice-Chair.

The GWG works on the various issues in close collaboration with ENTSOE, GSE and GLE, as well as with the other market players, and the other working groups of ACER and CEER.

In 2016 the CEER GWG approved the following documents:

- CEER priorities for the Revision of Regulation 994/2010 concerning measures to safeguard security of gas supply
- CEER response to the European Commission's strategy for liquefied natural gas and gas storage
- CEER Analysis on the role of LNG to improve security of supply.

In addition, the GWG contributed to the ACER-CEER Market Monitoring Report and the CEER 6th Benchmarking Report and organised or participated in the following: the Madrid Forum (see section 5.8.4 hereof), the CEER Security of Supply Workshop: Revision of Regulation 994/2010, and the CEER Workshop on Removing LNG barriers on gas markets.

#### ■ *The Market Integrity and Transparency Working Group*

The Market Integrity and Transparency Working Group (MIT WG) deals with matters relating to transparency and the monitoring of energy exchanges, as well as the correlation between the legislation of the wholesale energy market and that of the relevant financial market. As such, the MIT WG is tasked with tracking all the measures concerning the operation of the energy markets and the monitoring of energy exchanges in general. This especially includes the legislative proposals and matters related to energy exchanges, for example the decrease of VAT fraud on the energy markets.

In 2016 the MIT WG primarily focused its attention on two issues.

The first issue is related to the implementation of the REMIT legislation at the national level. In order to monitor the national implementation of the REMIT legislation and provide a tool for comparison, in 2015 a questionnaire was sent to the national regulatory bodies. In 2016 the replies to the questionnaire were analysed in depth, leading to conclusions on aspects to be improved and on which countries are most advanced.

The second issue refers to the interaction between financial legislation and REMIT legislation. In 2016 the MIT WG started collaborating with the EPU (European Policy Unit) in order for the main aspects of progress in financial legislation and the impact for REMIT to be presented at each meeting. At the end of 2016 a questionnaire was sent to each national regulatory body on collaboration with the national financial regulator. Based on the answers to this questionnaire the current situation could be described.

<sup>126</sup> Proposal from the Commission of 30 November 2016 for new rules for consumers with a view to a transition to clean energy: <http://ec.europa.eu/energy/en/news/commission-proposes-new-rules-consumer-centred-clean-energy-transition>



### ■ *The Implementation, Benchmarking and Monitoring Working Group*

The Implementation, Benchmarking and Monitoring Working Group (IBM WG), the successor of the Implementation, Benchmarking and Policy Working Group and the Energy Package Working Group, carried out its work in 2016 on the basis of continuity. CREG plays a leading role within this working group and its taskforces. It acts as Chair.

The IBM WG consists of three task forces:

The Incentives Regulation and Efficiency Benchmarking Task Force (IRB TF), as its name indicates, is primarily in charge of benchmarking. This task force ensures that essential information is collected and exchanged between national regulatory authorities (NRA) in view of the performance of their regulatory duties and hence encourages coherent regulatory practices throughout Europe. The two main activities of the IRB TF are drawing up the Investment conditions paper, which provides a general overview of investment conditions for transmission system users in Europe, on the one hand, and the activities in the context of the TSO Efficiency Benchmark, which gives us an idea of the efficiency of the various TSOs in Europe, on the other hand (in 2016 the TF performed a benchmark of the gas transmission system operators).

The activities of the Market Monitoring and Reporting Task Force in 2016 were mainly focused on drawing up the Joint Market Monitoring Report, which was created in close collaboration with ACER. This report provides a full annual overview of the results obtained in the European Union in terms of the integration of the gas and electricity markets. Therefore, the report reflects the degree of implementation of the various Directives, Regulations and network codes. Throughout the preparatory procedure, workshops were set up as well, in which the structure and the indicators required to write the monitoring report were developed.

Furthermore, in the autumn of 2016 the MMRTF organised its first internal workshop aimed at exchanging experience and manners of approach in the area of market monitoring between various NRAs (CREG was among those taking the initiative for this, and CREG representatives also presented their experiences). This resulted in a number of lessons learned and best practices.

The Legal Task Force (LTF) issues opinions on the legal and institutional aspects involved in the implementation of the third energy package; it also studies specific legal queries from other national regulators. This taskforce also provides legal advice to the IBM WG or to other working groups if specific legal support is requested in the performance of their tasks. In 2016 the activities of the LTF were mainly related to two documents, namely:

- the NRAs Cooperation in practice. This paper looks at collaboration between NRAs in practice at the regional and the pan-European level, as stipulated in the third energy package. Based on the analysis of the existing forms of collaboration, the paper concludes that voluntary collaboration between NRAs offers more advantages. The main characteristic of this is the pragmatic approach within the framework of the existing legislation and regulations; and
- the Status Review on the Implementation of distribution system operators' Unbundling Provisions of the 3rd Energy Package and the CEER Status Review on the Implementation of Transmission System Operators' Unbundling Provisions of the 3rd Energy Package. These two papers analyse the application of the unbundling requirements as provided for in the third energy package, applied to electricity and natural gas transmission system operators and applied to electricity and natural gas distribution system operators. Numerous case studies were developed. The most commonly applied unbundling model for transmission system operators is ownership unbundling, followed by the Independent Transmission Operator and Independent System Operator models, with a significant difference between gas and

electricity. 70% of electricity transmission system operators are certified under the ownership unbundling model, while the figure is only 40% for natural gas. The majority of gas transmission system operators (44%) are certified under the ITO model. Seven Member States applied two different models for the TSO certification of a transmission system operator, while for electricity only three Member States opted for a combination of different unbundling models. With respect to the concrete implementation of unbundling for the distribution system operators it was found that there are different situations and regimes in the Member States, depending on the market structure. While in some Member States hundreds of DSOs are active, in other countries only one or two distribution system operators are active. The same applies to the different unbundling structures: some distribution system operators have ownership that is independent from the suppliers, while others are part of the same group. When it comes to unbundling regimes, in all Member States except the Netherlands, where complete ownership unbundling is mandatory by law, at least legal and functional unbundling are applied in both the gas and the electricity sector.

The CEER Training Academy, organised by the IBM WG, continued its training programme in 2016.

### ■ *The Customers and Retail Markets Working Group*

The Customers and Retail Markets WG (CRM WG) is dedicated to giving priority to the interests of consumers by promoting consumer responsibility and the operation of the retail market in order to facilitate the development of competition for the benefit of energy consumers.

In 2016 the CRM WG published two reports.

A first report entitled 'CEER Benchmarking report on removing barriers to entry for energy suppliers in EU retail energy markets' identifies all kinds of access barriers for energy

suppliers in the retail gas and electricity markets throughout the European Union, as well as the measures the national regulatory bodies have taken or are planning to take to remove these obstacles. Concretely, the report looks into four categories of obstacles: obstacles relating to market access, obstacles relating to regulations, obstacles resulting from the differences between the procedures and the standards, and, finally, specific obstacles for cross-border newcomers. The results of this report provide the basis for the CEER's guidelines on best practices relating to the future elimination of access barriers for energy suppliers in the European retail markets.

A second report, entitled CEER Report on commercial barriers to supplier switching in EU retail energy markets, identifies two possible obstacles for consumers when it comes to changing suppliers: 1) consumers' perception of the complexity of the process of switching suppliers, in particular in view of the fact that the financial benefit is insufficient; and 2) the conditions of commercial contracts, especially unreasonable costs connected to breach of contract and added value services involving a lock-in for consumers, making them pay if they change suppliers.

Besides these two reports, the CRM WG also published a Position Paper on Early termination fees, and a Statement on the strategy of the European Commission on heating and cooling.

#### ■ *The Distribution Systems Working Group*

The Distribution Systems Working Group (DS WG) deals with potential developments and changes in the energy distribution sector, consequences for the regulatory framework and

matters related to the current and future activities of the distribution system operators, namely the quality of electricity and natural gas supply, cyber security, smart networks and flexibility in the operation of the distribution systems.

In 2016 the DS WG completed and published two documents: the CEER 6th Benchmarking Report on the Quality of Electricity and Gas Supply and the CEER Position Paper on the Future DSO and TSO Relationship. The first report analyses the quality of the electricity and natural gas supply in the Member and Observer States of the CEER. The second paper studies the relationship between the transmission system operators and distribution system operators and the regulations. These need to evolve to enable the implementation of effective system solutions to cater for the needs of a sustainable energy system.

#### ■ *International Coordination Group*

CREG's President assumes the Chairmanship of this working group.

The International Strategy Group (ISG) is responsible for forging and maintaining links with its counterparts in third-party countries and with international institutions in the energy regulation sector. The primary objective of creating the international system is to exchange good regulatory practices throughout the world and to issue specific opinions on the matter upon request from a member of CEER.

In 2016 the ICG further developed its general strategy, which dates from 2015, for the concrete cases of three specific organisations: the Energy Community Secretariat (EnC), the Mediterranean

Energy Regulators (MedReg) and the Energy Charter Secretariat (ECS). After consulting with them, possible topics which could offer added value for both parties were worked out. Whereas for the surrounding European regions, such as EnC and MedReg, topics were related more to the regulatory aspects concerning consumers, monitoring and the implementation of the European Acquis, for the ECS (which is geographically more extensive) the emphasis was rather on security of supply and the development and support of infrastructure projects. The contacts and follow-up in the framework of the International Confederation of Energy Regulators (ICER), including e.g. the organisation of the EU-US roundtable and the ARIAE workshop, were taken care of by the CEER secretariat in 2016.

#### ■ *Questionnaires*

CREG actively contributed to the creation of CEER questionnaires and responded to them within the framework of the harmonisation and integration of the European gas and electricity markets. In 2016 these referred to the following topics, among others (original titles):

- 1) Questionnaire on new CEER website
- 2) CEER questionnaire on Status Review of Renewable and Energy Efficiency Support Schemes
- 3) CEER questionnaire for an update on Incentive schemes – 2016
- 4) CEER questionnaire on NRA resources – 2016
- 5) CEER questionnaire on NRA powers, Resources and Framework Condition status review
- 6) Request from the Hungarian Energy and Public Utility Regulatory Authority for information about national electricity storage regulation



- 7) Request from the Estonian Energy and Water Regulatory Competition Authority for information on volume correction of gas meter readings
- 8) Request from the Hungarian Energy and Public Utility Regulatory Authority for information about conversion to MJ/cubic meters to kWh
- 9) Request from the Hungarian Energy and Public Utility Regulatory Authority for information about certain 3rd Package provisions
- 10) CEER questionnaire: ICG questionnaire on international activities and identifying their expectations towards CEER's new International Coordination Group
- 11) CEER quarterly report: update UTB-TF: status of transposition of the 3rd Package in Belgium
- 12) CEER questionnaire: REMIT implementation at national level 2015
- 13) CEER questionnaire on the Status review of NRA Staff and Resources 2011-2015
- 14) CEER questionnaire update in unbundling 2015 – DSO's
- 15) CEER questionnaire update on non-core DSO activities
- 16) CEER questionnaire for Guidelines of Good Practice on Incentive Schemes for DSOs, including innovation
- 17) CEER questionnaire on RES support schemes
- 18) CEER questionnaire on national indicators 2015 for gas & electricity
- 19) CEER questionnaire to NRAs on their strategies to remove cross-border entry barriers for energy suppliers
- 20) CEER questionnaire on Investment conditions 2016
- 21) CEER questionnaire on Investment conditions and incentives for 2014 and 2015
- 22) CEER questionnaire on Flexibility Task Force Survey
- 23) Request from the Hungarian Energy and Public Utility Regulatory Authority for information about HEA survey on Price Comparison Tools

- 24) CEER questionnaire on CEER Work programme 2017 – on-line poll public and internal deliverables
- 25) CEER questionnaire on poll of NRA resources for experts for CEER's new regulatory knowledge initiative
- 26) CEER questionnaire on Quality of Supply (gas & electricity)
- 27) CEER questionnaire on Power Losses
- 28) CEER survey on cross-sectoral cooperation among NRAs
- 29) Consumer parts of National Indicators 2016
- 30) CEER questionnaire Regulatory Benchmark.

All these questionnaires were used as a basis to write reports, status reviews, position papers and other documents issued by CEER, ACER and the European Commission. They not only give a detailed description of the differences and similarities between Member States, but also provide information on the degree of application of European legislation in each Member State. The European Commission, for its part, uses these documents as the basis for the creation of legal initiatives.

#### 5.8.4. European Gas Regulatory Forum

The European Gas Regulatory Forum, also known as the Madrid Forum, serves as a platform for consultation on the development of the internal natural gas market in Europe. The Member States, the European regulators (including CREG) and all other European market stakeholders take part in it, under the presidency of the European Commission. The 29th Forum meeting was held on 6 and 7 October 2016<sup>127</sup>.

This meeting can be described as a transition to a new phase in the development of the European natural gas markets. The last network codes for natural gas were either approved on this date or were in a final stage. For the first network codes ACER has already issued implementation reports. The reforms which must lead to the creation of a single natural gas market are gradually taking shape. Hence, during the 2016 forum again,

together with the stakeholders present, plans were made on how the natural gas market in Europe will evolve in the future.

A clear link was established with the European Commission's communication on 'Clean energy for all Europeans'<sup>128</sup>, published on 30 November 2016. Although this communication is mainly aimed at energy efficiency, the introduction of renewable production and the design of the electricity market, there was a clear request for a similar analysis for the natural gas market. To this end, it was announced that two studies would be conducted. This concerns, on the one hand, a study aimed at removing existing barriers to innovation for LNG and gas storage products, and, on the other hand, a 'Quo Vadis' study on the future of natural gas in Europe.

There was a clear request from the forum to deal with the future in consultation with the natural gas sector and not assume that what has already been done within the electricity sector can simply be copied. Although both sectors have the same goal of creating a single European internal market, the emphasis was placed on the fact that both sectors had their own specificities and challenges, and hence require different approaches.

#### 5.8.5. European Electricity Regulatory Forum

The European Electricity Regulatory Forum, also known as the Florence Forum, is a platform for consultation on the development of the internal electricity market whose participants include the European Commission, the Member States and the European regulators (including CREG). The 30th and 31st Forum meetings were held on 3 and 4 March 2016 and on 13 and 14 June 2016<sup>129</sup>.

The theme of both meetings was the European Commission's communication on 'Clean energy for all Europeans', published on 30 November 2016. By then the general lines had already

<sup>127</sup> The conclusions of the Forum and all related documents are available on the European Commission website: <https://ec.europa.eu/energy/en/events/madrid-forum>.

<sup>128</sup> <http://ec.europa.eu/energy/en/news/commission-proposes-new-rules-consumer-centred-clean-energy-transition>.

<sup>129</sup> The conclusions of the Forum and all related documents are available on the European Commission website: <https://ec.europa.eu/energy/en/events/meeting-european-electricity-regulatory-forum-florence>.

been defined and discussions were held on certain aspects, namely the organisation of the wholesale and retail market, capacity payment mechanisms, control of supply risks, regionalisation aspects of the internal market and the related modifications to the institutional framework. While most topics were already brought up during the first meeting, issues related to the retail market and consumers were discussed during the two days in June.

With respect to the wholesale market, the discussion was mainly centred on the introduction of prices that clearly reflect the scarcity of electricity in the market (scarcity price). This involved a plea for the elimination of all kinds of price restrictions, subsidies, exit restrictions, priority treatment of generating plants, etc. This contrasts with the acceptance of capacity payment mechanisms as a necessary remedy to the limitations of the Energy Only Market, on condition that the non-discrimination rules are observed and cross-border capacity is paid for. However, it remains a priority that these mechanisms are in line with market conditions.

Where consumer-related matters are concerned, it was announced that the energy bill will be reviewed, price comparison services can expect additional rules, and the implementation of demand management in the market needs to be worked on. The guideline on renewable energy sources, on the other hand, will focus on the period after 2020 and will deal with the financing of the high costs, self-consumption, integration barriers and regional coordination.

The further development of the technical foundations of the single European electricity market, namely network codes and directives, were only marginally mentioned. In 2015 the European Commission had already intensively worked on the treatment of the various network codes to be developed. Both the network management code and the emergency &

restoration code were approved in 2016, so there was no need to continue the discussion on these. In the electricity market, the new guidelines are also gradually being implemented. The balancing code – parts of which have been included in the proposals already published by the European Commission – needs to be developed further in 2017.

#### 5.8.6. Citizens' Energy Forum

The Citizens' Energy Forum, also known as the London Forum, set itself the objective in 2016 of creating a competitive, efficient and honest retail market for consumers. The European Commission has created working groups aimed at considering the themes covered at this forum. During the eighth edition on 23 and 24 February 2016<sup>130</sup> the forum dealt with a broad range of issues.

In her keynote speech, the European Commissioner for Justice, Consumers and Gender Equality stated – in a broader context – that consumer empowerment can only be achieved via the installation of meters (not necessarily smart meters, but always individual meters) and by making data and information available to customers. To this end, repeated pleas have been made for a horizontal approach to monitoring, across all sectors, but with an adapted regulatory framework.

Specifically for the energy sector, it was already clear that, besides the themes of competition and the new market design rules, there would also be a new initiative in the area of consumers. A change to the legislation on the final bill will be an essential element of this initiative, but there will also be a proposal relating to price comparison tools. In this context, entirely in line with the socially-inclusive regulation project, not only the fact that these tools exist, but also the fact that consumers do not always have the means to use these tools will be taken into account.

#### 5.8.7. Energy Infrastructure Forum

The Energy Infrastructure Forum, also known as the Copenhagen Forum, was held for the first time on 23 and 24 June 2016<sup>131</sup>. This forum, which was created by the Energy Union Package published on 25 February 2015, gathers the main market parties, under the presidency of the European Commission. These parties include the members of the regional groups set up for the privileged corridors (Member States, system operators, regulators and project promoters), together with representatives of a few European institutions (the European Parliament, the Committee of the Regions and the Economic and Social Committee) and European organisations (NGOs, ENTSO-E, ENTSO-G, ACER and EIB).

This forum, the youngest of the four existing forums, still needs to find its own dynamic.

Today, projects are grouped into a few high-level groups, where Member States, system operators and regulators perform the necessary analyses. A few examples: BEMIP, CESEC, SW Peninsula, Energy Community and North Sea Countries. In this last group Belgium is assuming the chairmanship for the first time, and the following topics will be discussed: town and country and ecological planning, infrastructure planning, cost control and subsidy rules for offshore wind energy, and the use of common standards.

Additionally, to support the forum, in analogy with the Florence School of Regulation, the Copenhagen School of Energy Infrastructure is being created. This new institution is aimed at the participation of the academic world in the forum. Although banks consider the energy sector to be a stable environment, and loans are not very expensive, energy investments must be looked at and calculated in the long term. The interaction with the objectives related to the reduction of CO<sub>2</sub> emissions is an important element in this reflection.

<sup>130</sup> The conclusions of the Forum and all related documents are available on the European Commission website: <https://ec.europa.eu/energy/en/events/citizens-energy-forum-london>.

<sup>131</sup> The documents of the Forum and all related documents are available on the European Commission website: <http://ec.europa.eu/energy/en/events/energy-infrastructure-forum>.

### 5.8.8. CREG and the other national regulators

In 2016, CREG also continued to maintain a good relationship with its foreign regulatory counterparts. More specifically, with respect to the neighbouring countries, it ensured that a dialogue was started at the highest level to explore areas of collaboration. For instance, ideas were exchanged with the French counterparts on the development of the European electricity market, a possible merger of both gas markets, and the legal implementation of the European vision on the single energy markets.

Within the CWE region CREG continued to play a leading role in 2016 in the consultations between regulators, transmission system operators and energy exchanges, both within the Regional Coordination Committee (in which only regulators are represented) and within the Expert Meetings (in which the transmission system operators and exchanges are represented). The main issues to work on related to the development and implementation of day-ahead and intraday flow-based market coupling and the development of regional methodologies in the framework of the CACM Regulation.

Following ACER's decision on the proposal for the definition of the capacity calculation regions, CREG, together with E-Control, also took on a leading role in setting up similar consultation platforms for the CORE capacity calculation region. These were attended by representatives of all regulators, transmission system operators and energy exchanges of the bidding zones within CORE.<sup>132</sup> During two meetings of the CORE Implementation Group, on 20 June 2016 in Budapest and on 30 November 2016 in Vienna, the first consultations were set up. The objective of these consultation groups is the implementation of all conditions or methodologies with a

regional character in the CACM Regulation in the short term and the FCA Regulation (Forward Capacity Allocation) in the medium term.

Finally, in September 2016 CREG mediated between the Ukrainian energy regulator and the Ukrainian gas storage operator UKRTRANSGAZ in Kiev, by explaining the best practices of the European Union and the specificities of capacity tariffs for gas storage services, and applying them to the specific situation of the Ukraine. This assistance was organised via the European Commission's TAIEX (Technical Assistance and Information Exchange Instrument). A report containing conclusions and recommendations was submitted to the European Commission, the energy regulator concerned, and UKRTRANSGAZ.

After the mission, UKRTRANSGAZ confirmed by letter that, thanks to CREG's professionalism and experience, it had gained insight into the European Union's best practices and the particularities of capacity-based tariffs for gas storage services. The answers to the many questions from the Ukrainian energy regulator had been enlightening and enriching and were accepted with gratitude.

### 5.8.9. CREG and the FSMA

In December 2016 the collaboration protocol between CREG and the Financial Services and Markets Authority (FSMA) was approved by the boards of directors of both authorities.

This protocol lays down the conditions for the collaboration relating to the exchange of information and expertise in order to ensure the integrity and transparency of the energy markets.

This agreement is very important because there is more and more interaction between the REMIT Regulation and the financial domain. For instance, energy derivatives can be regarded as either pure energy products that fall under the REMIT legislation, or financial instruments that fall under financial regulations.

### 5.8.10. CREG and the Parliament

Over the years, CREG has built an excellent relationship with the Parliament, more specifically with the Economic Commission. After a detailed presentation, CREG's budget was approved unanimously. In addition, CREG also provided a detailed overview of the progress made with respect to the implementation of the recommendations of the Court of Auditors (almost complete), insofar as this fell within the regulator's competence.

Finally, CREG, to the satisfaction of the Commission members, provided both an oral explanation and a more detailed analysis to the Parliament of the draft law on the nuclear distribution fee for the years 2016-2019. In conclusion, it can be said that CREG strictly complies with its legal obligations when it comes to providing information to the Parliament about the funds it manages.

Every time CREG was invited for a presentation by the Economic Commission, it received a lot of thanks for the great expertise shown.

<sup>132</sup> The regulators and transmission system operators concerned can be found in ACER's decision: ([http://www.acer.europa.eu/Official\\_documents/Acts\\_of\\_the\\_Agency/Individual%20decisions/ACER%20Decision%2006-2016%20on%20CCR.pdf](http://www.acer.europa.eu/Official_documents/Acts_of_the_Agency/Individual%20decisions/ACER%20Decision%2006-2016%20on%20CCR.pdf)) and the list of appointed electricity market operators of the bidding zones concerned: ([http://www.acer.europa.eu/en/electricity/FG\\_and\\_network\\_codes/CACM/Pages/NEMO-Designations.aspx](http://www.acer.europa.eu/en/electricity/FG_and_network_codes/CACM/Pages/NEMO-Designations.aspx))

### 5.8.11. CREG and the regional regulators

CREG's informal collaboration with the three regional regulators (BRUGEL, CWaPE and VREG) continued in 2016 within Forbeg. Six plenary sessions were held. CREG acted as Chair in the first semester and CWaPE in the second semester.

Once again, CREG chaired the Gas, Information Exchange, Europe and Distribution System working groups.

In 2016 the Gas working group met four times and continued the discussion of the following themes: i) the conclusion of the connection contract between Fluxys Belgium and the distribution system operators; ii) the drawing up of the investment plans of the system operators Fluxys Belgium, Eandis, Ores, Infrax, Resa and Sibelga; iii) the overview of regulations relating to the supplier of last resort for natural gas at a federal and regional level; iv) the discussion of the L/H conversion project and the associated investments from the system operators; v) the implementation of the capacity allocation network code; vi) the examination of gas leak detection reports from the Quality and Safety general directorate of the FPS Economy; vii) the Belgo-Luxembourg market integration project; viii) the regulations on security of supply; ix) the follow-up of the European network codes; and x) the operation of the gas working group of CEER and ACER.

In 2016 the Information Exchange working group continued its work to improve the process relating to the shared annual publication<sup>133</sup> of the four regulators on the evolution of the Belgian energy market and, in particular, the drawing up of the text part of the publication. The aim of this publication remains unchanged: to take stock of the market trends for electricity and natural gas and competition in Belgium based on a statistical overview of these markets. The working group is also

responsible for responding to ACER and CEER questionnaires. The working group has also carried out the ACER monitoring report, in the sense that data has been collected from the four regulators in view of providing indicators for Belgium.

The 'Europe' working group met four times in 2016. This working group provides a formal framework that enables CREG to perform its tasks as national regulator and represent Belgium within CEER and ACER. Thanks to the creation of the additional working group for distribution systems, the Europe working group was able to concentrate on an optimal general workflow between the various working groups that are part of Forbeg and between the four regulators. As in previous years, the focus was on the topics discussed at the various European forums and at the highest level within CEER and ACER. European policy was monitored through the discussion of ten themes, within which priority was given to the new market design for electricity, renewable energy, energy efficiency and energy consumers.

At each meeting, the new developments within these themes are presented and discussed (including consultations and studies performed by the European Commission). The publication of the European Commission's 'Clean Energy for all Europeans' communication was prepared in this way, and will also be at the centre of the debates in 2017. Whereas theme-specific discussions related to this communication take place in the relevant Forbeg working groups, the Europe working group takes care of general coordination, paying attention to the follow-up of contact with the various authorities.

The mission of the Distribution Systems Working Group (DS WG) is to inform regional regulators of the activities of the CEER DS WG, and present the documents that are on the agenda to the regional regulators so that they can submit comments on these documents, thus improving the information exchange

between the Belgian and the European regulators. In 2016 the working group met eight times and continued the discussions about the following CEER studies: i) CEER 6th Benchmarking Report on the Quality of Electricity and Gas Supply on the quality of the electricity and natural gas supply in the Member and Observer States of the CEER; ii) CEER Position Paper on the Future DSO and TSO Relationship, which studies the relationship between the transmission system operators and distribution system operators and the regulations; iii) Guidelines of Good Practice on Distribution Network Tariffs aimed at providing guidelines for the way in which the various tariff structures can be used to cope with the future challenges of the distribution networks; iv) Guidelines of Good Practice on Incentives Schemes including Innovation aimed at providing guidelines on best practices for incentive measures used in the regulations applying to distribution system operators; v) Guidelines of Good Practice on Flexibility Use at Distribution Level aimed at providing guidelines for national regulators on the way in which the use of flexibility by DSOs can be stimulated; vi) Report on New Services and Associated Activities for DSOs aimed at studying new services and related activities that can have an influence on the roles of the DSOs; and vii) CEER Benchmarking Report on Power Losses aimed at the assessment of the levels of loss of electricity networks in the European countries and the identification of the different national practices in the area of determining and calculating these losses.

In the framework of the other Forbeg working groups CREG further took part in discussions on the following themes: the adjustment and correct charging of transmission network tariffs, the charging of the federal electricity contribution, the impact of ongoing legal disputes on the operation of the energy market, the treatment of regulatory balances, the impact of adjustments to regional tariff decrees (and ordinances), the possible harmonisation of network tariffs in

<sup>133</sup> Joint report on the development of the electricity and natural gas markets in Belgium - Year 2015, 7 July 2016.

the Walloon Region, transparency criteria in connection with decisions concerning tariffs, the operation and modification of price comparison websites, the launch of a benchmarking tool (CREG Scan) by CREG, the calculation of social tariffs, the implementation of the European network codes (RfG, DCC, HVDC, SO), the technical requirements for battery systems, quality reporting, amendments to Elia's ARP and access contract, demand response, asymmetrical R3 and R1 at DSO level, flexibility on the distribution network and the local transmission network, and drawing up the emergency supplier regulation.

### 5.8.12. CREG and the competition authorities

#### ■ *General collaboration between CREG and the Belgian Competition Authority*

Article 43, paragraph 2 of Volume IV 'Protection of competition' of the Economic Code states that, for the economic sectors subject to the supervision or control of a competent public institution or other government body, the King, after consultation with those institutions or bodies, may regulate the collaboration between the Belgian Competition Authority and those institutions or bodies, both with respect to investigations and with respect to the mutual exchange of confidential information.

To this end, the Belgian Competition Authority and CREG have worked together closely on drafting a proposal for a Royal Decree governing the collaboration between both institutions. At the start of 2015, a shared text proposal (written in close collaboration with the FPS Economy) was submitted to the competent Ministers for Energy and the Economy. In mid-2015 CREG issued a (positive) opinion on the draft text to the Minister for Energy. On 12 November 2015 the Council of State also issued an opinion on this draft Royal Decree.

At the start of 2016 the FPS Economy announced some changes to be made to the draft text following a comment from the Council of State (which does not fall under CREG's competence). Hence, CREG is still waiting for possible changes, and it expects publication of the Royal Decree to be possible in 2017.

#### ■ *Decision of the Auditors regarding a request for an investigation filed by CREG in 2016*

By letter of 22 January 2016 the Auditors of the Belgian Competition Authority notified CREG of their decision to deny a request for an investigation filed by CREG on 12 October 2006 with the former Competition Council (registered under no MEDE-P/K-06/0039).

This complaint, which had already been filed by CREG in 2006, involved a request for an investigation of possible restrictive competitive practices, concretely an investigation relating to abuse of power by Electrabel in that it imposed unreasonable prices for making reserve capacity available for primary, secondary and tertiary reserves.

On 22 December 2015 the Auditors decided to dismiss this case on grounds of limitation. The Auditors found that the five-year limitation period had been exceeded given that no investigations had taken place during the previous 5 years. Due to this expiry of the limitation period the Auditors decided to dismiss the case.

It must be remarked that the issue that was raised by CREG at the time has also in the meantime been dealt with via other means, such as Ministerial or Royal Decrees, and that this market has also evolved a lot and has, for instance, become much more competitive.

#### ■ *CREG report on the relationship between costs and prices on the Belgian natural gas market in 2015*

As part of its permanent gas market monitoring task, on 16 August 2016 CREG issued a report on 'the relationship between costs and prices on the Belgian natural gas market in 2015'<sup>134</sup> and submitted this to the Belgian Competition Authority.

### 5.8.13. CREG and the Belgian universities

In the framework of its strategic objectives CREG worked together with the Belgian universities by participating in colloquia and scientific activities. Given the wish to develop this collaboration further the idea arose to award a prize for the best and most innovative Master's dissertation on energy.

In this way, CREG wants to support and encourage future developments in the energy sector. Each winner receives a cheque worth 2,500 € and the possibility of doing an apprenticeship at CREG.

On 26 January 2016 the two 2015 laureates and their tutors were invited by CREG to receive their prize. This concerns:

- for the Flemish Community: Marc Van de Looverbosch from the University of Antwerp for his dissertation entitled 'Ownership unbundling of transmission system operators in the European electricity sector';
- for the French Community: Gauthier Roig from the Université Libre de Bruxelles for his dissertation entitled 'Probabilistic Study of the Blackout Risks in the Electrical Transmission Grid'.

<sup>134</sup> Report (F)160825-CDC-1553 on the relationship between costs and prices on the Belgian natural gas market in 2015.

## 5.9. CREG finances

### 5.9.1. Federal contribution

The federal contribution is a surcharge levied on the quantity of electricity and natural gas used in Belgium.<sup>135</sup> The contribution is used to supply the various funds run by CREG (see section 5.9.2 hereof).

In December 2016, in accordance with the regulations<sup>136</sup>, CREG calculated and published the unit surcharges of the various components of the federal electricity and gas contribution to be applied from 1 January to 31 December 2017.

#### A. Federal natural gas contribution

Each quarter the natural gas transmission operator (Fluxys Belgium) and the operators of a direct line<sup>137</sup> pay the federal contribution for which they had previously billed their customers to CREG. In 2016 these companies also directly fed the CREG fund, the social energy fund and the protected customers fund.

For their part, the natural gas companies that offered their customers discounts (degressivity and exemption) submit their applications for reimbursement to CREG on a quarterly basis (see below).

#### ■ Feeding the funds

The expected amounts of the federal contribution are generally made up of the basic amount for each fund for the current year

as well as any possible supplements destined to compensate for the previous years' deficit and cover the various exemptions.

Globally speaking, revenue from the federal natural gas contribution recorded in 2016 was much higher than the expected amounts as a result of two factors. On the one hand, natural gas consumption, especially for customers connected to the distribution network (see section 4.4.1.A hereof), increased compared to the year before. On the other hand, the method for calculation of the 2016 unit-based contribution is based on consumption in 2014, which was particularly low. These two elements led to higher margins.

#### ■ Exemptions and degressivity

The full federal contribution was invoiced to the natural gas companies.

As they are unable to recover the full amount from their end customers due to the granting of a reduction (degressivity) or even an exemption, each quarter they may apply to CREG for reimbursement of the amounts corresponding to the degressivity and exemptions granted to their end customers.

During the year 2016, CREG reimbursed natural gas companies a total of 21,505,053 € corresponding to the exemption from the federal contributions for natural gas destined for the generation of electricity injected into the system (electricity power plants and quality cogeneration units). CREG also reimbursed 574,850 € in federal contributions to natural gas companies as they could not charge them to the international institutions. These reimbursements were made with the help of the resources available in the various funds.

The same natural gas companies also made degressivity reimbursement applications totalling 12,994,008 €. Additionally, an amount of 512,604 € not paid to CREG by the direct pipeline operator due to the granting of degressivity measures to its customers was split between the various funds. Finally, six end customers with a consumption location for which a separate bill was issued by different suppliers submitted an application for adjustment based on the degressivity measure from which they had benefited in 2015. They were reimbursed a total of 2,580,629 €.

In 2016 the FPS Finance made an advance of 19,000,000 € available to CREG to cover its aforementioned needs connected to degressivity. Therefore, in 2017 an amount of 2,912,759 € will be subtracted by the FPS Finance from the amount requested by CREG in 2017.

#### ■ Irrecoverable amounts

In 2016 the legal tariff adjustment destined to cover natural gas companies against federal contributions that they have been unable to recover from their customers generated an amount of 295,314 €, which, at the end of the year, was distributed between the funds fed by the federal natural gas contribution.

#### B. The federal electricity contribution

The electricity transmission system operator (Elia System Operator) pays the contribution it charged to its customers the previous quarter to CREG on a quarterly basis. In 2016 Elia fed the CREG fund, the social energy fund, the denuclearisation fund and the protected clients fund.

<sup>135</sup> In accordance with the international agreements, international institutions, which include European institutions as well as diplomatic assignments, consular posts, international organisations and armed forces located in Belgium, are fully exempt.

<sup>136</sup> In particular the Royal Decree of 7 December 2016 amending the Royal Decree of 24 March 2003 setting the federal contributions destined for the financing of certain public service obligations and costs related to the regulation and control of the electricity market and the Royal Decree of 2 April 2014 laying down the rules for the federal contribution destined for the financing of certain public service obligations and costs related to the regulation and control of the natural gas market (Belgian Official Journal of 21 December 2016), which, for the year 2017, once again sets the amount destined for the greenhouse gas fund at 0 € and prolongs the freeze on the amount destined for the social energy fund. In this context, CREG issued an opinion to the Minister in October 2016 (Opinion (A)161027-CDC-1584 on a draft Royal Decree amending the Royal Decree of 24 March 2003 setting the federal contributions destined for the financing of certain public service obligations and costs related to the regulation and control of the electricity market and the Royal Decree of 2 April 2014 laying down the rules for the federal contribution destined for the financing of certain public service obligations and costs related to the regulation and control of the natural gas market).

<sup>137</sup> On 31 December 2016 Wingas was the only operator of a direct connection in Belgium.



### ■ Feeding the funds

The expected amounts of the federal contribution for the year 2016 are made up of the basic amount for each fund for the current year and any possible supplements to compensate for previous years' deficit and the aforementioned exemptions from which the international institutions benefit.

Globally, however, the federal electricity contribution revenue received in 2016 was lower than the expected amounts due to the constant reduction of the quantity of electricity taken from the transmission system on which the federal contribution must be paid. In addition, the quantity of decentralised electricity produced that is injected into the distribution systems is continuously increasing.

As the period during which the greenhouse gas fund was set at zero (see section 5.9.2.D. below) was extended, this fund was no longer regularly fed in 2016. Only a few adjustments to past energy quantities were made.

### ■ Exemptions and degressivity

The electricity companies are billed for the entire federal contribution whilst they are unable to pass on the total amount to their end customers. They must deduct from it, if applicable, the exemptions and degressivity. It is now the case that, each quarter, these companies may reclaim the reimbursement of the exemption and degressivity measures that they have granted their end customers from CREG.

In 2016 CREG once again reimbursed 79 € and 2,634 €, respectively, after supplier corrections for the exemption (fuel mix) of greenhouse gas and denuclearisation surcharges paid on quantities of green electricity delivered until 31 December 2012. CREG also reimbursed 540,234 € to electricity companies to compensate for federal contributions they were unable to

bill to international institutions. These reimbursements were carried out using the resources available in the different funds.

The same electricity companies also made degressivity reimbursement applications totalling 21,754,083 €. Additionally, an amount of 32,807,527 € that was not paid by the transmission operator due to the granting of degressivity measures to certain customers, was split between the various electricity funds. Finally, one end customer with a consumption location for which a separate bill was issued by different suppliers submitted an application for adjustment based on the degressivity measure from which it had benefited in 2015. This customer was reimbursed a total of 5,238 €.

In 2016 the FPS Finance made an advance of 56,000,000 € available to CREG to cover its needs connected to degressivity. Therefore, in 2017 an amount of 1,433,152 € will be subtracted by the FPS Finance from the amount requested by CREG in 2017.

### ■ Irrecoverable amounts

In 2016 the legal tariff adjustment intended to cover electricity companies against federal contributions that they have been unable to recover from their customers during the previous years was not sufficient to reimburse electricity suppliers for all net costs corresponding to irrecoverable amounts. To cover this deficit, the various funds of the federal electricity contribution had to feed the account for irrecoverable amounts for electricity with an amount of 101,904 € in order to carry out the reimbursements for 2016.

### C.The offshore surcharge

This surcharge levied by the transmission system operator on its end customers and electricity companies, who then pass it on to their own customers, is intended to offset the

costs borne by the transmission system operator resulting from its obligation to purchase the green power certificates granted for electricity generation in the North Sea. CREG is responsible for reimbursing the transmission system operator and the electricity companies who granted their customers degressivity on this surcharge.

Requests submitted in 2016 by the transmission system operator (25,766,177 €) and electricity companies (53,862,683 €) totalled 79,628,860 €.

In 2016 the FPS Finance made an advance of 84,000,000 € available to CREG to cover its aforementioned needs. Therefore, in 2017 an amount of 4,371,140 € will be subtracted by the FPS Finance from the amount requested by CREG in 2017.

## 5.9.2. Funds

### A. CREG Fund

By decision of the Council of Ministers of 12 March 2012 CREG's budgets for the years 2012 to 2014 were frozen at the level of the budget for 2011 (14,952,254 €). As in 2015, CREG's board of directors again proposed a budget at the same level of 2011 to the Chamber of Representatives for 2016.

The partial coverage of CREG's total operating costs for 2016 was set at 14,952,254 € by the Chamber of Representatives during its plenary session of 3 December 2015. This amount is, however, supplemented by 539,356 € and 87,839 € in view of topping up the reserve and for the reimbursement for the international institutions.

CREG accounts for 2016 are set out in detail in section 5.9.3 below.

## B. Social Energy Fund

For 2016 a total of 52,890,292 € was provided to help the public centres for social welfare with their task of providing guidance and financial social support in the field of energy: 30,750,170 € from the electricity sector and 22,140,122 € from the natural gas sector<sup>138</sup>. However, these amounts are supplemented, respectively, by 251,182 € and 74,291 € for the reimbursement of the international institutions. Ultimately, in 2016 a total net revenue of 28,491,418 € was recorded for natural gas. For electricity a total net revenue of 31,130,877 € was recorded.

In addition to making the fourth payment for 2015 (13,223,300 €) to the public centres for social welfare, the fund's resources allowed for the full payment of the first three amounts for 2016, requested by the FPS Social Integration (39,675,634 €).

On 31 December 2016, the fund assets totalled 24,101,456 €. Hence, CREG will be able to pay the full fourth instalment for 2016 to the public centres for social welfare at the end of January 2017.

## C. Denuclearisation Fund

This fund, which is supplied exclusively by the federal contribution charged to the electricity sector, should have stood at 69,000,000 € in 2016<sup>139</sup>, plus 602,659 € to offset the exemption of international institutions. A net total revenue of 66,645,085 € was recorded for the fund in 2016.

In addition to the reimbursements carried out as part of the exemptions for international institutions and past adjustments for

a total amount of 199,721 €, CREG was able to pay ONDRAF/NIRAS all of the 69,000,000 € it was expected to receive in 2016.

On 31 December 2016, the fund assets totalled 670,992 €.

## D. Greenhouse Gas Fund

The amount destined for the fund, fed exclusively by the federal contribution from the electricity sector, was 0 € for 2016<sup>140</sup>.

The flat-rate amount of 3,600,000 € for the year 2016 was paid into the organic budget fund of the FPS Environment for the financing of the federal policy for the reduction of greenhouse gas emissions.

In addition to the reimbursements made for the exemption of the international institutions and past adjustments (for a total amount of 842 €), each year the greenhouse gas fund also pre-finances the 14,490,000 € corresponding to the VAT due on the annual amount payable to ONDRAF/NIRAS. The VAT authorities refunded CREG for the amount of these quarterly advances.

On 31 December 2016, the fund assets totalled 51,283,733 €.

### ■ Kyoto JI/CDM Fund

The Kyoto Joint Implementation/Clean Development Mechanism (Kyoto/CDM) fund, which is also managed by CREG, is used by the FPS Environment to purchase the CO<sub>2</sub> emission credits so that Belgium can meet its targets under the Kyoto Protocol.

The Kyoto JI/CDM fund receives the amounts from the greenhouse gas fund. During the year 2016, however, no amount was transferred from the greenhouse gas fund to the Kyoto JI/CDM fund while the FPS Environment contacted the latter in view of collecting the CO<sub>2</sub> emission credits at a rate of 242,833 €.

On 31 December 2016, the Kyoto JI/CDM fund assets totalled 14,972,767 €.

## E. The protected customers funds for electricity and natural gas

For the year 2016<sup>141</sup> the needs of these funds totalled 95,920,256 € for electricity and 43,212,401 € for natural gas, to which 479,744 € and 187,599 € must be added, respectively, for the reimbursement of the international institutions.

A net total revenue of 81,883,446 € was recorded for the electricity fund. For natural gas a net total revenue of 55,130,346 € was recorded.

In 2016 the reimbursements for the sector's companies who supplied the protected household customers at the social tariff in 2015 amounted to 74,005,996 € for electricity and 58,783,067 € for natural gas. Due to the lack of available means in the protected electricity customer fund in October 2016, certain suppliers could not be reimbursed until December 2016, after receipt of the federal electricity contribution sums paid by the transmission system operator, in accordance with the Royal Decree of 29 March 2012.

<sup>138</sup> The freeze on amounts was extended for 2016 by the Royal Decree of 18 December 2015 amending the Royal Decree of 24 March 2003 and the Royal Decree of 2 April 2014 (Belgian Official Journal of 24 December 2015). This Royal Decree was confirmed by the law of 25 December 2016 on various energy provisions (I) (Belgian Official Journal of 29 December 2016).

<sup>139</sup> Royal Decree of 26 January 2014 setting the amounts required for the financing of BP1 and BP2 nuclear liabilities for the period 2014-2018, in implementation of Article 3, paragraph 2 of the Royal Decree of 24 March 2013 setting the federal contribution modalities for the financing of certain public service obligations and costs associated with the regulation and control of the electricity market (Belgian Official Journal of 3 February 2014).

<sup>140</sup> Cf. the aforementioned Royal Decree of 18 December 2015.

<sup>141</sup> Royal Decree of 26 December 2015 determining the amounts for 2016 of the funds destined to finance the actual costs resulting from the application of maximum prices for electricity and natural gas supply to protected residential customers (Belgian Official Journal of 30 December 2014). This Royal Decree was confirmed by the law of 25 December 2016 on various energy provisions (I) (Belgian Official Journal of 29 December 2016).



An amount of 1,592,116 € and 1,004,833 €, respectively, was included in the electricity and natural gas funds; these amounts correspond to the applications for reimbursement initially rejected by CREG.

On 31 December 2016 the assets of the two funds totalled 12,885,035 € for electricity and 45,935,474 € for natural gas.

#### F. The fund for flat-rate reductions for natural gas and electricity heating

This fund was eliminated from the Electricity Act but is still mentioned in the Royal Decree of 24 March 2003 ('federal electricity contribution'). However, no amount was drawn in 2016. Only 138 € was recorded for exemptions and adjustments of previous amounts.

On 31 December 2016 the assets of the fund amounted to 24,404,008 €, split up into 16,810,470 € for electricity and 7,593,538 € for natural gas. As long as no legal allocation of the balance of the fund is defined, CREG will continue to manage it, in particular as regards possible adjustments of previous amounts.

#### G. Fund to offset the loss of revenue suffered by the municipalities

The fund, which has been completely inactive for several years, had a balance of 578,691 € on 31 December 2016, which corresponds to the interest received since 2005. As long as no legal allocation of the balance of the fund is available, it cannot be closed.

### 5.9.3. Accounts 2016

Globally speaking, once more, the revenues from the federal electricity contribution are 5% lower than the expected amounts, which provide a substantial share of the electricity reserve. Thanks to diverse and exceptional revenues (see below), total revenues from the electricity sector are 3.5% higher than the expected amounts of the federal contribution, without taking into account the topping up of the reserve as planned.

The revenues from the federal natural gas contribution recorded in 2016 were 23% higher than the expected amounts, despite the exemptions, which were more than twice as high as expected. These high revenues were only possible thanks to the double effect explained in section 5.9.1.A. above.

The various and extraordinary revenues compensate for a small part of the expenditure borne by CREG and include the structural reductions of the NSSO contributions from which CREG benefits, as well as the rebilling of the remuneration of a CREG employee on assignment during the year 2016. 69% of the total amount of these financial revenues come from the electricity sector, and 31% from the gas sector. Therefore, a revenue of 528,046 € is added to the aforementioned revenues from the federal contribution.

The total revenue for the electricity sector hence amounts to 10,759,850 €. The total revenue for the natural gas sector amounts to 5,897,396 €. This corresponds to a total revenue for CREG of 16,657,246 € (this is a 3.7% increase compared to the financial year 2015).

The total expenditure of CREG for the financial year 2016 amounts to 15,288,495 € (this is a 7.3% increase compared to 2015).

The subtotal of personnel costs globally increased by 793,172 € (+6.9%) in comparison with the financial year 2015 as a result of the wage indexation in 2016 and the hiring of temporary workers to replace absent employees, costs of hiring and efforts to top up the fund for the financing of group insurance.

The subtotal of the operating costs globally increased by 253,107 € (+9.1%), mainly as a result of the significant increase in costs of external experts. The costs of external studies rose by 205,954 € (+64%) as a result of the study performed by the Advisory Board and the external legal advice. The cost of the communication service increased by 48,855 € (+31%) as a result of the implementation of the new visual identity and the new website of CREG. Finally, CREG had to deal with several disputes, which are still ongoing.

Where general expenses are concerned, the 44,139 € (-5.4%) drop in rent and related charges and the 27,146 € (-17%) drop in maintenance costs amply compensate for the increases by 10,086 € (+8.1%) and 6,701 € (+2.3%), respectively, of other expenses, such as documentation or taxes. On the other hand, the meeting and transport fees have increased respectively by 4,868 € (+4.7%) and 7,098 € (+10.8%) due to CREG's close collaboration with the public authorities and other Belgian bodies, as well as its proactive role in European and international bodies (CEER, ACER, European Commission, European regulators, etc.).

The 2016 financial year ended with a global surplus of revenue received by CREG compared to its expenditure amounting to 1,368,751 €. This amount is divided between a surplus of 208,863 € associated with the electricity sector and a surplus of 1,159,887 € associated with the natural gas sector.

Despite the gradual topping up in the framework of the previous financial year, the electricity reserve amounts to only 90% of its legal maximum level of 1,547,558 €. In accordance with the aforementioned Royal Decree of 24 March 2003, an amount of 149,824 € of the electricity revenue of 2016 is transferred to the reserve in order to complete it. The balance (59,039 €) will be subtracted during the next calculation (2018 surcharge, calculated in December 2017) from the amount to be financed by the revenue from the federal electricity contribution.

In accordance with the aforementioned Royal Decree of 2 April 2014, 186 € of the 2016 surplus of revenue for natural gas will be transferred to the reserve so that this is completed as well. The balance (1,159,701 €) will be subtracted during the next calculation of the CREG surcharge for natural gas (2018 surcharge, calculated in December 2017) from the amount to be financed by the revenue from the federal natural gas contribution.

As at 31 December 2016 the balance sheet total consolidated with the funds was 195,127,320 €.

Since 1 January 2013 CREG has organised its bookkeeping in accordance with the principles laid down in the law of 22 May 2003 on the organisation of the budget and accounts of the federal State, and following the accounting schedule set out by the Royal Decree of 10 November 2009 setting the accounting schedule applicable to the federal State, communities, regions and the common community commission. Although the entry into force of this law has been postponed once again, this time until 1 January 2018<sup>142</sup>, CREG has continued to use this method of accounting.

The following tables provide a summary of the budget accounts for expenditure and revenue.

Table 17: Summary of the 2016 budget accounts in revenue (€)  
(Source: CREG)

Budget	14,952,254
Commitments	14,950,434
Liquidation	14,493,974
Differentiated appropriations	456,460

As CREG's budget for 2016 was set at 14,952,254 €, the 14,950,434 € of commitments correspond to 99.99% of this budget. The differentiated appropriations of the previous years which were still pending at the close of the financial year 2016 amounted to 190,375 €; together with the 456,460 € of differentiated appropriations of the budget year 2016, on 31 December 2016 a total of 646,835 € in differentiated appropriations was pending. All these differentiated appropriations will affect the general accounting results when they are liquidated/covered.

Table 18: Summary of the 2016 budget accounts in revenue (€)  
(Source: CREG)

Budget	15,007,710
Established entitlements	15,717,651
Liquidation	15,717,651

Globally speaking, CREG's revenue for 2016 is 4.7% higher than expected (see above for explanations).

<sup>142</sup> Law of 25 December 2016 amending the law of 22 May 2003 on budget organisation and Federal State accounting (Belgian Official Journal of 29 December 2014).

Table 19: Income statement as at 31 December 2016 (€) (Source: CREG)

	2016	2015
<b>Personnel costs</b>	<b>12,222,645</b>	<b>11,418,894</b>
Salaries and charges	11,608,211	10,904,575
Variation in provisions for compensation for outgoing members of the board of directors	113,230	133,357
Variation in provisions for holiday bonuses	31,518	51,076
Temporary staff	83,695	6,942
Recruitment costs	30,069	545
Training, seminars	70,406	37,026
Leasing, company cars	285,516	285,374
<b>Bodies</b>	<b>41,910</b>	<b>52,489</b>
Remuneration of Gas and Electricity Advisory Board	41,910	52,489
<b>'Personnel costs' subtotal</b>	<b>12,264,555</b>	<b>11,471,383</b>
<b>External experts</b>	<b>993,673</b>	<b>671,313</b>
External studies	524,876	318,922
Communication service	204,966	156,111
Translators, Auditor, Social Secretariat	186,838	144,403
Legal fees relating to lawsuits	76,992	51,877
<b>Operating costs</b>	<b>1,816,242</b>	<b>1,889,097</b>
Rent and charges for premises	774,758	818,897
Parking facilities	75,666	76,505
Building maintenance and security	133,906	135,035
Equipment maintenance and servicing	132,295	159,441
Documentation	134,313	124,227
Telephone, post, Internet	41,606	50,899
Office supplies	8,544	10,800
Costs of meetings and expenses	108,330	103,462
Travel expenses (including abroad)	72,870	65,772
Membership of associations	46,147	62,953
Insurance, taxes and sundry costs	287,807	281,106
<b>Depreciation costs</b>	<b>201,796</b>	<b>205,560</b>
Depreciation on tangible fixed assets	201,796	205,560
<b>Financial costs</b>	<b>12,230</b>	<b>4,863</b>
Other	6,022	4,839
Transfer to irrecoverable funds and federal contributions	6,208	23
<b>'Other operating costs' subtotal</b>	<b>3,023,940</b>	<b>2,770,833</b>
<b>TOTAL CHARGES</b>	<b>15,288,495</b>	<b>14,242,216</b>
<b>Income (surcharges and fees)</b>	<b>14,760,449</b>	<b>13,715,978</b>
Electricity and natural gas contribution	16,095,732	15,252,822
Transfer of irrecoverable funds - natural gas and electricity	13,320	10,531
Gas suppliers' adjustment, year n-1	14,158	264,049
CREG adjustment - electricity, year n	-208,863	-389,345
CREG adjustment - natural gas, year n	-1,159,887	-1,426,580
Other fees	6,000	4,500
<b>Financial income</b>	<b>386</b>	<b>405</b>
Income from current assets	327	405
Other financial income	59	1
<b>Extraordinary income</b>	<b>527,660</b>	<b>525,832</b>
Other extraordinary income	527,660	525,832
<b>TOTAL INCOME</b>	<b>15,288,495</b>	<b>14,242,216</b>
<b>RESULT FOR THE FINANCIAL YEAR</b>	<b>0</b>	<b>0</b>

Table 20: Balance as at 31 December 2016 (€) (Source: CREG)

ASSETS	2016	2015
<b>FIXED ASSETS</b>		
<b>Intangible and tangible fixed assets</b>	<b>348,786</b>	<b>361,876</b>
Building refurbishment	106,615	119,356
Office furniture and decoration	80,299	75,224
IT and telephone equipment	161,872	167,296
<b>Financial fixed assets</b>	<b>558</b>	<b>558</b>
Various guarantees	558	558
<b>CURRENT ASSETS</b>		
<b>Amounts receivable within one year</b>	<b>416,151</b>	<b>1,166,981</b>
Trade receivables	37,597	117,876
Other amounts receivable	252	65,977
Funds receivables	378,302	983,128
<b>Cash at bank and in hand</b>	<b>193,999,387</b>	<b>175,943,517</b>
CREG Fund	8,142,929	6,622,802
Social Energy Fund	24,013,053	17,117,535
Greenhouse Gas Fund	51,283,657	54,883,898
Denuclearisation Fund	670,848	2,752,338
Kyoto JI/CDM Fund	14,972,767	15,215,599
Protected Customers Fund - Electricity	12,884,906	4,757,466
Protected Customers Fund - Natural Gas	45,741,826	49,306,964
Municipalities Fund	578,691	578,691
Heating Grant Fund	24,403,994	24,403,997
Federal Contribution Fund	442	4,460
Electricity Degressivity Fund	3,350,913	43,798
Offshore Surcharge Degressivity Fund	4,742,963	3,275
Natural Gas Degressivity Fund	2,915,949	882
Irrecoverable Fund - Electricity	29,639	181,870
Irrecoverable Fund - Natural Gas	266,092	69,473
Cash	718	467
<b>Deferrals and accruals</b>	<b>362,437</b>	<b>1,022,157</b>
<b>TOTAL ASSETS</b>	<b>195,127,320</b>	<b>178,495,089</b>

LIABILITIES	2016	2015
<b>CAPITAL AND RESERVES</b>		
<b>Profit brought forward</b>	<b>1,314,222</b>	<b>1,314,222</b>
<b>CREG sector reserve</b>	<b>2,242,838</b>	<b>2,092,828</b>
Electricity	1,547,558	1,397,734
Gas	695,280	695,094
<b>PROVISIONS</b>		
<b>Compensation for outgoing members of the board of directors</b>	<b>424,396</b>	<b>311,166</b>
<b>Other provisions</b>	<b>0</b>	<b>5,710</b>
<b>AMOUNTS PAYABLE</b>		
<b>Amounts payable within one year</b>	<b>4,911,822</b>	<b>4,467,786</b>
Trade debts	3,106,410	2,756,090
Taxes, salaries and social charges payable	1,805,412	1,711,696
<b>Various debts</b>	<b>186,234,042</b>	<b>170,303,378</b>
Social Energy Fund	24,091,264	17,346,957
Greenhouse Gas Fund	51,283,898	54,884,664
Denuclearisation Fund	651,054	3,005,969
Kyoto JI/CDM Fund	14,972,767	15,215,599
Protected Customers Fund - Electricity	12,866,652	4,989,202
Protected Customers Fund - Natural Gas	45,935,474	49,538,291
Municipalities Fund	578,691	578,691
Heating Grant Fund	24,404,014	24,404,138
Federal Contribution Fund	442	4,460
Electricity Degressivity Fund	3,350,913	43,798
Offshore Surcharge Degressivity Fund	4,742,963	3,275
Natural Gas Degressivity Fund	2,915,949	882
Irrecoverable Fund - Electricity	137,626	202,819
Irrecoverable Fund - Natural Gas	302,336	84,633
<b>Deferrals and accruals</b>	<b>0</b>	<b>0</b>
<b>TOTAL LIABILITIES</b>	<b>195,127,320</b>	<b>178,495,089</b>

#### 5.9.4. Auditor's report on the financial statements for the year ended 31 December 2016

In accordance with the assignment entrusted to us by the Management Board pursuant to Article 31, §1 of the internal rules of 4<sup>th</sup> December 2015 of the Commission for Electricity and Gas Regulation, we have the pleasure of reporting to you on the accounts for the past financial year. This report contains our opinion on the accounts as well as the required additional statements and information.

##### Report on the accounts – unqualified opinion

We have audited the accounts of the Commission for the financial year ended 31 December 2016, prepared in accordance with the valuation rules adopted by the Management Board. These accounts are summarised in a balance sheet, the total of which amounts to 195,127,320 EUR and an income statement, the balance of which stands at 0 EUR, in accordance with the Royal Decrees of 24 March 2003 and of 2 April 2014 on the financing of the Commission, with the total income and charges standing at 15,288,495 EUR.

##### Responsibility of the Management Board for the preparation of the accounts

The Management Board is responsible for the preparation of accounts that give a true and fair view in accordance with the financial-reporting framework applicable to the Commission, and for such internal control as the Management Board determines is necessary to enable the preparation of accounts that are free from material misstatement, whether due to fraud or error.

##### Responsibility of the auditor

Our responsibility is to express an opinion on these accounts based on our audit. We conducted our audit in accordance with International Standards on Auditing (ISAs) as adopted in Belgium. Those standards require that we comply with the ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the accounts are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the accounts. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material misstatement of the accounts, whether due to fraud or error. In making those risk assessments, the auditor considers the Commission's internal control relevant to the preparation of accounts that give a true and fair view, in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Commission's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the Management Board, as well as evaluating the overall presentation of the accounts.

We have obtained from the Management Board and Commission officials the explanations and information necessary for performing our audit.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

##### Unqualified opinion

In our opinion, the balance sheet for the year ended 31 December 2016 and the income statement for the 2016 financial year give a true and fair view of the Commission's net equity and financial position of the Commission in accordance with the valuation rules adopted by the Management Board.

##### Additional statements and information

We would like to supplement our report with the following additional statements and information, which do not modify our audit opinion on the accounts:

- Without prejudice to formal aspects of minor importance, the accounting records were maintained in accordance with the general rules of the law of 22 May 2003 on the organization of the budget and the accounting of the federal State and with the Royal Decree of 10 November 2009 fixing the chart of accounts applicable to the federal State, Communities, Regions and the Joint Community Commission
- It should be highlighted that the Commission has, as at 31 December 2016, commitments for an amount of 646,835 EUR. These commitments do not appear in the accounts as it is not a debt.
- We have not noted any infringements of the "Electricity" and "Gas" Acts or their implementing decrees as regards transactions referred to in the accounts of the Commission.

Brussels, the 16<sup>th</sup> of February 2017

André KILESSE  
Company Auditor



## 5.10. List of CREG acts during 2016

<a href="#">(B)160121-CDC-1219E/13</a>	Décisions relatives à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur EBEM durant le premier, deuxième, troisième et quatrième trimestre de 2016
<a href="#">(B)160421-CDC-1219E/14</a>	
<a href="#">(B)160719-CDC-1219E/15</a>	Beslissingen over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier EBEM tijdens het eerste, tweede, derde en vierde kwartaal van 2016
<a href="#">(B)161020-CDC-1219E/16</a>	
<a href="#">(B)160121-CDC-1219G/13</a>	Décisions relatives à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur EBEM durant le premier, deuxième, troisième et quatrième trimestre de 2016
<a href="#">(B)160421-CDC-1219G/14</a>	
<a href="#">(B)160719-CDC-1219G/15</a>	Beslissingen over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier EBEM tijdens het eerste, tweede, derde en vierde kwartaal van 2016
<a href="#">(B)161020-CDC-1219G/16</a>	
<a href="#">(B)160121-CDC-1220E/13</a>	Décisions relatives à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur EDF LUMINUS durant le premier, deuxième, troisième et quatrième trimestre de 2016
<a href="#">(B)160421-CDC-1220E/14</a>	
<a href="#">(B)160719-CDC-1220E/15</a>	Beslissing over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier EDF LUMINUS tijdens het eerste, tweede, derde en vierde kwartaal van 2016
<a href="#">(B)161020-CDC-1220E/16</a>	
<a href="#">(B)160121-CDC-1220G/13</a>	Décisions relatives à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur EDF LUMINUS durant le premier, deuxième, troisième et quatrième trimestre de 2016
<a href="#">(B)160421-CDC-1220G/14</a>	
<a href="#">(B)160719-CDC-1220G/15</a>	Beslissingen over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier EDF LUMINUS tijdens het eerste, tweede, derde en vierde kwartaal van 2016
<a href="#">(B)161020-CDC-1220G/16</a>	
<a href="#">(B)160121-CDC-1221E/13</a>	Décisions relatives à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur ELECTRABEL CUSTOMER SOLUTIONS durant le premier, deuxième, troisième et quatrième trimestre de 2016
<a href="#">(B)160421-CDC-1221E/14</a>	
<a href="#">(B)160719-CDC-1221E/15</a>	Beslissingen over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier ELECTRABEL CUSTOMER SOLUTIONS tijdens het eerste, tweede, derde en vierde kwartaal van 2016
<a href="#">(B)161020-CDC-1221E/16</a>	
<a href="#">(B)160121-CDC-1221G/13</a>	Décisions relatives à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur ELECTRABEL CUSTOMER SOLUTIONS durant le premier, deuxième, troisième et quatrième trimestre de 2016
<a href="#">(B)160421-CDC-1221G/14</a>	
<a href="#">(B)160719-CDC-1221G/15</a>	Beslissingen over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier ELECTRABEL CUSTOMER SOLUTIONS tijdens het eerste, tweede, derde en vierde kwartaal van 2016
<a href="#">(B)161020-CDC-1221G/16</a>	
<a href="#">(B)160121-CDC-1222E/13</a>	Décisions relatives à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur ELEGANT durant le premier, deuxième, troisième et quatrième trimestre de 2016
<a href="#">(B)160421-CDC-1222E/14</a>	
<a href="#">(B)160719-CDC-1222E/15</a>	Beslissingen over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier ELEGANT tijdens het eerste, tweede, derde en vierde kwartaal van 2016
<a href="#">(B)161020-CDC-1222E/16</a>	
<a href="#">(B)160121-CDC-1222G/13</a>	Décisions relatives à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur ELEGANT durant le premier, deuxième, troisième et quatrième trimestre de 2016
<a href="#">(B)160421-CDC-1222G/14</a>	
<a href="#">(B)160719-CDC-1222G/15</a>	Beslissingen over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier ELEGANT tijdens het eerste, tweede, derde en vierde kwartaal van 2016
<a href="#">(B)161020-CDC-1222G/16</a>	



<b>(B)161020-CDC-1223E/1</b>	Décision relative à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur ENECO durant le quatrième trimestre de 2016 Beslissing over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier ENECO tijdens het vierde kwartaal van 2016
<b>(B)160121-CDC-1223G/13</b> <b>(B)160421-CDC-1223G/14</b> <b>(B)160719-CDC-1223G/15</b> <b>(B)161020-CDC-1223G/16</b>	Décisions relatives à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur ENECO durant le premier, deuxième, troisième et quatrième trimestre de 2016 Beslissingen over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier ENECO tijdens het eerste, tweede, derde en vierde kwartaal van 2016
<b>(B)160719-CDC-1224E/8</b> <b>(B)161020-CDC-1224E/9</b>	Décisions relatives à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur ENI durant le troisième et quatrième trimestre de 2016 Beslissingen over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier ENI tijdens het derde en vierde kwartaal van 2016
<b>(B)160719-CDC-1224G/8</b> <b>(B)161020-CDC-1224G/9</b>	Décisions relatives à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur ENI durant le troisième et quatrième trimestre de 2016 Beslissingen over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier ENI tijdens het derde en vierde kwartaal van 2016
<b>(B)160121-CDC-1225E/13</b> <b>(B)160421-CDC-1225E/14</b> <b>(B)160719-CDC-1225E/15</b> <b>(B)161020-CDC-1225E/16</b>	Décisions relatives à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur ESSENT durant le premier, deuxième, troisième et quatrième trimestre de 2016 Beslissingen over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier ESSENT tijdens het eerste, tweede, derde en vierde kwartaal van 2016
<b>(B)160121-CDC-1225G/13</b> <b>(B)160421-CDC-1225G/14</b> <b>(B)160719-CDC-1225G/15</b> <b>(B)161020-CDC-1225G/16</b>	Décisions relatives à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur ESSENT durant le premier, deuxième, troisième et quatrième trimestre de 2016 Beslissingen over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier ESSENT tijdens het eerste, tweede, derde en vierde kwartaal van 2016
<b>(B)160121-CDC-1226E/1</b> <b>(B)160421-CDC-1226E/2</b> <b>(B)160719-CDC-1226E/3</b> <b>(B)161020-CDC-1226E/4</b>	Décisions relatives à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur LAMPIRIS durant le premier, deuxième, troisième et quatrième trimestre de 2016 Beslissingen over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier LAMPIRIS tijdens het eerste, tweede, derde en vierde kwartaal van 2016
<b>(B)160121-CDC-1226G/13</b> <b>(B)160421-CDC-1226G/14</b> <b>(B)160719-CDC-1226G/15</b> <b>(B)161020-CDC-1226G/16</b>	Décisions relatives à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur LAMPIRIS durant le premier, deuxième, troisième et quatrième trimestre de 2016 Beslissingen over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier LAMPIRIS tijdens het eerste, tweede, derde en vierde kwartaal van 2016
<b>(B)160121-CDC-1227E/13</b> <b>(B)160421-CDC-1227E/14</b> <b>(B)160719-CDC-1227E/15</b> <b>(B)161020-CDC-1227E/16</b>	Décisions relatives à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur OCTA+ durant le premier, deuxième, troisième et quatrième trimestre de 2016 Beslissingen over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier OCTA+ tijdens het eerste, tweede, derde en vierde kwartaal van 2016



(B)160121-CDC-1227G/13 (B)160421-CDC-1227G/14 (B)160719-CDC-1227G/15 (B)161020-CDC-1227G16	Décisions relatives à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur OCTA+ durant le premier, deuxième, troisième et quatrième trimestre de 2016 Beslissingen over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier OCTA+ tijdens het eerste, tweede, derde en vierde kwartaal van 2016
(B)160121-CDC-1268G/11 (B)160421-CDC-1268G/12 (B)160719-CDC-1268G/13 (B)161020-CDC-1268G/14	Décisions relatives à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur ANTARGAZ durant le premier, deuxième, troisième et quatrième trimestre de 2016 Beslissingen over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier ANTARGAZ tijdens het eerste, tweede, derde en vierde kwartaal van 2016
(B)160121-CDC-1285E/10 (B)160421-CDC-1285G/11 (B)160719-CDC-1285G/12 (B)161020-CDC-1285G/13	Décisions relatives à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur WATZ durant le premier, deuxième, troisième et quatrième trimestre de 2016 Beslissingen over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier WATZ tijdens het eerste, tweede, derde en vierde kwartaal van 2016
(B)160121-CDC-1323E/8 (B)160421-CDC-1323E/9 (B)160719-CDC-1323E/10 (B)161020-CDC-1323E/11	Décisions relatives à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur MEGA POWERONLINE durant le premier, deuxième, troisième et quatrième trimestre de 2016 Beslissingen over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier MEGA POWERONLINE tijdens het eerste, tweede, derde en vierde kwartaal van 2016
(B)160121-CDC-1323G/8 (B)160421-CDC-1323G/9 (B)160719-CDC-1323G/10 (B)161020-CDC-1323G/11	Décisions relatives à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur MEGA POWERONLINE durant le premier, deuxième, troisième et quatrième trimestre de 2016 Beslissingen over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier MEGA POWERONLINE tijdens het eerste, tweede, derde en vierde kwartaal van 2016
(B)160121-CDC-1379E/6 (B)160421-CDC-1379E/7 (B)160719-CDC-1379E/8 (B)161020-CDC-1379E/9	Décisions relatives à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur ENERGY PEOPLE durant le premier, deuxième, troisième et quatrième trimestre de 2016 Beslissingen over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier ENERGY PEOPLE tijdens het eerste, tweede, derde en vierde kwartaal van 2016
(B)160121-CDC-1409E/4 (B)160421-CDC-1409E/5 (B)160719-CDC-1409E/6 (B)161020-CDC-1409E/7	Décisions relatives à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur COMFORT ENERGY durant le premier, deuxième, troisième et quatrième trimestre de 2016 Beslissingen over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier COMFORT ENERGY tijdens het eerste, tweede, derde en vierde kwartaal van 2016
(B)160121-CDC-1409G/4 (B)160421-CDC-1409G/5 (B)160719-CDC-1409G/6 (B)161020-CDC-1409G/7	Décisions relatives à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur COMFORT ENERGY durant le premier, deuxième, troisième et quatrième trimestre de 2016 Beslissingen over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier COMFORT ENERGY tijdens het eerste, tweede, derde en vierde kwartaal van 2016
(B)160121-CDC-1427E/3 (B)160421-CDC-1427E/4 (B)160719-CDC-1427E/5 (B)161020-CDC-1427E/6	Décisions relatives à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur ASPIRAVI ENERGY durant le premier, deuxième, troisième et quatrième trimestre de 2016 Beslissingen over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier ASPIRAVI ENERGY tijdens het eerste, tweede, derde en vierde kwartaal van 2016

<b>(B)160622-CDC-656G/32</b>	Décision sur le rapport tarifaire adapté incluant les soldes introduit par la S.A. Fluxys Belgium concernant l'exercice d'exploitation 2015 Beslissing over het aangepast tariefverslag met inbegrip van de saldi ingediend door NV Fluxys Belgium voor het exploitatiejaar 2015
<b>(B)161208-CDC-656G/33</b>	Décision sur la redevance d'équilibrage à des fins de neutralité et la valeur du petit ajustement Beslissing betreffende de neutraliteitsheffing voor balanceren en de waarde van de kleine aanpassing
<b>(B)160622-CDC-657G/12</b>	Décision sur le rapport tarifaire adapté incluant les soldes introduit par la S.A. Fluxus LNG concernant l'exercice d'exploitation 2015 Beslissing over het aangepast tariefverslag met inbegrip van de saldi ingediend door NV Fluxys LNG voor het exploitatiejaar 2015
<b>(B)160622-CDC-658E/37</b>	Décision relative au rapport tarifaire incluant les soldes introduit par la S.A. Elia System Operator concernant l'exercice d'exploitation 2015, tels que modifiés par le rapport tarifaire adapté Beslissing over het tariefverslag met inbegrip van de saldi ingediend door de NV Elia System Operator betreffende het exploitatiejaar 2015 en zoals gewijzigd door het aangepast tariefverslag
<b>(B)160630-CDC-658E/38</b>	Décision sur les objectifs à atteindre par Elia en 2017 dans le cadre de l'incitant laissé à la discrétion de la CREG visé à l'article 27 de la Méthodologie Tarifaire Beslissing over de doelstellingen die Elia in 2017 moet behalen in het kader van de stimulans overgelaten aan het eigen inzicht van de CREG zoals bedoeld in artikel 27 van de Tariefmethodologie
<b>(B)161222-CDC-658E/39</b>	Décision sur les objectifs à atteindre par Elia en 2017 dans le cadre de l'incitant à l'intégration du marché visé à l'article 24, §1er, 2) et §3 de la Méthodologie Tarifaire Beslissing over de doelstellingen die Elia in 2017 moet behalen in het kader van de stimulans voor de markintegratie zoals bedoeld in artikel 24, §1, 2) en §3 van de tariefmethodologie
<b>(B)161117-CDC-658E/40</b>	Décision relative à la demande d'approbation de la proposition tarifaire actualisée en vue d'une modification à partir du 1er janvier 2017 du tarif pour le financement de l'obligation de service public de la Réserve stratégique, introduite par la SA Elia System Operator Beslissing over de vraag tot goedkeuring van het geactualiseerd tariefvoorstel tot aanpassing vanaf 1 januari 2017 van het tarief voor de financiering van de openbare dienstverplichting van de Strategische Reserve, ingediend door de nv Elia System Operator
<b>(B)161208-CDC-658E/42</b>	Décision relative au rapport « <i>ex ante</i> » relatif aux tarifs pour les « obligations de service public » et « taxes et surcharges », à l'exception des informations relatives aux réserves stratégiques, d'application à partir du 1er janvier 2017 Beslissing over het " <i>ex ante</i> " verslag over de tarieven voor de "openbare dienstverplichtingen" en "taksen en toeslagen", met uitzondering van de informatie over de strategische reserve, met toepassing vanaf 1 januari 2017
<b>(B)1442/3 22-12-2016</b>	Décision relative à la prolongation de la validité de la méthodologie de tarification relative au contrat d'accès conclu avec Interconnector (UK) et au règlement d'accès d'Interconnector (UK) jusqu'à l'année calendrier 2017 Beslissing over de verlenging van de geldigheid van de vergoedingsmethodologie met betrekking tot de toegangsovereenkomst met Interconnector (UK) en het toegangsreglement van Interconnector (UK) tot het kalenderjaar 2017
<b>(B)160128-CDC-1487</b>	Décision relative à la demande de la SA Fluxys Belgium visant à être désignée partie chargée des prévisions en matière d'équilibrage du réseau de transport de gaz naturel Beslissing over de aanvraag door de NV Fluxys Belgium tot aanwijzing als partij die de prognoses opstelt inzake gasbalanceren van het aardgasvervoersnet
<b>(B)161020-CDC-1494</b>	Décision relative à la proposition de la SA Elia System Operator relative aux règles de fonctionnement de la réserve stratégique applicables à compter du 1er novembre 2016 Beslissing over het voorstel van NV Elia System Operator betreffende de werkingsregels van de strategische reserve toepasbaar vanaf 1 november 2016
<b>(A)160114-CDC-1501</b>	Avis relatif à la demande de Belpex SA/NV d'être désigné en qualité de gestionnaire du marché de l'électricité (NEMO) Advies over de aanvraag van Belpex NV/SA tot aanwijzing van benoemde elektriciteitsmarktbeheerder (NEMO)
<b>(A)160107-CDC-1502</b>	Avis relatif à la demande d'approbation de la proposition de modification du règlement de marché de Belpex Advies over de aanvraag tot goedkeuring van de door Belpex voorgestelde wijzigingen aan het Belpex marktreglement

<b>(A)160107-CDC-1503</b>	Avis relatif à la demande de Nord Pool Spot AS d'être désigné en qualité de gestionnaire du marché de l'électricité (NEMO) Advies over de aanvraag van Nord Pool Spot AS tot aanwijzing van benoemde elektriciteitsmarktbeheerder (NEMO)
<b>(C)160114-CDC-1504</b>	Proposition relative au renouvellement de l'autorisation de fourniture d'électricité d'Enovos Luxembourg Voorstel over de hernieuwing van de leveringsvergunning van elektriciteit voor Enovos Luxembourg
<b>(C)160115-CDC-1505</b>	Proposition d'arrêt royal modifiant l'arrêt royal du 16 juillet 2002 relatif à l'établissement de mécanismes visant la promotion de l'électricité produite à partir des sources d'énergie renouvelables Voorstel van koninklijk besluit tot wijziging van het koninklijk besluit van 16 juli 2002 betreffende de instelling van mechanismen voor de bevordering van elektriciteit opgewekt uit hernieuwbare energiebronnen
<b>(Z)160114-CDC-1506</b>	Note relative aux évolutions marquantes sur les marchés de gros de l'électricité et du gaz en 2015 Nota over de opvallende evoluties op de Belgische groothandelsmarkten elektriciteit en gas in 2015
<b>(Z)160121-CDC-1507</b>	Note relative à la proposition des modalités de la procédure pour la constitution de réserves stratégiques – période hivernale 2016-2017 Nota over het voorstel van de proceduremodaliteiten voor de aanleg van strategische reserves – winterperiode 2016-2017
<b>(B)160908-CDC-1508</b>	Décision sur le contrat standard de raccordement GRD proposé par la SA Fluxys Belgium (à savoir pour le raccordement des gestionnaires du réseau de distribution au réseau de transport de gaz naturel) Beslissing over het door de NV Fluxys Belgium voorgestelde standaard DNB-aansluitingscontract (d.w.z. voor de aansluiting van de distributienetbeheerders op het aardgasvervoersnet)
<b>(B)160622-CDC-1509</b>	Décision relative à la demande de nomination de Madame Valérie Vandegaart en tant que cadre chargé du respect des engagements de la S.A. Balansys et l'approbation des conditions régissant le mandat ou les conditions d'emploi, y compris la durée de son mandat, du cadre chargé du respect des engagements Beslissing over de aanvraag tot benoeming van mevrouw Valérie Vandegaart als nalevingsfunctionaris van de N.V. Balansys en de goedkeuring van de voorwaarden betreffende het mandaat of de arbeidsvoorwaarden, met inbegrip van de duur van het mandaat van de nalevingsfunctionaris
<b>(C)160204-CDC-1511</b>	Proposition relative au renouvellement de l'autorisation de fourniture d'électricité d'Essent Belgium Voorstel betreffende de hernieuwing aan Essent Belgium NV van een vergunning voor de levering van elektriciteit
<b>(B)160218-CDC-1512</b>	Décision relative aux modifications des conditions générales des contrats de responsables d'accès, proposées par le gestionnaire du réseau Beslissing over de wijzigingen van de algemene voorwaarden van de contracten van toegangsverantwoordelijke, voorgesteld door de netbeheerder
<b>(F)160526-CDC-1513</b>	Etude relative au fonctionnement et évolution des prix sur le marché de gros belge de l'électricité - rapport de monitoring 2015 Studie over de werking van en de prijsevolutie op de Belgische groothandelsmarkt voor elektriciteit - monitoringrapport 2015
<b>(A)160225-CDC-1514</b>	Avis relatif à la demande de la SA Fluxys Belgium d'octroi d'une autorisation de transport A323-4034 pour le raccordement de la conduite DN250 de 14,7 bars du gestionnaire de réseau de distribution Intergem à Beveren Advies over de aanvraag van de NV Fluxys Belgium voor de toekenning van een vervoersvergunning A323-4034 voor aansluiting van DN250 14.7 bar van de distributienetbeheerder Intergem te Beveren
<b>(Z)160424-CDC-1515</b>	Rapport comparatif des objectifs formulés dans la note de politique générale de la CREG et des réalisations de l'année 2015 Vergelijkend verslag van de doelstellingen geformuleerd in het beleidsplan van de CREG en van de verwezenlijkingen van het jaar 2015
<b>(F)160309-CDC-1516</b>	Etude sur les composantes des prix de l'électricité et du gaz naturel Studie betreffende de componenten van de elektriciteits- en aardgasprijzen
<b>(Z)160309-CDC-1517</b>	Rapport relatif à l'évolution des paramètres d'indexation des fournisseurs d'électricité et de gaz Verslag over de evolutie van de indexeringsparameters van de elektriciteits- en gasleveranciers

<b>(A)160324-CDC-1518</b>	Avis relatif à l'octroi d'une autorisation individuelle de fourniture de gaz naturel à Gas Natural Europe SAS Advies over de toekenning van een individuele leveringsvergunning voor aardgas aan Gas Natural Europe SAS
<b>(A)160324-CDC-1519</b>	Avis relatif à la demande de la SA Essent Energie Belgique de reconnaissance de son réseau situé sur le site d'Ineos en tant que réseau fermé industriel et de nomination en qualité de gestionnaire de ce dernier pour ce qui concerne la partie exploitée à une tension nominale supérieure à 70 kV Advies over de melding van de NV Essent Energie België met het oog op de erkenning van haar net op de site van Ineos als een gesloten industrieel net alsook om als beheerder hiervan te worden aangewezen voor wat betreft het gedeelte uitgebaat op een nominale spanning hoger dan 70 kV
<b>(F)160324-CDC-1520</b>	Study on The price spikes observed on the Belgian day-ahead spot exchange Belpex on 22 September and 16 October 2015
<b>(Z)160413-CDC-1521</b>	Note sur les données clés du marché belge du transport de gaz naturel en 2015 - Comparaison avec 2014 Nota over kerndata voor de vervoersmarkt voor aardgas in België in 2015 - Vergelijking met 2014
<b>(A)160413-CDC-1522</b>	Avis relatif à la demande de la SA Fluxys Belgium d'octroi d'une autorisation de transport A323-4032 pour le raccordement de la conduite DN600 de 14,7 bars du gestionnaire de réseau de distribution Sibelga à Overijse Advies over de aanvraag van de NV Fluxys Belgium voor de toekenning van een vervoersvergunning A323-4032 voor aansluiting van DN600 14.7 bar van de distributienetbeheerder Sibelga te Overijse
<b>(A)160413-CDC-1523</b>	Avis relatif à l'octroi d'une autorisation individuelle de fourniture de gaz naturel à RWE Supply & Trading GmbH Advies over de toekenning van een individuele leveringsvergunning voor aardgas aan RWE Supply & Trading GmbH
<b>(B)160421-CDC-1524E/1</b> <b>(B)160719-CDC-1524E/2</b> <b>(B)161020-CDC-1524E/3</b>	Décisions relatives à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur KLINKENBERG ENERGY durant le deuxième, troisième et quatrième trimestre de 2016 Beslissingen over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier KLINKENBERG ENERGY tijdens het tweede, derde en vierde kwartaal van 2016
<b>(B)161020-CDC-1524G/1</b>	Décision relative à la constatation de l'application correcte de la formule d'indexation et la conformité avec la liste exhaustive des critères admis pour les contrats-types à prix variable de l'énergie par le fournisseur KLINKENBERG ENERGY durant le quatrième trimestre de 2016 Beslissing over de vaststelling van de correcte toepassing van de indexeringsformule en de conformiteit met de exhaustieve lijst van toegelaten criteria voor de contracttypes met een variabele energieprijis door de leverancier KLINKENBERG ENERGY tijdens het vierde kwartaal van 2016
<b>(B)160429-CDC-1525</b>	Décision sur la proposition de la S.A. Elia System Operator concernant l'adaptation des règles de fonctionnement du marché relatif à la compensation des déséquilibres quart-horaires - Entrée en vigueur partiellement au 1er août 2016 et intégralement au 1er janvier 2017 Beslissing betreffende het voorstel van NV Elia System Operator betreffende de aanpassing van de werkingsregels van de markt voor de compensatie van de kwartieronevenwichten - Gedeeltelijke inwerkingtreding op 1 augustus 2016 en volledige inwerkingtreding op 1 januari 2017
<b>(B)160719-CDC-1526</b>	Décision sur la demande d'approbation de la méthode d'évaluation et de la détermination de la puissance de réserve primaire, secondaire et tertiaire pour 2017 Beslissing over de vraag tot goedkeuring van de evaluatiemethode voor en de bepaling van het primair, secundair en tertiair reservevermogen voor 2017
<b>(Z)160512-CDC-1527</b>	Note on scarcity pricing applied to Belgium
<b>(B)160630-CDC-1528</b>	Décision relative au contrôle des coûts totaux à prendre en compte par le gestionnaire de réseau pour le financement de l'achat, de la fourniture et de la pose du câble sous-marin ainsi que des installations de raccordement, des équipements et des jonctions de raccordement des installations de production du parc éolien offshore de Rentel Beslissing betreffende de controle van de door de netbeheerder voor de financiering in aanmerking te nemen totale kosten voor de aankoop, de levering en de plaatsing van de onderzeese kabel alsmede de aansluitingsinstallaties, de uitrustingen en de aansluitingsverbindingen van de productie-installaties van het offshore windturbinepark van Rentel
<b>(C)160512-CDC-1529</b>	Proposition relative au renouvellement de l'autorisation de fourniture d'électricité de Axpo Benelux SA Voorstel over de hernieuwing van de leveringsvergunning voor elektriciteit van Axpo Benelux NV

<b>(F)160519-CDC-1530</b>	Note on the Study on the impact of Price zones in different configurations in Europe
<b>(B)160519-CDC-1531</b>	Décision relative à la demande d'approbation de la proposition adaptée par la SA Fluxys Belgium du programme de transport de gaz naturel et des annexes A, B, C1, E et G du règlement d'accès pour le transport de gaz naturel Beslissing over de aanvraag tot goedkeuring van het door NV Fluxys Belgium aangepast voorstel van het aardgasvervoersprogramma en van de bijlagen A, B, C1, E en G van het toegangsreglement voor aardgasvervoer
<b>(Z)160527-CDC-1532</b>	Note relative à l'étude d'Elia portant sur le besoin d'« adequacy » et de flexibilité dans le système électrique belge pour la période 2017-2027 Nota over de studie van Elia over de nood aan 'adequacy' en aan flexibiliteit in het Belgische elektriciteitssysteem voor de periode 2017-2027
<b>(C)160526-CDC-1533</b>	Proposition relative au renouvellement de l'autorisation de fourniture d'électricité de UNIPER Global Commodities SE Voorstel over de hernieuwing van de leveringsvergunning voor elektriciteit van UNIPER Global Commodities SE
<b>(Z)160622-CDC-1534</b>	Rapport relatif à la vérification des revenus et des coûts réels de la centrale nucléaire de Tihange 1 pour la période du 1er octobre 2015 au 31 décembre 2015 conformément à la Convention relative à la prolongation de la durée de vie de Tihange 1 datée du 12 mars 2014 Rapport over de verificatie van de inkomsten en de werkelijke kosten van de kerncentrale van Tihange 1 voor de periode van 1 oktober 2015 tot 31 december 2015 overeenkomstig de conventie aangaande de verlenging van de levensduur van Tihange 1 de dato 12 maart 2014
<b>(A)160602-CDC-1535</b>	Avis relatif à la demande de la SA Fluxys Belgium d'avenants aux autorisations de transport A322-597, A322-12 et A322-296B pour la déviation de conduites de transport de gaz naturel Advies over de aanvraag van de NV Fluxys Belgium voor bijvoegsels aan vervoersvergunningen A322-597, A322-12 en A322 296B voor de omlegging van aardgasvervoersleidingen
<b>(A)160602-CDC-1536</b>	Avis relatif à la demande de la SA Fluxys Belgium d'octroi d'une autorisation de transport A323-4057 pour le remplacement d'une conduite DN500 de 14,7 bars par de nouvelles conduites DN600 et DN250 à Zaventem, Machelen et Bruxelles Advies over de aanvraag van de NV Fluxys Belgium voor de toekenning van een vervoersvergunning A323-4057 voor de vervanging van een 14.7 bar leiding DN500 door nieuwe leidingen DN600 en DN250 te Zaventem, Machelen en Brussel
<b>(B)160622-CDC-1537</b>	Décision sur les modifications des conditions générales des contrats de responsable d'accès proposées par le gestionnaire du réseau Beslissing over de wijzigingen van de algemene voorwaarden van de contracten van toegangsverantwoordelijke, voorgesteld door de netbeheerder
<b>(B)160622-CDC-1538</b>	Décision relative aux modifications des conditions générales des contrats d'accès, proposées par le gestionnaire de réseau Beslissing over de wijzigingen van de algemene voorwaarden van de toegangscontracten, voorgesteld door de netbeheerder
<b>(C)160617-CDC-1539</b>	Proposition d'arrêté royal modifiant l'arrêté royal du 16 juillet 2002 relatif à l'établissement de mécanismes visant la promotion de l'électricité produite à partir des sources d'énergie renouvelables Voorstel van koninklijk besluit tot wijziging van het koninklijk besluit van 16 juli 2002 betreffende de instelling van mechanismen voor de bevordering van elektriciteit opgewekt uit hernieuwbare energiebronnen
<b>(F)160526-CDC-1540</b>	Etude sur l'utilisation des compteurs électriques en basse tension en Belgique Studie betreffende het gebruik van elektriciteitsmeters op laagspanning in België
<b>(B)160630-CDC-1541</b>	Décision relative à la fixation des éléments pour la détermination du prix minimum des certificats verts délivrés pour l'électricité produite par les installations de la concession domaniale de Rentel Beslissing over het vastleggen van de elementen ter bepaling van de minimumprijs voor de groenestroomcertificaten uitgereikt voor de elektriciteit geproduceerd door de installaties in de domeinconcessie van Rentel

<b>(A)160622-CDC-1542</b>	<p>Avis sur l'indépendance de Monsieur Michel Allé en tant qu'administrateur indépendant au sein des conseils d'administration d'Elia System Operator SA et d'Elia Asset SA</p> <p>Advies over de onafhankelijkheid van de heer Michel Allé als onafhankelijke bestuurder in de raden van bestuur van Elia System Operator NV en Elia Asset NV</p>
<b>(A)160707-CDC-1543</b>	<p>Avis relatif à un projet d'arrêté royal relatif aux conditions et à la procédure d'octroi de concessions domaniales au gestionnaire du réseau pour la construction et l'exploitation d'installations nécessaires au transport d'électricité, dans les espaces marins sur lesquels la Belgique peut exercer sa juridiction conformément au droit international de la mer</p> <p>Advies over een ontwerp van koninklijk besluit betreffende de voorwaarden en de procedure voor de toekenning van domeinconcessies aan de netbeheerder voor de bouw en de exploitatie van installaties nodig voor de transmissie van elektriciteit, in de zeegebieden waarin België rechtsmacht kan uitoefenen overeenkomstig het internationaal zeerecht</p>
<b>(B)160825-CDC-1544</b>	<p>Décision relative au contrôle des coûts totaux à prendre en compte par le gestionnaire de réseau pour le financement de l'achat, de la fourniture et de la pose du câble sous-marin ainsi que des installations de raccordement, des équipements et des jonctions de raccordement des installations de production du parc éolien offshore de Norther</p> <p>Beslissing betreffende de controle van de door de netbeheerder voor de financiering in aanmerking te nemen totale kosten voor de aankoop, de levering en de plaatsing van de onderzeese kabel alsmede de aansluitingsinstallaties, de uitrustingen en de aansluitingsverbindingen van de productie-installaties van het offshore windturbinepark van Norther</p>
<b>(A)160707-CDC-1545</b>	<p>Avis relatif à un projet d'arrêté royal portant modification de l'arrêté royal du 11 mars 1966 relatif à la déclaration d'utilité publique pour l'établissement d'installations de transport de gaz, de l'arrêté royal du 11 mars 1966 déterminant les mesures de sécurité à prendre lors de l'établissement et dans l'exploitation des installations de transport de gaz par canalisations et de l'arrêté royal du 14 mai 2002 relatif à l'autorisation de transport de produits gazeux et autres par canalisations, fixant l'entrée en vigueur de diverses dispositions de la loi du 8 mai 2014 portant des dispositions diverses en matière d'énergie et définissant les modalités de la présomption d'utilité publique, visée à l'article 8/7 de la loi du 12 avril 1965 relatif au transport de produits gazeux et autres par canalisations</p> <p>Advies betreffende een ontwerp van koninklijk besluit tot wijziging van het koninklijk besluit van 11 maart 1966 tot verklaring van openbaar nut voor het oprichten van gasvervoerinstallaties, van het koninklijk besluit van 11 maart 1966 betreffende de te nemen veiligheidsmaatregelen bij de oprichting en bij de exploitatie van installaties voor gasvervoer door middel van leidingen en van het koninklijk besluit van 14 mei 2002 betreffende de vervoersvergunning voor gasachtige producten en andere door middel van leidingen, tot bepaling van de inwerkingtreding van diverse bepalingen van de wet van 8 mei 2014 houdende diverse bepalingen inzake energie en ter omschrijving van de nadere regels van het vermoeden van openbaar nut, bedoeld in artikel 8/7 van de wet van 12 april 1965 betreffende het vervoer van gasachtige producten en andere door middel van leidingen</p>
<b>(Z)160711-CDC-1546</b>	<p>Note relative aux mesures tendant à améliorer le fonctionnement du marché</p> <p>Nota over de maatregelen voor een verbeterde marktwerking</p>
<b>(F)160825-CDC-1548</b>	<p>Etude relative aux prix pratiqués sur le marché belge du gaz naturel en 2015</p> <p>Studie over de prijzen op de Belgische aardgasmarkt in 2015</p>
<b>(A)160719-CDC-1549</b>	<p>Avis relatif à la demande d'approbation de la proposition de modifications du règlement de marché Belpex</p> <p>Advies over de aanvraag tot goedkeuring van de door Belpex voorgestelde wijzigingen aan het Belpex marktreglement</p>
<b>(B)160901-CDC-1550</b>	<p>Décision relative à la fixation des éléments pour la détermination du prix minimum des certificats verts délivrés pour l'électricité produite par les installations de la concession domaniale de Norther</p> <p>Beslissing over het vastleggen van de elementen ter bepaling van de minimumprijs voor de groenestroomcertificaten uitgereikt voor de elektriciteit geproduceerd door de installaties in de domeinconcessie van Norther</p>
<b>(F)160825-CDC-1553</b>	<p>Rapport relatif à la relation entre les coûts et les prix sur le marché belge du gaz naturel en 2015</p> <p>Rapport over de verhouding tussen de kosten en prijzen op de Belgische aardgasmarkt in 2015</p>



<b>(F)160916-CDC-1554</b>	Etude relative aux mécanismes de fixation du prix de l'énergie en vigueur en 2015 au sein des contrats de fourniture d'électricité des grands clients industriels d'Electrabel s.a. Studie over de in 2015 geldende prijsvormingmechanismen in leveringscontracten voor elektriciteit van de grote industriële afnemers van Electrabel nv
<b>(F)160916-CDC-1555</b>	Etude relative aux mécanismes de fixation des prix de l'énergie en vigueur en 2015 au sein des contrats de fourniture d'électricité des grands clients industriels d'EDF Luminus s.a. Studie over de in 2015 geldende prijsvormingmechanismen in leveringscontracten voor elektriciteit van de grote industriële afnemers van EDF Luminus nv
<b>(B)161013-CDC-1556</b>	Décision sur la proposition de la S.A. Elia System Operator concernant l'adaptation des règles de fonctionnement du marché relatif à la compensation des déséquilibres quart-horaires - Entrée en vigueur au 1er janvier 2017 Beslissing betreffende het voorstel van NV Elia System Operator betreffende de aanpassing van de werkingsregels van de markt voor de compensatie van de kwartieronevenwichten - Inwerkingtreding op 1 januari 2017
<b>(A)160825-CDC-1557</b>	Avis relatif à la demande de la SA Fluxys Belgium d'octroi d'une autorisation de transport A323-4063 pour la construction d'une nouvelle station de détente de gaz naturel à Herentals, Huizen Advies over de aanvraag van de NV Fluxys Belgium voor de toekenning van een vervoersvergunning A323-4063 voor de bouw van een nieuw drukreducerstation voor aardgas te Herentals, Huizen
<b>(A)160825-CDC-1558</b>	Avis relatif à l'octroi d'une autorisation individuelle de fourniture de gaz naturel à la Société Européenne de Gestion de l'Energie SA Advies over de toekenning van een individuele leveringsvergunning voor aardgas aan Société Européenne de Gestion de l'Energie nv
<b>(A)160825-CDC-1559</b>	Avis relatif à la demande de la SA Fluxys Belgium d'octroi d'une autorisation de transport A323-4010 pour la reprise de la partie à haute pression d'une station de détente de gaz naturel existante d'Eandis (Iveka) à Oud-Turnhout Advies over de aanvraag van de NV Fluxys Belgium voor de toekenning van een vervoersvergunning A323-4010 voor de overname het hogedrukgedeelte van een bestaand drukreducerstation voor aardgas van Eandis (Iveka) te Oud-Turnhout
<b>(B)160916-CDC-1560</b>	Décision relative à la demande d'approbation de la proposition de contrat pour l'achat de certificats verts entre la S.A. Elia System Operator et la S.A. Rentel Beslissing over de vraag tot goedkeuring van het voorstel van contract voor het aankopen van groenestroomcertificaten tussen de N.V. Elia System Operator en de N.V. Rentel
<b>(A)160908-CDC-1561</b>	Avis relatif à l'octroi d'une autorisation individuelle de fourniture de gaz naturel à Lampiris S.A. Advies over de toekenning van een individuele leveringsvergunning voor aardgas aan Lampiris nv
<b>(Z)1562 22.12.2016</b>	Modifications du règlement d'ordre intérieur du comité de direction de la CREG du 4 décembre 2015, M.B. 14 décembre Wijzigingen van het huishoudelijk reglement van het directiecomité van de CREG van 4 december 2015, B.S. 14 december 2015
<b>(B)160922-CDC-1563</b>	Décision relative à la demande d'approbation de la proposition de contrat pour l'achat de certificats verts entre la S.A. Elia System Operator et la S.A. Norther Beslissing over de vraag tot goedkeuring van het voorstel van contract voor het aankopen van groenestroomcertificaten tussen de N.V. Elia System Operator en de N.V. Norther
<b>(A)160901-CDC-1564</b>	Avis relatif à la demande de la S.A. Fluxys Belgium pour l'octroi d'une autorisation de transport de gaz naturel pour la canalisation DN150/DN250 BP Andenne (Seilles) – Carmeuse Advies over de aanvraag van Fluxys Belgium NV voor de toekenning van een aardgasvervoersvergunning voor de pijpleiding DN150/DN250 BP Andenne (Seilles) – Carmeuse
<b>(A)160901-CDC-1565</b>	Avis relatif à la demande de la S.A. Fluxys Belgium pour l'octroi d'une autorisation de transport de gaz naturel pour la régularisation de la canalisation DN100 HP Aubange – SNC Michelman Int. Advies over de aanvraag van Fluxys Belgium NV voor de toekenning van een aardgasvervoersvergunning voor de regularisatie van de pijpleiding DN100 HP Aubange – SNC Michelman Int.

<b>(Z)161013-CDC-1566</b>	Rapport relatif au monitoring des éventuels effets perturbateurs sur le marché dans le cadre du mécanisme du filet de sécurité introduit par l'article 20bis, §§1er à 5 de la Loi électricité et l'article 15/10bis, §§1er à 5 de la Loi gaz Verslag over de monitoring van mogelijke marktversturende effecten in het kader van het vangnetmechanisme ingevoerd via artikel 20bis, §§1 tot 5 van de Elektriciteitswet en artikel 15/10bis, §§1 tot 5 van de Gaswet'
<b>(A)160922-CDC-1567</b>	Avis relatif à la demande d'approbation de la proposition modifiée par Belpex de modification du règlement de marché de Belpex Advies over de aanvraag tot goedkeuring van het door Belpex gewijzigd voorstel van wijziging aan het Belpex marktreglement
<b>(F)1568</b> <b>19.12.2016</b>	Etude relative à l'analyse du soutien à l'énergie éolienne offshore incluant le rapport annuel sur l'efficacité du prix minimum pour l'énergie éolienne offshore Studie over de analyse van ondersteuning van offshore windenergie met inbegrip van het jaarlijks verslag over de doeltreffendheid van de minimumprijs voor offshore windenergie
<b>(B)161013-CDC-1569</b>	Décision relative à la proposition de la SA Elia System Operator de méthode pour l'attribution des capacités disponibles annuelles et mensuelles pour les échanges d'énergie avec d'autres zones d'offres aux responsables d'accès ainsi que les règles d'allocation des capacités via des enchères fictives Beslissing over het voorstel van de NV Elia System Operator van de methode voor de toewijzing van de beschikbare jaar- en maandcapaciteiten voor energie-uitwisselingen met andere biedzones aan de toegangsverantwoordelijken alsook de toewijzingsregels van dagcapaciteit middels schaduwveilingen
<b>(F)160929-CDC-1570</b>	Etude sur la fourniture en gaz naturel des grands clients industriels en Belgique Studie over de aardgaslevering aan grote industriële klanten in België
<b>(B)161020-CDC-1571</b>	Décision relative à la demande de la SA Fluxys Belgium d'approbation du règlement d'accès pour le transport, du contrat standard de transport et du programme de transport modifiés Beslissing over de aanvraag van de NV Fluxys Belgium tot goedkeuring van het gewijzigde standaard vervoerscontract, toegangsreglement voor vervoer en vervoersprogramma
<b>(A)161010-CDC-1572</b>	Avis sur un avant-projet de loi modifiant la loi du 29 avril 1999 relative à l'organisation du marché de l'électricité – MOG Advies over een voorontwerp van wet tot wijziging van de wet van 29 april 1999 betreffende de organisatie van de elektriciteitsmarkt – MOG
<b>(RA)161013-CDC-1572</b>	Rapport relatif au caractère manifestement déraisonnable ou non des prix offerts à Elia System Operator SA pour la fourniture du service de réglage de la tension en 2017 Verslag betreffende het al dan niet manifest onredelijk karakter van de aan Elia System Operator nv aangeboden prijzen voor de levering van een dienst voor de regeling van spanning in 2017
<b>(Z)161027-CDC-1573</b>	Note de politique générale de la CREG pour l'année 2017 Algemene beleidsnota van de CREG voor het jaar 2017
<b>(C)161020-CDC-1574</b>	Proposition sur le calcul de la surcharge destinée à compenser le coût réel net supporté par le gestionnaire du réseau résultant de l'obligation d'achat et de vente des certificats verts en 2017 Voorstel betreffende de berekening van de toeslag bestemd om de reële nettokosten te compenseren die door de netbeheerder gedragen worden naar aanleiding van de aankoop- en verkoopverplichting van groene certificaten in 2017
<b>(B)1575</b> <b>22.12.2016</b>	Décision sur la proposition de la SA Elia System Operator de modalités applicables à plusieurs NEMO (MNA) dans la zone d'enchères belge Beslissing over de goedkeuringsaanvraag van de NV Elia System Operator NV voor het voorstel van Regelingen voor meerdere NEMO's (MNA) voor de Belgische biedzone
<b>(C)161020-CDC-1576</b>	Proposition d'arrêté royal modifiant l'arrêté royal du 29 mars 2012 fixant les règles de détermination du coût de l'application des tarifs sociaux par les entreprises d'électricité et les règles d'intervention pour leur prise en charge Voorstel van koninklijk besluit tot wijziging van het koninklijk besluit van 29 maart 2012 tot vaststelling van de regels voor het bepalen van de kosten van de toepassing van de sociale tarieven door de elektriciteitsbedrijven en de tussenkomstregels voor het ten laste nemen hiervan



<b>(C)161020-CDC-1577</b>	<p>Proposition d'arrêté royal modifiant l'arrêté royal du 16 juillet 2002 relatif à l'établissement de mécanismes visant la promotion de l'électricité produite à partir des sources d'énergie renouvelables</p> <p>Voorstel van koninklijk besluit tot wijziging van het koninklijk besluit van 16 juli 2002 betreffende de instelling van mechanismen voor de bevordering van elektriciteit opgewekt uit hernieuwbare energiebronnen</p>
<b>(C)161020-CDC-1578</b>	<p>Proposition d'arrêté royal modifiant l'arrêté royal du 29 mars 2012 fixant les règles de détermination du coût de l'application des tarifs sociaux par les entreprises de gaz naturel et les règles d'intervention pour leur prise en charge</p> <p>Voorstel van koninklijk besluit tot wijziging van het koninklijk besluit van 29 maart 2012 tot vaststelling van de regels voor het bepalen van de kost van de toepassing van de sociale tarieven door de aardgasondernemingen en de tussenkomstregels voor het ten laste nemen hiervan</p>
<b>(A)161027-CDC-1579</b>	<p>Avis relatif à la demande de modification de la concession domaniale pour la construction et l'exploitation d'installations de production d'électricité à partir de l'énergie éolienne dans les espaces marins (Thortonbank), octroyée à la SA C-Power par arrêté ministériel du 27 juin 2003 et modifiée par arrêtés ministériels du 3 février 2010 et du 6 mai 2013</p> <p>Advies over de aanvraag tot wijziging van de domeinconcessie voor de bouw en de exploitatie van installaties voor de productie van elektriciteit uit wind in de zeegebieden (Thortonbank) toegekend aan de NV C-Power bij ministerieel besluit van 27 juni 2003 en gewijzigd bij ministeriële besluiten van 3 februari 2010 en van 6 mei 2013</p>
<b>(A)161027-CDC-1580</b>	<p>Avis relatif à la demande d'autorisation de transport pour la construction d'une nouvelle station de détente de gaz naturel à Zele, Boomhamersstraat</p> <p>Advies over de aanvraag van een vervoersvergunning voor het bouwen van een nieuw drukreducerstation voor aardgas te Zele, Boomhamersstraat</p>
<b>(A)161027-CDC-1581</b>	<p>Avis relatif à la demande d'avenant à l'autorisation de transport A322-245 pour le raccordement et la construction d'une station de détente de gaz naturel Reuvoortweg à 3520 Zonhoven</p> <p>Advies over de aanvraag van een bijvoegsel aan vervoersvergunning A322-245 voor de aansluiting en de bouw van een drukreducerstation voor aardgas aan de Reuvoortweg te 3520 Zonhoven</p>
<b>(E)161027-CDC-1582</b>	<p>Proposition relative à l'octroi d'une autorisation de fourniture d'électricité à Next Kraftwerke</p> <p>Voorstel betreffende de toekenning van een vergunning voor de levering van elektriciteit aan Next Kraftwerke</p>
<b>(F)161027-CDC-1583</b>	<p>Etude relative à la rentabilité d'unités de production locales contrôlables</p> <p>Studie over de winstgevendheid van lokale stuurbare productie-eenheden</p>
<b>(A)161027-CDC-1584</b>	<p>Avis sur un projet d'arrêté royal portant modification de l'arrêté royal du 24 mars 2003 fixant les modalités de la cotisation fédérale destinée au financement de certaines obligations de service public et des coûts liés à la régulation et au contrôle du marché de l'électricité et de l'arrêté royal du 2 avril 2014 fixant les modalités de la cotisation fédérale destinée au financement de certaines obligations de service public et des coûts liés à la régulation et au contrôle du marché du gaz naturel</p> <p>Advies over een ontwerp van koninklijk besluit tot wijziging van het koninklijk besluit van 24 maart 2003 tot bepaling van de nadere regels betreffende de federale bijdrage tot financiering van sommige openbare dienstverplichtingen en van de kosten verbonden aan de regulering van en controle op de elektriciteitsmarkt en van het koninklijk besluit van 2 april 2014 tot vaststelling van de nadere regels betreffende een federale bijdrage bestemd voor de financiering van bepaalde openbare dienstverplichtingen en van de kosten verbonden aan de regulering van en controle op de aardgasmarkt</p>
<b>(E)161027-CDC-1585</b>	<p>Proposition relative à l'octroi d'une autorisation de fourniture d'électricité à Vlaams Energiebedrijf NV (VEB)</p> <p>Voorstel betreffende de toekenning van een vergunning voor de levering van elektriciteit aan Vlaams Energiebedrijf NV (VEB)</p>
<b>(RA)161110-CDC-1586</b>	<p>Rapport relatif au caractère manifestement déraisonnable ou non des prix offerts à Elia System Operator SA pour la fourniture des réserves tertiaires de puissance issues des charges interruptibles - R3 ICH - pour l'exercice d'exploitation 2017</p> <p>Rapport over het al dan niet manifest onredelijke karakter van de aan de Elia System Operator nv aangeboden prijzen voor de levering van tertiaire reservevermogens uit onderbreekbare afnames - R3 ICH - voor het exploitatiejaar 2017</p>

<b>(A)161124-CDC-1587</b>	Avis relatif à la nécessité d'un renouvellement d'une autorisation individuelle du parc éolien de Estinnes suite au changement de contrôle par l'achat de Windvision Windfarm Estinnes SA par CGN Europe Energy Belgium Holding Limited Advies over de noodzaak van een hernieuwing van een individuele vergunning voor het windmolenpark van Estinnes ten gevolge van de wijziging van controle door de aankoop van Windvision Windfarm Estinnes nv door CGN Europe Energy Belgium Holding Limited
<b>(A)161128-CDC-1589</b>	Avis sur le projet de loi n°54-2070/001 portant modifications de la loi du 11 avril 2003 sur les provisions constituées pour le démantèlement des centrales nucléaires et pour la gestion des matières fissiles irradiées dans ces centrales et de la loi du 29 avril 1999 relative à l'organisation du marché de l'électricité Advies over het wetsontwerp nr. 54-2070/001 tot wijziging van de wet van 11 april 2003 betreffende de voorzieningen aangelegd voor de ontmanteling van de kerncentrales en voor het beheer van splijtstoffen bestaand in deze centrales en van de wet van 29 april 1999 betreffende de organisatie van de elektriciteitsmarkt
<b>(A)161202-CDC-1590</b>	Avis relatif à la nécessité d'un renouvellement d'une autorisation individuelle de la centrale TGV de Marcinelle suite changement de contrôle par l'achat de Marcinelle Energie SA par Direct Energie SA Advies over de noodzaak van een hernieuwing van een individuele vergunning van de STEG-centrale van Marcinelle ten gevolge van de wijziging van controle door de aankoop van Marcinelle Energie nv door Direct Energie nv
<b>(A)161208-CDC-1592</b>	Avis relatif à la demande de la SA Fluxys Belgium d'octroi d'une autorisation de transport A323-4142 pour l'installation d'une nouvelle conduite de transport de gaz naturel pour le raccordement du client industriel Farm Frites à Lommel Advies over de aanvraag van de NV Fluxys Belgium voor de toekenning van een vervoersvergunning A323-4142 voor de aanleg van een nieuwe aardgasvervoerleiding voor de aansluiting van de industriële afnemer Farm Frites te Lommel.
<b>(A)1595 16-12-2016</b>	Avis relatif à un projet d'arrêté royal imposant à la SA EDF Luminus une obligation de service public couvrant le volume et le prix du service réglage de la tension et de la puissance réactive du 1er janvier 2017 au 31 décembre 2017 inclus Advies over een ontwerp van koninklijk besluit houdende oplegging van een openbare dienstverplichting aan EDF Luminus nv tot dekking van het volume en de prijs voor de dienst regeling van de spanning en het reactief vermogen vanaf 1 januari 2017 tot en met 31 december 2017
<b>(A)1596 16-12-2016</b>	Avis sur le projet d'arrêté royal imposant à RWE Supply & Trading GmbH une obligation de service public couvrant le volume et le prix du service réglage de la tension et de la puissance réactive du 1er janvier 2017 au 31 décembre 2017 inclus Advies over het ontwerp van koninklijk besluit houdende oplegging van een openbare dienstverplichting aan RWE Supply & Trading GmbH tot dekking van het volume en de prijs voor de dienst regeling van de spanning en het reactief vermogen vanaf 1 januari 2017 tot en met 31 december 2017
<b>(A)1597 16-12-2016</b>	Avis sur le projet d'arrêté royal imposant à Electrabel NV une obligation de service public couvrant le volume et le prix du service réglage de la tension et de la puissance réactive du 1er janvier 2017 au 31 décembre 2017 inclus Advies over het ontwerp van koninklijk besluit houdende oplegging aan Electrabel NV van een openbare dienstverplichting tot dekking van het volume en de prijs voor de dienst regeling van de spanning en het reactief vermogen vanaf 1 januari 2017 tot en met 31 december 2017
<b>(E)1599 22.12.2016</b>	Proposition relative à l'octroi d'une autorisation de fourniture d'électricité à Eneco Voorstel betreffende de toekenning van een vergunning voor de levering van elektriciteit aan Eneco
<b>(F)1600 22.12.2016</b>	Etude relative à la fourniture d'électricité des grands clients industriels en Belgique en 2015 Studie over de elektriciteitsbelevering van grote industriële klanten in België in 2015

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