



**2012 National Report  
NMa (Dutch Office of Energy Regulation)  
to the European Commission**

---

---

## Table of Contents

<b>STRUCTURE OF NATIONAL REPORTS .....</b>	<b>4</b>
<b>1 FOREWORD .....</b>	<b>4</b>
<b>2 MAIN DEVELOPMENTS IN THE GAS AND ELECTRICITY MARKETS .....</b>	<b>5</b>
<b>3 THE ELECTRICITY MARKET .....</b>	<b>8</b>
3.1 Network regulation .....	8
3.1.1 Unbundling .....	8
3.1.2 Technical functioning.....	9
3.1.3 Network tariffs for connection and access .....	10
3.1.4 Cross-border issues .....	11
3.1.5 Compliance .....	13
3.1.6 Dispute settlement.....	13
3.2 Promoting Competition.....	13
3.2.1 Wholesale markets.....	13
3.2.2 Retail markets .....	16
3.2.3 Recommendations on supply prices.....	26
3.2.4 Carry out investigations and imposing measures to promote effective competition .....	26
3.3 Consumer protection.....	27
3.4 Security of supply (if and in so far as NRA is competent authority).....	28
3.4.1 Monitoring balance of supply and demand .....	28
3.4.2 Monitoring investment in generation capacities in relation to SoS .....	28
3.4.3 Measures to cover peak demand or shortfalls of suppliers .....	30
<b>4 THE GAS MARKET .....</b>	<b>30</b>
4.1 Network regulation .....	30
4.1.1 Unbundling .....	30
4.1.2 Technical functioning.....	31
4.1.3 Network and LNG tariffs for connection and access .....	32
4.1.4 Cross-border issues .....	33
4.1.5 Compliance .....	33
4.1.6 Dispute settlement.....	34
4.2 Promoting Competition.....	34
4.2.1 Wholesale Markets.....	34
4.2.2 Retail Markets .....	36
4.2.3 Recommendations on supply prices.....	38
4.2.4 Carry out investigations and imposing measures to promote effective competition .....	38
4.3 Consumer protection.....	39

4.4	Security of supply.....	39
4.4.1	Monitoring balance of supply and demand .....	39
4.4.2	Expected future demand and available supplies as well as envisaged additional capacity.....	39
4.4.3	Measures to cover peak demand or shortfalls of suppliers .....	41
<b>ANNEX A: INDICATORS WITH DEFINITIONS .....</b>		<b>43</b>
<b>ANNEX 1 – CEER .....</b>		<b>58</b>

## Structure of National Reports

### 1 Foreword

#### *Our mission: to make energy markets work*

The Dutch office of Energy Regulation is part of the Netherlands Competition Authority and committed to making energy markets work as effectively as possible. To fulfil this mission, we aim to create conditions that ensure an effective and efficient market functioning and protect consumer interests if necessary. As a result, access to networks should be safeguarded, transparency should be sufficient and consumers should be protected against any malpractices.

#### *Our approach*

NMa operates in a problem-solving and issue orientated manner and aims to tackle issues and problems that hamper the conditions for effective market operations and consumer protection. Although the third energy package was not yet transposed in 2011, NMa strived to boost the creation of the internal energy market by actively cooperating both at a European and regional level. Furthermore the preparation of the merger between the Netherlands Competition Authority, the Telecom authority (OPTA) and Consumer authority into the Netherlands Consumer Authority (ACM) will help to bring more focus on the benefits the internal energy market will bring for consumers. This national report provides an insight into (the developments of) the Dutch energy market for both electricity and gas in 2011.

Remko Bos  
Director of Dutch office of Energy Regulation

## 2 Main developments in the gas and electricity markets

### Gas

#### *Wholesale markets*

The Dutch gas trading hub TTF (Title Transfer Facility) has shown a remarkable growth in 2011. The *traded* gas volume reached 6300 TWh (645 bcm), while the net delivered gas volume on TTF amounted to 375 TWh (38 bcm). As such, on average each TTF cubic meter was traded approximately 17 times before being physically delivered (compared to approximately 10 in 2010). If the churn factor is calculated based upon the traded volumes that the Dutch TSO recorded for nomination – thus leaving mutual trades out that took place outside the trades reported to GTS – the churn is 4,6 (compared to 3,6 in 2011). Based upon these figures, TTF is – next to the NBP – the most liquid hub in the European Union.

In 2011 traded TTF volumes doubled compared to the previous year and the number of active traders on TTF was also on the rise (on average 90 compared to 82 in 2010). The vast majority of gas trading is OTC. Although gas trading on the exchange compared to OTC trading was relatively moderate, volumes on the gas exchange were also on the rise. APX ENDEX (the Dutch gas and power exchange) spot market volumes went up to 11,9 TWh in 2011 (compared to 5,8 TWh in 2010) and the futures volumes rose to 237,7 in 2011 (compared to 119,1 TWh in 2010).

The growth of TTF can probably for a large part be attributed to several measures that came into effect in 2011. On April 1<sup>st</sup> a new market based balancing regime (see below for more information) came into force. Under the new gas model all traded gas should in principle be delivered on TTF and under the new balancing regime all parties carry in principle responsibility for their own balancing. Market participants were also quick to respond to this new reality and introduced a range of new gas products. GasTerra – as the biggest shipper of gas in the Netherlands and seller of gas from the Groningen field – for instance started to offer several within-day products on TTF in 2011: hourly blocks (one or two hours ahead), peak and off peak blocks and balance of day. Previously spot trade was primarily in day ahead products with flat delivery over the whole gas day. With these new within-day products shippers can now also source on TTF for their balancing needs. Also Gasterra introduced a new virtual storage service which is being auctioned by APX-ENDEX. The storage services allow market parties to inject or withdraw gas from a virtual storage facility thereby providing them direct access to flexibility which in turn enables them to trade more actively on TTF. The virtual storage capacity was sold out in 2011.

On 1 April 2011, a new balancing regime has come into force. In the new system, the Dutch TSO will take no balancing actions as long as the whole system remains within the available linepack. Because it is not known when the system will be out of balance (this could be after a few hours, a few days or longer), each shipper has an incentive to balance his portfolio at any time. If the system is out of balance, either due to long position or short position of the system, the Dutch TSO will call of the so called Bid Price Ladder (hereafter: BPL) and buys gas in case the system is short and sells gas in case the system is long from market participants that offered gas in the bidding ladder. The Dutch TSO will keep buying or selling gas (starting with the lowest offer) until the system is in balance again. Those shippers causing the imbalance (either being all shippers that are long if the system is long or the other way around) will pay the costs that the Dutch TSO incurred when buying gas through the BPL and also pay for assistance gas. With the latter, shippers that were in balance (in this example by being short) helped to keep the system in balance are “awarded for that”.

## *Infrastructure*

In general the domestic demand for gas and the export obligations are largely covered by a guaranteed supply of both domestic production and import from e.g. Norway and Russia. The decline of production in the Netherlands will ask for investments in new gas infrastructure. (New) investments should ensure that more sources of flexibility are available and that infrastructure can accommodate changing gas flow directions and demand patterns. Based on an integrated open season held in 2009 by Gas Transport Services (used to determine future capacity needs of market parties), several new projects are undertaken that aim to enlarge the existing gas transmission system. One of these project is the so called North-South connection, an important connection for transmission of gas. The proposed North-South route will provide the Netherlands with the extra kilometres of pipeline and compressor stations its needs and work on this project continued in 2011. This is also the case for a Gasunie project to produce, transport and store nitrogen in an empty salt cavern. This project aims to ensure that – with the decline of the Groningen field – sufficient nitrogen exists that can be blended with high calorific gas if needed.

At the beginning of 2011, a storage facility (salt cavern) operated by Gasunie Zuidwending became operational. This storage facility has a working volume of 0,2 bcm and withdrawal capacity/ injection capacity of 1.6 million m<sup>3</sup>/h (respectively 0,8 million m<sup>3</sup>/h) and can be used to cope with peak demand on the short term. A fifth cavern of the Gasunie Zuidwending storage facility will become operational in 2014, expanding the working volume further to 0,3 bcm.

At the end of 2011, construction of the Eneco storage facility (salt cavern) in Epe, Germany was completed. It is expected that this storage facility – with a working volume of 0,1 bcm and injection/ withdrawal capacity of 0,2, respectively 0,4 million m<sup>3</sup>/h – becomes operational in 2012. With regard to the seasonal TAQA storage facility Bergermeer (with a working volume of over 4 bcm one of the largest storages in Europe), construction was delayed in 2011 due to legal objections raised. It is expected that in 2012 the final go/ no go decision (depending on a ruling of the Dutch council of State) will be taken.

On 1 September 2011, the Gate terminal (a joint venture of Vopak and Gasunie) became commercially operational and LNG gas is now imported into the Netherlands. The Gate terminal currently exists out of three storage tanks (of each 180.000 m<sup>3</sup>) and has a throughput capacity of 12 bcma. Based upon the exemption that the Gate terminal has been granted, the terminal could be further extended to a throughput capacity of 16bcma.

## *Tariff regulation*

In 2011, the Board of the Netherlands Competition Authority (hereafter: the Board) established new methods of regulation for the periods from 2006-2009 and 2010-2013 after the prior method decisions had been annulled by the Trade and Industry Appeals Tribunal. With these methods of regulation, NMa calculates the efficiency factors for the legal tasks of the TSO concerning transport and transport related services, the performing of balancing services and the quality conversion service.

**Electricity***Wholesale markets*

Last year has seen a number of major developments for the Dutch wholesale electricity market. First of all day ahead market coupling with the Nordic region via NorNed was achieved at the start of the year. This is a big step towards integration of the electricity markets in the Northwest region. Secondly, allocation of cross border intraday capacity via the Elbas platform was introduced on the Dutch-Belgian border in February 2011. This has enabled the start of continuous implicit trading on this border and has led to a rise in traded intraday volumes towards the end of the year. Also, work on implementing intraday capacity allocation via the Elbas platform for NorNed started during spring 2011. The decision concerning the required grid code amendment was taken in the summer of 2011. (Intraday NorNed became operational in March 2012). Besides these important developments the Dutch spot market (day ahead/intraday/strips) has also seen an improvement in traded volumes in 2011. APX-ENDEX recorded traded volumes of 40.7 TWh.

*Infrastructure*

Tennet, the Dutch electricity TSO, has worked on several major investments as well as on plans to invest in expansions of high voltage transmission capacities since 2006. They are meant to transport the increasing amounts of electricity that are produced in a number of large power plants that have been issued recently and will be produced in plants that will be constructed in the years to come, e.g. the Randstad Ring, the North-West and South-West connections. These efforts have continued in 2011.

Britned, the electricity interconnector between the Netherlands and Great Britain, became operational in April 2011. BritNed enables integration of the Dutch electricity market with the British market. In its first year of operation BritNed has accounted for 7,6 TWh traded volume in the direction Netherlands-UK and 5,3 TWh traded volume in the direction UK-Netherlands. BritNed offers medium term products via explicit auctions and a short term day ahead product via implicit auctions facilitated by APX-ENDEX. (As of May 2012 BritNed also offers intraday auctions).

*Tariff regulation*

In 2011 the method of regulation of TenneT for the period (2008 – 2010) has been adjusted by NMa because of a ruling of the Trade and Industry Appeals Tribunal. Interested parties did not make an appeal against this adjustment and therefore this method is definite. This is also the case for the method of regulation for the current period (2011 – 2013), which has passed the Trade and Industry Appeals Tribunal after the Tribunal made one self-written adjustment in the calculation of an efficiency parameter. Both adjustments have resulted in additional revenue for TenneT which NMa will take into account when setting future tariffs, starting in 2012.

### **3 The electricity market**

#### **3.1 Network regulation**

##### **3.1.1 Unbundling**

With regard to unbundling of TSOs and DSOs, no major developments have taken place in 2011. New developments regarding the unbundling are expected now that the Third Package was transposed into national law<sup>1</sup>, in particular the certification of the owners of transmission systems as laid down in articles 10 and 11 of Directive 2009/73/EC and Article 3 of Regulation (EC) 715/2009.

##### **TSOs**

There is only one national TSO for electricity in the Netherlands (TenneT TSO B.V.). Since July 2005, TSOs must be structured in such a way that their commercial and public activities are clearly separated. TSOs can still be part of a holding company in which commercial activities are carried out, provided no activities with supply or production interests are undertaken. TSOs are obliged to keep separate accounts (per legal task). Members of the executive board and the majority of the supervisory board of the TSOs are not entitled to have direct or indirect ties with producers, traders of suppliers, nor their shareholders. Furthermore, TSOs have to comply with detailed obligations with regard to the organisation and financial management of TSOs. In case of TenneT TSO B.V., the holding company is TenneT Holding B.V. TenneT TSO B.V. is responsible for carrying out the legal tasks of the transmission system operator.

Furthermore, BritNed Development Ltd. exploits an electricity link/interconnector between the Isle of Grain (UK) and Maasvlakte that started operations in April 2011. BritNed Development Ltd. is partly exempted in accordance with Article 17 of Regulation (EC) nr. 714/2009. BritNed Development Ltd. is co-owned by National Grid and TenneT Holding B.V.

##### **DSOs**

In 2011 eight DSOs that distribute gas and electricity, and two DSOs that distribute only gas were active in the Netherlands. According to Dutch law DSOs must be fully ownership unbundled from the vertically integrated company. Due to a court decision part of the law on full ownership unbundling cannot be applied. As a result, the two remaining integrated companies that are not yet ownership unbundled, announced to postpone their activities regarding unbundling. The Ministry of Economic Affairs, Agriculture and Innovation lodged an appeal to the court of cassation. A decision in this case however is postponed pending preliminary ruling by the Court of Justice in reply to questions referred to the Supreme Court.

---

<sup>1</sup> The transposition of the Third Package into national law is completed at July 20<sup>th</sup> 2012.



### 3.1.2 Technical functioning

#### Balancing services

Since its introduction in 2001 the Dutch balancing mechanism is fully market based. The combination of program responsibility, imbalance settlement and reserve provision has resulted in low average costs for balancing and incentives for market participants to balance their production. There is also demand participation, a tender process for longer term contracts for reserve provision and an obligation to bid in any surplus of every production unit larger than 60 MW. Next to that the Dutch imbalance settlement is open for “passive contributions” enabling non contracted parties to help TenneT reduce imbalances. This possibility was introduced in 2005.

In 2011 TenneT tested technical features for contribution to module one of the International Grid Control Cooperation (IGCC). This module prevents counter activation of balancing energy. TenneT aims to join in the first quarter of 2012.

#### Monitoring technical co-operation between Community and third-country TSOs

In 2004 TenneT requested an investment application for the NorNed cable, a HVDC cable connecting Norway with the Netherlands. This DC interconnection was realised in 2008. Through the CWE regional initiative and with support from the Penta lateral initiative TenneT interacts with the Swiss TSO. Further interaction with third country TSOs might occur through cross-regional projects and ENTSO-E.

#### Security and reliability standards and safeguard measures

NMa does not have a direct role in investments and the granting of licences for new generation facilities. There are no implicit or explicit mechanisms to promote construction of new production capacity. The TSO reports to the Minister of Economic Affairs with regard to the development of security of supply. If necessary, the Minister may decide to invoke an additional capacity mechanism, the so-called safety net. This safety net means that the TSO will contract additional power for a number of years to create an incentive for investment. In 2011 it proved unnecessary to invoke this safety net. Domestic production has increased and will do so for the coming years.

Most of the construction plans being developed are in a phase of final decision. The vast majority of the plans that were announced in the 2007-2009 period are still existent. Few projects were cancelled although a number of projects have been postponed.

The sharp increase of new production capacity coming online led to the activation of the national congestion management system. New legislative measures for congestion management, based on the ‘Connect and manage principle’ have been approved by parliament. The ongoing increase of domestic generation will result in a generation surplus.

The TSO is increasing the capacity of the transmission network by means of three main projects. The ‘Randstad 380 kV project’ strengthens and expands the 380 kV grid in the west of the Netherlands. This project is of specific importance for increased consumption in the region as well as the connection of the aforementioned large amount of planned new generation facilities. For the same reasons the TSO is planning an expansion of the 380 kV grid in the northwestern and southwestern part of the Netherlands (North-West 380 kV project & South-West 380kV). These projects are planned to be completed in 2016.

The most recent expansion of interconnection capacity for The Netherlands was done with two HVDC submarine cables:

- ❑ NorNed, a regulated connection of 700 MW between the Netherlands and Norway and built by the TSO's of these countries, was put into operation in May 2008;
- ❑ BritNed, a merchant interconnection of 1GW between the Netherlands and Great Britain has been commissioned in April of 2011. BritNed is a joint venture of NLink International B.V., a fully-owned subsidiary of TenneT Holding B.V. and National Grid International Ltd, a fully-owned subsidiary of the British National Grid plc.

A fourth AC interconnection with Germany – between Doetinchem and Wesel - is in the preparatory phase and research is underway for the COBRA cable, an HVDC interconnection between the Netherlands and Denmark, with an option to connect offshore generation. The investment decision is planned for 2013.

### 3.1.3 Network tariffs for connection and access

#### Regulation of TSOs

TenneT is the only national grid company for the transmission of electricity in the Netherlands and regulated by NMa. To do so, NMa uses a system of turnover regulation (revenue cap) for the transmission tariffs with a yardstick that is partly based on international benchmark (best practice), combined with a frontier shift based on productivity growth of other foreign TSO-companies. The yardstick objective is set for the final year of a 3 to 5 year period. The current period will finish at the end of 2013. The allowed revenue of the company is adjusted annually by  $(1+CPI-X)$ , in which CPI is the Consumer Price Index and X is the efficiency incentive. The quality is regulated through quality standards (laid down in codes) and not with financial incentives. The system of yardstick competition provides incentives to increase cost efficiency. Higher profits can be achieved if the company achieves higher cost savings than expected, or vice versa. For costs for energy (a.o. net losses) and power (a.o. balancing power) a bonus/malus is applied to the difference between expected efficient costs and actual costs. This means that since 2011 TenneT faces a risk (or opportunity) of 25% of the first 20% difference (symmetric).

In 2011 the method of regulation of TenneT for the period (2008 – 2010) has been adjusted by NMa because of a ruling of the Trade and Industry Appeals Tribunal. Interested parties did not make an appeal against this adjustment and therefore this method is definite. This is also the case for the method of regulation for the current period (2011 – 2013), which has passed the Trade and Industry Appeals Tribunal after the Tribunal made one self-written adjustment in the calculation of an efficiency parameter. Both adjustments have resulted in additional revenue for TenneT which NMa will take into account when setting future tariffs, starting in 2012.

Costs are determined according to a standardised method. Annually, NMa collects actual OPEX, investments and depreciation (based on regulatory accounting rules) and volumes charged to customers. To guarantee security of supply in the Netherlands, a separate system is used for assessing expansion investments. Energiekamer will assess to what extent investments have been performed efficiently. Also, the utility and necessity of these investments must be assessed. If the investment is useful and necessary, the revenue cap and tariffs will be corrected, but only for the amount of the investment that has been found to be efficient. Based on the revenue cap, TenneT will draft (on a yearly basis) a tariff proposal for all tariff components (given expected volumes). This proposal is assessed and approved by NMa. Customers can find the tariffs on the website of NMa or TenneT.

The tariff structure is laid down in a so called 'Tariffcode' and can be adjusted by NMa. The adjustments are usually proposed by (a majority) of Dutch grid companies.

### 3.1.4 Cross-border issues

The CWE regional initiative published an update of the "CWE Flow Based feasibility report". The results of this report were presented to the Penta Lateral Energy Forum on 28 October 2011. This report and the presentation are published on the website of individual project partners such as TenneT<sup>2</sup>.

#### Congestion management methods

The interconnector capacity available to the market on the borders of the Netherlands is allocated to market parties by means of different systems. Currently methods for four different timeframes are in place: the year-ahead timeframe (capacity for an entire year), the month-ahead timeframe (capacity for an entire month), the day-ahead timeframe (capacity for every hour for the next day) and the intraday timeframe (capacity for a particular clock hour for the next/current day). Several auction methods are used for different timeframes on the Dutch Borders. The table outlines these different methods used in 2011.

Border	Germany	Belgium	Norway	Great Britain
Timeframe				
Year	Explicit	Explicit	-	Explicit
Month	Explicit	Explicit	-	Explicit
Day-ahead	Implicit	Implicit	Implicit	Implicit
Intraday	FCFS-OU	Implicit		

*Table 1: Congestion management methods applied*

In the paragraphs below the congestion management methods will be handled per timeframe

#### Yearly and Monthly allocation

For the Dutch borders CASC.EU S.A a subsidiary of all the participating CWE, CSE and Swiss TSOs, carries out the explicit auctions. The available capacity is allocated to the various auctions in a prescribed manner. Market parties bid for both import and export capacity. If there is sufficient capacity to meet demand in full, the price for this capacity (the clearing price) is EUR 0. In the event of scarcity, that is if the demand for capacity exceeds the supply of capacity, the clearing price is equal to the lowest offer accepted. Since the beginning of 2010 these auctions are performed under a harmonized set of rules for all the explicit auctions on the internal borders of the CWE-region.

All CWE NRA's have to coordinate the approval of these rules. Expansion of these harmonized auction rules took place in 2011, with the inclusion of Central South Europe Region (CSE) and Switzerland. Per 2012 there is one set of auction rules for CWE, CSE and Switzerland,

<sup>2</sup> [http://www.tennet.org/images/PLEF\\_20111028\\_FB\\_Report\\_tcm41-20388.pdf](http://www.tennet.org/images/PLEF_20111028_FB_Report_tcm41-20388.pdf)

these Auction Rules replace the CWE Auction Rules, the Italian Borders Auctions Rules, the Germany – Switzerland Auction Rules and the Austrian – Switzerland Auction Rules. They are valid for physical transmission rights with a delivery date starting from the 1st of January 2012 and for the following country borders: Netherlands – Germany, Netherlands – Belgium, Belgium – France, France – Germany, France- Switzerland, Switzerland – Germany, Austria- Switzerland, France- Italy, Switzerland – Italy, Austria – Italy, Slovenia – Italy and Greece – Italy. The harmonisation of these rules across several regional initiatives and with EFTA members is an important accomplishment towards the internal market.

### **Day ahead allocation**

On the 9th of November 2010 the day-ahead implicit auction transmission capacity between the Netherlands and Belgium was extended towards the borders of Germany. At the same time the CWE price coupling algorithm was linked the Nordic market through an interim tight volume coupling between Germany and Denmark. The combination of these two separate algorithms requires a tight time schedule with defined deadlines for fall-back in order to ensure the delivery of market results by 13.00 CET. Since the start of CWE and ITVC market coupling the price convergence has risen.

With the start of CWE market coupling the CWE TSOs also introduced a capacity calculation method which includes improved coordination in case of expected overloads in the network. This coordinated mechanism is a first step towards a flow-based mechanism. In 2008 and 2009 TSOs and Power Exchanges of the CWE-region have started the development of a flow-based market coupling in order to implement implicit auctioning on the German borders. Because of the highly meshed networks within the CWE-region this market coupling mechanism requires a capacity calculation system which takes into account the discrepancies between physical and commercial flows. Flow based market coupling in CWE is planned to be introduced in mid 2013, after implementation of NWE Day Ahead market coupling.

A new submarine cable between Norway and the Netherlands (NorNed-cable) was, put into operation in may 2008. As of January 2011, this capacity is included in ITVC.

BritNed, a merchant interconnection of 1GW between the Netherlands and the United Kingdom has been commissioned in April of 2011.

### **Intraday-allocation**

In December 2008 TenneT introduced an intraday capacity allocation platform on the German borders. This platform offers the residual capacity which is left unused after the day-ahead stage. The platform explicitly allocated capacity on a First-come-first-serve basis with obligatory use. This means that when capacity is allocated to a certain market party at his request, this allocation also obliges him to use the capacity. If he fails to do so this will result in imbalance charges on both sides of the border. In the Dutch-Belgium border an intraday platform was introduced in May 2009 which is the same as the system implemented on the border between Belgium and France. In parallel to the development of interim solution on the Dutch borders regulators in the CWE-region are working, together with market parties, on a harmonised solution for cross-border intra-day trade for the Central West European region.

### **Degree of integration of congestion management with the wholesale markets**

Congestion management is very important for the operation of the Dutch wholesale markets. Due to economic developments import and export volumes were roughly the same in 2011. Effective congestion management means that as much cross-border capacity as possible is made available to the market within the limits of grid security. The available capacity is important for price formation on the wholesale markets due to the high convergence of prices through CWE market coupling. As day-ahead market coupling has been established on all Dutch borders, the efficient use of the available capacity is now assured. Although this is a very positive development, it must be noted that most trade is done through (year and month ahead) OTC products. Furthermore with the introduction of flow based in 2013 more capacity can be made available to the market depending on market outcome, increasing the price convergence.

#### **3.1.5 Compliance**

NMa has powers to carry out investigations and impose measures to enforce compliance and to promote competition, as well as powers to ask relevant information from system operators and market participants. For effective execution these powers, NMa has an Investigation and Detection unit that supports the other units by investigating possible violations of the Dutch Electricity Act 1998 and Gas Act and applicable EU regulations. Examples of issues that have been under NMa's attention in 2011 are the unbundling requirements for formerly vertically integrated DSOs, the billing procedures of energy suppliers, the quality management by DSOs and TSOs, compliance with transparency requirements, and compliance with conditions in exemption decisions.

#### **3.1.6 Dispute settlement**

Article 51 of the Dutch Electricity Act contains the provisions on dispute settlement in the Netherlands. Based on these provisions NMa can take binding decisions regarding disputes relating to a transmission/distribution system operator.

Eleven dispute settlement procedures launched in 2011 relate to electricity issues, of which three related to gas as well. This is less than in previous years. The subjects of most disputes relate to grid connection, tariffication, and billing. Seven applications for dispute settlement were withdrawn during the process due to fact that parties agreed on a solution together. NMa is pleased to see that parties can reach agreement together without a binding decision of the regulator. The remaining disputes were settled by a binding decision of the NMa.

### **3.2 Promoting Competition**

#### **3.2.1 Wholesale markets**

The Dutch wholesale market can be subdivided into the following marketplaces where supply and demand meet:

- the trade in bilateral contracts, or the bilateral market which accounts for approximately 20% of total trade;
- the OTC (over-the-counter) market which accounts for roughly 60% of total trade;
- the power exchange (APX-ENDEX); which accounts for 20% of total trade and practically all day-ahead trade in the Netherlands;
- the balancing market, or the market for control and reserve power.

*APX-ENDEX provides a representative day-ahead price.*

In addition to a day-ahead market, APX-ENDEX also operates an intraday, a strips market and a marketplace for trading standardised forward contracts. At the moment, 7 standard forward contracts are available. In the table below, the current numbers of traders and volumes traded are presented.

	APX-ENDEX 2011		
	Spot	Futures	
Number of traders	56	40	
Volumes traded	39,8 TWh	16,1 TWh	

Table 1: Number of traders and volumes traded on the power exchanges in 2011

The next two graphs show the development in volumes at APX-ENDEX.

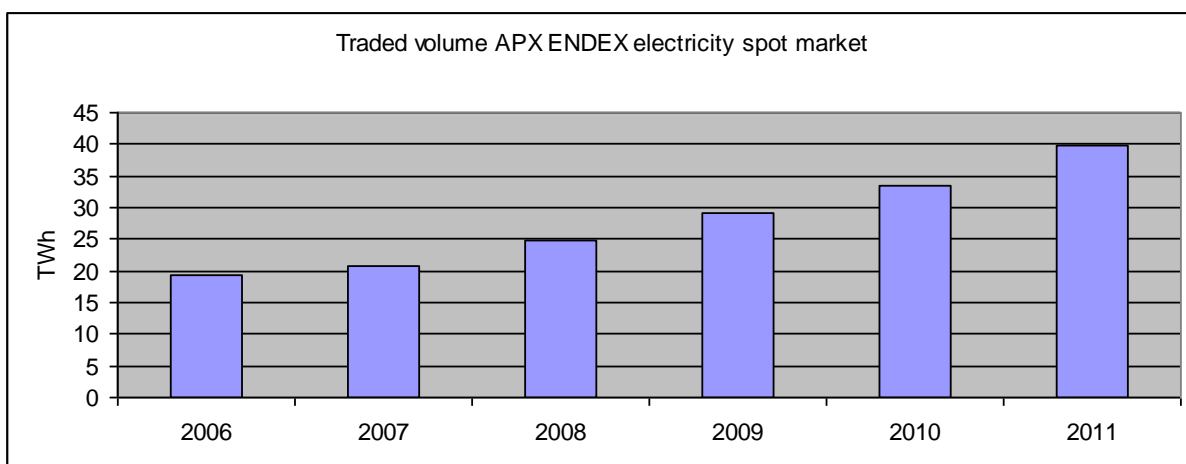


Figure 1: APX-ENDEX day ahead volumes in TWh 2006-2011. 2011: 39,8 TWh

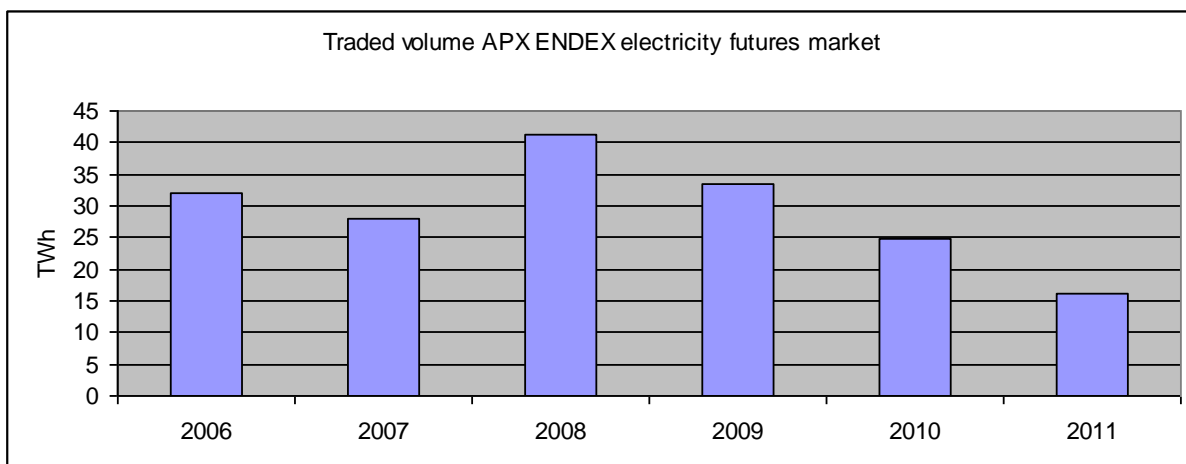


Figure 2: APX-ENDEX volumes (all contracts) 2006-2011. 2011: 16,1 TWh

*The market for control and reserve power*

TenneT contracts a certain quantity of control and emergency power on an annual basis. The costs of contracting power are charged to all consumers through TenneT's system services tariff. TenneT calls for bids for control power if an imbalance arises. The costs of the energy required for this are recovered from the party responsible for this imbalance (through the system of programme responsibility). The market for control and reserve power is a special market used by TenneT to restore balance in real-time. Emergency power is used when the Dutch system is disrupted.

### **Degree of integration with markets in neighbouring countries**

Being able to trade electricity freely, not only with respect to origin and destination of generated electricity but also, as much as possible, between the different timeframes contributes to competitive wholesale prices and to maximizing social welfare. As in past years, NMa has put continuous and substantial effort in the integration of the Dutch wholesale electricity market with the surrounding markets. An important achievement has been the day-ahead market coupling within the CWE-region in 2010. During 2011, prices on the four coupled market CWE day-ahead market converged 66% of the time. CWE market coupling in combination with the simultaneous integration of the CWE-market with the Nordic electricity market by means of a tight volume coupling meant a big step forward in reaching the goal of the internal energy market. NorNed was also included in the tight volume coupling in the beginning of 2011. Another milestone was the introduction of the Elbas platform for intraday trade on the Dutch-Belgian border in February 2011. This has enabled the start of continuous implicit trading on this border. The decision concerning the start of continuous implicit intraday trade on NorNed was taken mid 2011. In April 2011 BritNed, the 1000 MW interconnector linking the electricity markets of the UK and the Netherlands, went live.

The day-ahead trading on APX exchange recorded a volume of 39,8 TWh in 2011, up by almost 20% year-on-year. In the coming years NMa will continue its efforts with vigour, with the ultimate perspective of finalizing the integrated European market in 2014. In order to do so, it will use its responsibilities to ensure that the use and availability of interconnector capacities with neighbouring countries are optimized further and national regulations harmonized and adapted. The next important steps foreseen will be the integration of the entire NWE day-ahead market through a price coupling mechanism at the end of 2012, the switch to flow-based capacity calculation within the CWE-region in the course of 2013 and the introduction of continuous implicit intraday trading in the NWE-region.

At the same time, NMa has to ensure that the ambitious investment programme for the Dutch grid will be implemented smoothly and efficiently. These investments are necessary to connect the large amount of extra generation that is expected to come online in future years and to transport the extra electricity that will be generated. In addition, increasing cross-border flows and supplies of renewable energy will have to be accommodated.

### *Transparency*

Mid 2011 NMa started assessing the compliance of TenneT's transparency website with the transparency provisions of the Congestion Management Guidelines. In the course of that same year TenneT began putting a lot of effort into improving its transparency platform. The new platform, which is operational since February 2012, is fully compliant with the CMG.

## Investment

Tennet, the Dutch TSO, has worked on several major investments as well as on plans to invest in expansions of high voltage transmission capacities since 2006. They are meant to transport the increasing amounts of electricity that are produced in a number of large power plants that have been issued recently and will be produced in plants that will be constructed in the years to come, e.g. the Randstad Ring, the North-West and South-West connections. These efforts have continued in 2011.

## 3.2.2 Retail markets

### 3.2.2.1 Price monitoring

Suppliers tend to offer fixed-term contracts in combination with fixed tariffs, except for the 1-year contracts.

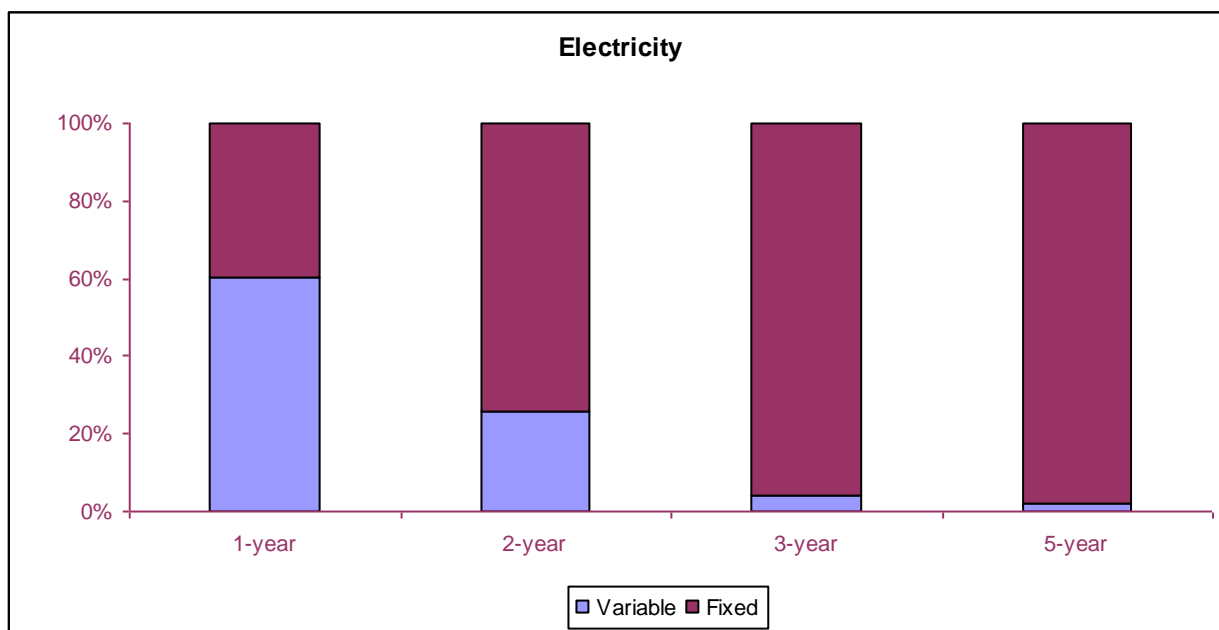


Figure 3: Electricity and gas contracts with fixed terms by tariff type (on January 1, 2012)

Compared with the first half of 2011, the selection of fixed-variable combinations for 1-year contracts has decreased. In the first half of 2011, 1-year electricity contracts with a variable tariff had a share of almost 70%, compared with 60% in the second half of 2011.



## Prices

The figures below show the trend of electricity and gas prices for permanent contracts with variable tariffs, and permanent contracts with fixed tariffs, expressed as costs per year for an average household<sup>3</sup>. The annual costs in these figures reflect the supply tariff minus taxes.

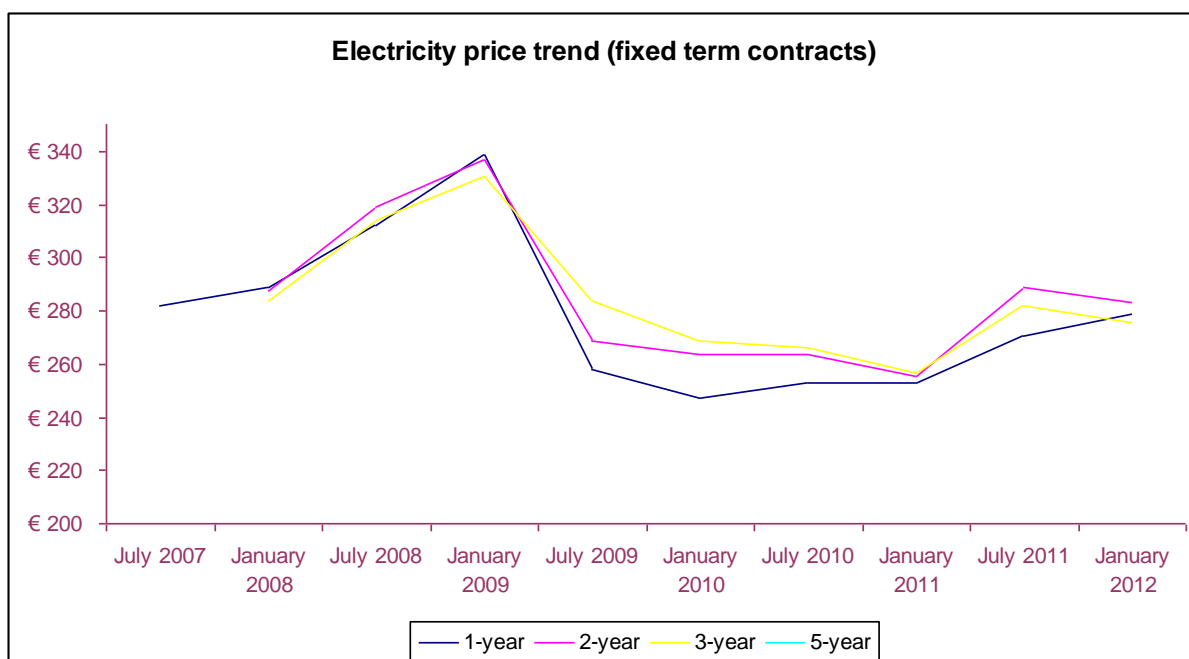


Figure 4: Electricity price trends (only a single measurement is available for 5-year contracts)

<sup>2,3</sup> Based on a household's average annual consumption in 2010: 3,480 kWh electricity and 1,617 m<sup>3</sup> gas. Source: Energie in Nederland 2011 (Dutch publication).

The electricity price for fixed-term contracts with variable tariffs increased in the second half of 2011 from €269 in July 2011 to €285 on January 1, 2012. Green-power contracts on average were slightly cheaper in 2011, while annual costs were €274 on January 1, 2012.

The fixed-term contracts offer a similar picture. On January 1, 2012, annual costs for 1-year, 2-year, 3-year, and 5-year contracts were €278, €283, €275 and €286, respectively.

### Price differences

The figures below show the annualized price difference in costs between the most expensive and the cheapest contract, and the difference between the average and the cheapest contract, respectively, for an average supplier. Figures 6 and 7 are based on data provided by suppliers on contracts for electricity or gas only. Figure 8 is based on data on contracts for both electricity and gas, coming from two random price-comparison websites. These figures are based on an average household's annual consumption. These results are therefore an approximation of actual price differences.

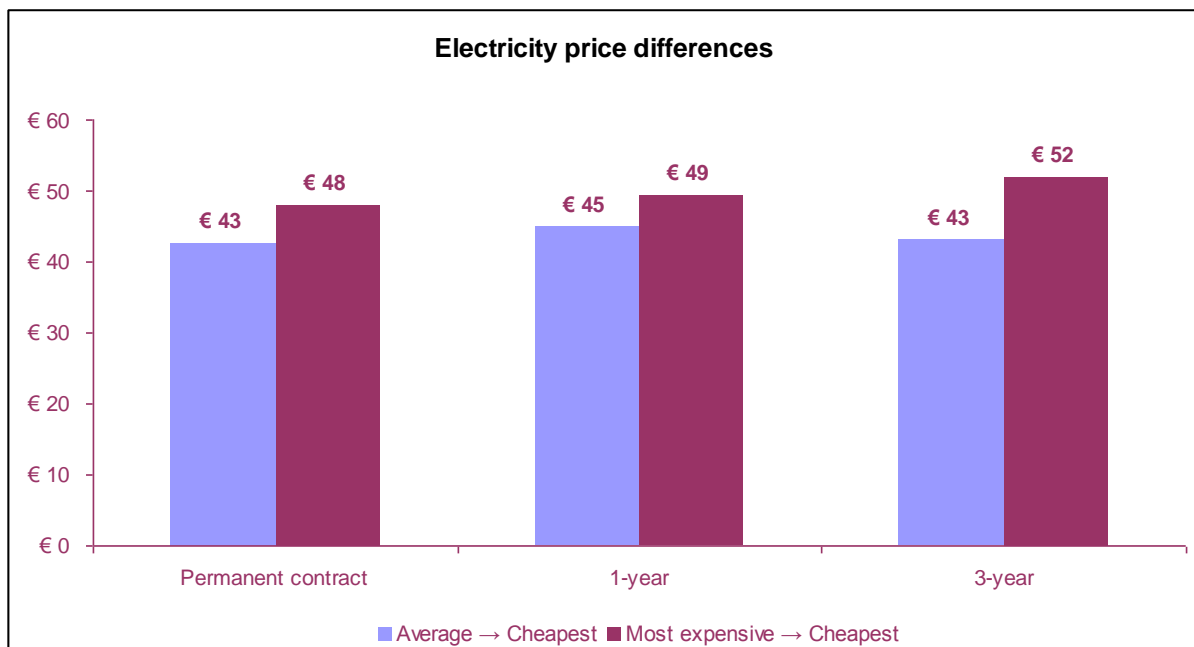


Figure 5: Differences in electricity prices (on December 31, 2011)

The 3-year contracts (with a fixed tariff) have the biggest price differences: the difference between the most expensive and the cheapest 3-year contract is €52. Compared with the first of 2011, the price differences between the cheapest and the average electricity contract for all contract types have increased. The differences between the cheapest and the most expensive contract (for all types) have decreased, except for the 3-year contract.

## The price differences on price comparison websites

Similar to the first half of 2011, the biggest price differences on price comparison websites have been observed with contracts that combine electricity and natural gas (dual fuel). This observation is reflected by figure 8 based on a snapshot of prices taken from two random price comparison websites. These too are an approximation of actual price differences. Another trend is that fixed-term contracts are increasingly offered with month-based terms rather than year-based terms. That is part of the reason why the term categories in figure 8 differs from the previous figures.

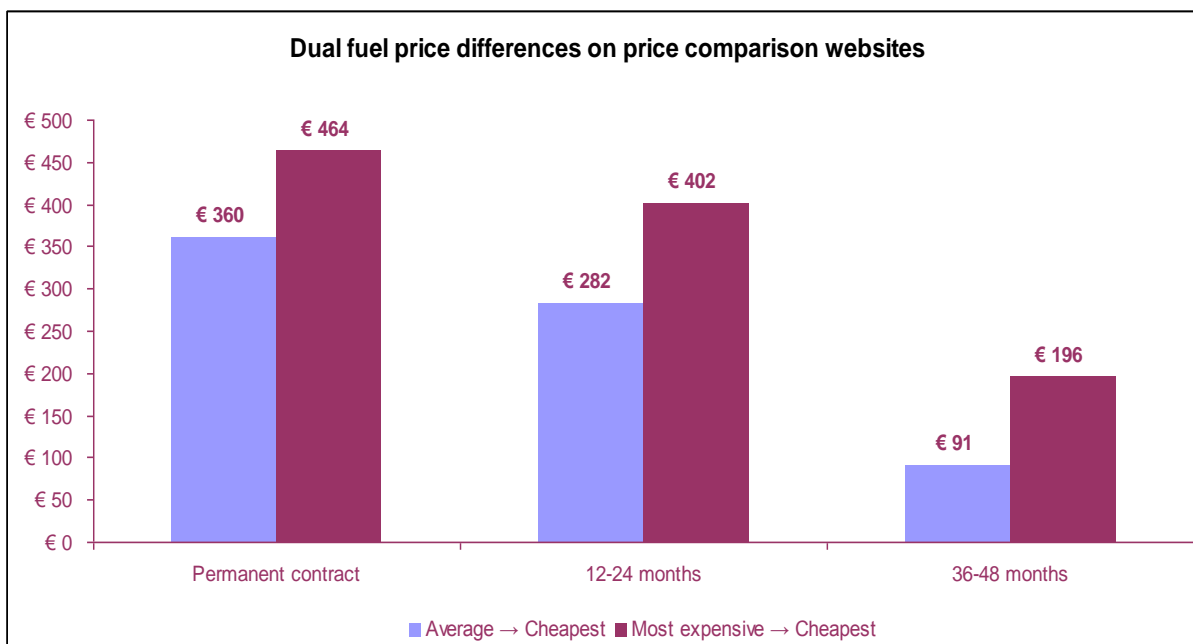


Figure 6: Differences in dual-fuel contract prices on two price comparison websites (in February 2012)

## Breakdown of energy bill

On January 1, 2012, households paid on average €1,880 per year for electricity and natural gas (figure 9), 48% of which are supply costs, 17% network costs and meter rent, and 35% energy tax and VAT. These shares have not changed since a year ago. Average annual costs have risen though, since these were still €1,685 on July 1, 2010. The increase can be attributed to an increase in supply and network costs. In addition, the energy tax rate has increased as well. Electricity and gas consumption have remained reasonably stable in recent years<sup>2</sup>.

<sup>2</sup> Average energy consumption per household in 2009 was 3,430 kWh and 1,609 m3 gas. Consumption slightly increased in 2010 to 3,480 kWh and 1,617 m3 gas. Source: Energie in Nederland 2010 and Energie in Nederland 2011.

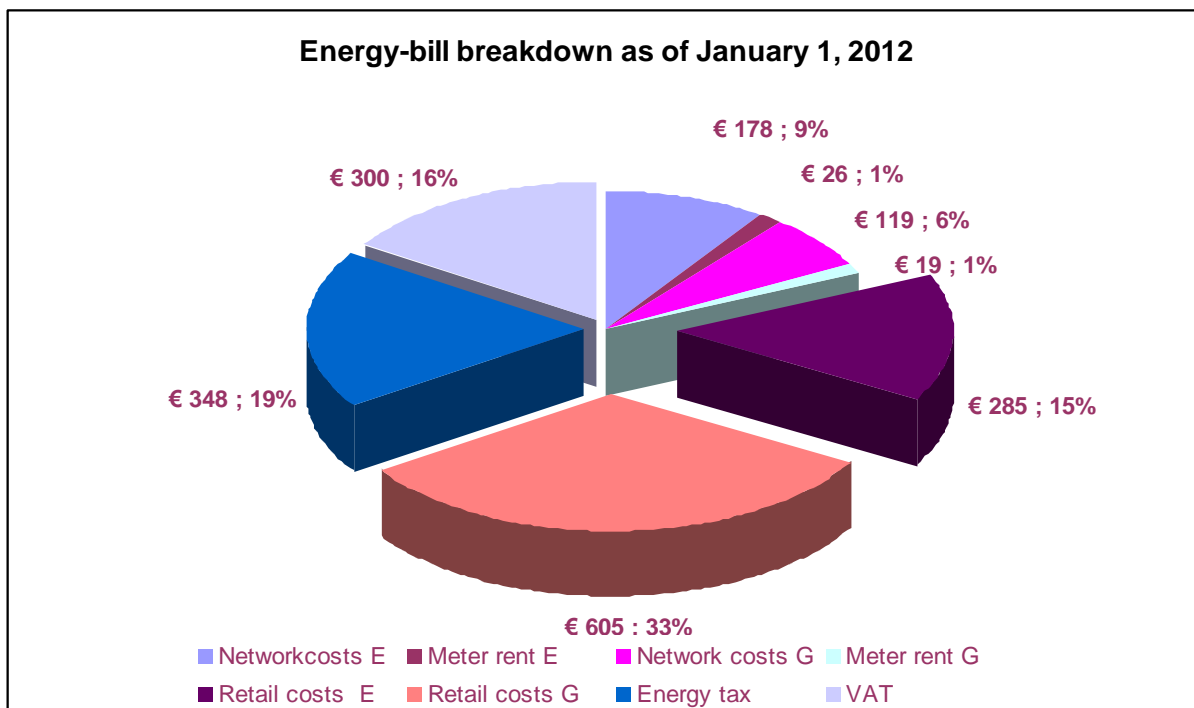


Figure 7: Breakdown of average energy bill as of January 1, 2012

### Consumer perceptions of energy prices

Just as in the first half of 2011, a substantial share (79%) of consumers perceived energy prices 'high' or 'very high' (figure 10). In the second half of 2011, consumers estimated that, on average, they were paying €167 per month on energy. That is €10 less than in the first half of 2011. This most recent estimate of total costs is on par with that of 2010 (€164). In that year, fewer consumers perceived energy prices as 'high' or 'very high'.

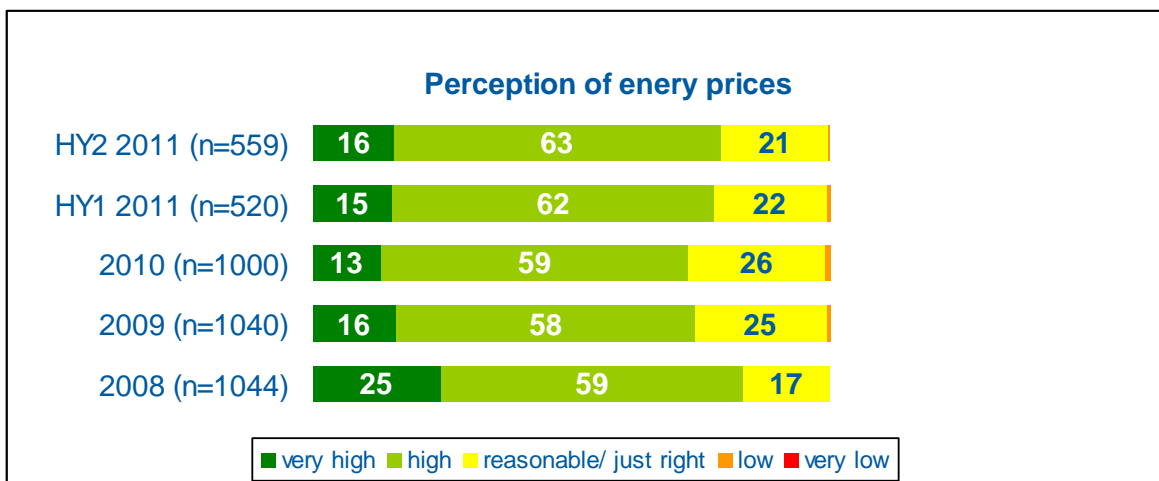


Figure 8: Evaluation of energy prices

### 3.2.2.2 Monitoring the level of transparency, including compliance with transparency obligations, and the level and effectiveness of market opening and competition

#### Concentration

In the second half of 2011, both the C3 and the HHI<sup>4</sup> indices remained stable compared with the first half of 2011. The C3 index on January 1, 2012 was 85% for electricity and 83% for natural gas, while the HHI index was 2,465 for electricity and 2,344 for natural gas.

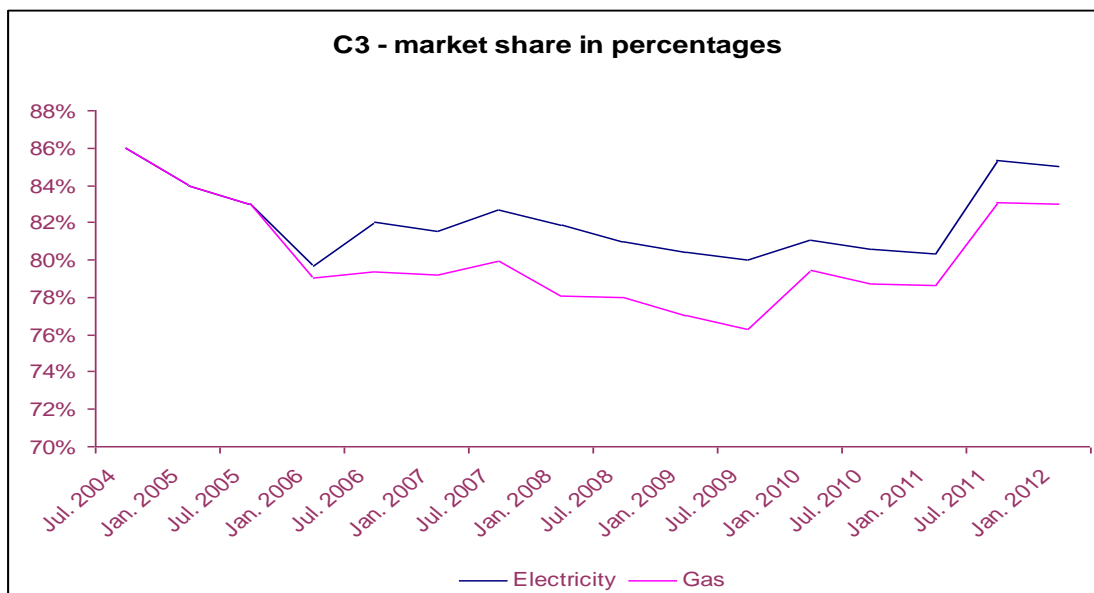


Figure 8: C3-index trend since liberalization of energy market

<sup>4</sup> The Herfindahl-Hirschman index is equal to the sum of the squares of the market shares in percentages. An increase in the HHI may indicate a decrease in competition, whereas a decrease in the HHI may indicate increased competition. For the calculation of the indices on the small-scale user market for electricity and natural gas, the market shares of the parent companies were used. Suppliers that fall under the same parent company have been grouped into the same parent company.

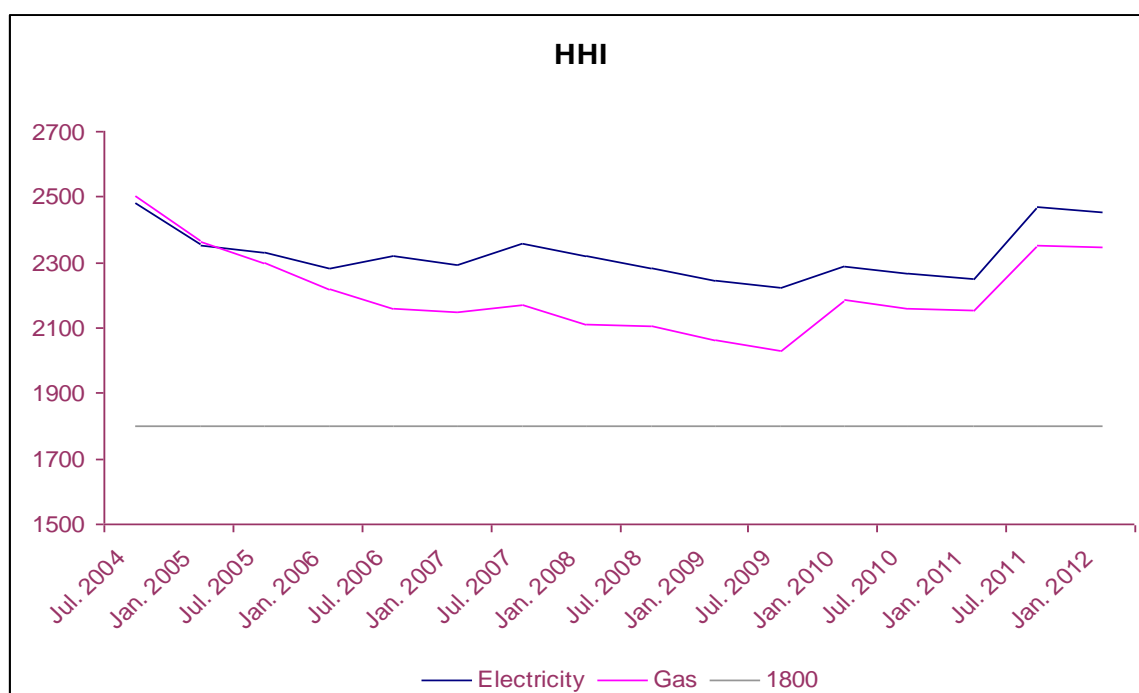


Figure 9: HHI-index trend since liberalization of energy market

## Competition measures

NMa monitors the competition and barriers to competition in the retail markets for gas and electricity yearly. The monitoring report is published on the website of NMa. Part of this monitoring project is aimed at establishing the level of concentration for the different parts of the electricity market. However, this exercise is meant to monitor the concentration over the years, not the establishment of market dominance.

Despite the fact that the supply tariffs are not regulated, NMa has the statutory power to impose tariff reductions on supply companies if the tariffs are determined to be unreasonably high. Until now, this has never occurred.

With regard to transparency, NMa has taken facilitative measures to improve the transparency of the market and, by doing so, also to improve competition on the retail market (and prevent the abuse of market dominance). For instance, NMa investigates the correctness and completeness of data published on websites of energy companies and websites that make price comparisons. Also there is a Policy Rule on information requirements. This Policy Rule is applicable to all communication channels. NMa actively uses this new Policy Rule to enforce these information requirements. In 2008, NMa also started a comparison site for energy suppliers where all other service aspects besides prices are compared. This comparison site is called "Energiewijzer" (this can be translated to "Energy Guide").

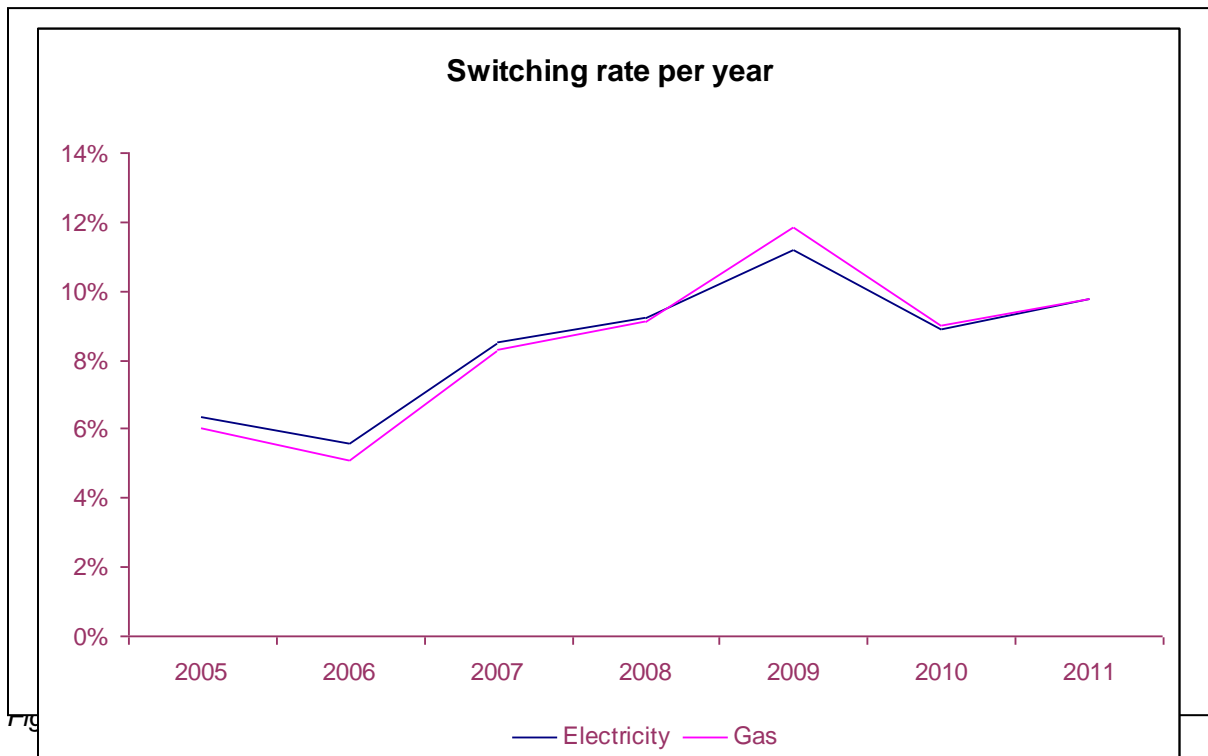
The contractual conditions which suppliers use in supply contracts with consumers must be transparent, fair and known beforehand. According to section 95m of the Electricity Act and section 52b of the Gas Act, misleading advertising is not permitted. This has been explained in more detail in the following documents:

- ❑ the Policy Rule on Invoicing Deadlines for Energy [Beleidsregel factureringstermijnen energie]. This requires the sending of a correct and complete (final) invoice to small consumers (suppliers) within two months after a change of address, switch or termination of the invoicing month, and to send to consumers a statement containing a clear and comprehensible specification of the connection charges (grid management);
- ❑ the Policy Rule on Fair Cancellation Fees for Licence Holders [Beleidsregel Redelijke Opzegvergoedingen Vergunninghouders] of January 2008. This limits the cancellation fee which a supplier may charge if a small consumer cancels a contract prematurely;
- ❑ the Decision in Relation to Licences for the Supply of Electricity to Small Consumers [Besluit vergunning levering elektriciteit aan kleinverbruikers] of May 2003 and the Decision in Relation to Licences for the Supply of Gas to Small Consumers [Besluit vergunning levering gas aan kleinverbruikers] of June 2nd, 2003. These documents state the conditions which an electricity and/or gas supplier must meet to supply small consumers. Conditions include (amongst others) the use of clear offers and agreements in which the level of the tariffs and the composition of these is stated, a transparent and fair payment scheme, a transparent and fair scheme for cancelling or dissolving agreements and the ability to process complaints adequately;
- ❑ the Ministerial Scheme for Consumers and Monitoring. The Electricity Act of 1998 and the Gas Act stipulate requirements regarding supply agreements with small consumers, such as personal details and the address of the supplier, a description of the goods and services to be supplied and the agreed quality levels in relation to these, as well as the way in which information can be attained with regard to tariffs, the contractual term (if nothing is specified in this regard, the agreement is concluded for an unspecified period), the right to cancel the agreement and the conditions applicable to renewal or cancellation of the agreement, a description of the applicable fees and reimbursement scheme, and the way in which the dispute procedures can be invoked. Since the beginning of 2006, NMa monitors on a monthly basis the administrative processes (and accompanying communication) in relation to switches and changes of address, to ensure that consumers and other market parties (grid operators and suppliers) are not obstructed by any administrative processes of energy companies. The results are published on the energy comparison website and are also used for enforcement purposes. With regards to unbundling, the law stipulates that energy transmission and distribution services must be legally separated from other commercial services. Finally, the proposed mergers and acquisitions (for instance, in the energy sector) must be approved by the Netherlands Competition Authority (NMa).

## Switching

### *Switching rate*

In 2011, the switching rate slightly rose compared with the previous year. From January 1 through December 31, 2011, 9.7% of all small-scale electricity users switched, and 9.8% of small-scale gas users did so.



### Switching and propensity to switch

Compared with six months earlier, consumer propensity to switch within two years remained unchanged in the second half of 2011: 26% of consumers said they considered switching (figure 14).

For many consumers, the experience of switching is critical in their decision to switch again. The share of switchers that have switched at least once is rising, as 49% of switchers have switched twice or more since July 2004.

In the second half of 2011, the share of switchers has risen from 33% to 35%. In addition, the increasing trend of switching contracts (with their current supplier) continued in the second half of 2011. By now, 30% of consumers that have not switched suppliers have switched contracts with their current supplier.

Since July 2004, 65% of consumers have either switched suppliers or contracts.

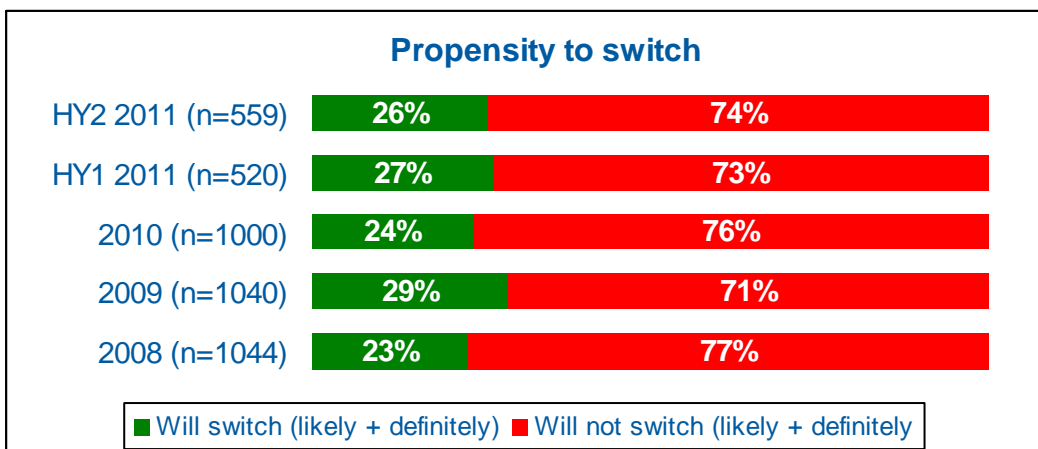


Figure 10: Propensity to switch



## Barriers to switching

For 69% of consumers, satisfaction with their current supplier is the primary reason for not considering switching in the next two years. This means that, as in previous surveys, satisfaction with their current supplier is, by far, the most important reason not to switch.

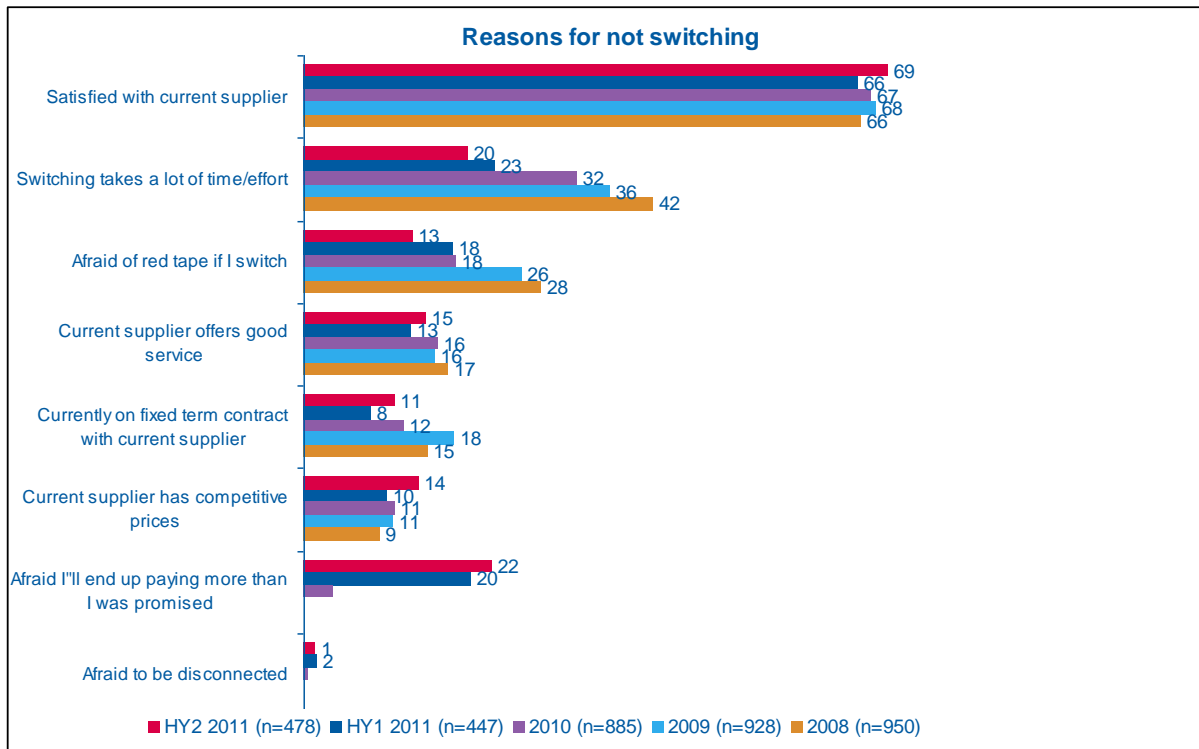


Figure 11: Reasons for not switching (percentages of respondents, multiple responses possible)

Another barrier to switching is the level of the price barrier that consumers perceive. In the first half of 2011, it was found that the difference between the estimated cost savings and the desired price benefit was rising (figure 16). Even though this difference slightly decreased in the second half of 2011, the gap remains large. In the second half of 2011, consumers believed they could save €59 on average from switching, while they wished to save €190. Nevertheless, that gap of €131 can, under certain conditions (consumption, current contract type), be bridged if the price benefits that are actually possible are taken into consideration (see section 2.1).

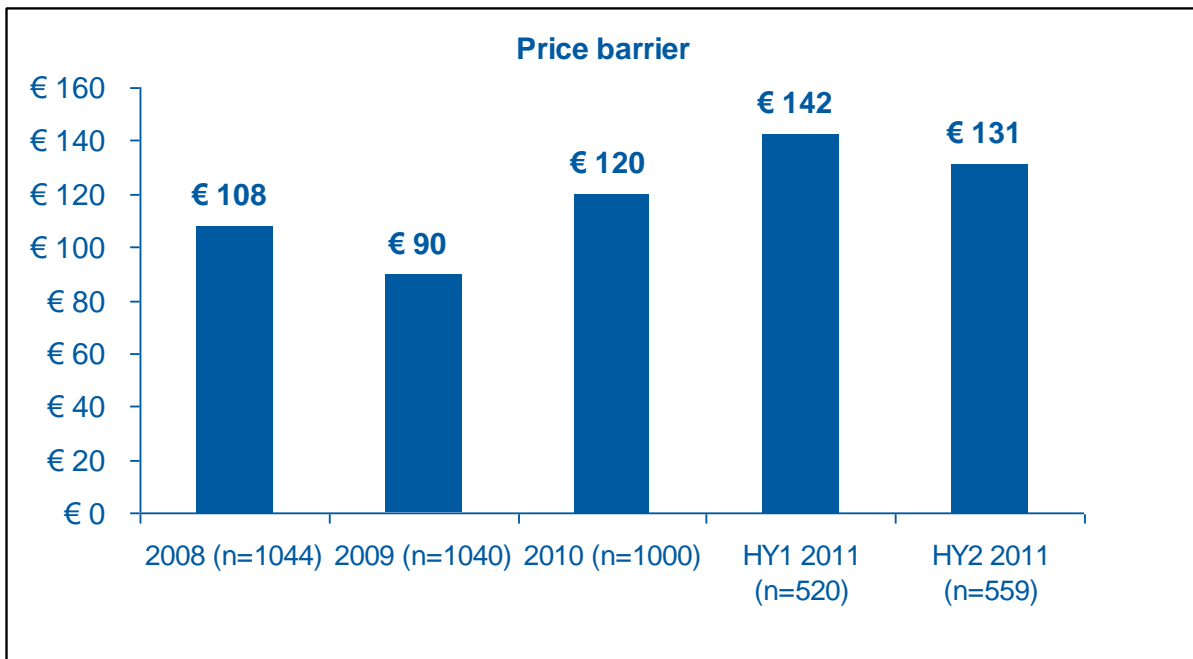


Figure 12: Price barrier for switching

*Switching in other industries*

The share of consumers that in the second half of 2011 said that, since July 1, 2004, they have switched health insurers and mobile-phone providers is 27% and 42% respectively. These shares are practically the same as those in the first half of 2011. With a share of 35% of consumers that switched energy suppliers, the energy industry’s percentage lies in between those of the health insurers and mobile-phone providers.

**3.2.3 Recommendations on supply prices**

Supply tariffs are not regulated in The Netherlands. There is however a form of tariff surveillance with regard to the retail energy market. NMa checks the reasonableness of tariff proposals, since suppliers to the retail energy market are bound by law to submit all prices to NMa. It is worth noting that in this system allows enough room for differentiation and until 2012 NMa has not yet used this power to force suppliers to lower their tariffs (see also paragraph 3.3).

**3.2.4 Carry out investigations and imposing measures to promote effective competition**

One investigation focused on Tennet fulfilling the transparency requirements as prescribed by the fifth article of the first annex of Regulation (EC) No. 1228/2003. The main goal of this article is to keep the market informed about network availability, network access and network use, including the occurrence of congestion, hereby providing the marked information necessary for an effective competition. The conclusion of this investigation was that Tennet didn’t comply with all requirements. On one hand side this was caused by some of the electricity producers who did not supply Tennet with sufficient data to fulfill its task. On the other hand, Tennet fell short in publishing data that was actually available. The NMa did put pressure on the electricity producers, emphasizing that the Regulation obliged them to provide Tennet with necessary data. The NMa also convinced Tennet to publish all data

required. Tennet now complies with all transparency requirements as mentioned in the Regulation.

In May 2011 Tennet made clear that the realization of an allocation mechanism to support the intraday trading of capacity on the NorNed cable was delayed again. This publication triggered the NMa, because the allocation mechanism should have been realized in 2008 already, according to the first annex of Regulation (EC) No. 1228/2003. Tennet now sent out the message that the realization of this allocation mechanism would not happen before March 2012. Tennet had made a new plan in which the road to realization in March 2012 was described. From then on, the NMa closely monitored the progress of Tennet, which resulted in the realization of the intraday trade on the NorNed cable on 14 March 2012.

### **3.3 Consumer protection**

Since July 1st 2004, the energy market for residential customers and small businesses ('small consumers') has been fully liberalised. In addition to the phased liberalisation of large consumers at an earlier stage, as of July 1st 2004 small consumers are also able to choose their own supplier of gas and or electricity. From this date the supply tariffs are no longer regulated, although NMa assesses the fairness of supply tariffs. The liberalisation of the small consumer market requires extra awareness of the interests of the small consumer.

The role of NMa is to monitor (and ultimately enforce) compliance with the rules for the protection of small consumers and to ensure that the operation of market forces reaches an adequate level. The protection of small consumers is therefore one of NMa's core tasks. This protection has been implemented in various ways.

An important theme is promoting a transparent market (see also paragraph 3.2.2.2).

A supplier for small consumers is obliged to have a supply licence (see also paragraph 3.2.2.2). These licenses are issued by NMa. When a supplier applies for a license, NMa assesses whether the supplier has the necessary organisational, financial and technical qualities to carry out its task properly. Also it has to prove that, within reason, it is able to comply with the obligations applicable to suppliers under the Dutch Gas Act and the Dutch Electricity Act. In addition to this, NMa assesses whether a supplier uses clear offers and terms of agreements. Furthermore, NMa assesses whether the supplier has a transparent and fair payment scheme and a transparent and fair scheme for cancelling and dissolving agreements. A supplier also has to show that it is able to process complaints and disputes adequately. In this regard, most energy companies make use of an independent alternative dispute resolution body which adjudicates disputes between small consumers and energy companies. Further conditions may be included in specific supply licences, which ensure further protection of small consumers, such as rules relating to telephone canvassing and the supplier's obligation to notify small consumers of changes in supply tariffs.

In addition to this and in cooperation with the industry, NMa has drawn up general rules with which suppliers have to comply (see also paragraph 3.2.2.2).

Although the supply tariffs for small consumers are not regulated by NMa, the various supply tariffs charged to small consumers are assessed by NMa with regard to their fairness. If NMa deems certain supply tariffs unfair, a maximum tariff can be set by means of a public decision. This protects small consumers from excessive tariffs. Each year NMa requires several suppliers to give an explanation about the level of their supply tariffs. The suppliers in question will have to explain the level of the tariffs set. A possible explanation may be that the superior quality of the product offered justifies a higher price. If the explanation is not adequate, the supplier must adjust the tariffs. Every year, some supplier(s) need(s) to adjust their tariffs in order to be considered fair. To this day NMa hasn't needed to determine a maximum tariff for a supplier by means of a public decision.

NMa still receives questions and complaints about the way (potential) customers are approached and acquired, although the number of complaints has decreased compared to previous years. This relates mainly to complaints about telephone canvassing and supply contracts entered into by door-to-door sales. In consultation with NMa, the energy sector has drawn up a code of conduct. This code of conduct has been signed by almost all energy suppliers that are active on the market. The code of conduct functions also as a 'quality stamp' of proper acquisition practices. If NMa receives reports that a company has infringed the code of conduct, it will intensify its supervision and conduct an investigation.

A Ministerial Decree on disconnections is in place for the winter period (October through April). The decree prevents network operators and suppliers from disconnecting a consumer if the consumer is in the process of debt recovery with a recognised body. Only if a consumer refuses to enter debt recovery or if the consumer cannot enter a debt recovery programme, then the network company/supplier can disconnect the consumer.

### **3.4 Security of supply (if and in so far as NRA is competent authority)**

It should be noted that the Ministry of Economic Affairs is the competent authority.

#### **3.4.1 Monitoring balance of supply and demand**

The TSO report on the Security of Supply concludes that in the Netherlands for the viewing period until 2018 there is in principle sufficient supply to meet domestic demand for electricity. The Netherlands no longer depends on supply from abroad but has a surplus in capacity which continues to grow. The growth of capacity surplus is largely caused by the ongoing plans for major new production capacity. In addition, it is strengthened as a result of lower electricity demand due to the economic crisis. That electricity demand is currently at a lower level than market participants in the past had anticipated, has not yet produced significant effects on the construction plans. Looking further forward to the year 2026 there is in principle sufficient supply to meet the domestic demand for electricity, although there is a large degree of uncertainty regarding the intentions of producers to construct new plants and put others out of operation. It should also be borne in mind that there are large uncertainties as to the level of the power demand at the end of such a long period of view. All developments can not be accurately predicted, but can simultaneously have a major impact on the level of electricity demand. This may for instance think of large increase in electric cars, or heat pumps.

#### **3.4.2 Monitoring investment in generation capacities in relation to SoS**

##### **Generation**

NMa does not have a direct role in investments and the granting of licences for

new generation facilities. There are no implicit or explicit mechanisms to promote the construction of new production capacity. The TSO does contract control power and emergency power for balancing. This is therefore a source of revenues in addition to the normal electricity market for a small part of the production capacity. The TSO reports to the Minister of Economic Affairs with regard to the development of Security of Supply. If necessary, the Minister may decide to invoke an additional capacity mechanism, the so-called safety net. This safety net means that the TSO will contract additional power for a number of years to create an incentive for investment. In 2010, it proved unnecessary to invoke this safety net.

## **Network**

The framework for the construction of transmission infrastructure is as follows: NMa regulates the tariffs of network operators, both TSO and DSOs. In so far as this relates to DSOs, NMa monitors the output of network quality. The frequency and duration of interruptions, is monitored and used to influence network tariffs. The network operators are required to maintain the networks and finance normal expansion of the transmission networks from these tariff revenues. NMa. The network operators are free to decide on the construction of infrastructure. If a special expansion of the transmission networks is planned, a special tariff increase can be requested. This application must be submitted to and assessed by NMa.

On the other hand, the TSO must finance replacement investments from turnover generated from tariffs (turnover regulation). A tariff increase or use of the proceeds of the cross border capacity auctions may be requested for investments within the constraints of European and national legislation. The planning criteria for the design of the TSOs grids, grids from 110kV, including the connections with the downstream grids, are set out in the Grid Codes that have to be approved by NMa. The TSO assesses how these criteria can be met in various growth scenarios. The TSO publishes the results in a Quality and Capacity Plan. This plan has to meet the Ministerial Regulations in Relation to Quality Aspects of Electricity Grid and Gas Network Management and must be assessed by NMa. The above-mentioned planning process with the Quality and Capacity Plan also applies to the DSOs.

## **Infrastructure projects (network)**

The most important infrastructure projects are the following:

Since 2002, construction has been in progress to strengthen and expand the 380 kV grid in the west of the Netherlands (the so-called "Randstad 380 kV project") through the Maasvlakte - Bleiswijk and Diemen–Zaandam–Beverwijk sections of the grid. This project is of specific importance for increased consumption in the region as well as the connection of the large amount of planned new generation facilities as discussed above. Next to the expansion in the west, for the same reasons the TSO is planning an expansion of the 380 kV grid in the north of the Netherlands (the North-West 380 kV project). The project is now in the preparation phase and the construction is planned to be completed in 2016. The new grid with a length of 220 kilometres will connect the Eemshaven in the north with Diemen in the west. Recently the interconnection capacity of The Netherlands has been expanded with two HVDC submarine cables:

- NorNed, a regulated connection of 700 MW between the Netherlands and Norway by the TSOs of these countries was put into operation in May 2008.
- BritNed, a merchant interconnection of 1GW between the Netherlands and Great Britain was commissioned in April 2011. BritNed is a joint venture of NLink International B.V. (hereinafter "NLink"), a fully-owned subsidiary of TenneT Holding B.V. and National Grid International Ltd, a fully-owned subsidiary of the British National Grid plc.

The fourth AC interconnection with Germany is in the preparatory phase. Furthermore, research is underway for the COBRA cable, and HVDC interconnection between the Netherlands and Denmark, with an option to connect offshore generation.

	Bel/Ger	NorNed	BritNed	Cobra	Total(nominal)	Total (after reductions)
2011	3,9	0,7	0,0	0,0	4,6	4,2
2012	3,9	0,7	1,0	0,0	5,6	5,2
2015	5,4	0,7	1,0	0,0	7,1	6,6
2018	5,4	0,7	1,0	0,7	7,8	7,2

Table 2: available interconnection capacity for the Netherlands in GW

	Operational capacity	Interconnection capacity	Peak demand
2011	26,6	4,2	17,9
2012	28,2	5,2	18,2
2015	37,2	6,6	19,0
2018	41,1	7,2	19,9

Table 3: available production and interconnection capacity and demand levels in GW

### 3.4.3 Measures to cover peak demand or shortfalls of suppliers

The TSO does contract control power and emergency power for balancing. See paragraph 3.4.2 for further details.

## 4 The gas market

### 4.1 Network regulation

#### 4.1.1 Unbundling

With regard to unbundling of TSOs and DSOs, no major developments have taken place in 2011. New developments regarding the unbundling are expected after transposition of the Third Package into national law, in particular the certification of the owners of transmission systems as laid down in articles 10 and 11 of Directive 2009/73/EC and Article 3 of Regulation (EC) 715/2009. The transposition of the Third Package into national law is expected to be completed in August 2012.

#### TSOs

Just as is the case for electricity, there is only one national TSO for gas in the Netherlands (Gas Transport Services B.V.). Since July 2005, TSOs must be structured in such a way that their commercial and public activities are clearly separated. TSOs can still be part of a holding company in which commercial activities are carried out, provided no activities with supply or production interests are undertaken. TSOs are obliged to keep separate accounts (per legal task). Members of the executive board and the majority of the supervisory board of the TSOs are not entitled to have direct or indirect ties with producers, traders of suppliers, nor their shareholders. Furthermore, TSOs have to comply with detailed obligations with regard to the organisation and financial management of TSOs. In case of Gas Transport Services B.V., the holding company is N.V. Nederlandse Gasunie. Gas Transport Services B.V. is responsible for carrying out the legal tasks of the transmission system operator.

Furthermore, BBL Company V.O.F. exploits a gas pipeline/interconnector between Bacton (UK) and Balgzand that started operations in December 2006. Large part of the capacity of BBL Company is exempted in accordance with Article 36 of Directive 2009/73/EC. BBL Company V.O.F. is co-owned by Gasunie BBL B.V., Fluxys BBL B.V., and E.ON Ruhrgas BBL B.V.

### **DSOs**

In 2011 eight DSOs that distribute gas and electricity, and only two DSOs that distribute gas were active in the Netherlands. According to Dutch law DSOs must be fully ownership unbundled from the vertically integrated company. Due to a court decision part of the law on full ownership unbundling cannot be applied. As a result, the two integrated companies that are not yet ownership unbundled, announced to postpone their activities regarding unbundling. The Ministry of Economic Affairs, Agriculture and Innovation lodged an appeal to the court of cassation. A decision in this case however is postponed pending preliminary ruling by the Court of Justice in reply to questions referred by the Supreme Court.

## **4.1.2 Technical functioning**

### **Balancing services**

#### ***Bidpriceladder***

One balancing service is the service to balance the Transmission Grid of the TSO. In the Netherlands this is done by a system whereby, in case of imbalance situation of the Transmission Grid, a Bid Price Ladder (BPL) is called to restore the imbalance situation. This BPL is operated by the TSO. The BPL is a market based system because only market parties (grid users) can offer gas on the BPL. Also, in case the BPL is called, only the grid users who have caused the imbalance situation will be charged for the imbalance cost of the BPL.

#### ***Additional balancing service (Nomination Flex)***

TSO is obliged to offer an extra balancing service to grid users. Grid users can contract this service from the TSO. With this balancing service grid users are able to balance their portfolio during the day. The TSO contracts the needed flexibility for this service on a yearly basis in advance by subscribing a tender procedure.

#### ***Provision of Balancing Information***

The TSO provides within-day balancing information to grid users. With this information grid users are able to balance their portfolios and prevent imbalance charges in case the BPL is used.

TSO provides to each grid user on an hourly basis the following information:

- System Balance Information of the Transmission Grid of the previous hour.

- Portfolio Imbalance Information about the position of the Grid User of the previous hour.

### **Security and reliability standards, quality of service and supply**

TSO is obliged to compose every two years a Quality- an Capacity Report. NMa checks this information.

### **Monitoring time taken to connect and repair**

The repair time is monitored and each year the amount of repairs and the time needed to repair planned and unplanned interruption is reported to the NRA by the TSO. The time taken to connect an off taker to the grid is not monitored, but complaints about this topic will be reported to the NMa.

### **Monitoring**

#### ***Access to storage***

The Dutch Gas Act describes two access regimes: heavy nTPA and light nTPA. In the case of heavy nTPA, indicative tariffs and conditions for access need to be published by an SSO by 1 July and sent to NMa. The latter has the possibility to issue a binding instruction (Bindende Aanwijzing) with regard to these indicative tariffs and/ or conditions for access. In case of disagreement between an SSO and a customer with regard to getting access, parties can request dispute settlement by NMa. If a dispute concerns the indicative tariff and/ or conditions of an SSO, NMa can set the tariff and/ or the conditions for access for a certain period of time. In the light regime, NMa does not have these possibilities, an SSO is only obliged to publish his indicative tariff and conditions for access on 1 October.

#### ***Linepack***

In the Dutch Balancing regime no separate linepack services are offered to individual grid users.

Instead there is a system active where grid users all together can make use of the line pack. The rules for the use of line pack are stated in de national network codes.

#### ***Ancillary services***

According to the Dutch Gas Act, customers have to negotiate with an SSO for access to storage and related services (ancillary services).

#### ***Correct application of criteria that determine model of access to storage***

In 2011, the Dutch Gas act did not state that criteria need to be in place to determine whether storage facilities should offer nTPA and/ or rTPA. As a consequence, NMa has no monitoring task as to check the correct application of these criteria.

### **Monitoring safeguard measures**

The TSO is responsible of for that part of the gas and capacity to meet the demand of households below a temperature of -9 C. This process is monitored by the NRA.

### **4.1.3 Network and LNG tariffs for connection and access**

In 2011, the Board of the Netherlands Competition Authority (hereafter: the Board) established new methods of regulation for the periods from 2006-2009 and 2010-2013 after the prior method decisions had been annulled by the Trade and Industry Appeals Tribunal. With these methods of regulation, NMa calculates the efficiency factors for the legal tasks of the TSO concerning transport and transport related services, the performing of balancing services and the quality conversion service.



These methods lead to efficiency factors and to tariffs for 2012 and 2013. Based on these new method decisions, Gas Transport Services is to return approximately EUR 400 million in excess revenues to its network users by means of a discount on future gas transport tariffs.

In the Netherlands tariffs are set for each entry- and exit point on the basis of cost reflection. It is the regulator who approves the tariffs. Apart from the methodology, which takes into account all the legal obligations that tariffs have to adhere to, Gas Transport Services has a legal obligation to submit a tariff proposal annually for all the tariffs.

The first LNG terminal in the Netherlands has been operational since September 2011. Due to an exemption as provided by the Ministry of Economic Affairs, Gate Terminal B.V. does not need to have their tariff methodology or conditions approved by the regulator.

Income can be generated by tariffs, which are approved by NMa. Since the TSO has the incentive to keep its costs below its income, there is an incentive for the TSO to work in an efficient manner. The regulation is done per legal task that is assigned to the TSO. In determining the efficiency factor, costs are estimated for operational expenditure (including labour and energy costs) and capital expenditure (RAB, WACC and depreciation).

When setting individual tariffs, assumptions are made concerning volume. It is the TSO that carries the burden of the so-called 'volume risk'. This means that when it sells more than expected, it is allowed to keep the extra income. This gives an incentive to use the network as efficiently as possible whilst offering a good quality of services.

It is worth mentioning that although NMa has now set new method decisions from 2006, both Gas Transport Services and organisations representing customers have again appealed these decisions. A verdict by the Trade and Industry Appeals Tribunal is expected in the fall of 2012.

#### **4.1.4 Cross-border issues**

The Netherlands imports high calorific gas at border points with Germany and Belgium, for which Gas Transport Services makes firm transmission capacity of more than 38 GW available to the market. The Netherlands exports high calorific gas at border points with Germany, Belgium and the United Kingdom. For this purpose, Gas Transport Services makes firm capacity of more than 66 GW available to the market. For exports of low calorific gas at border points with Germany and Belgium, more than 87 GW is available. GTS allocates the capacity on a FCFS basis. Bookings are made on a firm basis as long as the capacity permits. Thereafter, bookings are registered on an interruptible basis.

#### **4.1.5 Compliance**

NMa has powers to carry out investigations and impose measures to enforce compliance and to promote competition, as well as powers to ask relevant information from system operators and market participants. For effective execution these powers, NMa has an Investigation and Detection unit that supports the other units by investigating possible violations of the Dutch Electricity Act 1998 and Gas Act and applicable EU regulations. Examples of issues that have been under NMa's attention in 2011 are the unbundling requirements for formerly vertically integrated DSOs, the billing procedures of energy suppliers, the quality management by DSOs and TSOs, compliance with transparency requirements, and compliance with conditions in exemption decisions.

## 4.1.6 Dispute settlement

Article 19 of the Dutch Gas Act contains the provisions on dispute settlement in the Netherlands. Based on these provisions NMa can take binding decisions regarding disputes relating to a transmission/distribution system operator or a LNG facility.

Most of the dispute settlement procedures launched in 2011 relate to electricity issues. However, six disputes (also) relate to gas. The subjects of these disputes relate to biogas, grid connection costs, and billing. Four applications for dispute settlement were withdrawn during the process due to fact that parties agreed on a solution together. NMa is pleased to see that parties can reach agreement together without a binding decision of the regulator. The remaining two disputes were settled by a binding decision of the NMa.

## 4.2 Promoting Competition

### 4.2.1 Wholesale Markets

#### 4.2.1.1 Price monitoring

The following figures show the development of gas prices over the period 2009-2011. The first one gives future prices traded on the APX ENDEX exchange for month-, quarter-, season and year ahead prices. The second gives spot prices for day ahead contracts on the Dutch TTF hub compared to neighboring hubs NCG, Zeebrugge and NBP.

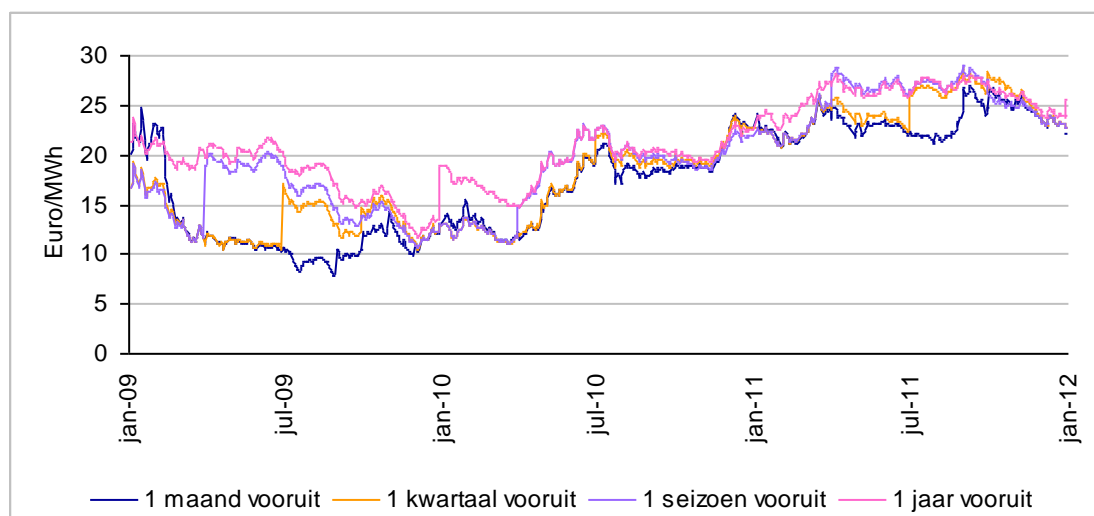


Figure 13: gas future prices on APX ENDEX exchange, 2009-2011 (source: NMa liquidity report 2012)

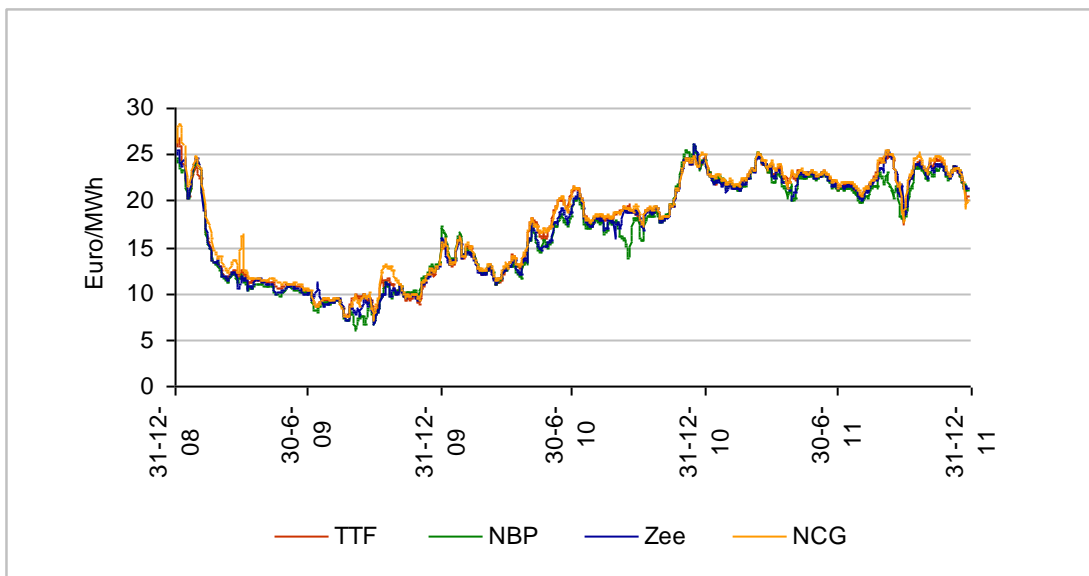


Figure 14: gas spot prices on Northwest European gas hubs, 2009-2011 (source: NMa liquidity report 2012)

#### 4.2.1.2 Monitoring the level of transparency, including compliance with transparency obligations, and the level and effectiveness of market opening and competition

Transparency of market places in the Netherlands is generally regarded by market participants as good. The next graph shows (high) satisfaction with transparency on the spot and futures exchange and on the OTC market. Due to its character it is not surprising that the bilateral market scores less in terms of transparency.

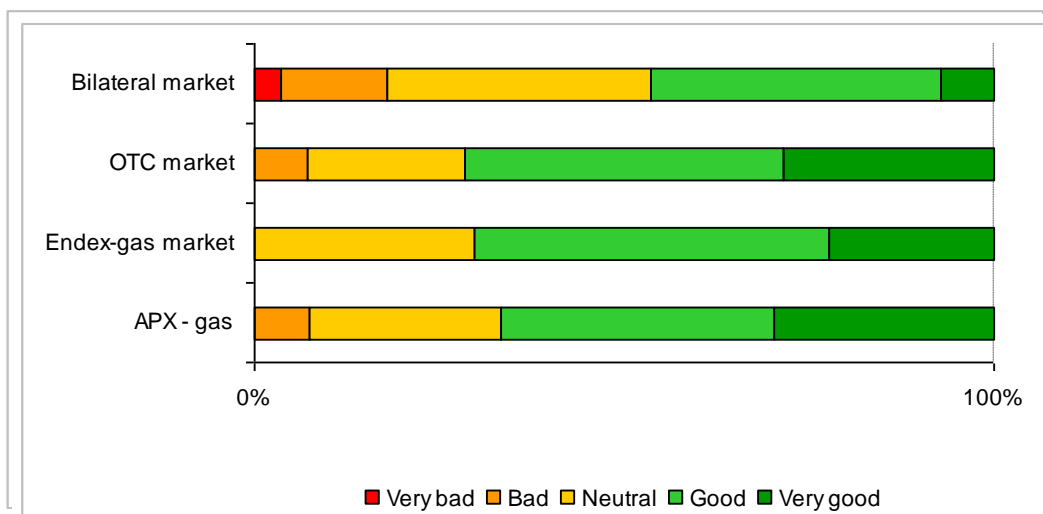


Figure 15: opinion of traders on transparency of market places (source: NMa liquidity report 2012)

Market opening and competition have resulted in a surge in trading activities on the Dutch gas hub TTF in recent years.

The following tables gives the development of trade volumes and number of transactions on the APX ENDEX exchange for the years 2009-2011.

In TWh	2009	2010	2011
Within day	0,1	0,1	0,5
Day ahead	1,7	5,7	11,4
Month	10,7	16,5	27,0
Quarter	8,5	13,6	29,1
Season	9,5	34,4	92,1
Year	11,9	54,7	89,6

Table 4: APX ENDEX traded volumes, 2009-2011

	2009	2010	2011
Within day	125	179	3.227
Day ahead	608	2.687	6.709
Month	441	703	1.299
Quarter	162	305	648
Season	103	413	1.314
Year	125	603	1.128

Table 5: APEX ENDEX number of transactions, 2009-2011

Trade on the exchange is still limited compared to the size of the overall market. Based on a questionnaire among market participants total traded volume has doubled in 2011 to over 6000 TWh with the vast majority of trades being conducted OTC (over 5000 TWh). For more information on the development of liquidity in the Dutch gas market please refer to the upcoming NMa publication Liquidity report 2012.

## 4.2.2 Retail Markets

### 4.2.2.1 Price monitoring

#### Gas prices

Gas prices for permanent contracts with variable tariffs increased from €591 on July 1, 2011 to €605 on January 1, 2012. Gas prices for fixed-term contracts with fixed tariffs remained stable, except for the 3-year contracts for gas, which decreased from €626 to €602.

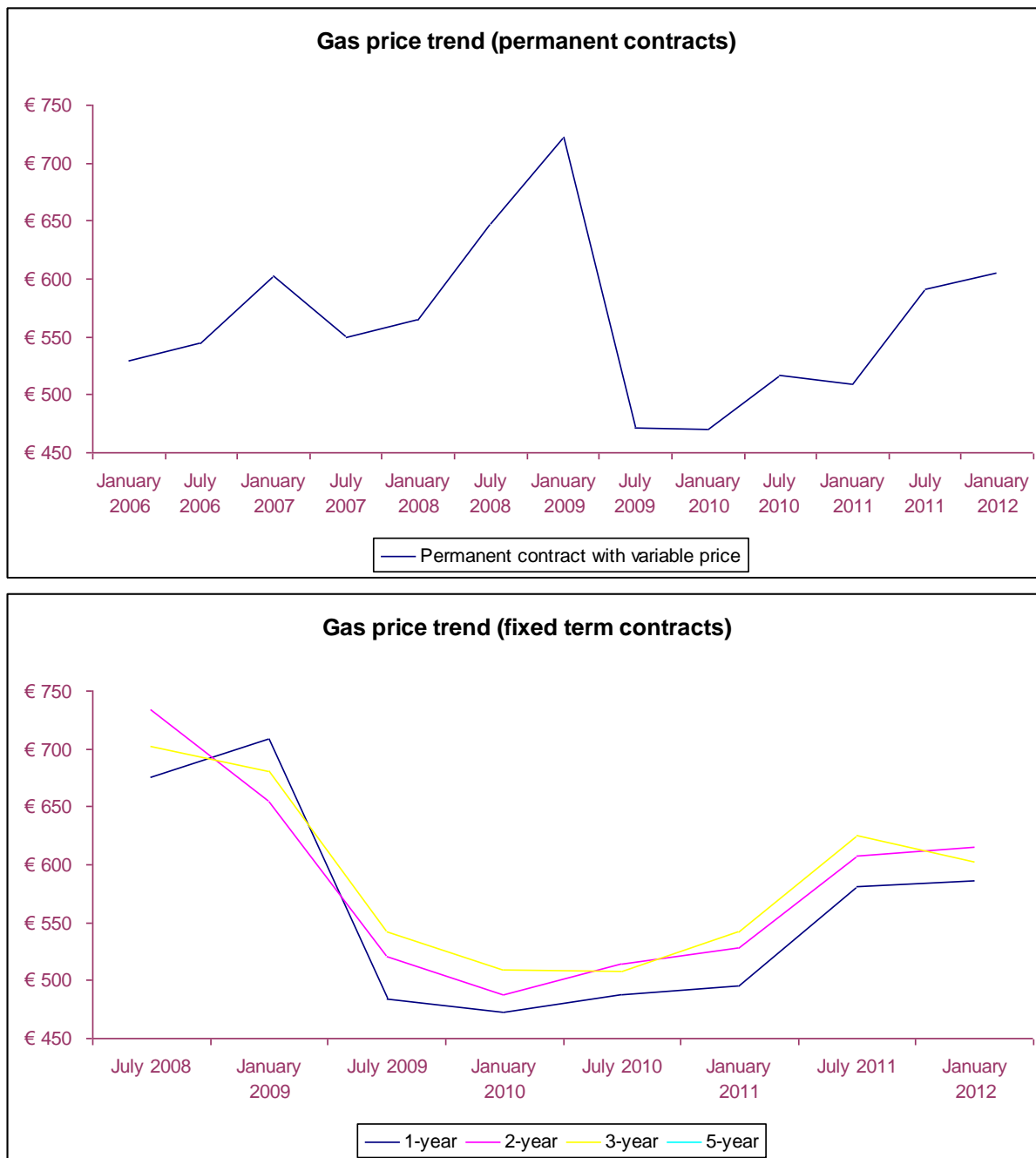


Figure 16: Gas price trends

For natural gas, the difference between the most expensive and the cheapest contract is the biggest with the 1-year contract, which is €107 (figure 8). Compared with the first half of 2011, the price differences between the most expensive and the cheapest contract (for all types) have increased, except for 3-year contracts. So this trend is the opposite of that in electricity.

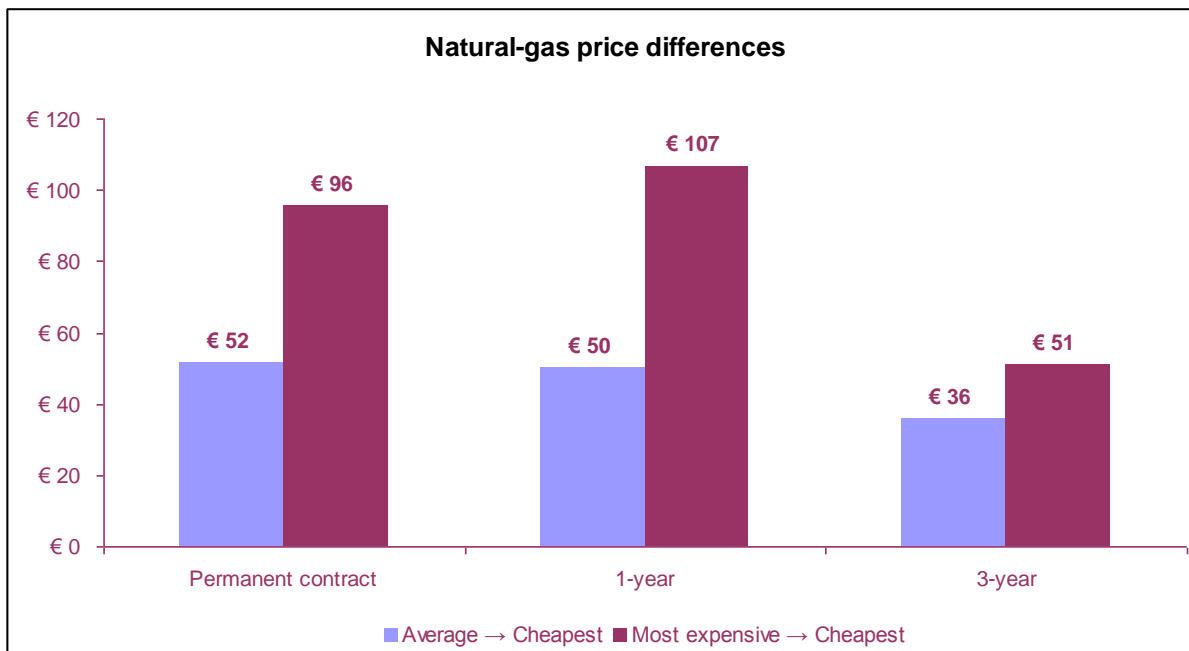


Figure 17: Differences in natural-gas prices (on December 31, 2011)

**4.2.2.2 Monitoring the level of transparency, including compliance with transparency obligations, and the level and effectiveness of market opening and competition**

Same for gas as for electricity (see paragraph 3.2.2.2).

**4.2.3 Recommendations on supply prices**

Same for gas as for electricity (see paragraph 3.2.3).

**4.2.4 Carry out investigations and imposing measures to promote effective competition**

In 2011, NMa has carried out – both in electricity and gas – several investigations and/ or imposed measures to promote effective competition. For reasons of clarity, these investigations and measures have been mentioned in the relevant chapters throughout this report.

## 4.3 Consumer protection

Same for gas as for electricity (see paragraph 3.3).

## 4.4 Security of supply

It should be noted that the Ministry of Economic Affairs is the competent authority.

### 4.4.1 Monitoring balance of supply and demand

The TSO report on Security of Supply in the Netherlands concludes that for the coming years sufficient gas will be available to meet Dutch demand. GTS findings are based on a survey of shippers who are asked to report on contracted and not yet contracted volumes (domestic production and sales, imports and exports, transit). After 2014 total volumes reported by shippers to GTS lag behind the gas demand estimates for the Netherlands. Supplementary volumes need still to be contracted to cover Dutch gas demand but as GTS also signals the ever increasing liquidity on gas hubs may lead parties to contract volumes closer to actual delivery moment and not so long in advance any more. The next figure shows future available volumes.

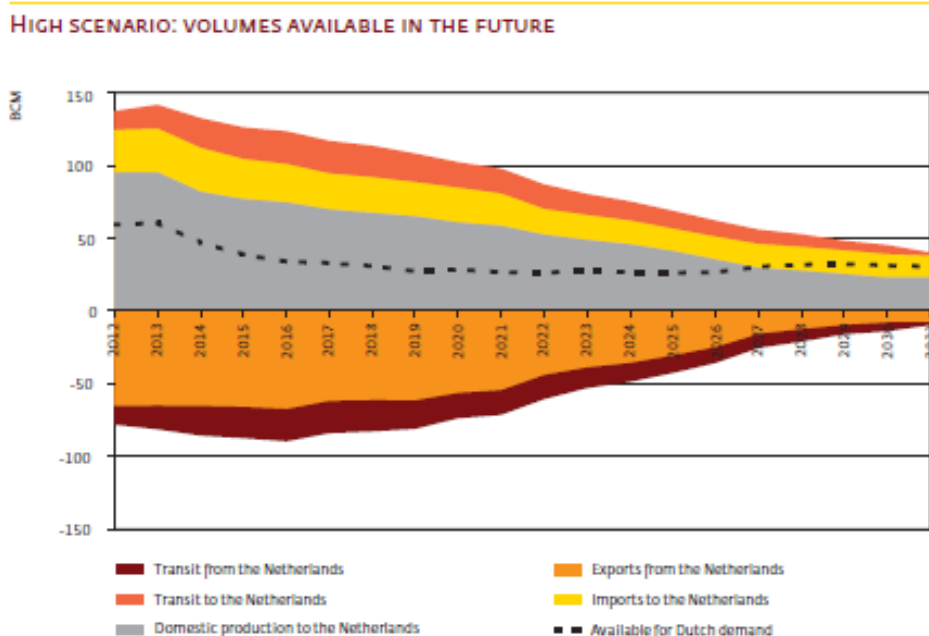


Figure 18: volumes available in the future 2012-2031 (source GTS: The security of gas supply 2011)

### 4.4.2 Expected future demand and available supplies as well as envisaged additional capacity

The following graphs show the development of gas demand and available supplies in the Netherlands for the future.

Up till now Dutch gas demand has remained below 50 bcm per year. In ten years time it will be above 50 bcm a year and in twenty years time a further increase in gas demand is foreseen to roughly 55 bcm per year. Although household demand will not change much over this period, gas demand from industry and power plants is expected to grow.

## GAS DEMAND IN THE NETHERLANDS

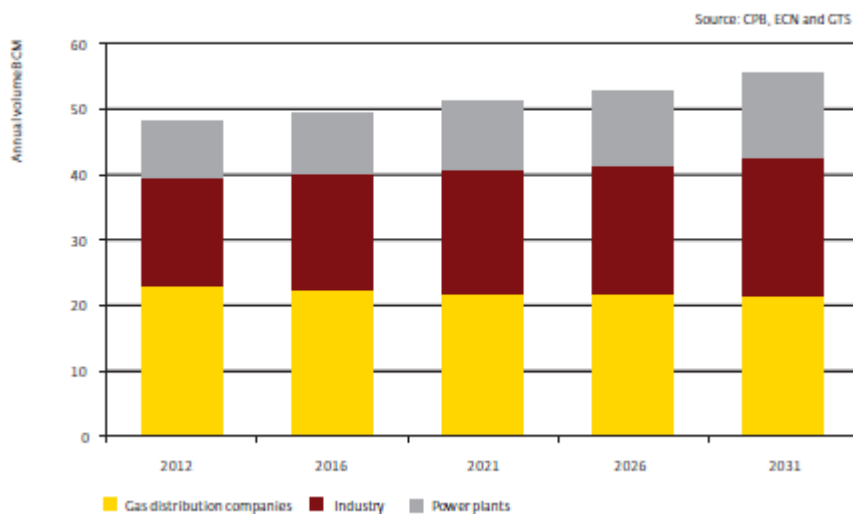


Figure 19: projected gas demand in the Netherlands, 2012 – 2031 (source GTS: The security of gas supply 2011)

Dutch gas production has reached levels of more than 80 bcm in recent years. Domestic production however is expected to decline in the future to a level of 65 bcm in 2020 and 25 bcm in 2030.

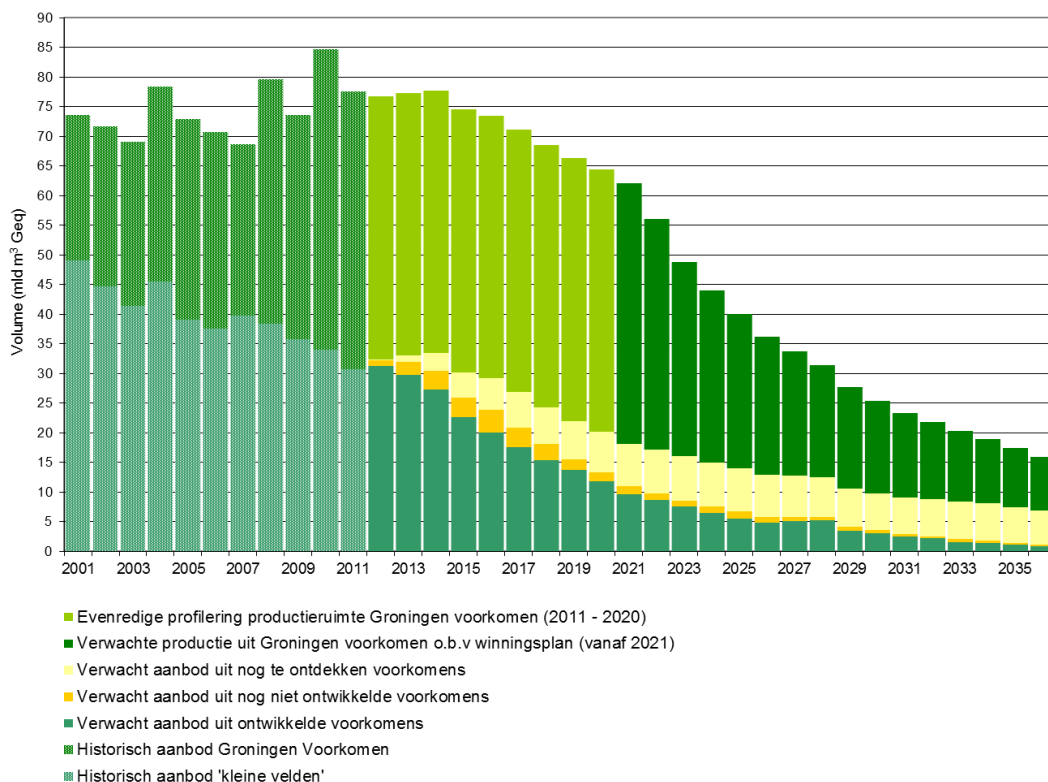




Figure 20: realized and projected gas production in the Netherlands, 2001-2035 (Source TNO/Ministerie EL&I, Delfstoffen en aardwarmte in Nederland Jaarverslag 2011)

It is the policy of the Dutch government to ensure the security of the gas supply in the future by diversifying supply sources (LNG, countries of origin). The first Dutch LNG Terminal became operational in September 2011. The figure below shows Dutch import volumes which are already contracted by its country of origin. Moreover, the Dutch small fields policy ensures an efficient depletion of domestic resources by allowing production from small fields to take precedence over production from the Groningen field. Flexibility in the Netherlands is largely supplied by the Groningen field. In the future more investments in other sources of flexibility will be needed and storage capacity is one of those. In the near future several new activities in storage for peak supply (salt caverns) are planned, also just across the Dutch border in Germany. One project for seasonal storage is far advanced and set to become operational in 2014.

### ORIGIN OF IMPORT CONTRACTS

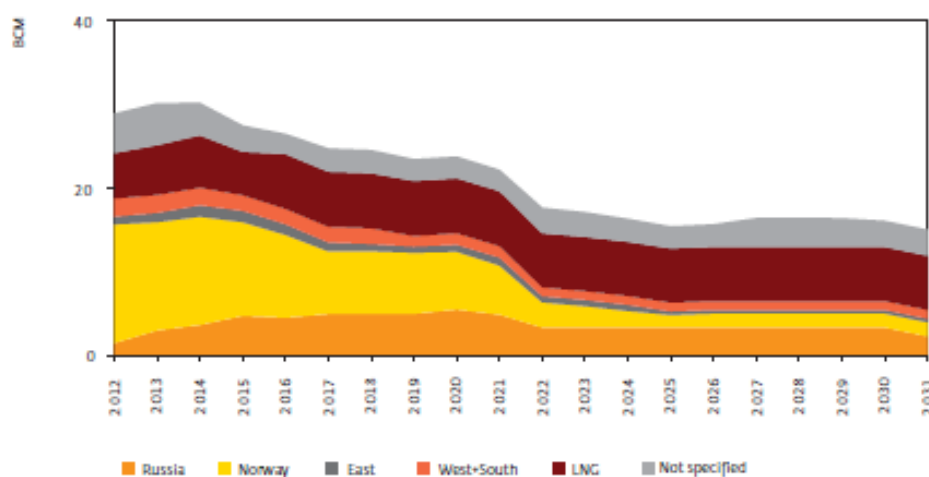


Figure 21: import volumes already contracted by country of origin, 2012-2031 (source GTS: The security of gas supply 2011).

In general the trigger for extra investment in cross border capacity is the Open Season procedure. In total three Open Season procedures have taken place so far, the results of which have led to investments that reinforce the transmission network and make it able to accommodate future cross border flows. Cross border entry capacity into the Netherlands is currently at almost 8 mcm/h firm and will in the next five years reach 10 mcm/h firm. Up till now investments are not ex ante approved by the regulator. In the near future a new regime will be introduced in which the Ministry of Economic Affairs decides on the necessity of an investment (taking into account the advice from the regulator) and the regulator ex post decides on its efficiency.

#### 4.4.3 Measures to cover peak demand or shortfalls of suppliers

Directive 2004/67/EC obliged Member States to protect the supply of gas to domestic consumers, for instance in the event of extremely cold weather conditions. In the Netherlands, the Decision in Relation to Security of Supply Pursuant to the Gas Act was drawn up for this purpose. With the entry into force of the Security of Supply Regulation (EU)

994/2010 the Dutch Gas Act is amended at several points. The Ministry of Economic Affairs is the competent authority.

The aforementioned Decision however will stay in place since the supply standard laid down in that Decision is more strict than the Regulation. To prevent situations that leave small consumers without heating during an extremely cold day, due to a shortage of production and transmission capacity, this decision stipulates that the TSO (instead of the regular supplier or 'licence holder') is responsible for reserving volume and capacity for the additional demand from small consumers if the effective temperature during the day falls below  $-9^{\circ}\text{C}$ . A total capacity of 2.44 million  $\text{m}^3/\text{h}$  and a volume of 101 million  $\text{m}^3$  is currently contracted for this peak supply of gas (2011/2012 season). The volume and capacity is limited to the hours in which the hourly consumption by small consumers exceeds the maximum hourly consumption of a " $-9^{\circ}\text{C}$  day". The licence holder obtains this volume and capacity on an obligatory basis through the TSO. Together with the freely contactable basic supply for  $-9^{\circ}\text{C}$  and warmer, the licence holder can therefore fully supply small consumers up to and including  $-17^{\circ}\text{C}$  (an average effective daily temperature of  $-17^{\circ}\text{C}$  occurs once every 50 years). The TSO is required to charge tariffs that are in line with the European market for the supply of gas during peak demand. This ensures that the TSO as the sole supplier of gas to meet peak demand will not be abused. Also, under supervision of the regulator the TSO is obliged to obtain the necessary supplies as cost efficiently as possible. The figure below illustrates how peak supply generally operates.

## PEAK SUPPLY

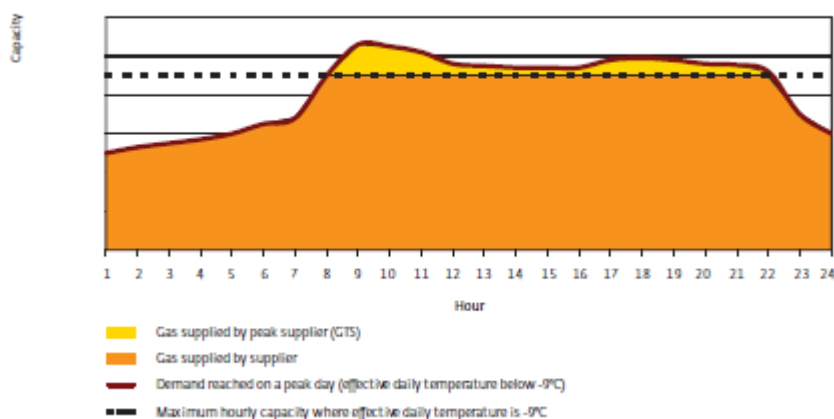


Figure 22: General operation of peak supply (source GTS: The security of gas supply 2011)

Furthermore, the Decision states the obligations and appropriate actions for the TSO in the case the license of a gas supplier on the domestic consumer market is withdrawn, making sure that the gas supply to the customers (consumers) of this gas supplier will be continued. This emergency supply procedure requires the TSO to take measures to guarantee temporary supply to domestic consumers as long as they have failed to find an alternative supplier.

## Annex A: Indicators with definitions

This Annex A contains the structure (indicators with definitions) of the final questionnaire of the indicators for the 2012 National Report. This questionnaire will be launched electronically (online web questionnaire -> CEER Database) by the URB TF at the end of May. **The data must be filled in online by 31 August 2012.**

**The data/contents should refer to 31 December 2011 or the reporting period 2011 unless otherwise stated.**

**Classification of the indicators:**

- A** mandatory for the European Commission / ACER
- B** mandatory for CEER
- C** optional

**The classification is listed beside the numbering of each indicator.**

The questionnaire can be found on the CEER website in the restricted Area (Database/National Reports - Indicators/Questionnaire).

The red asterisks beside the indicators mean that these indicators are part of the CEER database.

### 1. General Regulatory Issues (Electricity)

- 1.A Electricity market opening threshold \*  
Threshold of eligibility of customers to choose supplier
- 2.A Proportion of market open to competition \*  
Eligible consumption divided by annual consumption in the country
- 3. Interruptions  
SAIDI = System average interruption duration index. It indicates the total duration of interruption for the average customer during a pre-defined period of time. It is commonly measured in customer minutes separated for planned and unplanned interruptions and cleared for extreme weather.
  - 3.1.A SAIDI (planned and unplanned interruptions) \*
  - 3.2.B SAIDI (planned interruptions) \*
  - 3.3.B SAIDI (unplanned interruptions) \*
- 4. Length of network in the country
  - 4.1.B Length of routes (total sum of all TSO) \*
    - 4.1.1.B Length of routes (overhead lines  $\geq$  220 kV, sum of all TSO) \*
    - 4.1.2.B Length of routes (underground cables  $\geq$  150 kV, sum of all TSO) \*
    - 4.1.3.B Length of routes (sea cables  $\geq$  150 kV, sum of all TSO) \*
  - 4.2.B Length of circuits (total sum of all TSO) \*
    - 4.2.1.B Length of circuits (overhead lines  $\geq$  220 kV, sum of all TSO) \*
    - 4.2.2.B Length of circuits (underground cables  $\geq$  150 kV, sum of all TSO) \*
    - 4.2.3.B Length of circuits (sea cables  $\geq$  150 kV, sum of all TSO) \*
  - 4.3.B Length of network (sum of all DSO) in km \*
- 5. Investments (CAPEX, without interests and depreciation) and expenditures (OPEX) in networks
  - 5.1.B Sum of all TSO investments and expenditures in networks\*

5.2.B Sum of all DSO investments and expenditures in networks \*

## 2. Effective unbundling (Electricity)

Report on unbundling requirements on the network companies.

1. Transmission System Operators (TSOs)
  - 1.1.A TSOs in the country \*
 

Number of TSOs in the country
  - 1.2.A Unbundling of TSOs \*
    - 1.2.1.A Number of certified ownership unbundled TSOs \*
    - 1.2.2.A Number of certified ISO TSOs \*
    - 1.2.3.A Number of certified ITO TSOs \*
    - 1.2.4.A Number of certified ITO+ TSOs \*
  - 1.3.C Name, market share and unbundling model of largest TSO \*
 

% of total TSO network (by km of transmission grid) in the country managed by the largest TSO
  - 1.4. Ownership structure of largest TSO
    - 1.4.1.C Indicate % of public ownership \*
    - 1.4.2.C Indicate % of private companies ownership \* (1.4.1 + 1.4.2. = 100%) \*
2. Distribution System Operators (DSOs)
  - 2.1.A DSOs in the country \*
 

Number of DSOs in the country
  - 2.2.B Ownership unbundled DSOs \*
 

Number of DSO that are ownership unbundled
  - 2.3.A Legally unbundled DSOs \*
 

Number of DSOs that are legally unbundled
  - 2.4.A 100 000 customer exemption \*
 

Application of the 100 000 customer exemption in the country
  - 2.5.A Small DSOs (< 100 000 customers) \*
 

Number of DSOs with less than 100 000 customers
  - 2.6.B DSOs with network assets \*
 

Number of legally unbundled DSOs that own network assets
  - 2.7.B DSOs w/o network assets \*
 

Number of legally unbundled DSOs that do not own network assets

## 3. Description of the wholesale market incl. generation and cross-border issues (Electricity)

This section serves to describe the structure of generation and cross-border issues in the wholesale market.

1. Generation and consumption figures
  - 1.1.A Demand/consumption \*
 

Annual final total demand including losses without pumped storage
  - 1.2. Peak load in the country
    - The highest simultaneous demand for electricity satisfied during the year.
    - The electricity supply at the time of peak demand may include demand satisfied by imported electricity or alternatively the demand may include exports of electricity.
    - The total peak load on the national grid is not the sum of the peak loads during the year on every power station as they may occur at different times.

- Load on a power system is according to ENTSO-E the net consumption (excluding consumption of power plants' auxiliaries, but including network losses) corresponding to the hourly average active power absorbed by all installations connected to the transmission or distribution grid, excluding the pumps of the pumped-storage stations.

1.2.1.B Peak load in the country \*

1.2.2.B Date and time of peak load in the country \*

1.3. Maximum net generating capacity

The capacity should be reported at 31<sup>st</sup> December of the relevant reported year. Includes electrical capacity of both electricity (only) and CHP plants.

The Net Maximum Electrical Capacity is the sum of the net maximum capacities of all stations taken individually throughout a given period of operation. The period of operation assumed for present purposes is continuous running: in practice 15 hours or more per day. The net maximum capacity is the maximum power assumed to be solely active power that can be supplied, continuously, with all plant running, at the point of outlet to the network.

1.3.1.A Maximum net generating capacity (sum of all energy sources) \*

1.3.2.B Maximum net generating capacity (sum of all non-renewable energy sources) \*

1.3.3.B Maximum net generating capacity (sum of all renewable energy sources) \*

1.3.4.B Maximum net generating capacity (sum of wind energy) \*

1.3.5.B Maximum net generating capacity (sum of solar energy) \*

1.3.6.B Maximum net generating capacity (sum of combined heat and power plants, electrical capacity) \*

1.4.B Reliably available net generating capacity at time of peak \*

According to ENTSO-E "Reliably available capacity" is defined as follows:

**Net Generating Capacity (NGC)** of a power station is the maximum electrical net active power it can produce continuously throughout a long period of operation in normal conditions. NGC of a country is the sum of the individual NGC of all power stations connected to either the transmission grid or to the distribution grid.

**Unavailable Capacity** is the part of NGC that is not reliably available to power plant operators owing to the limitations of the output power of power plants. It consists of the Non-Usable Capacity (resulting from the variability of the primary sources like wind, hydro, solar or biomass and power stations in mothball), Maintenance and Overhauls, Outages and System Services Reserve.

**Reliably Available Capacity (RAC)** on a power system is the difference between NGC and Unavailable Capacity. RAC is that part of the NGC actually available to cover the load.

1.5.C Minimal difference between reliably available capacity and load in the country (RAC-Load) \*

1.6. Total net generation volume

The gross electricity production less the electrical energy absorbed by the generating auxiliaries and the losses in the main generator transformers

(Gross Electricity Production: the sum of the electrical energy production by all the generating sets concerned - including pumped storage - measured at the output terminals of the main generators).

1.6.1.A Net generation volume (sum of all energy sources) \*

1.6.2.B Net generation volume (sum of all non-renewable energy sources) \*

1.6.3.B Net generation volume (sum of all renewable energy sources) \*

1.6.4.B Net generation volume (sum of wind energy) \*

1.6.5.B Net generation volume (sum of solar energy) \*

1.6.6.B Net generation volume (sum of combined heat and power plants, electrical generation) \*

1.7. Network interconnection and exchange programmes

Total sum of NTC for import: The total sum of NTC for import for all borders is defined as the average of Summer-NTC (summer 2011) and Winter-NTC (winter 2011-2012) for import for each border according to ENTSO-E standards. NTC is the maximum exchange programme between two areas compatible with security standards applicable in both areas and taking into account the technical uncertainties on future network conditions. \*

1.7.2.B Binding exchange programmes (import) – sum for all cross-border connections \*

1.7.3.B Binding exchange programmes (export) – sum for all cross-border connections \*

1.8.B Load Flows

Amounts of electricity are considered as imported or exported when they have crossed the political boundaries of the country, whether customs clearance has taken place or not. If electricity is transited through a country, the amount should be reported as both an import and an export.

1.8.1.B Load flows (Imports) \*

Total sum of physical Import Quantity

1.8.2.B Load flows (Exports) \*

Total sum of physical Export Quantity

2. Market dominance figures

For groupings the domination principle should be used: Where one generation firm owns (controls) 50% or more of another generation firm, they are counted as one company. If exactly 50% are owned only 50% are added to the one company.

2.1.B Generation companies  $\geq 5\%$  by capacity \*

Number of companies running more than 5% of national net generating capacity

2.2.B Generation companies  $\geq 5\%$  by volume \*

Number of companies running more than 5% of national net generation volume

2.3.A Share of three biggest generators by capacity \*

Share of three largest generation companies by net generating capacity

2.4.B Share of three biggest generators by volume \*

Share of three largest generation companies by net generation volume

2.5.C HHI by capacity \*

Sum of squared shares of individual companies. The threshold should be set in a way to guarantee 80% coverage

2.6.C HHI by volume \*

Sum of squared shares of individual companies. The threshold should be set in a way to guarantee 80% coverage

## 4. Description of the wholesale market (traded electricity)

The data should be typed in the CEER database by the regulator of the country with the seat of the power exchange / broker platform and should cover the entire trade at this power exchange for all market areas in EU 27 plus Norway. The data should be given for each market area separately. The data should include physical and financial trades.

1 Electricity traded (power exchange – spot market)

Volume of electricity traded at power exchange spot market. Trade of standardised products for periods of delivery of less than one week.

1.1.B Intra-day and day-after \*

Intra-Day (from 15:00 hours on the day before supply until 15 minutes before supply begins) and day-after (until 16:00 hours on the day following supply)

1.2.A Day-ahead \*

Day-Ahead (from the beginning of trading on the day before supply begins until 15:00 hours on the day before supply)

1.3.B Other spot volumes \*

Other trade volume with supply periods of less than one week (not included in 1.1 and 1.2)

2.A Electricity traded (power exchange – futures market)

Volume of electricity traded at power exchange futures markets without OTC Contracts that are cleared at power exchange. Trade of standardised products for periods of delivery of at least one week.

Futures and Options \*

3.B Electricity traded (OTC-Clearing at power exchange)

OTC contracts that are cleared at power exchange

Futures and Options \*

4 A Number of companies active at power exchange \*

Companies exchanging volumes of electricity at power exchanges except OTC-clearing at power exchanges

5 Electricity traded at broker platforms (financial and physical trades)

5.1.B Volume of electricity traded at broker platforms (spot market). Trade for periods of delivery of less than one week. \*

5.2.B Volume of electricity traded at broker platforms (futures market) without OTC Contracts that are cleared at power exchange. Trade of products for periods of delivery of at least one week. \*

5.3.B Volume of electricity traded at broker platforms (futures market) - only OTC Contracts that are cleared at power exchange. Trade of products for periods of delivery of at least one week. \*

6 Electricity prices \*

6.1.B Spot day-ahead baseload \*

6.2.B Spot day-ahead peakload \*

6.3.B Average electricity price futures year-ahead baseload \*

6.4.B Average electricity price futures year-ahead peakload \*

## 5. Description of the retail market (Electricity)

1. Active Suppliers

1.1. Total number of electricity suppliers in the country

1.1.1.B Total number of electricity suppliers for final customers in the country \*

1.1.2.B Total number of electricity suppliers for household customers in the country \*

1.2. Number of suppliers active nationwide in the country

1.2.1.B Number of suppliers for final customers active nationwide in the country \*

1.2.1.B Number of suppliers for household customers active nationwide in the country \*

1.3. Average number of suppliers in the DSO networks

1.3.1.B Average number of suppliers for final customers in the DSO networks \*

1.3.1.B Average number of suppliers for household customers in the DSO networks \*

2. Share in the retail market

For groupings the domination principle should be used: Where one supplier owns (controls) 50% or more of another supplier, they are counted as one company. If exactly 50% are owned only 50% are added to the one company.

(large, medium and small industry as usually defined in the individual country)

The final retail market should be split into eligible and not eligible and the share calculated on the basis of consumption quantity of eligible customers.

2.1.B No companies  $\geq$  5% market share in the whole retail market by volume \*

2.2.B Market share of the three largest companies in the whole retail market by volume \*

2.3.B Market share of the three largest companies in large industry by volume \*

- 2.4.C Market share of the three largest companies in medium-sized industry by volume \*
- 2.5.C Market share of the three largest companies in small industry and households by volume \*
- 2.6.B Market share of the three largest companies in the market for households by metering points

### 3. Switching rates

A supplier switch is defined as "the action through which a customer changes supplier". More detailed: A switch is essentially seen as the free (by choice) movement of a customer (defined in terms of an overall relationship or the supply points and quantity of electricity or gas associated with the relationship) from one supplier to another. It involves some activity by the customer. (So changes of supplier resulting from a merger are excluded). Switching activity is defined as the number of switches in a given period of time.

A switch additionally includes:

- A re-switch: when a customer switches for the second or subsequent time, even within the same measured period of time.
- A switch-back: when a customer switches back to his/her former or previous supplier.
- A switch to a competitive company of the incumbent and vice versa.

Switching and moving: When a customer moves, a switch should only be recorded if a customer switches to a supplier other than the supplier which is incumbent in the area where he/she is moving to.

Changes of tariffs: A change of tariff with the same retailer is not equivalent to a switch (this exclusion extends to: changing to a new tariff; changing from a regulated to a non-regulated tariff or vice versa with the same supplier or a subsidiary of the same supplier).

Switching by volume: The annual consumption of a switched customer should be counted without consideration of the switching date.

Reference figures for calculating the switching rates are either the number of customers on 31 December 2011 (switching rates by number) or the consumption of the customers during the reporting period 2011 (switching rates by volume).

- 3.1.A Annual switching rate in the whole retail market (by number of eligible meter points) \*  
% of customers having changed supplier
  - 3.2.A Annual switching rate of household customers (by number of eligible meter points) \*  
% of household customers having changed supplier
  - 3.3.A Annual switching rate in small industry and households (by number of eligible meter points) \*  
% of small commercial customers and households having changed supplier
  - 3.4.A Annual switching rate in the whole retail market (by eligible volume) \*  
% of customers having changed supplier
  - 3.5.A Annual switching rate of non-household customers (by eligible volume) \*  
% of non-household customers having changed supplier
  - 3.6.A Annual switching rate in large industry (by eligible volume) \*  
% of large industrial customers having changed supplier
  - 3.7.A Annual switching rate in medium-sized industry (by eligible volume) \*  
% of medium industrial and commercial customers having changed supplier
  - 3.8.A Annual switching rate in and out of regulated prices (by metering point) \*  
% of total retail market having switched to or from regulated prices
- 4. Households and non-household customers
    - 4.1. Number of household customers in the country
      - 4.1.1.B Total number of household customers \*
      - 4.1.2.B Number of household customers with a different supplier than their incumbent supplier \*



- 4.2.B Total number of non-household customers in the country \*
- 4.3.B Total consumption of household customers in the country \*
- 4.4.B Total consumption of non-household customers in the country \*
  
- 5. Regulated end-user prices
  - 5.1.B Application of end-user price regulation for household customers in the country \*
  - 5.2.B Application of end-user price regulation for non-household customers in the country \*
  - 5.3.B Number of household customers in the country supplied under regulated end-user prices \*
  - 5.4.B Number of non-household customers in the country supplied under regulated end-user prices \*
  - 5.5.B Consumption of household customers in the country supplied under regulated end-user prices \*
  - 5.6.B Consumption of non-household customers in the country supplied under regulated end-user prices \*
  - 5.7.B Number of households with social tariffs (for vulnerable customers) \*
  
- 6. Customer Complaints (Households)
  - 6.1.B Number of Complaints at NRA \*
  - 6.2. A Classification of complaints at NRA
 

Indicate the types of complaints that occurred most often by using the following classification (more than 5% of complaints):

    - Connection to the grid
    - End-consumers
    - Conventional producers
    - Renewable consumers
    - Metering,
    - Quality of supply,
    - Unfair commercial practices,
    - Contracts and sales,
    - Activation,
    - Disconnection due to no or late payment,
    - Invoicing / billing and dept collection,
    - Final closures later than six weeks after switching
    - Wrongly estimated consumption
    - Insufficient payment methods
    - Price / tariff,
    - Redress,
    - Provider change / switching
    - , Delayed switches
    - Refusals
    - Customer service
    - No choice of frequency for reportings on consumption and prices
  - 6.2.1.A Is there a clearly defined procedure for residential customers to complain to the NRA?
  - 6.2.2.A Is there a clearly defined procedure for residential customers to complain to the supplier?
  
- 7. Price level for household customers
  - 7.1.A Is there at least one reliable tariff comparison website available for household customers? \*
  - Average price level for the typical household customer band in the country (Eurostat methodology); standard conditions at their incumbent supplier for customers that are not active in the competitive market
  - 7.2
  - 7.2.1.A Network Charges \*
 

Including

    - system operators costs incl. metering and metering operations

- commercial and billing costs related to transmission and distribution activities
- congestion management costs
- excluding levies and taxes

#### 7.2.2.A Levies \*

Renewables, stranded cost, chp levies, concession levies

#### 7.2.3.A Taxes \*

VAT, energy taxes, local taxes

#### 7.2.4.A Energy and Supply \*

Total price  
 - network charges  
 - levies  
 - taxes  
 = Energy and Supply

7.3 Average price level for typical household customer band in the country; special conditions (change of contract or supplier) for customers that are active in the competitive market

#### 7.3.1.A Network Charges \*

Including

- system operators costs incl. metering and metering operations
- commercial and billing costs related to transmission and distribution activities
- congestion management costs
- excluding levies and taxes

#### 7.3.2.A Levies \*

Renewables, stranded cost, chp levies, concession levies

#### 7.3.3.A Taxes \*

VAT, energy taxes, local taxes

#### 7.3.4.A Energy and Supply \*

Total price  
 - network charges  
 - levies  
 - taxes  
 = Energy and Supply

#### 7.4.A Average annual household consumption \*

## 8 Annex 1/Consumer Rights

8.1. A Are residential end-customers informed about price changes before new prices become applicable? (Y/N)

8.2. A Is the termination of the contract possible if residential end-consumers do not accept the new conditions? (Y/N)

8.3. A Does the residential end-consumer have the right and possibility to have his dispute settled by out of court dispute settlement procedures with the supplier? (Y/N)

8.4. A Are complaints at suppliers settled within three months? (Y/N)

8.5. A Does a supplier of last resort exist (Y/N)

8.6. A How many end-consumers use the supplier of last resort

8.6. A How many customers are vulnerable according to national definition?

8.7. A Is there a national action plan securing supply to vulnerable customers?

## 6. General Regulatory Issues (Gas)

#### 1.A Gas market opening threshold \*

Threshold of eligibility of customers to choose supplier

#### 2.A Proportion (%) of market open to competition \*

Eligible consumption (TWh) divided by annual consumption (TWh) in the country

3. Length of network in the country in km
  - 3.1.B Length of network (sum of all TSO) in km \*
  - 3.2.B Length of network (sum of all DSO) in km \*
4. Investments (CAPEX, without interests and depreciation) and expenditures (OPEX) in networks
  - 4.1.B Sum of all TSO investments and expenditures in networks\*
  - 4.2.B Sum of all DSO investments and expenditures in networks \*
5. Balancing
  - 5.1.A Balancing model applied \*
 

TSO buys balancing gas on the regular gas market/TSO contracts sources of balancing gas/TSO uses storage for balancing
  - 5.2.B Tolerance in balancing \*
 

Balancing model allows tolerances/ balancing model does not allow tolerances
- 6.A Tariff model \*
 

entry exit (coupled/uncoupled)/point to point
- 7.A Capacity allocation mechanism \*
 

First come first served/ auction/ pro rata/ allocation on deadline / capacity goes with the customer
- 8.A Congestion management \*
 

auction/pro rata/ lottery/ capacity buy back /UIOLI/ secondary market/ interruptible capacity/ use it or sell it

## 7. Effective unbundling (Gas)

Report on unbundling requirements on the network companies

1. Transmission System Operators (TSOs)
  - 1.1.A TSOs in the country \*
 

Number of TSOs in the country
  - 1.2.A Unbundling of TSOs \*
    - 1.2.1.A Number of certified ownership unbundled TSOs \*
    - 1.2.2.A Number of certified ISO TSOs \*
    - 1.2.3.A Number of certified ITO TSOs \*
    - 1.2.4.A Number of certified ITO+ TSOs \*
  - 1.3.C Name, market share and unbundling model of largest TSO \*
 

% of total TSO network (by km of transmission pipelines) in the country managed by the largest TSO
  - 1.4. Ownership structure of largest TSO
    - 1.4.1.C Indicate % of public ownership \*
    - 1.4.2.C Indicate % of private companies ownership \* (1.4.1 + 1.4.2. = 100%)
2. Distribution System Operators (DSOs)
  - 2.1.A DSOs in the country \*
 

Number of DSOs in the country

- 2.2.B Ownership unbundled DSOs \*  
Number of DSO that are ownership unbundled
- 2.3.A Legally unbundled DSOs \*  
Number of DSOs that are legally unbundled
- 2.4.A 100 000 customer exemption \*  
Application of the 100 000 customer exemption in the country
- 2.5.A Small DSOs (< 100 000 customers) \*  
Number of DSOs with less than 100 000 customers
- 2.6.B DSOs with network assets \*  
Number of legally unbundled DSOs that own network assets
- 2.7.B DSOs w/o network assets \*  
Number of legally unbundled DSOs that do not own network assets

## 8. Description of the wholesale market incl. production, import, export, transit and storage (Gas)

This section serves to describe the structure of production, import, export, transit and storage in the wholesale market.

- 1. Production, import, export, transit and consumption figures
  - 1.1.A Demand/Consumption<sup>5</sup> \*  
(Unit in Database: TWh/yr)  
Gross Inland Consumption = Production + Imports - Exports + Storage variations  
Storage variation reflect the difference between opening stock level at the first day of the year and closing stock level at the last day of the year of stocks held on national territory. A stock build is shown as a negative number and a stock draw as a positive number.
  - 1.2.A Peak \*  
Maximum quantity of gas consumed in a day during the year (TWh/day)
  - 1.3.A National production quantity \*  
National production per year (TWh/yr)  
Indigenous Production: All dry marketable production within national boundaries, including offshore production. Production is measured after purification and extraction of NGLs and sulphur. Excludes extraction losses and quantities reinjected, vented or flared.
  - 1.4.A National production capacity \*  
Production capacity (maximal technical availability) per day (TWh/day)  
Amounts of gas are considered as imported or exported when they have crossed the political boundaries of the country, whether customs clearance has taken place or not. If gas is transited through a country, the amount should be reported as both an import and an export.
  - 1.5.A Pipeline net import quantity per year (TWh/yr) \*
  - 1.6.A Pipeline import capacity (maximal technical availability) total (TWh/h) \*
  - 1.7.B Export net quantity per year (TWh/yr) \*
  - 1.8.B Export capacity (maximal technical availability) total (TWh/h) \*
  - 1.9.B Transit quantity per year (TWh/yr) \*
  - 1.10. Free pipeline import capacity

---

<sup>5</sup> Units in database were converted from m<sup>3</sup> to kWh as gas qualities and energy content of the gas differ significantly throughout Germany and within Europe. Reference to m<sup>3</sup> results in incomparable results.

- 1.10.1.A Peak hourly import gas flow (TWh/h) within the year \*
  - 1.10.2.A Maximum pipeline utilisation \*
    - Calculate:  $[1.10.1]/[1.6] * 100$  (peak hourly import gas flow within the year/pipeline import capacity (maximal technical availability) (percent))
  - 1.11.A (N-1) according to Annex I of regulation (EU) No 994/2010 on national level \*
  - 1.12.A LNG import capacity (maximal technical availability) total (TWh/h) \*
  - 1.13.A LNG Gas volume flow into the country (TWh/yr) \*
  - 1.14.A Maximum peak outflow rate of all LNG terminals (TWh/h) \*
    - Maximum peak outflow rate of all LNG terminals in the country
  - 1.15.A Gas import flows to the EU-27 incl. Norway \*
    - Total gas volume (physical flows, not commercial contracts) imported via cross-border interconnections with countries outside EU-27 incl. Norway (TWh/yr)
  - 1.16.A Gas export flows from the EU incl. Norway \*
    - Total gas volume (physical flows, not commercial contracts) exported via cross-border interconnections with countries outside EU-27 incl. Norway (TWh/yr)
  - 1.17.A Firm Capacity (GWh/h\*h)
  - 1.18.A Interruptable Capacity (GWh/h\*h)
  - 1.19.A Capacity requested as firm but made available only on interruptable basis (GWh/h\*h)
  - 1.20.A Capacity requested denied (GWh/h\*h)
  - 1.21.A Capacity requested as firm but made available only on interruptable basis(GWh/h\*h)
  - 1.22.A Leakage in the system (GWh)
- 
- 2. Storage figures
    - 2.1.A LNG Gas Storage Capacity (Nm3) \*
    - 2.2.A Underground gas storage – Working gas volume (Nm3) \*
    - 2.3.A Underground gas storage – Maximum withdrawal capacity (Nm3/h) \*
  - 3. Market dominance figures
    - For groupings the domination principle should be used: Where one firm owns (controls) 50% or more of another firm, they are counted as one company. If exactly 50% are owned only 50% are added to the one company.
    - 3.1.B No of companies  $\geq 5\%$  available gas \*
      - available gas = gross inland consumption (production + net imports + storage variations)
      - Net imports=imports-exports
    - 3.2.A Share of three biggest companies by available gas \*
    - 3.3.B HHI by available gas \*
      - Sum of squared shares of individual companies. The threshold should be set in a way to guarantee 80 % coverage.
  - 4.B Calorific value \*
    - Average calorific value in the country (kWh/m<sup>3</sup>)

## 9. Description of the wholesale market (traded gas)

The data should be typed in the CEER database by the regulator of the country with the seat of the trading hub / gas exchange / broker platform and should cover the entire trade at this trading point / gas exchange / broker platform for all market areas in EU 27 plus Norway. The data should be given for each market area separately. The data should include physical and financial trades.

1. Gas traded (gas exchange – spot market)
 

Volume of gas traded at gas exchange spot market. Trade of standardised products for periods of delivery of less than one week.  
(TWh/yr)

  - 1.1.B Intra-day \*
  - 1.2.A Day-ahead \*
  - 1.3.B Other trade volume with supply periods of less than one week (not included in 1.1 and 1.2) \*
- 2.A Gas traded (gas exchange – futures market)
 

Volume of gas traded at gas exchange futures markets without OTC contracts that are cleared at gas exchange. Trade of standardised products for periods of delivery of at least one week.  
(TWh/yr)

Futures and Options \*
- 3.B Gas traded (OTC-Clearing at gas exchange)
 

OTC contracts that are cleared at gas exchange  
(TWh/yr)

Futures and Options \*
- 4.A Number of companies active at gas exchange \*
 

Companies exchanging volumes of gas at gas exchanges except OTC-clearing at gas exchanges
- 5 Gas traded at broker platforms
  - 5.1.B Volume of gas traded at broker platforms (spot market). Trade for periods of delivery of less than one week. \*
  - 5.2.B Volume of gas traded at broker platforms (futures market) without OTC Contracts that are cleared at gas exchange. Trade of products for periods of delivery of at least one week. \*
  - 5.3.B Volume of gas traded at broker platforms (futures market) - only OTC Contracts that are cleared at gas exchange. Trade of products for periods of delivery of at least one week. \*
- 6.A Volume of gas traded at trading hubs (e.g. NBP, TTF, Zeebrugge, PEG, NCG, Gaspool, Baumgarten etc.) \*
7. Average wholesale gas prices \*
 

Yearly average of daily average price

  - 7.1.B Spot base day-ahead at gas exchange \*
  - 7.2.B Spot base day-ahead at each trading hub \*
  - 7.3.C Average gas price futures month-ahead at gas exchange \*
  - 7.3.B Average cross border price \*

## 10. Description of the retail market (Gas)

1. Active Suppliers
  - 1.1. Total number of gas suppliers in the country
    - 1.1.1.B Total number of gas suppliers for final customers in the country \*

- 1.1.2.B Total number of gas suppliers for household customers in the country \*
- 1.2.B Number of nationwide suppliers in the country \*
- 1.2.1.B Number of suppliers for final customers active nationwide in the country \*
- 1.2.1.B Number of suppliers for household customers active nationwide in the country \*
- 1.3.B Average number of suppliers in the DSO networks \*
- 1.3.1.B Average number of suppliers for final customers in the DSO networks \*
- 1.3.1.B Average number of suppliers for household customers in the DSO networks \*

## 2. Share in the retail market

For groupings the domination principle should be used. Where one supplier owns 50% or more of another supplier, they are counted as one company. If exactly 50% are owned only 50% are added to the one company.

(large, medium and small industry as usually defined in the individual country)

The final retail market should be split into eligible and not eligible and the share calculated on the basis of consumption quantity of eligible customers.

- 2.1.B No of companies >= 5% market share in the whole retail market **by volume** \*
- 2.2.B Market share of the three largest companies in the whole retail market **by volume** \*
- 2.3.B Market share of the three largest companies in power plants **by volume** \*
- 2.4.B Market share of the three largest companies in large industry **by volume** \*
- 2.5.C Market share of the three largest companies in medium-sized industry **by volume** \*
- 2.6.C Market share of the three largest companies in small industry and households **by volume** \*
- 2.7.B Market share of the three largest companies in the market for households **by metering points** \*

## 3. Switching rates

A supplier switch is defined as "the action through which a customer changes supplier". More detailed: A switch is essentially seen as the free (by choice) movement of a customer (defined in terms of an overall relationship or the supply points and quantity of electricity or gas associated with the relationship) from one supplier to another. It involves some activity by the customer. (So changes of supplier resulting from a merger are excluded). Switching activity is defined as the number of switches in a given period of time.

A switch additionally includes:

- A re-switch: when a customer switches for the second or subsequent time, even within the same measured period of time.
- A switch-back: when a customer switches back to his/her former or previous supplier.
- A switch to a competitive company of the incumbent and vice versa.

Switching and moving: When a customer moves, a switch should only be recorded if a customer switches to a supplier other than the supplier which is incumbent in the area where he/she is moving to.

Changes of tariffs: A change of tariff with the same retailer is not equivalent to a switch (this exclusion extends to: changing to a new tariff; changing from a regulated to a non-regulated tariff or vice versa with the same supplier or a subsidiary of the same supplier).

Switching by volume: The annual consumption of a switched customer should be counted without consideration of the switching date.

Reference figures for calculating the switching rates are either the number of customers on 31 December 2011 (switching rates by number) or the consumption of the customers during the reporting period 2011 (switching rates by volume).

- 3.1.A Annual switching rate in the whole retail market (by number of eligible meter points) \*  
% of customers having changed supplier
- 3.2.A Annual switching rate of household customers (by number of eligible meter points) \*  
% of household customers having changed supplier

- 3.3.A Annual switching rate in small industry and households (by number of eligible meter points) \*  
% of small commercial customers and households having changed supplier
- 3.4.A Annual switching rate in the whole retail market (by eligible volume) \*  
% of customers having changed supplier
- 3.5.A Annual switching rate of non-household customers (by eligible volume) \*  
% of non-household customers having changed supplier
- 3.6.A Annual switching rate in large industry (by eligible volume) \*  
% of large industrial customers having changed supplier
- 3.7.A Annual switching rate in medium-sized industry (by eligible volume) \*  
% of medium industrial and commercial customers having changed supplier
- 3.8.A Annual switching rate in and out of regulated prices (by metering point) \*  
% of total retail market having switched to or from regulated prices
  
- 4. Households and non-household customers
  - 4.1. Total number of household customers in the country
    - 4.1.1.B Total number of household customers \*
    - 4.1.2.B Number of household customers with a different supplier than their incumbent supplier \*
  - 4.2.B Total number of non-household customers in the country \*
  - 4.3.B Total consumption of household customers in the country \*
  - 4.4.B Total consumption of non-household customers in the country \*
  
- 5. Regulated end-user prices
  - 5.1.B Application of end-user price regulation for household customers in the country \*
  - 5.2.B Application of end-user price regulation for non-household customers in the country \*
  - 5.3.B Number of household customers in the country supplied under regulated end-user prices \*
  - 5.4.B Number of non-household customers in the country supplied under regulated end-user prices \*
  - 5.5.B Consumption of household customers in the country supplied under regulated end-user prices \*
  - 5.6.B Consumption of non-household customers in the country supplied under regulated end-user prices \*
  - 5.7.B Number of households with social tariffs (for vulnerable customers) \*
  
- 6. Customer Complaints (Households)
  - 6.1.B Number of Complaints at NRA \*
  - 6.2. A Classification of complaints at NRA  
Indicate the types of complaints that occurred most often by using the following classification (more than 5% of complaints):
    - Connection to the grid
    - End-consumers
    - Conventional producers
    - Renewable consumers
    - Metering,
    - Quality of supply,
    - Unfair commercial practices,
    - Contracts and sales,
    - Activation,
    - Disconnection due to no or late payment,
    - Invoicing / billing and debt collection,
    - Final closures later than six weeks after switching
    - Wrongly estimated consumption



- Insufficient payment methods
- Price / tariff,
- Redress,
- Provider change / switching
- , Delayed switches
- Refusals
- Customer service
- No choice of frequency for reportings on consumption and prices

6.2.1.A Is there a clearly defined procedure for residential customers to complain to the NRA?

6.2.2.A Is there a clearly defined procedure for residential customers to complain to the supplier?

## 7. Price level for household customers

7.1.A Is there at least one reliable tariff comparison website available for household customers? \*

7.2 Average price level for typical household customer band in the country; standard conditions at their incumbent supplier for customers that are not active in the competitive market

### 7.2.1.A Network Charges \*

Including

- system operators costs incl. metering and metering operations
- commercial and billing costs related to transmission and distribution activities
- congestion management costs
- excluding levies and taxes

### 7.2.2.A Levies \*

Concession levies

### 7.2.3.A Taxes \*

VAT, energy taxes, local taxes

### 7.2.4.A Energy and Supply \*

Total price

- network charges

- levies

- taxes

= Energy and Supply

7.3 Average price level for typical household customer band in the country; special conditions (change of contract or supplier) for customers that are active in the competitive market

### 7.3.1.A Network Charges \*

Including

- system operators costs incl. metering and metering operations
- commercial and billing costs related to transmission and distribution activities
- congestion management costs
- excluding levies and taxes

### 7.3.2.A Levies \*

Concession levies

### 7.3.3.A Taxes \*

VAT, energy taxes, local taxes

### 7.3.4.A Energy and Supply \*

Total price

- network charges

- levies

- taxes

= Energy and Supply

### 7.4.A Average annual household consumption \*

## 8 Annex 1/Consumer Rights

8.1. A Are residential end-customers informed about price changes before new prices become applicable? (Y/N)

8.2. A Is the termination of the contract possible if residential end-customers do not accept the new conditions? (Y/N)

8.3. A Does the residential end-consumer have the right and possibility to have his dispute settled by out of court dispute settlement procedures with the supplier? (Y/N)

8.4. A Are complaints at suppliers settled within three months? (Y/N)

8.5. A Does a supplier of last resort exist (Y/N)

8.6. A How many end-consumers use the supplier of last resort

8.6. A How many customers are vulnerable according to national definition?

8.7. A Is there a national action plan securing supply to vulnerable customers?

## Annex 1 – CEER

The Council of European Energy Regulators (CEER) is the voice of Europe's national regulators of electricity and gas at EU and international level. Through CEER, a not-for-profit association, the national regulators cooperate and exchange best practice. A key objective of CEER is to facilitate the creation of a single, competitive, efficient and sustainable EU internal energy market that works in the public interest.

CEER works closely with (and supports) the [Agency for the Cooperation of Energy Regulators \(ACER\)](#). ACER, which has its seat in Ljubljana, is an EU Agency with its own staff and resources. CEER, based in Brussels, deals with many complementary (and not overlapping) issues to ACER's work such as international issues, smart grids, sustainability and customer issues.

The work of CEER is structured according to a number of working groups and task forces, composed of staff members of the national energy regulatory authorities, and supported by the CEER Secretariat.

This report was prepared by the Unbundling, Reporting and Benchmarking Task Force of CEER's Implementation, Benchmarking and Policy Working Group.