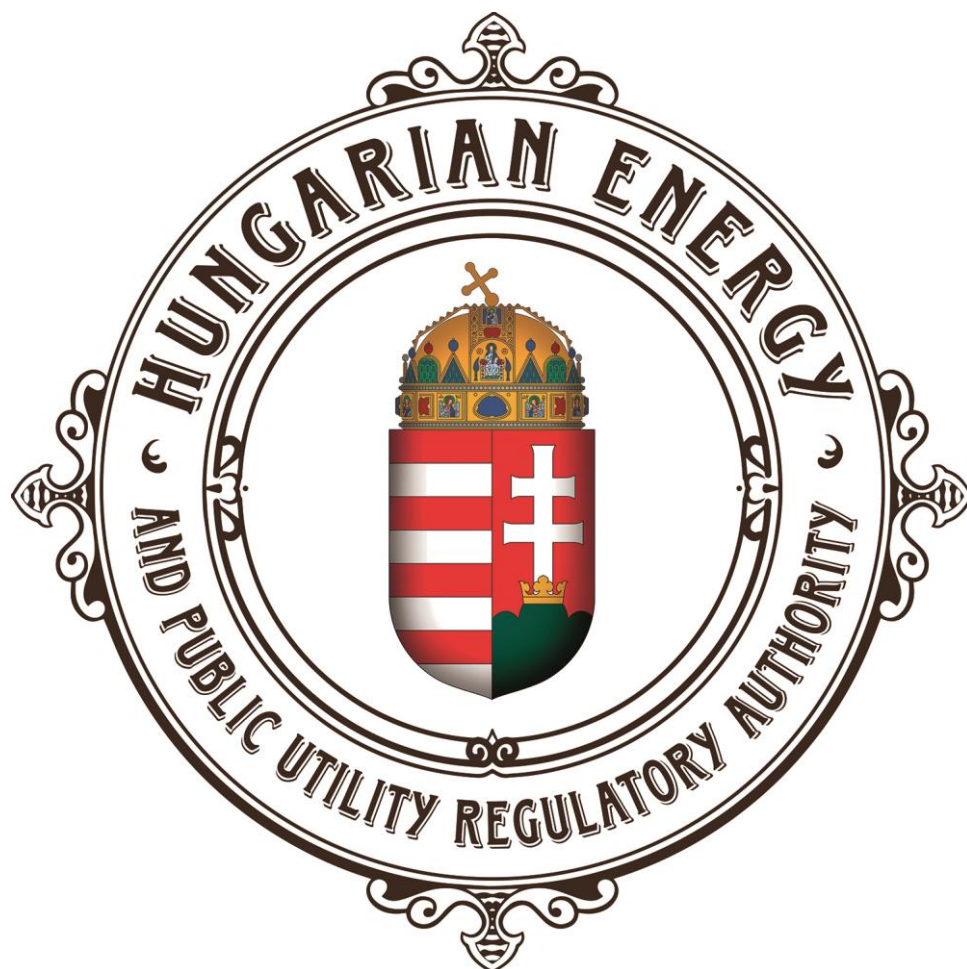


# Report on the activities of the Hungarian Energy and Public Utility Regulatory Authority in 2013



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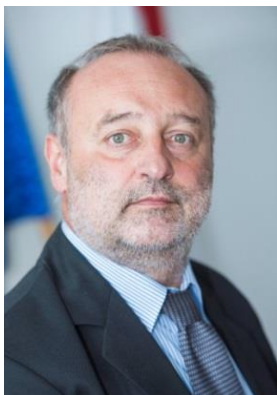
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## The President's message

Dear Reader,



The Hungarian Energy and Public Utility Regulatory Authority was established by the legislative Parliament as an independent regulatory body as of 4 April 2013. Today the successor of the Hungarian Energy Office is an independent regulatory authority responsible for the licensing, supervision, price regulation and price preparation for electricity, natural gas, district heating, and water utility, as well as the price preparation of public waste management services. The present report details the activities of the Authority under its increased competence and responsibility in the 2013 year.

In order to maintain the quality and security of supply, the Authority further developed the former licensing and supervisory inspection practices, forecasts, monitoring and the provision of statistical data. The new responsibilities included the issuance of licenses for water utility and operating licenses for public lighting service providers, and the preparation for chimney sweeping utility-related price regulations.

In supervising district heating license holders, the Authority also functioned as mediator in the disputes between district heating suppliers and district heating generators. It is important to note that the Authority played an integral part in the elaboration of certain phases of utility cost reduction and the methodology of preparing district heating prices. In addition, to strengthen its customer protection activity and to enable a better representation of customer interests, the Authority introduced a toll-free customer hotline as of 15 January 2013.

Furthermore, the 2013 report outlines the Authority's international activities and provides a detailed account of the supervised sectors with a comprehensive description of the key processes and broader market environment of the energy and utilities industries.

Dr. Lajos Dorkota  
  
President

May 2014, Budapest

## Executive summary

### Legal status and responsibilities of the Authority

The Authority was established as an independent regulatory body under Act XXII of 2013 as of 4 April 2013. The legal predecessor of the Authority is the Hungarian Energy Office as established under Act XLI of 1994 on Natural Gas Supply.

The Authority is an independent regulatory body for the energy and utilities industry, responsible for the licensing, supervision, price regulation and price preparation for electricity, natural gas, district heating, and water utility, as well as the price preparation of public waste management services.

**Table 1: Key regulations governing the Authority's scope of responsibilities**

<b>Sector</b>	<b>Act</b>
<b>Electricity</b>	Act LXXXVI of 2007 on Electricity (Electricity Act, hereinafter: VET)
<b>Natural gas</b>	Act XL of 2008 on Natural Gas Supply (Gas Act, hereinafter: GET)
<b>District heating</b>	Act XVIII of 2005 on District Heating Supply (hereinafter: Tszt.)
<b>Water Utility Supply</b>	Act CCIX of 2011 on Water Utility Supply (Water Utility Act, hereinafter: Vksztv.)
<b>Public waste management services</b>	Act CLXXXV of 2012 on Wastes (Waste Act, hereinafter: Ht)

### Functions relating to the supervised sectors

#### Licensing and supervision

In line with the provisions of the VET, the GET, the Tszt. and the Vksztv., the Authority shall establish the conditions for conducting activities subject to authorisation and related operations in the license issued by the Authority. Compliance with the requirements laid down therein is monitored continuously and the legal consequences are applied as appropriate.

## Electricity

In relation to the licensing and supervision of electricity companies, the Authority passed 314 resolutions in total, including the issuance of 80 new licenses<sup>1</sup> in 2013.

**Table 2: New electricity licenses issued by the Authority in 2013**

<i>License type</i>	<i>Number of new licenses</i>
<b>Electricity trading license</b>	12
<b>Limited electricity trading license</b>	21
<b>Simplified license for small power plants</b>	12
<b>License for public lighting operation</b>	35

In 2013 the Authority performed the following functions in relation to the supervision of electricity license holders:

- **Securing electricity supply:**  
In order to secure safe supply of electricity, the Authority continuously monitors the situation on the Hungarian electricity market, as well as the activities and operations of individual players. This practice included the examination of the power plants' winter preparations, the existence of statutory fuel stocks, and the conduction of several on-the-spot inspections. The Authority found that the power plants complied with the statutory requirements.
- **FiT inspections:**  
The Authority inspected sales not conducted in compliance with the provisions of the FiT Decree (in 10 cases).
- **Issuance of licenses for public lighting operation:**  
As a new responsibility, the Authority issued 35 licenses for public lighting operation in 2013.
- **Market supervision:**  
The Authority continuously monitored the organised electricity market (HUPX) prices.

## Natural gas

In relation to the licensing and supervision of natural gas market players, the Authority passed 158 resolutions in total, including the issuance of 14 new operating licenses and withdrawal of 5 natural gas trading licenses (4 upon request and 1 as penalty) in 2013.

**Table 3: New natural gas licenses issued by the Authority in 2013**

<i>License type</i>	<i>Number of new licenses</i>
<b>Natural gas trading license</b>	5
<b>Limited natural gas trading license</b>	9

In 2013 the Authority performed the following functions in relation to the supervision of natural gas license holders:

- **Securing natural gas supply:**  
In order to secure safe supply of natural gas, the Authority continuously monitors the situation on the Hungarian natural gas market, as well as the activities and operations of individual players. In the heating season it prepared weekly forecasts for the case of

<sup>1</sup> Excluding license modification resolutions.

unexpected shortfalls in gas supply received from the Ukrainian border, as well as potentially extreme climate conditions.

- Development plan:**  
 On 30 October 2013 the Authority rejected the ten-year system development plan submitted by the transmission system operator and obliged the competent license holder to revise the proposal.
- Market supervision:**  
 The Authority investigated and passed resolution in relation to disputes between license holders in 20 cases.
- Regulation:**  
 The Authority granted approval for the rules, procedures and methods regarding the operation of the cooperating natural gas system, the minimum content requirements of agreements related to network usage, measurement-settlement and data exchange, as well as the Network Code, including the detailed rules of daily balancing submitted by the transmission system operator. The Authority participated in developing the regulation required to launch the balancing platform.

## District heating

The Authority is responsible for the licensing and supervision of district heating generators and suppliers. In relation to the licensing and supervision of the district heating sector, the Authority passed 67 resolutions in total, including the issuance of 31 new licenses in 2013.

**Table 4: New district heating licenses issued by the Authority in 2013**

<i>License type</i>	<i>Number of new licenses</i>
<b>Issuance of operating licenses for district heating suppliers</b>	7
<b>Issuance of operating licenses for district heating generation</b>	18
<b>Issuance of establishing license for district heating generation</b>	6

In supervising district heating license holders in 2013, the Authority functioned as mediator to provide swift and effective solutions to the disputes and relevant issues between the district heating supplier(s) and district heating generator(s). In this function the Authority provided guidance to local governments and the involved parties on district heating-related issues on numerous occasions.

## Water utility

The Authority continued its activities regarding the supervision of public water utility service providers in 2013: The Authority instituted proceedings against 79 public water utility service providers, which involved 113 local administrative areas and 425,000 customers. As a result, the Authority found infringement in 47 cases and prohibited the public water utility service providers to apply the unlawful price, obliged the service providers to apply the statutory price and reimburse the aggrieved customers in the amount of their income acquired from unlawful conduct. The Authority also ensured that reimbursements were duly made through posterior inspections.

The water utility operating licensing has also been conducted: Eighty-four business entities submitted their request before 31 May 2013 and 46 entities were granted license.



Based on the data provided by approximately 1,400 local governments during the preliminary data collection, the Authority instituted 70 inspections in total, which involved 90 local administrative areas and 23 service providers. Based on the statements received, the Authority identified 11 business entities in 26 local administrative areas who failed to comply with the provisions of the Vksztv. in providing water utility services.

In 2013 the Authority instituted 133 proceedings in total for appointing operators of public interest in order to ensure water utility services to be provided throughout the country in accordance with the provisions of the Vksztv.

## Price regulation

As a result of the liberalisation of electricity and natural gas markets (2008 and 2009 respectively) each customer is entitled to choose its electricity and gas supplier. In the free market, the prices of energy products are determined by the market, whereas customers eligible for universal service are entitled to purchase power and natural gas at a regulated price.

Similarly, households and public institutions can purchase district heating at a regulated price, while district heating prices are set in bilateral agreements for the rest of customers.

The Authority acts as the price regulatory body in the supervised sectors. Within the electricity and natural gas sectors, the Authority prepares the universal service prices for the Minister. The Authority also prepares the fees of district heating generation and service provision, as well as the utility fees for water and waste management. The Authority determines the system charges of electricity and natural gas in regulation.

In addition, the Authority supervises fees and carries out cost review. In supervising fees, the Authority examines whether license holders actually apply the fees set by the Ministry or the Authority. During the cost review process, the Authority determines the eligible costs for license holders, which forms the basis of regulated price setting.

In line with the governmental decision on prices, the Authority prepared the utility cost reduction at the end of 2012, meaning a 10% cut in natural gas, electricity and district heating household prices effective from 1 January 2013. As of 1 November 2013, the end user household prices of natural gas, electricity and district heating were further reduced by 11.1% which totalled to a 20% price decrease in comparison to the end user prices in 2012.

## Electricity

The full end user price of electricity for users eligible for universal service consists of the universal service fee of electricity, the system charges, the energy tax paid by non-household users and the VAT thereof, as well as the separately treated cash-at-hand and bank deposits (subsidy for the structural reform of coal industry, subsidy for the reduced-price electricity supply for electricity industry pensioners, subsidy for connected production structure reorganisation) paid only by non-household users as of 1 November 2013 as stipulated in Section 147 of the VET.

The household end user prices of electricity were reduced by 10.1% as of 1 January 2013 and were further reduced by 11.1% on 1 November 2013.

## Natural gas

The universal service end user prices (fix and variable charge) contain the product price of natural gas, the system charges and working gas financing charges, as well as the trade margins. The price is liable to VAT but the prices contained in Decree No. 28/2009. (VI. 25.) KHEM on determining the tariff rates related to universal service provision on the natural gas market are exclusive of VAT.

The contribution fee of members of the Hungarian Hydrocarbon Stockpiling Association (strategic stockpiling fee) passed through to non-household customers appears separately on the bills of universal service providers, which has accounted for 0.0605 HUF/MJ since 2012. From January 2013, licensed universal service providers may recover this fee based on household consumption and, as a consequence, cannot charge this fee on customers.

The specific natural gas price is determined based on the natural gas price formula set out in Decree No. 29/2009. (VI. 29.) KHEM on the pricing of prices related to universal service provision on the natural gas market. This formula takes several factors into account. In the case of non-storage natural gas, the 70% weight of regulated (spot [immediate] and forward) prices and 30% weight of the price of natural gas purchased on the basis of the long-term contract remained unchanged in 2013. In the case of natural gas from storage, regulated market prices account for 90%, while the price of natural gas purchased on the basis of the long-term contract accounts for 10%.

The regulation on the Authority's status grants the Authority statutory power and entitlement to set system charges in regulation. As a result, system charges were set in regulation as issued by the Authority during the regular price determination process as of 26 July 2013.

Due to the Government's utility cost reduction measures, an extraordinary price determination was carried out in November 2013. The end user price of natural gas was reset twice in 2013:

- On 1 January 2013 the end user price for household customers (including HUSA fees) was reduced by 10%.
- Household end user prices were reduced by another 11.1% as of 1 November 2013. Thus, the decrease in household prices (including HUSA fees) reached 20% in comparison to 2012 prices.

The prices for non-household end users purchasing natural gas under universal service remained unchanged.

## District heating

The Authority is responsible for the preparation of the proposal regarding district heating prices sold to district heating service providers, district heating prices for households and specific institutions, and district heating subsidies before 31 August of each year. In 2013 the Authority prepared its proposal regarding prices and subsidies for the 2013/2014 heating season, which entered into force as of 1 November 2013. Pursuant to the government resolution on utility cost reduction, a 10% price cut in the household end user district heating prices was adopted in the Authority's proposal as of 1 January 2013. In line with the governmental decision, the Authority proposed an 11.1% reduction in household end user prices as of 1 November 2013.

The Authority also contributed to the elaboration of the methodology for preparing the prices of district heating. As a result, prices are prepared today in a transparent manner, using the methodology specified in the relevant provisions.

Following several consultations with the district heating sector, the Authority prepared proposal No. 1/2013 regarding the gas purchase of district heating service providers and district heating generators, a revised and amended version of its successfully implemented 2012 proposal, which facilitated the conclusion of contracts under the most favourable terms possible for the sector.

The Authority is responsible for the continuous monitoring of the application and granting of district heating subsidies and, in case of infringement, for taking the necessary official actions and for reaching a decision as well.

### **Water utility**

The Authority sends its proposal concerning the applicable fees to the Minister by 15 October each year; this will take place for the first time by 15 October 2014. Accordingly, the regulation of prices applied by public water utility service providers starts in 2014 and the prices determined will be effective as of 2015. However, in order to complete the task the Authority already started to elaborate the price regulation concept and methodology in 2012.

In 2013 requests regarding approximately 50 local administrative areas were submitted to the Authority for setting price for services not provided before, the majority of which has been submitted to the Ministry or the specific facts of the case are being examined under proceedings.

Pursuant to the provisions of the Vksztv., a division compatible with the Authority's structure, in charge of monitoring and regulating the water utility sector was developed in 2012, which continued its official activities in accordance with the new regulations in 2013.

### **Public waste management services**

The Authority commenced the preparation of regulating public waste management service fees, which falls under the statutory power Minister of National Development. Due to the interim legislative changes, the Authority was obliged to submit its proposal – based on which the Minister of National Development can adopt a decree – relating to public waste management service fees only in 2014.

In 2013 the Authority has instituted the official inspection of the public waste management services fees applied by 28 public waste management service providers, which involved 2,828,800 residents in 197 local administrative areas. As a result of the inspections, the Authority terminated the proceedings in 10 cases and found that public waste management service providers applied an unlawful pricing and obliged the service providers to refund the income acquired from unlawful pricing in 3 cases. At the preparation of the present report, the remaining 15 official proceedings are in progress.

In 2013 the Authority was assigned to examine the eligible additional costs of public utility service providers appointed in accordance with the rules of non-regular waste transport and provide an opinion about the related subsidy claims. The Authority published all the documents required for the examination of eligible additional costs along with the methodology of examination on its website.

## **International activities**

### **Energy saving, energy awareness**

In 2012 the new energy efficiency directive of the EU (2012/27/EU, Energy Efficiency Directive, hereinafter referred to as: EED) was adopted, which sets mandatory energy efficiency targets for member states, including the decrease of energy consumption by service providers or the renovation of central government buildings to achieve higher energy efficiency. For the implementation of the directive, an Energy Efficiency Working Group has been established within the Authority. The Working Group supports and coordinates the close professional cooperation of the Authority with the Ministry of National Development (NFM) responsible for the transposition of EED. The Authority is closely affected by several EED areas and actively participates in the preparation of EED-related legislation. The Energy Efficiency Working Group assists NFM in the elaboration of the related strategies on request on a daily basis.

Furthermore, the Authority also contributes to the implementation of the energy saving and energy efficiency strategy of the Government.

The Authority delegates experts to the Energy Efficiency (EE) Working Group of the International Energy Agency (IEA). The main activities of the IEA EE Working Group are the following: preparation of general political proposals, monitoring the energy efficiency market of OECD member states, examination of the external impacts of energy efficiency-related policies (e.g. in terms of industrial competitiveness or health care), preparation of international databases (e.g. Policies and Measures Databases), international cooperations (e.g. with UN-bodies).

### **The integrity and transparency of wholesale energy markets (Regulation [EU] No 1227/2011)**

Regulation (EU) No. 1227/2011 of the European Parliament and the Council on the integrity and transparency of wholesale energy markets entered into force on 28 December 2011. The regulation is a regulatory framework specific to the energy industry to prevent market abuses.

The European Commission specifies implementing measures regarding the date and format of data provision of wholesale energy market transactions, and the agreements and derivative products to be reported. One of the most significant tasks of 2013 was for the Authority to participate in the elaboration of the final texts relating to the regulation, thus the relevant comitology proceedings commenced in December. The comitology proceedings are expected to be completed in the second quarter of 2014.

Following a series of consultations and revisions, the Hungarian harmonisation proposal required to implement Regulation (EU) No. 1227/2011 was submitted as a bill to the Parliament during the autumn session. The implementation of the regulation required the amendment of the VET and the GET, which entered into force on 1 October 2013. Another major assignment was the implementation of the CEREMP system – developed by ACER to provide a register of market participants – for which a user's manual was drawn up and the testing system was tried between November and December 2013. The Authority forwarded a report of its findings to ACER.

In November 2013 the Authority held a four-day industry forum for wholesale market players on Regulation (EU) No. 1227/2011 and the Hungarian regulatory issues, where participants could learn

about the legal framework and listen to presentations about the new electronic platform to be used for publishing inside information as of 1 January 2014.

## Regulation on infrastructure

On 17 April 2013 the European Parliament and Council adopted the regulation on guidelines for trans-European energy infrastructure (347/2013/EU) which imposed a number of new competences and responsibilities on the Authority. The Authority became member of the regional groups in charge of selecting the European Projects of Common Interest (PCI) and evaluated the submitted Hungarian development proposals.

Pursuant to the provisions of the regulation, in November 2013 ENTSO-E (European Network of Transmission System Operators for Electricity) and ENTSO-G (European Network of Transmission System Operators for Gas) published a draft cost-benefit analysis methodology which aims to facilitate a consistent assessment of future projects with cross-border impacts. Regulatory authorities and ACER are obliged to form an opinion about the proposal and inform the European Commission and member states thereof.

## Customer protection

One of the main functions of the Authority is facilitating a better representation of consumer interests. In this function, the Authority examines the quality and continuity of services provided for end users, the quality of customer service provided by energy suppliers, and whether the criteria for providing the so-called Guaranteed Services are met. The Authority examines the conduct of service providers both ex officio and on the request of customers under shared competence with the Hungarian Authority for Consumer Protection.

In addition to the proceedings conducted, the Authority is also in charge of approving the general terms of business of universal service provider and distributor license holders which serves as another tool for improving customer protection. Protecting consumer interests is a key aspect for the Authority in reviewing general terms of business.

The Authority handled 6,415 cases concerning the protection of customers in 2013, representing a 25% growth compared to the number of cases a year earlier. Direct customer complaints accounted for 76.3% of the cases. 51.2% of the complaints received were related to natural gas supply, while 43.8% to electricity supply.

The Authority recognised that consumers expect objective information on the utility cost reduction decreed by the Parliament and launched a call centre to provide consumers with accurate and up-to-date information on utility cost reduction. In 2013 6,682 consumers contacted the Authority for information on utility cost reduction. The Authority also published specific information on utility cost reduction on its website.

The correctness of data supply to the Authority and the management of automatically payable penalties under the Guaranteed Services were inspected. In order to ensure the reliability and continuity of electricity supply, on-the-spot inspections have been carried out at each licensed electricity distributor following previous years' practice. The same inspections have been carried out in the case of natural gas supply.

Customer satisfaction surveys were conducted, findings assessed and action plans for remedial actions completed in 2013 as well. The Authority conducted the survey for the 17th time this year to examine customer satisfaction in regard to the activities of licensed electricity and natural gas service providers.

## Other activities and publicity

In line with the plan contained in the annual communication strategy, the Authority organised several external and internal events, press conferences and executive meetings in 2013. The Authority issued 56 press releases in 2013 which – due to the successful systematisation of (specialised) press – generated more than 1,000 positive media releases.

As part of its press communication, the Authority answered more than 100 queries from journalists and organised several press events and interviews. At the end of the year, the renewed Authority entered into a media sponsorship agreement with InfoRádió Kft and launched the revision of the public relations collaborations initiated by the Hungarian Energy Office.

At the end of May 2013 the Authority launched a brand design tender, which was unsuccessful. Thus, in December 2013 an internally recruited Branding Project Team was established to create the Authority's brand guidelines.

**Table 5: The Authority in the press in 2013**

Period	Number of press releases	Media releases			
		Print	Radio and television	Online	Total
January	2	4	1	54	59
February	0	0	0	0	0
March	2	1	1	3	5
April	7	19	6	77	102
May	4	11	6	35	52
June	7	17	3	92	112
July	8	20	6	63	89
August	7	18	36	58	112
September	4	4	0	49	53
October	8	35	63	161	259
November	5	21	34	93	148
December	2	11	2	22	35
<b>Total in 2013</b>	<b>56</b>	<b>161</b>	<b>158</b>	<b>707</b>	<b>1026</b>

Based on the experiences of 2013, the Authority prepared for the challenges of the 2014 year strengthened, led by a new spokesperson and with the aim of building a more proactive official communication.

# **1. The operation, financial management and relations of the Hungarian Energy and Public Utility Regulatory Authority**

## **1.1. Legal status and responsibilities of the Authority**

The Authority was established as the legal successor of the Hungarian Energy Office under Act XXII of 2013 on the Hungarian Energy and Public Utility Regulatory Authority as of 4 April 2013.

The Authority is an independent regulatory body of the energy and utilities industry, responsible for the licensing, supervision, price regulation and price preparation for electricity, natural gas, district heating, and water utility, as well as the price preparation of public waste management services.

The Authority is in charge of supervising the activities of entities and individuals subject to the act on natural gas supply, the act on strategic stockpiling of natural gas, the act on electricity, the act on district heating supply, the act on water utility supply and the act on waste, and any regulation issued pursuant thereto.

The Authority's principal activities stipulated in its statute are the following:

The Authority carries out functions in relation to

- natural gas and electricity supply;
- ensuring the security of the natural gas and electricity supply and effective operation of the natural gas and electricity market;
- strategic stockpiling of natural gas;
- application of the requirement of equal treatment and fostering effective competition;
- licensing of establishing district heating generation facilities and district heating generation, approval of the connection charge of district heating, preparation of proposal regarding the price for district heating sold to district heating service providers and the fee of district heating supplied to household customers and priority institutions, as well as reviewing district heating-related subsidies;
- elaboration of the framework rules for determining and regulating natural gas and electricity system charges, the criteria for determining connection charges and the elements of connection charges, and rules for the fees and scope of universal service and services to be provided for a specific fee, preparation of the amount of subsidy and equalised subsidy for connected production structure reorganisation for domestic natural gas producers in relation to natural gas offerings and the price of domestic production, as well as customer protection-related duties relating to natural gas, electricity and water utility supply as stipulated in pertaining regulations;
- legislative duties;
- obligations stipulated in the Act on water utility supply;
- issuance of guarantee of origin for electricity produced from renewable energy resources or waste, and electricity generated in co-generation facilities;
- price determination, price preparation and price revision relating to public waste management services as stipulated in pertaining regulations;

In fulfilling its energy statistics-related duties, the Authority:

- collects and handles energy-related statutory data as part of the National Statistical Data Collection Program;
- implements and maintains the information system of national energy and utility statistics to provide public information;
- supplies data to the European Union, international organisations and organisations of official statistical services in accordance with the provisions of the VET, Stt. and other relevant legislations.

The establishment of the Hungarian Energy and Public Utility Regulatory Authority brought about major organisational and personnel changes. The operation of the Authority in its new status is regulated in the Organisational and Operational Rules which came to effect under Directive No. 1/2013. (VII. 25.) MEKH.

### 1.1.1. Detailed information on the Authority's legal actions

**Table 6: Detailed information on the Authority's legal actions in 2013:**

NON-CUSTOMER PROTECTION-RELATED LEGAL ACTIONS	
<b>Number of actions filed, of which:</b>	<b>37</b>
• Closed in 2013	16
• Suspended	1
• Halt	1
<b>Actions continued in 2013, of which:</b>	<b>89</b>
• Finally closed in 2013	39
• Suspended	0
• Halt	0
<b>Actions in progress in 2013, of which:</b>	<b>126</b>
• Finally closed in 2013	55
CUSTOMER PROTECTION-RELATED LEGAL ACTIONS	
<b>Number of actions filed, of which:</b>	<b>100</b>
• Closed in 2013	17
• Suspended	0
• Halt	2
<b>Actions continued in 2013, of which:</b>	<b>148</b>
• Finally closed in 2013	83
• Suspended	1
• Halt	0
<b>Actions in progress in 2013, of which:</b>	<b>248</b>
• Finally closed in 2013	83
LABOUR ACTIONS	
<b>Actions in progress in 2013, of which:</b>	<b>13</b>
• Finally closed in 2013	4

In 2013 the Authority issued 25 resolutions in relation to company law affairs and acquisition of a significant shareholding and 9 new internal policies. In total, 126 legal actions (37 filed in the year concerned and 89 in previous years) were in progress against – non-customer protection-related – resolutions and orders passed by the Authority in the course of 2013. Fifty-five of these actions were terminated in the course of the year concerned.

In total, 248 legal actions (100 filed in the year concerned and 148 in previous years) were in progress against – customer protection-related – resolutions and orders passed by the Authority in the course of 2013. Fifty-five of these actions were terminated in the course of the year concerned.



In addition, in 2013 thirteen labour rights-related lawsuits were in progress and 4 of them were terminated.

In total, 387 legal actions were in progress during the 2013 year, 159 of which have been terminated.

## **1.2. Financial management of the Authority**

The Hungarian Energy Office represented an independent title in the budget of the Ministry of National Development before Act XXII of 2013 came into effect.

Act XXXI of 2013 on the Amendment of Act CCIV of 2012 on the 2013 central budget of Hungary autonomously determines the Authority's budget under subtitle 23 of heading Parliament I. By operation of law, its new classification is: central budgetary institution with a legal status of an institution administering a heading.

The principal amounts of expenditures and revenues of the Authority's budget may only be reduced by the Parliament. The operation of the Authority is solely based on revenues originating from supervisory and administrative service fees. The volume and collection of revenues are governed by Decree No. 91/2007 (XI. 20.) GMK on the rate of administration service fees of the Hungarian Energy Office and the rules of paying administration and supervision fees, as well as by Act CCIX of 2011 on water utility supply. The Authority collected the expected supervisory and regulatory fees.

The volume of expenditures corresponds to the amount of expected revenues. Paragraph (2) of Section 10 of Act CCIV of 2012 obliged the Authority to pay 1,805 million HUF to the budget, 1/12 of which to be paid before the 20th day of each month starting February and another 1/12 on 10 December. The Authority fulfilled its statutory payment obligation. The Authority incurred an operation-related payment obligation in the amount of 224.1 million HUF towards the supervisory body, which we fulfilled in monthly instalments.

The funding of operational and accumulation expenditures was secure during the financial year. All supplier invoices have been settled. The Authority has fully complied with the statutory provisions regarding payment obligations.

## **1.3. The Authority's organisation**

The organisation of the Authority is determined by Directive No. 1/2013 (VII. 25.) MEKH on the organisational and operational rules of the Hungarian Energy and Public Utility Regulatory Authority. The present organisational structure ensures optimum conditions and clear roles and responsibilities for the Authority to conduct its duties of outstanding importance for the national economy.

The headcount of the Authority totals 280 as stipulated in the Organisational and Operational Rules. In shaping the new organisation, our aim is to recruit employees who are able to identify with the Authority's objectives, are highly qualified and help the Authority to meet the considerable demands and expectations imposed.

In operating the organisation, carrying out our activities in compliance with statutory provisions and creating a pleasant working environment was taken into account in 2013 as well. We also put emphasis on exploring opportunities relating to the recruitment and training of skilled professionals, e.g. the Hungarian Public Administration Scholarship Program.

## 1.4. Bilateral institutional relations

In 2013 the Authority continued to foster relationship with several domestic administrative bodies, institutions and other relevant entities.

Beside the Authority, other administrative bodies also take (partial or full) care of customer protection functions. The Authority maintained regular contacts with these institutions (Hungarian Competition Authority, Office of Parliamentary Commissioners, Parliamentary Commissioner for Data Security, Hungarian Authority for Consumer protection, Hungarian Trade Licensing Office) as a customary practice from the previous years, and conducted its work in coordination with them. The Authority conducted consultations with these administrative bodies and various parliamentary committees regarding customer protection issues on several occasions. As a consequence of the distribution of powers implemented in the previous years, the Authority also concluded a cooperation agreement with the Hungarian Authority for Consumer protection, under which it conducted consultations on professional issues on a monthly basis, or if necessary. In July 2013 the heads of the two organisations renewed the agreement. Regarding special complaints, the Authority also consulted the general inspectorates for customer protection of county (metropolitan) government office on a case-by-case basis in order to avoid collision of responsibilities under the distribution of powers.

The Authority has hold consultations with GVH regarding mutually relevant issues on several occasions. The Authority's representatives attended the meetings of the parliamentary working group responsible for utility cost reduction, the Authority provided an opinion about the pertaining bills, and contributed to the legislative process by reviewing several other industry-specific bills and creating proactive proposals.

Beside administrative bodies, the Authority maintained constant contacts with civil customer protection organisations, as well. As part of these contacts, civil organisations participated in providing opinion about amendments to general terms of business and regulatory concepts of service quality control, and attended meetings for evaluating the data supplied pursuant to certain regulations on quality standards.

The Authority attended the first meeting held by the customer protection working group of the Association of Hungarian District Heating Enterprises – founded in 2013 –, the aim of which is to foster the development of comprehensible, consistent customer protection rules and procedures, increase customer awareness, and promote fair and lawful market conduct.

The Authority regularly attended the national customer service conferences organised by Energetikai Kiadó. Two customer protection-themed presentations were held at the 2013 conference, and the Authority also provided consultation during the round table discussions regarding current customer protection and other professional issues.

## 1.5. International relations

In 2013 the Authority continued to actively participate in international collaborations on European, regional and bilateral level. The primary aim of these collaborations was to represent national interests and foster local initiatives at international forums, and adopt the international practices learned within the Authority. In addition to directly collaborating with international professional

organisations, the Authority also helped the work of the Ministry of National Development through its professional support for European legislative processes.

### **1.5.1. International organisations**

The Authority regularly cooperates with EU member states in the co-operational organisations of regulatory bodies of the European Union member states. These include the Council of European Energy Regulators (CEER), which is organised on a voluntary basis with the aim to exchange regulatory experiences and to develop common European regulatory positions in energy issues. The Agency for the Cooperation of Energy Regulators (ACER) is an official body of the EU (established under Regulation [EC] No 713/2009), with functions including the development of rules to foster the formation of a single internal European energy market through the coordination of close cooperation between national regulatory authorities. The Authority actively participates in the work of both of these organisations in relevant areas by taking part in the elaboration of legal provisions, resolutions and publications or assisting the bodies with its comments.

The Authority is also an active member of the Energy Regulators Regional Association (ERRA). This organisation encompasses the national regulators of several member states of the European Union and non-EU countries (primarily in Eastern Europe and Asia). The organisation's objective is to exchange experiences and provide coordinated preparations for new regulatory challenges, including the training of expert staff. In 2013 the Authority delegated members of its senior management and experts to participate in the work of three committees and one working group of ERRA: Chairmen Committee, Licensing/Competition Committee, Tariffs/Pricing Committee, Legal Regulation Working Group.

On 10 June 2013 ERRA held its annual General Assembly and three committee meetings in Budapest. At the assembly the ERRA-members with a voting right accepted the proposed amendments to the deed of foundation and elected the members of Presidium, including a senior representative of the Authority. On 12 June – for the first time in the history of ERRA – a water utility regulation workshop was organised, which was also attended by the water utility regulation specialists of the Authority.

In September 2013, the Vice President for International Affairs represented the Authority at the annually held conference of ERRA (12th ERRA Energy Investment and Regulation Conference) in Tallinn. ERRA held the upcoming meeting of the Legal Regulation Working Group in Budapest, supported by the Authority as the hosting body.

The Authority also attended the forums initiated by the EU Commission to facilitate the development of the European internal market in terms of regulations:

- European Gas Regulatory Forum (*Madrid Forum, 17-18 April 2013, 15-16 October 2013*);
- European Electricity Regulatory Forum (*Florence Forum, 15-16 May 2013, 12-13 November 2013*);
- European Citizens' Energy Forum (*London Forum, 16-17 December 2013*)

### **1.5.2. Regional collaboration**

The Authority contributed to the harmonisation of rules for fostering cooperation between the members states of EU electricity and natural gas market regions, including the preparation of expanding the Czech-Slovakian-Hungarian (CZ-SK-HU) market coupling with the inclusion of Romania and, later, Poland (interconnection of day-ahead electricity markets). In addition, the

preparations for developing a flow-based market coupling – according to the EU target model for the Central Eastern European (CEE) region – were conducted as part of the electricity regional initiative (ERI). In July 2013 the representatives of the energy regulatory authorities (ERÚ, ÚRSO, HEA, URE, ANRE), transmission system operators (ČEPS, SEPS, MAVIR, PSE, Transelectrica), and organised electricity market operators (OTE, OKTE, HUPX, TGE, OPCOM) of the five countries signed a common Memorandum of Understanding . Their aim was set to provide a lower-priced electricity supply for the consumers of the countries involved through an extended regional market and more efficient utilisation cross-border capacities. The price of the periodic, average day-ahead baseload (a product related to continuous, 24-hour supply) has dropped significantly since the market coupling of the Hungarian organised electricity market (HUPX).

On 6 November 2013 the Presidents of the energy regulatory authorities of the Visegrád Group signed a common declaration in the Authority's headquarters. They also decided to establish a Permanent Forum under which they agreed to help develop a competitive, safe and environmentally sustainable internal energy market in close cooperation with the regulatory authorities of other member states, and fulfil the requirements of the effective and reliable operation of electricity and natural gas networks.

In 2013 the Authority continued the preparatory and consultation process with Hungarian market actors involved in the integration of the energy markets within the EU. The aim of meetings was to inform domestic market and administrative actors and industry experts about the development process of the new mandatory regulations introduced in the European Union (Network Codes) and how they can be influenced to promote domestic interests, as well as to discuss the operation of the single European target models already set up for certain market segments and procedures, and the necessary (administrative and market-related) steps involved in the preparations thereto.

### **1.5.3. Bilateral cooperation**

A number of bilateral consultations were held in 2013 between the experts of the Authority and representatives of foreign energy regulators in order to discuss key regulatory issues and to share experiences, including:

In January 2013 the Authority invited experts of ERO (Energy Regulatory Authority in Kosovo) for a two-day study tour to learn about the Hungarian regulatory and supervisory practice. The experts of the Authority gave presentations about professional topics related to price regulation, licensing, market supervision, customer protection and security of supply, and about the status and responsibilities of the Authority itself.

In April 2013 the Romanian and Hungarian regulatory authorities and TSOs held a consultation in regard to the introduction of quarterly, monthly and daily capacity products in Romania under the regulation issued by ANRE (Romanian Energy Regulatory Authority) as of 15 March 2013.

In May 2013 as per the request of the President of our Croatian partner, HERA the Authority shared its experiences relating to the EU-regulations on unbundling with the experts of the Croatian regulatory agency. In October 2013 we initiated and conducted a negotiation in Zagreb regarding the interconnector established under bilateral agreement but still not operating in a bidirectional manner due to the omission of the Croatian party.

In August 2013 the representatives of E-Control (Austrian Energy Regulatory Authority) and the experts of the Authority held a discussion regarding the benchmarking system for household end user prices and collaboration in support thereof.

In September-October 2013 the Vice President for International Affairs and experts of the Authority visited the Slovakian (URSO), Czech (ERU) and Polish (URE) regulatory authorities, where they held discussions of the interconnection and integration of the electricity and natural gas markets of V4 – and, broadly speaking, Central Eastern European – countries.

In September 2013 the authority attended the ‘Budapest Water Summit’, an event organised by the Foreign Office and the Ministry of Rural Development on water utility regulation. The Business Panel was launched by the Vice President for Public Utilities of the Authority. Our management and experts represented the Authority at the ‘World Water Week’ held in Stockholm in September 2013 as well as at the ‘International Water Week’ conference in November 2013.

Following a consultation with NFM and the Foreign Office, in October 2013 the management of EWURA (Energy and Water Utilities Regulatory Authority of Tanzania) visited Hungary to learn about the development of local energy and water utility regulation. A Memorandum of Understanding has been signed with the Tanzanian regulatory authority regarding the exchange of information, experiences and best practices, and various collaborations in several other areas.

In October 2013 a 27-member delegation of young experts of the Dutch regulatory agency (ACM) visited the Authority. Following a general introduction to the structure, operation and legislative environment of the authorities, the participants learned about the national electricity and natural gas markets and price regulation practice in detail.

In November 2013 the Authority negotiated with the management of AEEG (Italian Regulatory Authority for Electricity Gas and Water) regarding the elaboration of a proposal for developing a common European water utility regulation in cooperation with the partner organisations by spring 2014. The experts of the Authority contributed to the collaboration by handing over the texts of regulations.

In November 2013 the President and Vice President for International Affairs of the Authority met the representatives of the Russian Trade Commission at our headquarters to discuss potential opportunities for collaboration and current issues of energy policy.

## **1.6. Public information**

As to international obligations, the Authority provided regular or ad hoc data supply to various bodies of the European Union, ACER, the European Commission, EUROSTAT and several international organisations including IEA, CEER, ERRA, International Regulation Network (IERN) and OECD.

### **1.6.1. Statistics**

In 2013 the Authority continued to collect and process the statutory energy statistics data supplied by nearly 800 license holders containing the technical and financial information necessary for the proper functioning of the Authority. This meant the receipt, verification and registration of more than 35,000 data sheets annually – received

electronically through the data reception interface called Energy Information Database on the Authority's website.

Based on the data received, the Authority prepared regular or specific data reports to both domestic authorities and international organisations. As to international obligations, the staff members of the Authority also provided data to various bodies of the European Union, such as ACER, the European Commission and EUROSTAT, as well as several international organisations such as IEA; CEER; ERRA (the professional association uniting energy regulators of a number of countries in Central and Eastern Europe, Asia and the Middle-East); the International Energy Regulation Network (IERN) and the Organisation for Economic Co-operation and Development (OECD) on a regular or ad-hoc basis.

As in the previous years, the Authority released several general and thematic energy statistics publications in 2013, e.g. the annual guide of the Hungarian Energy and Public Utility Regulatory Authority. Furthermore, in close cooperation with MAVIR Zrt. (Hungarian Electricity Industry Transmission System Operator Company Ltd.) a publication titled 'Statistical Data of the Hungarian Electricity System (VER) 2012' was issued.

During the year new data requirements and sets of forms have been introduced in accordance with the demands of professional units and the changes in regulations.

Staff members of the Authority continued their work – commenced in 2011 – in the European Cooperation Platform established for the harmonised implementation of Directive 2009/28/EC of the European Parliament and of the Council on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC (Concerted Action on the Renewable Energy Sources Directive, hereinafter referred to as: CA-RES). Under this project, the Authority was primarily represented by its staff members in the working group established for the elaboration of a unified energy statistical methodology, and in the working group in charge of issuing and tracking of guarantees of origin.

In regard to the data collections regulated in Decree No. 288/2009 (XII. 15.) on data collected and taken over by the National Statistical Data Collection Program, the statistics unit expected to receive energy statistical data from approximately 5,700 data supplier. As to the procession of data, the methodological background was confirmed in the second half of 2013.

The statistics department carried out the maintenance and clarification of the water utility master database. The database contains the contact details and company data of public water utility service providers, the areas supplied by them, the service lines, and the service fees applied (for different time periods).

## 2. Operation and regulation of the Electricity market

### 2.1. Operation of the Electricity market

#### 2.1.1. Operating model

In the supply chain of electricity system, power generation companies sell the generated electricity to traders and universal service providers, who resell it on the wholesale market or supply it directly to customers. Electricity flows from generators to customers through transmission and distribution networks. Despite the monopolistic situation of the owners of this transport infrastructure, the domestic regulations ensure non-discriminatory access to the infrastructure in compliance with the EU regulations. The transmission and distribution activities are to be conducted by independent companies that cannot be involved in production or supply.

Figure 1: Structure of Hungarian electricity market in 2012 (physical flow)

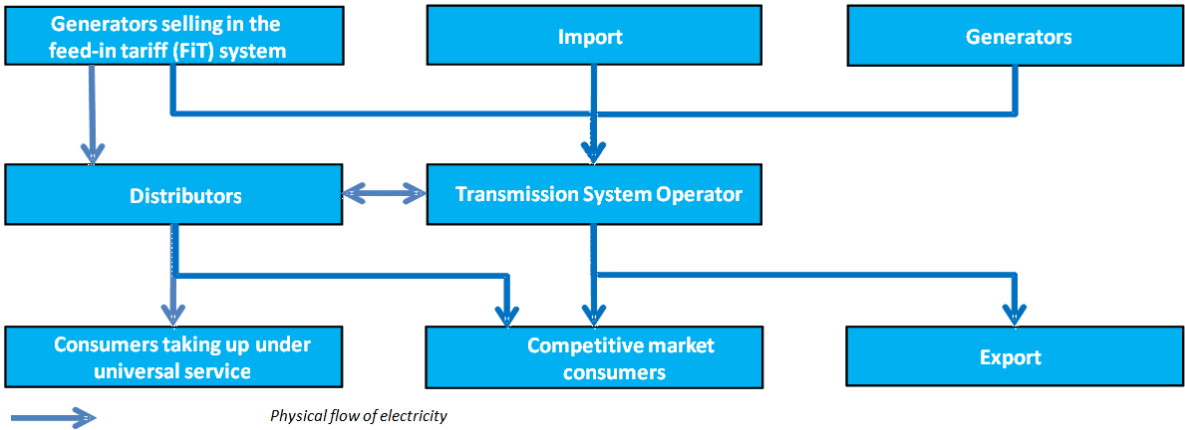
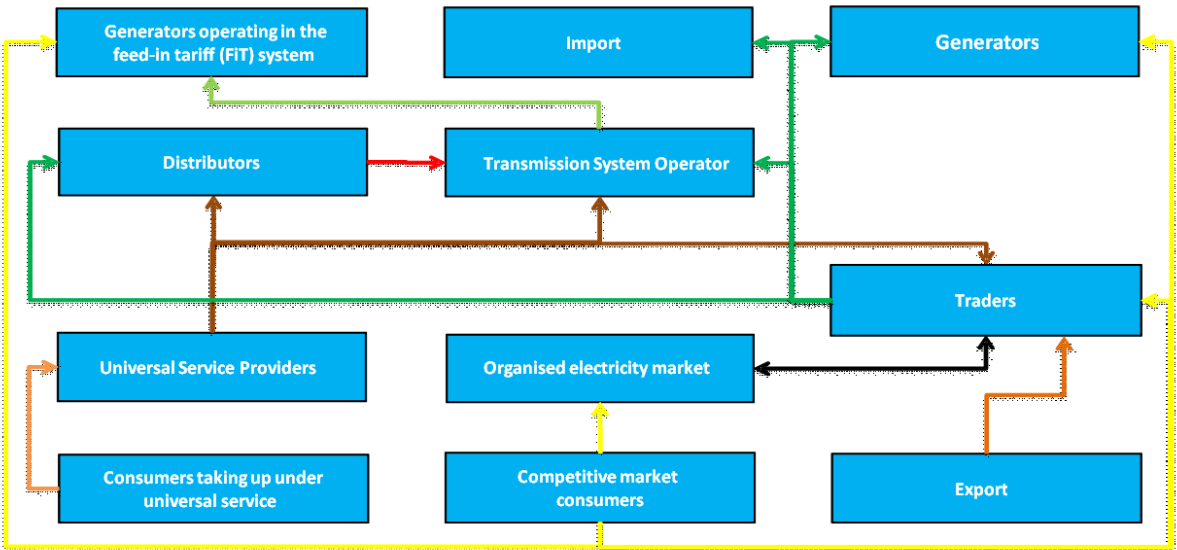


Figure 2: Structure of Hungarian electricity market in 2012 (financial flow)



The current structure of the Hungarian market essentially took shape around 1995, when the majority of large power plants, the operating public utility suppliers and the distribution networks were privatised.

Presently, domestic power plants sell the majority of their power generation in the framework of medium-term power purchase agreements concluded with the former public utility wholesaler (MVM), while their renewable and waste-based generation is bought by the transmission system operator (MAVIR Zrt., MAVIR Hungarian Transmission Operator Co.) in the framework of the feed-in tariff system at a price set in the relevant decree.

Approximately one fifth of power plant generation is sold directly to the free market in the framework of short-term (mostly annual) contracts. Typically, MVM establishes contracts with power plants for 5 to 8 years. MVM sells approximately half of the electricity purchased from domestic power plants through framework contracts, PSAs to universal service providers supplying electricity for customers eligible for universal service (residential and small customers, public institutions etc.). In 2013, about a quarter of the gross domestic electricity consumption took place in this channel subject to price regulation by the authorities.

Approximately half of the electricity available from generators is sold by MVM to traders either under bilateral contracts or at public capacity auctions. A significant part of primary purchases of traders goes through a secondary trade within the trading sector before reaching final customers or export markets. The trade of electricity generated from renewable resources and waste falls in a special trading category. This kind of electricity has to be purchased from generators by the transmission system operator under the feed-in tariff system (FiT) (at a price specified in the respective legislation and in volumes and during a period defined by the Authority). Traders are obliged to buy electricity from MAVIR sold in the framework of FiT and the corresponding balancing energy in the proportion of their sales to customers.

### **2.1.2. The generation and wholesale markets**

The total installed capacity of domestic power plants amounted to 9166 MW by the end of 2013, of which four units of the Paks Nuclear Power Plant accounted for 2000 MW. Further significant power plant capacities are the natural gas-fired Dunamenti Power Plant (1068 MW), and the basically lignite-fired Mátra Power Plant (950 MW).

While the concentration of power generation capacities is relatively low, a higher concentration can be observed on the wholesale market parallel to this. This is due to the fact that the former public utility wholesaler (MVM Rt.) reserved the majority of the capacities required to supply end customers by concluding long-term agreements (HTMs) during the years of the power plant sector privatizations (1995–1997).

However, the resolution of the European Commission dated 4 June 2008 ordered the termination of all HTMs as well as the reimbursement of all prohibited state subsidies by the given power plants. Act LXX of 2008 on certain issues related to electricity (hereinafter referred to as: the HTM Act) stipulated the termination of said agreements with effect from 31 December, 2008. MVM concluded new 5-8 year agreements with the majority of the affected power plants.



**Table 7: The market share of the domestic power generation companies/groups in 2013 by installed capacity and generation**

	Installed capacities (MW) <sup>12</sup>	Market shares (by capacity) <sup>13</sup>	Net generation (TWh)	Market shares (by generation) <sup>14</sup>
<b>MVM<sup>1</sup></b>	2766	30%	15.13	<b>38.76%</b>
<b>GDF SUEZ<sup>2</sup></b>	1068	12%	0.94	<b>2.42%</b>
<b>RWE<sup>4</sup></b>	950	10%	5.42	<b>13.88%</b>
<b>Tisza Erőmű Kft.<sup>4</sup></b>	900	10%	0.00	<b>0.00%</b>
<b>E.ON<sup>5</sup></b>	528	6%	0.37	<b>0.95%</b>
<b>Alpiq<sup>6</sup></b>	403	4%	0.92	<b>2.36%</b>
<b>EdF<sup>7</sup></b>	396	4%	0.91	<b>2.34%</b>
<b>AES f.a.<sup>8</sup></b>	337	4%	0.00	<b>0.00%</b>
<b>Other domestic power plants<sup>9</sup></b>	1698	20%	3.46	<b>8.87%</b>
<b>Total net generation of domestic power plants</b>	9046	100%	27.15	<b>69.57%</b>
<b>Net import</b>			11.88	<b>30.43%</b>
<b>Gross consumption</b>			39.03	<b>100.00%</b>
<b>3 largest power generation companies<sup>10</sup></b>	4784	51.85%	21.49	<b>55.05%</b>
<b>HHI index<sup>11</sup></b>		<b>1318</b>		<b>1713</b>

**Explanation:**

Power generation companies in this table are understood as the majority shareholder investor groups having a majority ownership of the power stations. The grouping by company only includes power plants with installed capacities of 50 MW or above.

1. MVM: Paksi Atomerőmű Zrt., Vértesi Erőmű Zrt., MVM GTER Zrt., BVMT Bakonyi Villamos Művek Termelő Zrt.
2. GDF SUEZ: Dunamenti Erőmű Zrt.
3. RWE: Mátrai Erőmű Zrt.
4. Property of Invest Finance Consulting Group Zrt.
5. E.ON: E.ON Erőművek Kft., Debreceni Kombinált Ciklusú Erőmű Kft.
6. Alpiq (Atel until 1 February 2010): Csepeli Áramtermelő Kft.
7. EdF: Budapesti Erőmű Zrt.
8. AES: AES Borsodi Energetikai Kft. "f.a."
9. Consolidated share of power plants with a market share below 5%
10. Calculated according to gross installed capacity.
11. The concentration indices one may obtain are higher when calculated with available or actually usable capacities and lower when taking import capacities into consideration. Upon calculation of the HHI index, power plants with installed capacities below 50 MW (the line "Other domestic power plants") have not been taken into account.
12. Calculated according to the 12th month of the year concerned.
13. Net (fed to the grid) generation of the power generation company in question divided by the gross national consumption.
14. Gross generation of the given power generation company divided by the total national consumption.

The Authority shall monitor the rate of return of the power plants concerned on an annual basis up to the end of the subsidy program, i.e. up to the date when the original HTMs were due to be terminated and shall prepare a consolidated account for each of the generators at the end of the program. Provided the investments related to the HTMs pay off or a transition cost is incurred which was offset without eligibility pursuant to the HTM Act, – in other words, if the power generator retains power generation without reason, requests the suspension of its power generation license or if its power generation license has been withdrawn – the Authority shall establish an obligation of reimbursement of the government subsidies for the power generator.

In accordance with the HTM Decree, the Authority shall inform the Ministry of National Development once annually, not later than 30 April after the year concerned, on the trends observed in the rate of return of the power generators in question (Budapest Power Plant and Dunamenti Power Plant). No reimbursement occurred in the year 2013.

**Table 8: Sales patterns of national power generation companies**

	Sales of electricity (TWh)			Share
	2011	2012	2013	2013
<b>MVM</b>	22.6	22	20.3	<b>72.30</b>
<b>Trader</b>	5.1	6.5	5.5	<b>19.70</b>
<b>Power feed-in tariff system</b>	4	1.9	1.9	<b>6.60%</b>
<b>Other</b>	0.9	0.5	0.4	<b>1.40%</b>
<b>Total</b>	<b>32.6</b>	<b>30.9</b>	<b>28.1</b>	<b>100%</b>

The structure of the wholesale electricity market is different in terms of selling to universal service providers and traders. The universal service providers have majorly purchased electricity from MVM also in the year 2013. In the universal service provider segment subject to price control by the authorities (although its size is only a fraction of that of public utility), MVM remained a dominant player in 2013 with its market share of 78%. In 2013, the universal service providers no longer needed to purchase renewable energy generation subject to the feed-in tariff system.

**Table 9: Procurement patterns of universal service providers**

	Electricity procurement (TWh)			Share
	2011	2012	2013	2013
<b>MVM</b>	10.8	10.8	9.1	<b>77.7%</b>
<b>Power feed-in tariff system</b>	1.7	0.6	0.0	<b>0.0%</b>
<b>Other</b>	0.9	0.8	2.6	<b>22.3%</b>
<b>Total</b>	<b>13.4</b>	<b>12.2</b>	<b>11.7</b>	<b>100.0%</b>

Contrary to universal service providers, the procurement activities of free market traders are determined by wholesaling activity besides customer demand. Primary purchases of traders in 2013 (i.e. disregarding trading among traders) relied essentially on four basic sources (Table 10). These included import sources, electricity from power generation capacities reserved by MVM, sales by domestic power plants outside FiT and reselling electricity purchased by MAVIR under the feed-in tariff system and power originating from balancing the FiT balance group. Electricity purchased from primary sources (a significant part of it was subject to trader to trader transactions previously) is sold partly on the domestic wholesale and retail market and partly abroad.

**Table 10: Primary procurement patterns of traders<sup>1</sup>**

	Electricity procurement (TWh)			Share
	2011	2012	2013	2013
<b>Import</b>	23.3	23.2	22.0	<b>55.8%</b>
<b>MVM</b>	10.6	9.9	10.1	<b>25.6%</b>
<b>Domestic power plants</b>	5.1	6.5	5.5	<b>14.0%</b>
<b>Other<sup>2</sup></b>	2.8	1.4	1.8	<b>4.6%</b>
<b>Total</b>	<b>41.8</b>	<b>41.0</b>	<b>39.4</b>	<b>100.0%</b>

**Explanation:**

1. Primary procurement of traders means electricity purchased directly from domestic power plants, import or from MVM. The table does not contain the significant transaction volumes among the traders and their turnover realised on the organised market.
2. E.g. electricity purchased under the feed-in tariff system or balancing energy procured from the transmission system operator.

Although an organised energy market (i.e. power exchange) had already been established earlier in Hungary, similarly to EU member states, electricity trading still took place in essence in the form of bilateral energy contracts in 2013. For purposes of comparison, the trading system of the HUPX (Magyar Szervezett Villamosenergia-piac Zrt., HUPX Hungarian Power Exchange Company Limited by Shares) hosted volumes of 9.1 TWh spot and 7.1 TWh forward products in 2013, while the trader to trader sales turnover according to the data provided by traders was close to 150 TWh in the same year. In spite of this, the volume of spot products traded on HUPX in comparison to domestic consumption is even considered high by international standards: In 2013, it exceeded 23% of the gross domestic consumption.

The jurisdiction of ex-ante intervention stipulated in the VET intended to prevent abuse of market power is exercised by the Authority to influence the evolution of free market prices. Official ex-post (competition supervision) functions laid down in Act LVII of 1996 on the prohibition of unfair trading practices and unfair competition (hereinafter referred to as the Competition Act) concerning the subsequent investigation and sanctioning of the abuse of dominant position are performed by the Hungarian Competition Authority (hereinafter referred to as: GVH).

The VET applies special rules in order to avoid abuse of significant market power: the regulatory practices applicable for licensees with significant market power were introduced which is a new tool in the regulation of the electricity sector but is well known in the electronic communications industry. The Act and the corresponding enforcement decree contain detailed provisions for the purposes of identification and management of licensees with significant market power.

Under this new regulation the Authority as a supervisory agency may impose additional special obligations (such as electricity sales under public capacity auctions, cost based pricing, preparation of sample bids, etc.) on any licensee deemed to possess significant market power after the conduct of a market analysis – be it a player on the wholesale or retail market.

Imposing obligations serves the prevention of abuse of market power and the establishment of more efficient market competition. The Authority identifies the licensees possessing significant market power based on market analyses in collaboration with the GVH and imposes special additional obligations adjusted to their respective market positions.

### **2.1.3. The retail market**

The retail market has been characterised by a dual structure since the market opening in 2003, i.e. the two distinct segments of the regulated price and the free market. As of 2008, the regulated public utility services formerly available to all customers were replaced by universal services, available to a far more limited range of eligible customers.

Customers eligible for universal services are still predominantly supplied by the former public utility service providers, now holding universal service provider licenses. Universal service providers are obliged to sell electricity to and establish contracts with customers eligible to universal services.

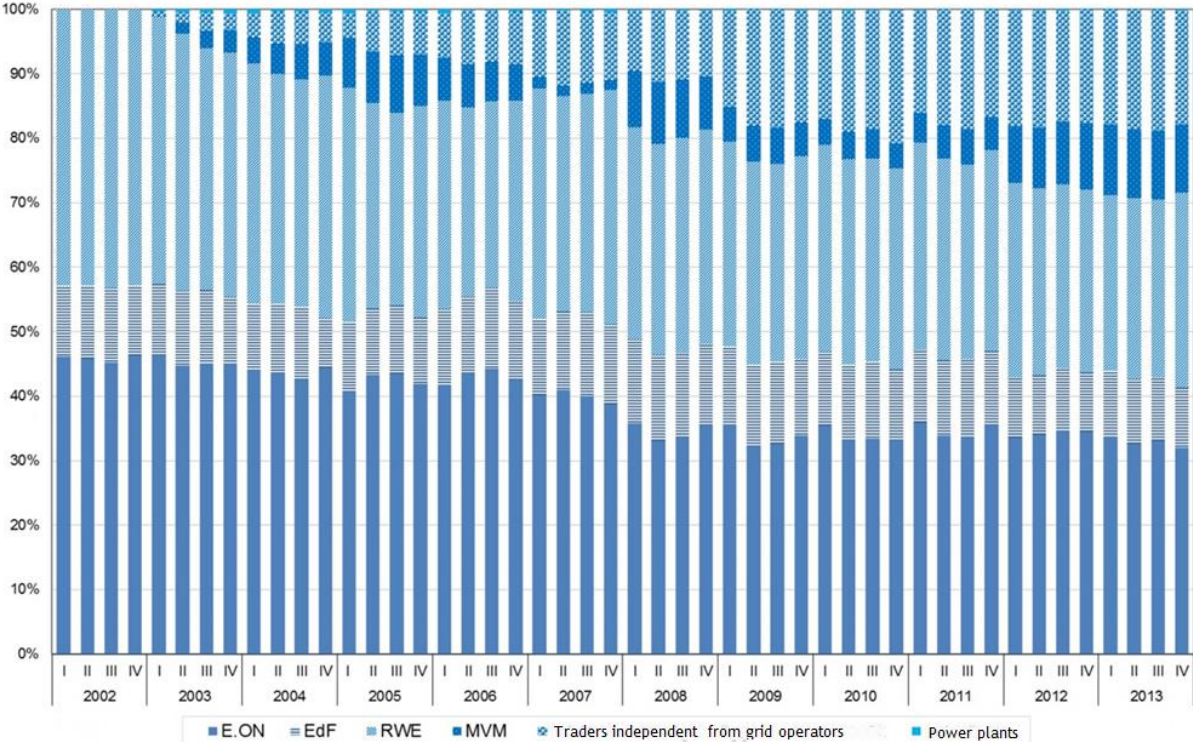
Customers not eligible for universal services either purchased power from the free market earlier on (mainly large customers) or were exposed to the free market only upon termination of the public utility scheme (mainly medium and small non-household customers). Small customers exposed to the free market in 2008 upon termination of the public utility services mostly remained with their

former service providers, who supplied energy to these free market customers holding their respective trading licenses.

Companies holding universal service provider and trading licenses – E.ON Energiaszolgáltató Kft. (E.ON Energy Supplier Ltd.), Budapesti Elektromos Művek (ELMŰ) Nyrt. (Budapest Electric Works Ltd.), Észak-magyarországi Áramszolgáltató (ÉMÁSZ) Nyrt. (North Hungarian Electricity Supply Plc.) and EDF Dél-magyarországi Áramszolgáltató (EDF DÉMÁSZ) Zrt. (EDF South Hungarian Electricity Supply Ltd.) – are also interested in the operation of the distribution grids through their subsidiaries or affiliates. The universal service providers are owned by three multinationals – E.ON, RWE and EDF –, also providing power to users through other trading companies apart from those referred to above. The total market share of these groups of companies on the domestic retail market is still significant even 10 years after market opening in 2003, amounting to about 70%, meaning they lost 30% of their market in the past 12 years.

The strong market concentration was reduced by the appearance of traders undertaking the supply of customers upon market liberalisation in addition to their wholesale trading operations. They equally included multinational companies controlling several subsidiaries in the region and smaller domestic traders. About thirty traders with no proprietary relations to domestic distribution system operators were active on the retail market in 2013. Their respective share was – similarly to last year – approximately 20%. MVM’s market share is 10%.

**Figure 3: Changes in the retail market share of investor groups (2002–2013)**



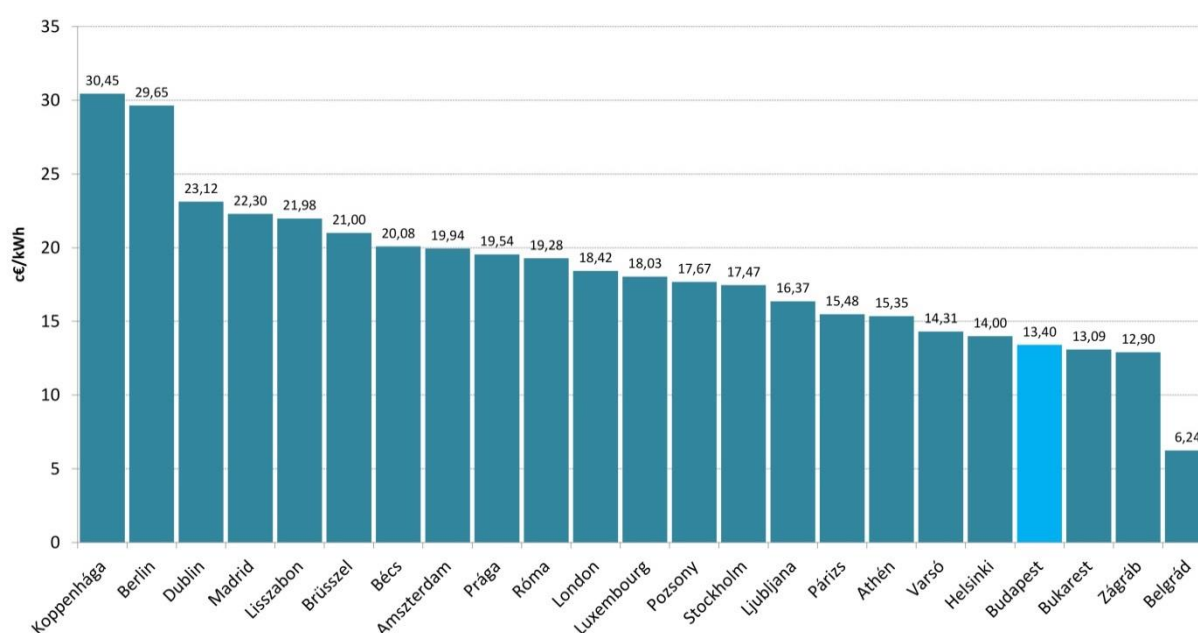
The market share of the three large multinational groups (E.ON, EDF and RWE) is still high as the majority of users purchase electricity in the form of universal service. It however must be emphasized that hardly over half of the approximately 380,000 free market customers are served by the traders of the three large groups of companies (primarily the small and medium customers not eligible for universal services).

**Table 11: Market shares based on the number of points of delivery in December 2013**

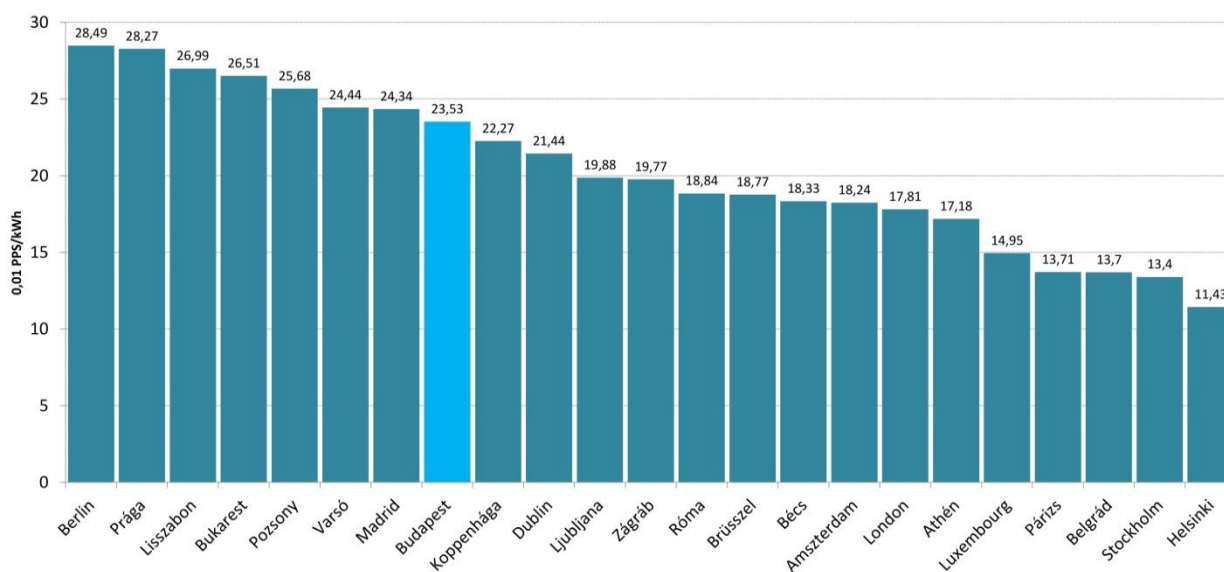
Company/Number of customers	Universal service	Free market	Total	Share (of the total)
E.ON Energiaszolgáltató Kft.	2,407,133	81,512	2,488,645	<b>44.15%</b>
ELMŰ Nyrt., ÉMÁSZ Nyrt., Magyar Áramszolgáltató Kft.	2,109,961	95,782	2,205,743	<b>39.13%</b>
EDF DÉMÁSZ Zrt.	739,468	16,860	756,328	<b>13.42%</b>
Magyar Telekom Távközlési Nyrt.	0	106,287	106,287	<b>1.89%</b>
MVM Partner Energiakereskedelmi Zrt.	0	55,217	55,217	<b>0.98%</b>
Other	0	24,807	24,807	<b>0.44%</b>
<b>Total</b>	<b>5,256,562</b>	<b>380,465</b>	<b>5,637,027</b>	<b>100%</b>

On a European scale – as reported by HEA (Hungarian Energy and Public Utility Regulatory Authority) – residential end user prices were one of the lowest in the region. If calculated by purchasing power parity, they are in the mid-range.

**Figure 4: Mean electricity prices for household consumers (EUR cent/kWh), December 2013**

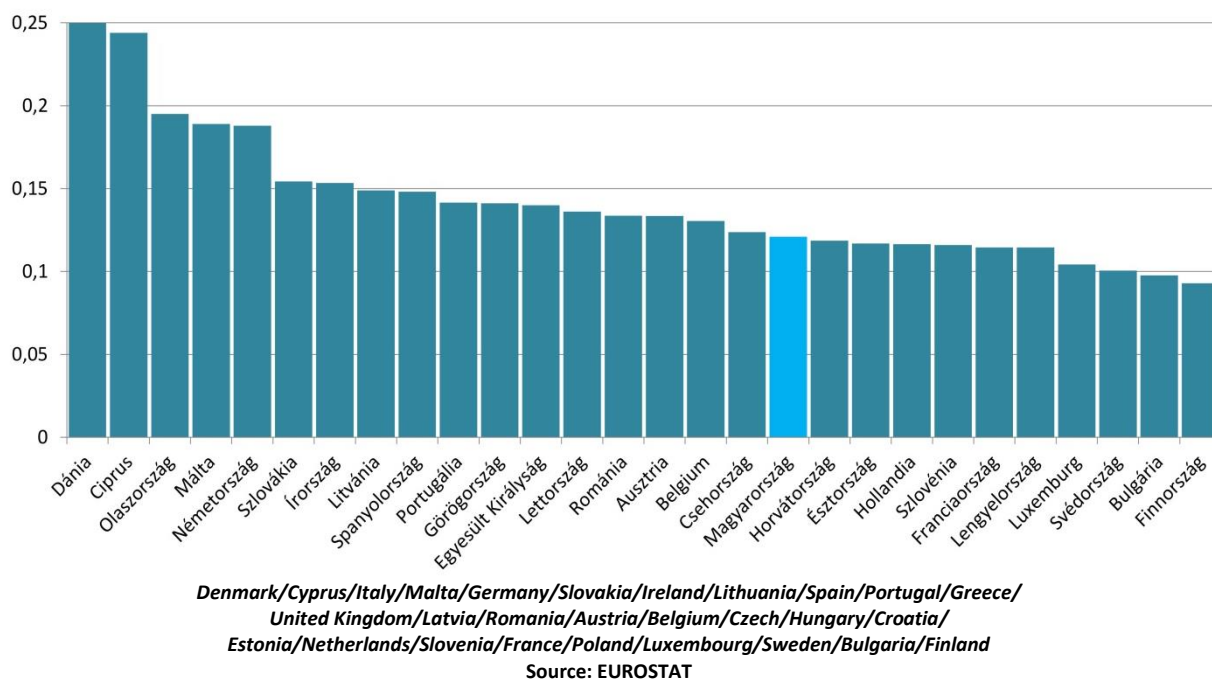


**Figure 5: Mean electricity prices for household consumers based on purchasing power parity (0.01 PPS/kWh), December 2013**



For industrial consumers, the Hungarian competitive market mean price for electricity is in the EU mid-range.

**Figure 6: Comparison of mean electricity prices for industrial customers in Europe (500–2,000 MWh annual consumption; first half of 2013, EUR/kWh)**



## 2.1.4. Security of supply

For the purposes of supply security it is reassuring that for the most part of the year 2013 supply reserves larger than that set forth by ENTSO-E (1350 MW) were available. Due to the resulting market situation, the increasing share of import forces domestic generators out, as a consequence of which the rate of the actually available secondary current reserves – within that, markedly in the “downward” direction – shows an increasingly deteriorating tendency. The Authority evaluated the preparation for winter – this being a crucial period from the aspect of security of supply – by taking the annual scheduled maintenances, the realisation of developments, the fuel stocks required for winter months as specified in the relevant rules and regulations, the electric capacity, the electricity balance, the reserve capacities and the availability of cross-border capacities into consideration. In its evaluation, the Authority established that power plants completed the winter preparation programme for 2013, having completed their annual maintenance programme until 15 October 2013, and contracted their required fuel demand.

The power plants for which the availability of fuel stock laid down in Decree 44/2002. (XII. 28.) GKM is obligatory have duly fulfilled their respective liabilities in 2013. In the winter period of 2013-2014 – based on the preliminary maintenance plans submitted by power plants – the output balance of the Hungarian electricity system had larger than required reserve levels from the beginning of October to the end of April. The capacity balance of the Hungarian electricity system for the second half of 2013 was adequate.

In scheduling the maintenance, power plants had to consider that the maximum capacity demands in the summer – due to the increasingly widespread use of HVAC equipment – nearly reach those of the

winter (in July 2013 it was 6,288 MW, while the maximum peak load in this year was 6,463 MW in December 2013).

Shut down of natural gas supply to hydrocarbon-fired power plants may be necessary in the cold winter season, therefore cooperation between the electricity transmission system operator dispatcher and the natural gas transmission system dispatcher FGSZ Földgázszállító Zrt. (FGSZ Natural Gas Transmission Company Ltd.) is still necessary. No shut down of natural gas supply occurred in the winter of 2012-2013. Though measures were taken to prevent the freezing of coal supplies, in the event of a substantial temperature drop such incidents may nevertheless occur, limiting the generation of Mátra Power Plant. In such cases, quick action may be needed to switch reserve capacities on. No reserves had to be switched on due to freezing of coal supplies in the winter of 2012-2013.

From among the factors affecting the safety of energy supply in the winter, the responsible behaviour of market players, the continuous availability of natural gas supply and, to a lesser degree, that of the alternative fuels (biomass) are the most important. Therefore, a harmonised cooperation of natural gas and electricity markets ensuring adequate flexibility is of special importance.

Of power plants having installed capacities of 50 MW or above, the following major – in progress or planned – developments and changes are known as of 2013:

**Table 12: Developments of power plants having installed capacities of 50 MW or above in 2013**

<b>Paksi Atomerőmű Zrt.</b>	The power plant underwent a series of developments in the recent period. These include modifications related to serious accidents, the implementation of the reconstruction of the waste treatment system, the transformation of the withdrawal route of radioactive waste processing, the reconstruction of the ventilation and air conditioning equipment, the reduction of desalinated water consumption, the modernisation of the turbine oil purification technology, the reconstruction of the make-up water preparation facility, the modification of the machine room leachate drainage system, the structural reinforcement works of the nuclear power plant technological facilities and the introduction of a 15 month operational cycle.
<b>Alpiq Csepel Kft.</b>	As a result of the power plant developments, the power plant decreased its minimum capacity attainable under regulated conditions. Thanks to this, it will be serving the electricity system with increased secondary regulatory capacity. Based on the manufacturer's and the industry's regulations, the power plant implemented its maintenance programme. The borescope inspection of the gas turbines has been performed.
<b>Bakonyi Erőmű Zrt.</b>	The 30 MW steam turbine has undergone maintenance involving its disassembly. The environmental authority's license has been issued to modernise the slurry removal system. The state assessment of the main steam pipes of the turbo machinery group has been concluded with positive results. In order to improve the level and security of the district heating service of the housing estates, the inserts of the heat exchangers have been replaced and the hot and cold water pipes have been partially replaced by thermally insulated Isoplus pipes. Following assessment of the electrofilters, part of the separator electrodes were replaced. The works performed were carried out at a lower cost in comparison to the base year, thanks to rationalised material consumption.
<b>Tisza Erőmű Kft.</b>	The power plant received an operation suspension license from the Authority as of 1 July 2013.

<b>Debreceni Kombinált Ciklusú Erőmű Kft.</b>	The power plant received an operation suspension license from the Authority as of 1 July 2013. The power plant carried out among others the electric shock protection, lightning protection and fire protection assessments and the examination of the lifting equipment used during the operational suspension period. The works needed for the conservation of the power plant have been performed.
<b>Dunamenti Erőmű Zrt.</b>	In order to maintain the security of the urban heating service, thermal energy and electricity generation have been unbundled. As part of this, a steam boiler of capacity 22 t/h has been built to supply the heating system of the power plant and to temporarily supply the urban heating system. Further to the above, two hot water boilers have also been built with a thermal capacity of 12.6 MW each for urban heating purposes. The reconstruction of the water extraction facility has begun; its completion will stretch into the year 2014. The power station downsized its personnel by about 30% in a number of phases.
<b>AES Borsodi Energetikai Kft.</b>	Borsod Thermal Power Station and Tiszapalkonya Thermal Power Station also held a permit in 2013 to suspend power generation activities. The company is presently under liquidation.
<b>E.ON Erőművek Termelő és Üzemeltető Kft.</b>	No significant developments influencing the operation of the Gönyű Combined Cycle Power Plant took place recently. The annual maintenances have been performed according to the plans.
<b>Budapesti Erőmű Zrt.</b>	The company does not plan any development. The first major overhaul after construction took place in the Kispest power station. The state assessment of the gas turbines of the Újpest and Kelenföld power stations has been performed. All heating equipment were available for the heating season.
<b>ISD Power Kft.</b>	The power plant renovated two steam turbines, feed pump no. 10. received frequency inverter regulation, the new feedwater pump no. 4 has been installed and the 10,000 m <sup>3</sup> fuel oil reservoir no 2. had its heating pipe network replaced.
<b>Mátrai Erőmű Zrt.</b>	The development plans of the power plant include the implementation of a 15 MW solar power plant in the slurry yard. The Authority issued its resolution in which it established availability of the conditions of operating in the FIT system. Majorly normative maintenance took place on Unit I. Unit II. has undergone maintenance involving its disassembly. The inspection of the main steam and reheated steam pipes continued on Unit III. The new, high efficiency condensation pumps and feedwater pumps have been installed. In Unit IV-V further modernisation works of the slag removal system were performed. The ice prevention system for the gas turbines has also been built. The recultivation works of the old slurry yard have also commenced.
<b>MVM BVMT Zrt.</b>	In order to increase security, the existing property security system has been expanded; the premises were surrounded by further fence sections. In order to increase operational safety, switching automation has been installed in the 10 kV electrical system, the 120 kV substation circuit breakers' operation has been transformed to redundant, the natural gas supply system received heating, allowing safe start-up of the units also with gas fuel in the winter months. Monitoring wells have been installed for the oil reservoir stock and a hazardous materials and waste collection facility has been built at the plant. The annual maintenance of the main equipment and auxiliary systems has been carried out and the mechanical, electrical, control and instrumentation maintenances have been likewise performed. The annual emission measurements have been conducted.
<b>MVM GTER Zrt.</b>	In the GT power plants of Litér and Sajószöged, the repair and reconstruction due to the damage of the compressor have been completed. In these power plants, the excitation controllers and the protection systems have also been replaced. The control and instrumentation system of the gas turbine, the generator and the excitation controller



	have been modernised in the Lőrinci gas fired power plant.
<b>Vértesi Erőmű Zrt.</b>	The major overhauls of units I, III, and IV have been performed during the year.
<b>Pannon Hőerőmű Zrt.</b>	During the year 2013, the power plant sold its fundamental assets required for electricity generation and therefore requested termination of its electricity generation activities. The Authority revoked the operational license for the generation of electricity from the power plant. The power plant continued its district heating generation activity.

The effective MAVIR Network Code (Üzemi Szabályzat) – specified by Item a) of Section 67 of the VET – (MEH resolution no. 891/2011; hereinafter referred to as: ÜSZ) was modified once in the year 2013. In its resolution 1859/2013 dated 9 October 2013, the Authority approved of the amendment of the ÜSZ and amended it on 24 January 2014 in its own scope of authority with its resolution 831/2014 as this latter was previously issued as an amendment, but the request concerned the approval of a new ÜSZ.

With the resolution 1346/2013 of the Authority the Rotational Load Shedding Order (hereinafter: RKR) regulated by Government Decree 285/2007 was approved on 9 July 2013 . According to this resolution, MAVIR is obliged to initiate revision of the scope of fundamental and essential customers by taking into account the recommendations of the Crisis Working Committee and in view of the results, it is further obliged to amend the RKR and submit it to the Authority for approval not later than 31 March 2014.

Within the scope of its supervisory activities, the Authority has been preparing assessments of the operational safety of electricity transmission by May-June of each year for over a decade. MAVIR Zrt's report for 2012 complied with the set of criteria set up by the Authority. The two indicators monitored particularly closely in order to promote operational safety of the transmission network license holder, namely the "Outage indicator" and the "Average unavailability of the transmission network connection" showed better 3 year average figures than those expected by the "Expected level of operational safety" and therefore better than the "Minimum quality requirement" as well.

In 2013, MAVIR had to comply with the more stringent conditions set forth in resolution 1087/2012 of the Authority. The evaluation of the requests of the distribution license holders along with qualifying the extreme weather in March 2013 as an extraordinary operational event were still in progress in April 2014, but they are to be concluded by the end of the first half of the year.

### 2.1.5. Network development

Regarding network development, it is the task of MAVIR Zrt. as the transmission system operator and the distribution licensees to ensure long term, safe availability of the transmission and distribution networks constituting an integral part of the Hungarian electricity system, meeting national and international expectations for development, improvement, maintenance and operation activities and to maintain a European level security of electricity supply on the national grid.

In order to develop the transmission and distribution networks, the following developments have been implemented in 2013:

- By MAVIR Zrt.: Construction of the Debrecen–Józsa 400 kV substation with 2 units of 400/120 kV transformers, 250 MVA each, with 2x70 Mvar tertiary shunt reactors, establishment of the Sajószöged–Debrecen–Józsa 400 kV connection by deviating the Sajószöged–Debrecen II.

transmission line presently operating at 220 kV. Using the former 220 kV line section as a coupling connection on 120 kV.

- By ELMŰ Hálózati Kft.: New 120 kV substation at Vecsés: Splitting the Soroksár–Üllő transmission line and connection to Vecsés substation.

### 2.1.6. Use of renewable energy sources

The share of the renewable energy sources within the total gross energy consumption in Hungary was 9.6% according to data from 2012.

The ratio of electricity generation from renewables within total electricity use was <sup>2</sup>6.56% in 2013 according to the preliminary data, which is a slight increase compared to the figure of 6.32% in 2012. In its Renewable Energy Action Plan, Hungary set the objective of achieving a share of 10.9% for electricity by 2020.

**Table 13: Trends of electricity generation from renewable energy sources and waste  
In Hungary (GWh)<sup>3</sup>**

Electricity production (GWh)	2008	2009	2010	2011	2012	2013	Change (GWh) 2013/2012	Change (%) 2013/2012
Wind power	211.07	332.14	534.68	626.05	771.70	717.67	-54.04	-7.00%
Hydro power	213.80	228.49	188.37	222.18	213.18	213.21	0.03	0.02%
Biomass firing (pure)	620.50	651.70	725.32	588.48	693.83	836.51	142.68	20.56%
Coal-biomass co-firing	1,149.76	1,372.05	1,281.23	928.04	611.63	578.71	-32.92	-5.38%
Biogas	35.13	39.94	63.14	106.69	150.02	155.20	5.18	3.45%
Landfill gas	9.97	10.48	23.84	36.39	45.90	50.19	4.29	9.34%
Sewage gas	18.35	27.90	35.07	55.86	53.81	53.60	-0.22	-0.40%
Solar energy <sup>4</sup>	0.36	0.41	0.73	1.97	7.84	22.95	15.11	192.77%
Waste	236.44	236.41	294.43	251.91	228.40	237.09	8.69	3.81%
The renewable part of the waste	112.37	151.12	218.62	112.86	135.59	139.64	4.05	2.99%
<b>Total renewable:</b>	<b>2,371.32</b>	<b>2,814.24</b>	<b>3,071.00</b>	<b>2,678.50</b>	<b>2,683.50</b>	<b>2,767.67</b>	<b>84.17</b>	<b>3.14%</b>
<b>Total (renewable+waste):</b>	<b>2,495.39</b>	<b>2,899.53</b>	<b>3,146.82</b>	<b>2,817.56</b>	<b>2,776.31</b>	<b>2,865.12</b>	<b>88.81</b>	<b>3.20%</b>
<b>Total electricity use</b>	<b>43,928</b>	<b>41,422</b>	<b>42,566</b>	<b>42,626</b>	<b>42,375</b>	<b>42,166*</b>	<b>-209.00</b>	<b>-0.49%</b>
<b>The ratio of electricity generation from renewable energy sources in total electricity use</b>	<b>5.40%</b>	<b>6.79%</b>	<b>7.21%</b>	<b>6.28%</b>	<b>6.33%</b>	<b>6.56%*</b>	<b>-</b>	<b>-</b>

\* Preliminary data.

<sup>2</sup> According to Article 5 of the 2009/28/EC Directive 5, this is a calculated share, i.e. the ratio of the gross consumption of electricity generated from renewables and the total gross electricity consumption.

<sup>3</sup> The data provided are based on data supplied by the power plants and distribution system operators and also include the own consumption of the plants.

<sup>4</sup> The electricity generation of household scale photovoltaic devices connected to the grid and non FIT small photovoltaic power plants was estimated on the basis of data supplied by distributors by taking the average of the total installed capacity of the end of the year concerned and that of the end of last year, and multiplying this by an estimated number of equivalent full power hours of 1000 hours/year. As no data were available for the year 2007, for estimating the generation for 2008, the capacity at the end of the year was multiplied by an estimated number of equivalent full power hours. The same procedure was followed for wind, hydro and biogas household scale power plants, where the estimated number of equivalent full power hours was derived from the average of the larger power plants generating throughout the year concerned.

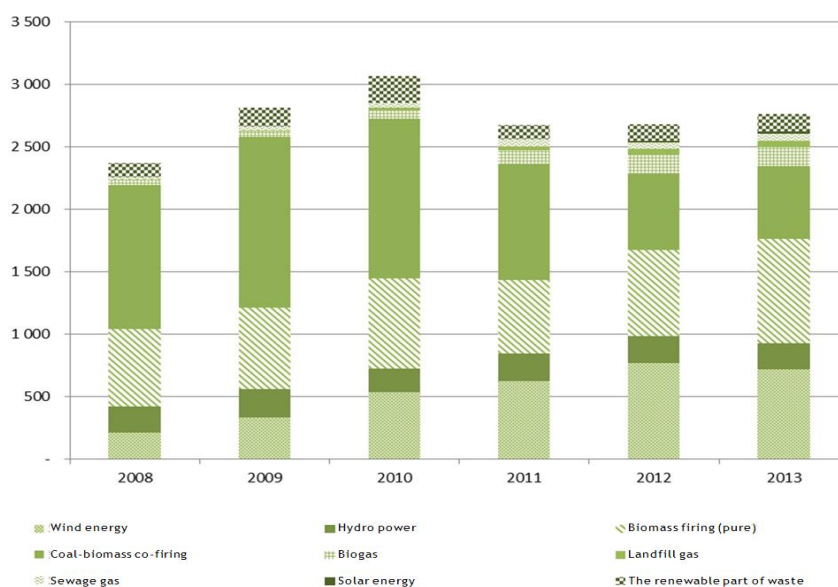
A significant part of the renewable electricity generation is sold in the feed-in tariff system (FiT). Electricity generation from renewable energy sources was 2767.67 GWh<sup>5</sup> in 2013 which is 3.00% higher than the figure of 2683.50 GWh in 2012. This is mostly made up of the growth of pure biomass firing electricity generation (by the start of operation of the biomass power plant of Pannon-Hő Kft. at Pécs). The effect of this overcompensated the decrease of electricity generation from wind energy and coal-biomass co-firing. In addition to this, solar energy generation also increased rapidly, similarly to biogas and landfill gas based generation, but the effects of these latter are not significant.

Electricity generation from biomass accounts for the overwhelming majority of electricity generation from renewable energy sources. Its share within renewable electricity generation in 2013 accounted for more than half (51.13%) of the total electricity generation from renewable energy sources. The electricity generated by pure biomass firing saw growth in 2013, too, similarly to the year 2012 after the decrease in 2011, thanks to the commissioning of Pannon-Hő Kft's new straw fired power plant at Pécs.

Co-firing has been showing a decreasing tendency since 2010 (due to the expiry of the FiT eligibility) although this decrease has not been significant over the last year, totalling 578.71 GWh in 2013. During the year 2013, co-firing power plants were reintroduced to the feed-in tariff system due to legislative changes, indicating a likely turnaround of the decreasing tendency in the future.

Electricity generation from wind power also shows a continuously increasing tendency, although 2013 showed some decrease due to unfavourable wind conditions, to 717.67 GWh. Within the green electricity mix, wind power however continues to have a significant share (in excess of 25%). At the end of 2013 installed wind-power capacity reached 328.93 MW<sup>6</sup>, indicating stagnation in comparison to the previous years. The cause of stagnation is that wind turbines larger than household scale connected to the grid may only be built through tendering and no such tenders have been announced.

**Figure 7: Electric power generated from renewable energy resources in Hungary 2008–2013 (GWh)**



<sup>5</sup>This includes half of the electricity generated in the waste recovery plant of the Fővárosi Közterület-fenntartó Zrt. (Metropolitan Public Domain Maintenance Private Company Limited by Shares) and the share of the Mátra Power Plant's generation from biodegradable communal waste (which in 2013 made up 80% according to unofficial data of the power plant.)

<sup>6</sup> This includes the installed capacities of the household sized wind turbines.

Electricity generation from biogas, landfill gas and sewage gas reflected a significant increase in the recent years, but sewage gas stagnated in 2013 (as no new sewage gas power plant was commissioned). In contrast to this, a number of landfill gas power plants have commenced generation and generation from biogas saw growth thanks to an increase in the share of biogas utilisation in one of the power plants.

In addition, the generation of solar power plants grew significantly, since in 2012 only one solar plant larger than household scale was registered in generation, while their number rose to nine by 2013. In a single year, solar electricity generation thus nearly tripled, due mostly to the rapid growth in usage of household scale small power generation systems<sup>7</sup>, reaching 22.95 GWh in 2013. The causes of the growth are the rapidly decreasing costs of the technology and the favourable effect of the investment subsidies granted.

Generation from waste only saw slight growth (237.09 GWh) as no new power plant has been commissioned in 2013. Over the recent period, the Budapest waste recovery plant owned by Fővárosi Közterület-fenntartó Zrt. and Mátra Power Plant used waste types that could be accounted as renewable sources. Due to the growth of waste incineration of this type at Mátra Power Plant, the overall generation of this category increased from 135.39 GWh in 2012 to 139.64 GWh in 2013.

## 2.2. Licensing and supervision

In the field of electricity licensing and supervision the Authority issued 314 resolutions to electricity companies in 2013. The following table shows the types of the resolutions:

**Table 14: Resolutions issued in 2013 in the field of electricity licensing and supervision**

Resolution type	pc
<b>Transmission System Operator</b>	<b>25</b>
<b>Distribution</b>	<b>21</b>
<b>License holder for organised electricity market</b>	<b>2</b>
<b>Trading license holder</b>	<b>39</b>
new license	12
license amendment	9
exemption from general terms of business	4
license withdrawal	1
amendment of general terms of business	3
approval of general terms of business	7
closure of procedure	2
license extension	1
<b>Limited trading license holders for electricity</b>	<b>28</b>
new license	21
license amendment	2
license withdrawal	5
<b>Universal Service Provider</b>	<b>4</b>
<b>Power plant with a rated capacity in excess of 50 MW</b>	<b>21</b>
establishment license	1
disposition of basic assets	2
exemption from general terms of business	1
license amendment	14
license withdrawal	1
suspension	2

<sup>7</sup> The generation of the household scale small power plants is an estimated value.

<b>Simplified license for small power plants</b>	<b>96</b>
new license	12
license amendment	53
termination of generation	7
new license + establishment of FIT	7
license withdrawal	20
electricity and district heating generation license	1
<b>FiT inspections</b>	<b>11</b>
amendment	1
closure	10
<b>Establishment of FIT</b>	<b>28</b>
establishment	26
unauthorised supply	2
<b>Public lighting</b>	<b>37</b>
new license	35
license amendment	2
<b>TOTAL</b>	<b>310</b>

## 2.2.1. Licensing and control of generators

### Power plants with a rated capacity of 50 MW or above

The Authority issued 21 different licenses and license amendments concerning power plants with a rated capacity of 50 MW or above. Of these, two licenses were granted for the suspension activities (DKCE Power Plant, AES Tisza Erőmű Kft.), one concerned the approval of acquisition (Vértesi Power Plant) and the rest involved amendments of operating licenses.

### Small power plants

In cases provided for by the VET, a simplified licensing procedure should be conducted for small power plants with a rated capacity of 0.5 MW and above. Licensing was carried out on an ongoing basis in 2013. The installed capacity of actively generating small power plants was 1318 MW in December 2013. In 2013, the Authority issued a total of 98 resolutions concerning small power plants, of which 16 were consolidated licenses for small power plants.

### Power plants using renewable energy resources

In comparison to the previous years, fewer licenses were issued in 2013. No requests were submitted in relation to establishment of biomass power plants. The Authority issued a total of 6 licenses for biogas power plants. Among small power plants without licensing obligation, the Authority issued in a total of 26 instances a so-called FiT quota resolution in order to determine the volume of electricity to feed in and the period of takeover. 88% of the applications targeted the construction of solar power plants.

### Supervision of power plants

The Authority continued to control the availability of the fuel stocks required by law in 2013 and established that several generators possessed stocks even in excess of the requirements. Maintenance – albeit based on different principles – is conducted according to schedule, thus ensuring reliability and availability. Power plants usually have contracts in place to procure fuel for several years.

The power plants comply with the environmental protection related regulations, proving the effectiveness of former developments and restructuring in satisfying the strict standards.

In review of quality assurance it can be established that all generators above 50 MW of generation capacity operate quality assurance systems. Some large power generators are in the process of developing integrated quality assurance, environmental management and work health and safety systems. Several sites already operate integrated environmental management and quality assurance systems.

The Authority held site inspections at 3 power plants in 2013: Budapesti Erőmű Zrt., Alpiq Csepel Kft. and BE Optimum Kft. Upon inspection, the Authority found that the power plants operate in compliance with the statutory requirements.

### **Origin certification and guarantee of origin systems**

Upon request of the electricity generator, HEA issued an origin certification and arranged for the electronic registration of the origin certifications, as detailed in Section 6/A and Paragraph (1) of Section 12 of Act LXXXVI of 2007 on electricity (hereinafter referred to as: Vet) (the notion of origin certification was removed from the VET effective as of 22 June 2013).

The other details regarding the origin certification are laid down in Gov. Decree No 389/2007 (XII. 23.) on the feed-in obligation and feed-in tariff of electricity produced from renewable energy resources or from waste and electricity generated in co-generation facilities (hereinafter referred to as: FiTD). Any generator may have asked for an origin certification, but generators selling under feed-in obligation were obliged in any case to certify their compliance with the requirements of the feed-in tariff system after the year concerned [Paragraph (1) of Section 8 of FiTD]. The volume of electricity sold under the feed-in tariff system could not exceed the volume of electricity determined in the origin certification [Paragraph (1) of Section 7 of FiTD].

The controls were performed by the Authority in the course of individual inspections and through reconciliation with other data sources.

The system of origin certification was replaced by that of the guarantees of origin with the effect of Government Decree 309/2013 (VIII. 16.) on the guarantee of origin of electricity produced from renewable energy sources or from high efficiency cogeneration.

According to Paragraph (1) of Section 12 of the VET, the volume of electricity produced from renewable energy sources or from high efficiency cogeneration may only be certified by the generator to the user exclusively with a guarantee of origin.

According to Government Decree 309/2013 (VIII. 16.) on the guarantee of origin of electricity produced from renewable energy sources or from high efficiency cogeneration, the guarantees of origin are registered by the Authority through an electronic management system. In order to access to the management system, the generator or the buyer of the guarantee of origin must open a current account at the Authority.

Upon request by the generator, the Authority will establish by resolution whether the generation unit is suitable to generate electricity from renewable energy sources or from high efficiency cogeneration (rating). The rating remains effective for five years. Requests for rating a generation unit may be submitted to the Authority from 1 October 2013 and registration requests (the application of the generator in possession of an effective rating for the issuance of a guarantee of

origin) may be submitted from 1 January 2014. Guarantees of origin may only be issued to generators with effective ratings.

The guarantee of origin must be issued for volumes of 1 MWh. For all units of the energy generated, one guarantee of origin may be issued.

Registration applications may be submitted in case of energy generation from renewable energy sources until the last day of the 6th calendar month after generation of the volume of electricity in question and until the last day of the 12th calendar month after generation in case of high efficiency cogeneration. One entry request must correspond to the electricity volume generated in at least one calendar month.

Usage of the guarantee of origin is understood as presenting it to the user as per the act on electricity usage in order to certify that the electricity supplied originates from renewable energy sources or from high efficiency cogeneration. The owner of the guarantee of origin shall report its usage to the Authority not later than five days after usage of the guarantee of origin.

The owner of the guarantee of origin may transfer the valid guarantee of origin through the management system.

Based on such request, the Authority may recognise guarantees of origin for electricity from renewable energy sources or from high efficiency cogeneration issued in other countries. The Authority cooperates with the authorities of other countries issuing guarantees of origin upon the recognition of its own guarantees of origin abroad.

As stipulated by the VET, the Authority may issue fines of fifteen thousand HUF per guarantee of origin but not in excess of five million HUF per entry request to the generator if it is established that the generator provided false data in its entry request.

The system of guarantees of origin does not concern heating and cooling energy.

### **2.2.2. Licensing and control of the transmission system operator company**

One transmission system operator (TSO) operated in Hungary in 2013.

MAVIR Zrt's Business Code was amended four times in 2013 – regarding its content – (by resolutions: no. 852/2013, dated 27 May, 2013; no. 1220/2013, dated 29 May 2013; no. 1790/2013, dated 16 September 2013; and no. 2099/2013, dated 25 November 2013). The key changes affecting the operations of the electricity system were the following:

- The GCC (Grid Control Cooperation) agreement on regulatory cooperation among cooperating electricity systems was introduced on 1 April 2013. Hungary acceded to the Czech-Slovakian GCC cooperation. The objective of the GCC is the netting of the simultaneous and opposite differences of the regulatory territories by means of a central optimisation process in order to avoid using secondary reserves.
- As of 1 June 2013, the parameters of the new balancing energy settlement system introduced as of 1 January 2012 have been amended. The purpose of the amendment is to create a further incentive for the market participants to prepare more accurate schedules and adhering to them.

- As of 1 January 2014, the distribution of electricity subject to the feed-in tariff system by the transmission system operator and on the method of determining prices to be applied in the course of distribution have changed. The rules describing this had been approved in 2013.

### 2.2.3. Licensing and control of distribution network companies

Six distribution system operators (DSO) operated in Hungary in 2013.

*Figure 8: Electricity distribution companies in Hungary*



In 2013 the Authority issued no further distribution system operator licenses, but the act on electricity became effective as of 11 April 2013 and the operating licenses were amended as per the new regulations appertaining to outsourcing the activities subject to license. The license holders started in 2013 to transform their organisational structures and operational processes in accordance with the legal regulations and the operating licenses. In observance of the statutory deadline, the necessary transformations are likely to be completed by spring 2014.

### 2.2.4. Licensing and controlling electricity traders and universal service providers

During the year 2013 a total of 33 new electricity trading operational licenses were issued. Within these, the number of limited electricity trading licenses made up a total of 21. In relation to 2 limited electricity trading license applications, the procedures were concluded in 2014. No new applications for universal service provision were received. A total of 6 power trading licenses were withdrawn in 2013 upon the request of the licensees. One of the potential reasons for withdrawal was that in addition to the Hungarian subsidiaries registered previously, the limited power trading license was also obtained by the foreign owners of the parent companies and they were only involved in wholesale trading in any case.



Several electricity trading licenses issued for a finite period of 10 years in accordance with the formerly effective legal regulations have reached their expiry deadlines. 1 license was extended in 2013 (a total of 3 extensions took place in 2012) and 5 companies opted not to extend the validity of their licenses. The total number of issued resolutions affecting electricity traders and universal service providers in 2013 was 73) license amendments, approvals and amendments of general terms of business and other resolutions affecting the field).

## **2.2.5. Licensing and supervision of the organised electricity market**

HUPX Magyar Szervezett Villamosenergia-piac Zrt. started commercial operations in day-ahead (spot) trading on 20 July 2010 with 10 members. From 48 at the end of 2012, the number of members grew to 53 by the end of 2013. The rise in trading volume experienced over the previous years continued in 2013, although the pace of growth slowed down. The average monthly trading volume on the day-ahead market exceeded 756 GWh, while the average growth in trading volume in comparison to the same month of the previous period showed a growth of 16 GWh. In November 2013 the organised electricity market set a new operational record and the monthly trading volume exceeded 900 GWh. In 2013, the entire traded volume in comparison to the previous year grew by one and a half times to over 9 TWh, which corresponds to 21.5% of the domestic gross electricity consumption. The largest daily peak was seen on 8 April 2013 when the volume exceeded 41 MWh.

Long-term physical futures electricity trading (HUPX Physical Futures – HUPX PhF) was launched on the HUPX on 19 July 2011 with 10 members and the number of members grew to 33 by the end of 2013. Furthermore, the organised electricity market also provides services supporting OTC trading opportunities to its members. Long-term physical futures electricity trading in 2013 exceeded 7.1 TWh, which is a growth greater than 13% in comparison to the volume of the previous year. The monthly trading volume in 2013 was highest in October, nearly 943 GWh. This is significantly lower than the value of 2.1 TWh from November 2012 (This volume was however extremely high during the operation to date). The highest daily peak to date was recorded on 17 April by HUPX with a volume of 315,240 MWh. The volume of OTC trading in 2013 was 929,940 MWh; slightly lower than previous year's volume.

One of the most important events in 2012 – for the HUPX and the Hungarian electricity market – was the coupling of Czech, Slovakian and Hungarian electricity markets on 11 September 2012, as a result of which the prices on the electricity exchanges involved were approximated, the formerly experienced price volatility on the HUPX calmed down and prices decreased substantially.

As a result of the successful operation, a memorandum of understanding was signed in June 2013 about the extension of coupling the markets in relation to the Romanian and the Polish electricity markets. Based on the decision of the parties, the extension will be implemented in two phases, the first of which will be coupling the Romanian market in the fourth quarter of 2014.

For the sake of the applicability of the regulation 1227/2011/EU of the European Parliament and of the Council on wholesale energy market integrity and transparency (REMIT) the Authority started its required legislative preparation and market observation work in 2012. The monitoring and analysis of the prices of the organised markets has been continuous ever since. Based on this, the Authority conducted a survey on the evolution of the spot prices of HUPX.

Based on that inspection, the Authority found that the prices of products traded on the day-ahead market on HUPX reacted sensitively to the analysed market changes (termination of FiT of co-

generation and changes of regional demand and supply), which resulted in a significant premium in the Hungarian market compared to the region's and the neighbouring countries' day-ahead market prices. The Authority obliged HUPX to inform the Authority without delay as soon as it identifies any irregular phenomena on the market.

### **2.2.6. Licenses for public lighting operation**

In order to establish social public utility services, following entry into effect of the Act XXIV of 2013 on the amendment of the energy laws, the regulation of public lighting by the VET changed after 11 April 2013. If the public lighting system is not operated by the body obligated to provide public lighting, then it requires a public lighting operation license – with the exception of the public lighting operation equipment of the public lighting distribution grid – which is issued and may be withdrawn by the Authority.

The applicant for the license must substantiate with documents and data its suitability for performing the activity subject to licensing obligation and must also possess a valid contract with the party obligated to provide public lighting. The scope of documents to be attached to the application are determined by the VET and the enforcement decree of the VET.

In 2013, the Authority received a total of 40 license applications and 9 license amendment applications. In the year concerned, the Authority issued a total of 35 public lighting operation licenses and 2 license amendment resolutions and terminated two procedures by decree with the evaluation of the rest lasting into the year 2014.

The lighting armatures operated by the licensees exceeds 1.17 million with the accounted capacity being 91.7 MW. The accounted capacity of a single lighting armature is 78 W. Most municipalities and lighting armatures are operated by EH-SZER Kft. (1197 municipalities and 287,000 lighting armatures). The licensee with the largest accounted capacity (19.9 MW) is Budapesti Dísz- és Közvilágítási Kft. The average accounted capacity of a light armature in Budapest is 112 W.

The breakdown according to type of light source of the public lighting equipment is as follows: compact fluorescent lamps 50.9%; sodium vapour lamps 45.2%; mercury vapour lamps 1.8%; LED lamps 1.2%, fluorescent lamps 0.5%; metal halide lamps 0.2% and others 0.2%.

### **2.2.7. Allocation of cross border capacities and congestion management**

Cross-border capacity is the transmission capacity that allows electricity transmission between countries. Congestion occurs when the electricity transmission requirement exceeds the transmission capacity.

Congestion management is administered by the CAO ([www.central-ao.com](http://www.central-ao.com)) in the Central and Eastern European Region (hereinafter referred to as: CEE Region) as defined in the Annex of Regulation 714/2009/EC. Congestions are managed on the basis of net transmission capacities (NTC) under a coordinated auction between the following transmission system operators:

- APG Austrian Power Grid AG (formerly: VERBUND APG AG);
- CEPS a.s.;
- Elektro-Slovenija, d.o.o.;
- MAVIR Zrt.;

- PSE S.A.;
- SEPS, a.s.;
- TenneT TSO GmbH (formerly: E.on Netz GmbH);
- 50 Hertz Transmission GmbH (formerly: Vattenfall Europe Transmission GmbH).

In 2013, a significant change occurred in the operation of the CAO, affecting MAVIR Zrt. as well; its annual, monthly and daily capacity auctions for the year 2013 were carried out by CAO on behalf of the Croatian transmission system operator, too (this change concerns the border between Croatia and Hungary).

The work aimed at the adoption of a coordinated flow based allocation system (FBA) that has been in progress in the CEE Region for years, was continued in 2013 as well. At the same time the decision made by the European Council in February 2011 on the introduction of the unified European electricity market by the end of 2014 and the resulting road maps developed during the year and adopted on 5 December 2011 by the Florence Forum had a substantial influence – among others – on the market integration work in the CEE region.

ACER, the regulatory bodies of the region, the transmission system operators and the electricity exchanges have prepared the signature of a memorandum of understanding at the end of 2013 to introduce flow-based market coupling – FBMC, determined as a target model for the region.

### **2.2.8. Unbundling of operations**

In the supply chain of electricity, distribution and transmission network activities are natural monopolies, since the operation of one single distribution network company in a region or one single transmission network operator in a country is a more economical way of operation as a whole. In order to provide for the non-discriminatory access to network and avoid cross-financing among activities conducted under regulated and free market conditions, the regulatory authority controls the compliance with the unbundling rules included in statutory provisions.

The transmission system operator and distributor companies operate according to the unbundling rules of the VET based on the 2009/72/EC directive.

#### ***Unbundling rules of electricity industrial activities in Hungary***

The VET and the enforcement decree of the VET contain the mandatory requirements of unbundling natural monopolies (transmission system operation and distribution) from other competitive electricity operations (generation, trade and universal services) in Hungary.

In 2006, the system operator was integrated into MVM Zrt. (Hungarian Electricity Ltd.), which was owned by the state and conducted generation and trading activities via its subsidiaries, thus Hungary switched from the previous Independent System Operator (ISO) model to an Independent Transmission Operator (ITO) model, where ITO operates as an independent subsidiary within a vertically integrated company. In the course of the transaction, the transmission network was acquired by the transmission system operator.

MVM Zrt. developed a corporate structure where the holding company coordinating the subsidiaries is not engaged in any electricity industrial operations subject to licensing. MAVIR Zrt., the single transmission system operator in Hungary, continued to conduct its licensee activity in 2013 as an independent subsidiary of MVM Zrt. In order to fulfil the requirements set out in the Third Energy

Package, the contracts concerning outsourced activities were terminated by the beginning of 2012. Due to the above, MAVIR Zrt.'s auditor is other than the auditor of the MVM Group.

### *Practical experiences of complying with the activity unbundling regulations*

#### Transmission System Operator

The transmission system operator implemented the necessary measures to comply with the new unbundling regulations as set out in the Third Energy Package by 2012. During the year 2012, the certification process was successfully concluded and the corresponding transmission system operator licenses were issued (ITO) and the Compliance Program, the General Terms of Business and the Internal Rules of Selection have been approved.

#### Distribution network companies

The six distribution network licensees operate as part of a vertically integrated electricity sector undertaking, in compliance with the legal unbundling provisions of 2009/72/EC European Union Directive, observing the rules of full legal unbundling. The Hungarian electricity regulation does not use the exemption rules applicable to 100 thousand customers, as each distributor has more than 100 thousand connected customers at present. The network assets are owned by network companies.

### **2.2.9. Preparations for the adoption of smart metering**

According to Directives 2009/72/EC and 2009/73/EC Member States shall ensure the adoption of smart metering systems. However, the introduction of the so-called smart metering systems depends very much on the economic assessment of all costs and benefits incurred by the market operators, on the cost efficiency of each smart metering model and the timing of their installation.

The Authority operates a Smart Metering Work Committee with the involvement of all parties affected. In 2013, the distributors have implemented sample projects in relation to smart metering, which have since gone live and the experiences gained are continuously reported.

## **2.3. Price preparation and price regulation**

### **2.3.1. System charges**

The transmission system operation charge forming the part of the system charges is set to cover the acknowledged costs of high voltage network operation and maintenance, the physical network loss and the cost of management of the national electricity system.

The charge of ancillary services basically is intended to cover the cost of reserving capacities to ensure the balance of electricity production and consumption.

The two fee elements above must therefore provide cover for the acknowledged costs of the activities of the transmission system operator.

Electricity generated in power plants is forwarded to the distribution network via the transmission network. The distribution network in Hungary is currently operated, maintained and developed by 6 distributor companies (licensees), each having territorial monopolies.

Distribution tariffs (namely: distribution base charge, distribution energy charge, distribution network loss charge and capacity charge for certain customer categories, reactive power charge and distribution balancing charge) and the public lighting charge are therefore set to cover the costs of operation and maintenance of distribution networks for distributors, their costs related to customer service as well as the eligible costs of network loss.

The electricity system charges in 2013 were changed twice; on 1 January and 1 November. The Authority – in compliance with the current legislative background – determined the system charges effective as of 1 January in a resolution and those effective as of 1 November in a decree.

The system charges – in coherence with the government’s decision on utility cost reduction – have also changed on 1 November 2013. The system charges effective as of 1 November 2013 are essentially understood as the changes due on 1 January 2014 brought forward.

The distribution tariffs decreased on 1 November 2013 (in comparison to the prices at 1 January 2013) by 1.9% on average. The reduction was essentially made possible by the decrease of the market price of electricity, as this reduces the cost of electricity purchased to cover the distribution network loss.

### **Pricing incentive of distribution service quality**

The incentive system is implemented through the annual evaluation of the service quality indicators.

In the course of distribution cost review the Authority considers on the one hand how the distributors met the required level of quality-of-service indicators and the service quality the distributors achieved in comparison to one another. According to this, when determining the value of recognised justified expenses (upon comparative examination of technical sub-activities) the Authority reduced the recoupment rate in case of distributors that “perform better”.

In relation to the initial cost base in 2013, this concerned – to varying degrees – EDF DÉMÁSZ, ELMŰ and ÉMÁSZ.

The other “price” element of the incentive system of service quality, aimed at sanctioning the impaired distribution service quality parameters is included in the regulation on electricity system charges and their applications formulated in the MEKH Decree 4/2013 (X. 16.)<sup>8</sup>. This regulation provides for the distribution service provider to provide a specified amount of discount on the distribution tariffs charged to users for the next second half year, if the impairment of any service quality indicator determined in the resolutions of the Authority (depending on the degree of deterioration and the number of indicators concerned).

By May 2013, the Authority carried out the annual evaluation of the service quality indicators for 2012 after processing the available data. As the evolution of the service quality indicators did not necessitate it, no obligatory price discounts were offered in the second half of 2013. (Detailed information on the evaluation of service quality is available in the chapter titled “Customer Protection”.)

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<sup>8</sup>The regulations of the incentive prior to 1 November 2013 were contained in NFM Decree No 64/2011 (XI. 30.) on the rules of establishment and application of electricity system charges.

## 2.3.2. Universal service

### The price regulation framework for the universal service

Small customers and public institutions (if they did not enter the free market), could continue to purchase electricity in 2013 under universal service provision at the regulated tariff rate.

Small customers (eligible for universal service) are understood as household<sup>9</sup> customers and those taking up at low voltage in overall connection capacities including all their points of delivery not in excess of 3x63 A (mostly small businesses).

Since the introduction of the universal services in 2008, the price of electricity as a product emerges as a separate price element for household and non household small customers alike, besides the system charge (charges) of network use as a service ensuring that this “product” is delivered to customers and the taxes and other tax type items.

As an element of the so-called second utility cost reduction implemented in November 2013, the tax type items (the so-called financial assets) – contrary to the previous period – no longer appear; those (similarly to the energy tax) are only paid by non-household customers.

Since July 2009, universal service prices have been set regionally, whereas the other price components (system charges, financial assets and energy tax) are set uniformly, nationwide.

In case of electricity, the universal services tariff rate refers only to the product in terms of content (along with the acknowledged expenses of the service provider), exclusive of the system charges.

An element of the 3rd item, the so-called financial asset in the electricity bill – only to be paid by non-household customers as of 1 November 2013, regardless of being supplied by free market traders or a universal service provider – the subsidy for the structural reform of coal industry, is meant to cover the costs of operation of the Márkushegy coal mine owned by Vértési Erőmű Zrt. (Vértési Power Plant Ltd.) (until its shutdown) which are not recoverable from the electricity generated from selling electricity. Another financial asset creates the cover for the subsidy for the reduced-price electricity supply for electricity industry pensioners, while the third (cogeneration restructuring fee) is an item aimed at subsidising the district heating supply.

As of 1 February 2011, the Minister of National Development establishes the universal service prices of electricity in the ministerial decree 4/2011. (I. 31.) NFM: The Authority proposed price recommendations to the minister. The Authority prepared its decree amending proposition for the universal service prices effective as of January 2013 on the basis of the estimated quantity and average price of electricity purchased by the universal service providers in the free market, on the basis of the recognised average purchase price of electricity and assuming the annual realisation of the annual average margin of the pricing mechanism as stipulated by law.

In comparison to the previous years – beyond the above – a new aspect was the governmental decision on the first utility cost reduction (in January 2013), which the Authority took into account in its proposal. In order to implement the governmental decision on the second utility cost reduction (in November 2013), the Authority proposed its further recommendations on universal service prices in October 2013 to the minister, likewise in consideration of the above factors.

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<sup>9</sup> As of 31 December 2013, apartment blocks are also classified under certain conditions as household consumers (Item 3 of Section 42 of the VET).

The specific margin of the universal service providers recognised for 2013 have been unified in relation to the implementation of the first governmental decision to reduce the household end-user prices by 10% as of 1 January 2013 (first utility cost reduction). The specific extent of the recognised margin – far lower than the level of justifiable expenses established by the Authority – has also been quantified by taking into account the requirement of utility cost reduction. (In the previous years, the extent of the recognised margin varied with each supplier.)

As a consequence of the above, the recognised specific margin for the year 2013 has been announced as 1.316 HUF/kWh as of 1 January 2013. (In order to implement the second utility cost reduction, the recognised margin decreased to 0.986 HUF/kWh as of 1 January 2014.)

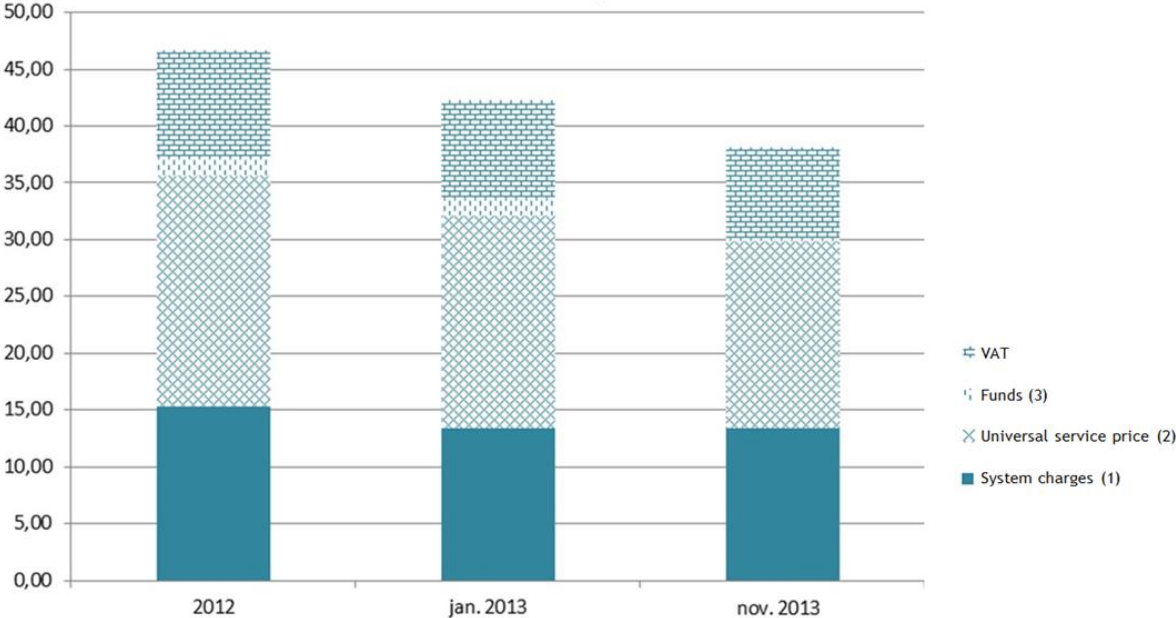
The recognised purchase price of the universal service providers has remained unaltered since 1 January 2013 (at 17.6 HUF/kWh). A significant change was, however that as of 1 January 2013 (pursuant to the amendment of the VET) the universal service providers – to reduce their costs of procuring electricity – are exonerated from the feed-in tariff system applicable to the electricity generated from renewable energy sources or wastes. As of 1 November 2013, the recognised market purchase price – reflecting the sustained decrease of the prices of electricity exchanges – decreased to 15.15 HUF/kWh.

**Changes of universal service prices**

The universal service fees (exclusive in the case of electricity of the system charges) in 2013 were changed twice; on 1 January and 1 November.

In case of the household consumers, the universal service prices have been quantified by taking the 10% decrease as of 1 January 2013 and the further one of 11.1% as of 1 November 2013 into consideration.

**Figure 9: Average end user prices in the universal service (HUF/kWh)**



(1) Average values of tariff categories K1FI, K1FII and K1FIII weighted with the planned sales volumes for 2013 according to the data provided by the universal service providers in September 2013.  
 (2) Average values weighted with the planned sales volumes for 2013 according to the data provided by the universal service providers in September 2013.  
 (3) For November 2013: Average values weighted with the planned sales volumes for 2013 according to the data provided by the universal service providers in September 2013, only paid by non-household customers (2.08 HUF/kWh).  
 (4) Apart from the listed items, non-household customers are also obliged to pay energy tax (also forming a base for VAT), the extent of which at the periods indicated was 295 HUF/MWh (unaltered). (Act LXXXVIII of 2003)

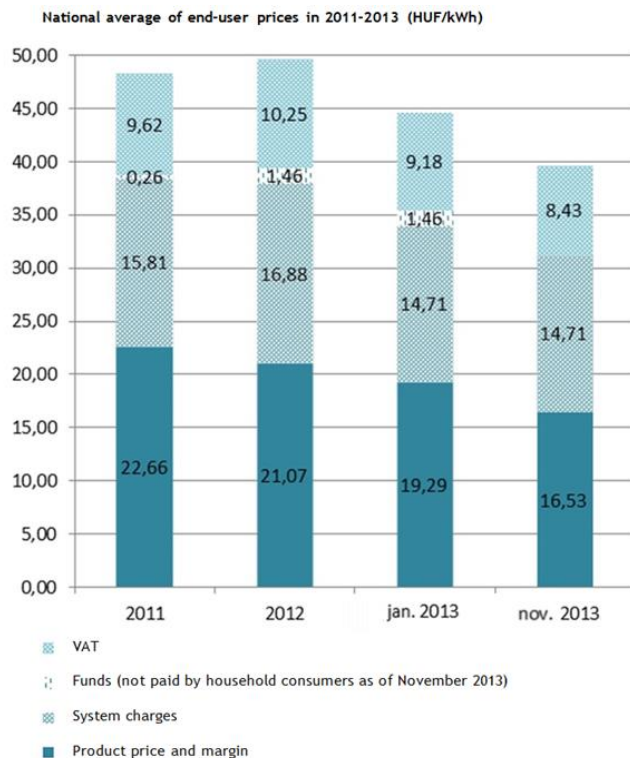
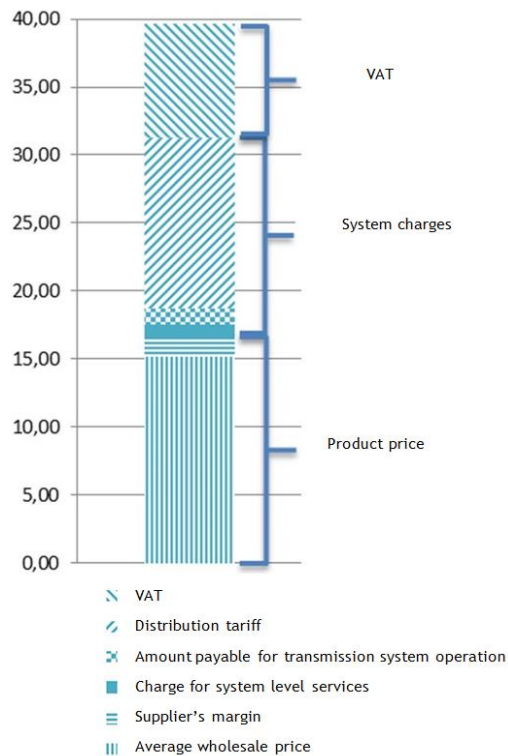
## Changes in the end-user tariff of household customers supplied in the universal service

As of 1 January 2013, the end user price of electricity – in accordance with the government’s decision – for household customers taking up electricity in the form of universal service decreased by 10% in comparison to the prices in December 2012 on 1 January 2013 and by a further 11.1% on 1 November 2013 in comparison to the prices effective as of 1 January 2013. The combined effect of these two changes represents a total reduction of 20% in comparison to the prices in December 2012.

The figure below shows the national average end user prices of household customers supplied in universal service and their components as at 1 January 2011, 1 January 2012, 1 January 2013 and as at 1 November 2013.

**Figure 10: National average end user prices of household customers purchasing electricity in universal service (“A1” tariff, at a consumption of 2400 kWh/year) was composed of the following components (HUF/kWh):**

Details of the price elements based on the prices (fees) applicable in November 2013 (HUF/kWh)



## Price margin control

The Authority is obliged to carry out the supervision of the sales margin of the electricity universal service providers as stipulated in the relevant decree until 31 March of the year following the year concerned. On the basis of the inspection carried out in March 2013, the Authority stated that the annual average margin based on the actual data from 2012, calculated according to the price regulation prescriptions, has exceeded the extent stipulated by the law. Major data of the 2012 margins of certain service providers are shown in the following table.



**Table 15: Revision findings of the 2012 margins of universal service providers**

Universal Service Provider	USP's excess margin (VAT excluded), HUF/kWh	USP's excess margin, amount due to the customers (VAT excluded), million HUF	Amount vested to customers of average consumption (VAT excluded), HUF/month
ÉMÁSZ Nyrt.	0.12	177	app. 25
E.ON Energiaszolgáltató Kft.	0.17	897	app. 35
ELMŰ Nyrt	0.32	1128	app. 65
EDF DÉMÁSZ Zrt.	0.47	775	app. 95

The excess price margins were generated primarily from the deviations of the quantity and price estimations regarding the FiT system.

The resolutions adopted by the Authority on the extra margin of certain service providers, the amounts to be reimbursed and the method of accounting of the reimbursement <sup>10</sup>provide for offsetting the above in the universal service rates of the next year.

Margin differences expected for 2013 were already considered by the Authority in its proposal made for the recognised universal service tariff rates for 2014 on the basis of the estimated data available in autumn 2013.

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<sup>10</sup> Resolutions no. 114–117/2013

## 3. Regulation and operation of the gas market

### 3.1. Operation of the gas market

#### 3.1.1. Natural gas market model

In the present natural gas market model, imported and domestically produced natural gas is sold to domestic customers by traders and universal service providers. Customers can also purchase natural gas in their own right.

The Authority, in order to boost trading in the national gas market – including the organised market (CEEGEX) – initiated and actively participated in the creation of a so-called limited natural gas trading license for natural gas trade, as well as in the establishment of legal and permitting conditions. From 1 January 2013, this new license enabled gas traders that are registered and operating in an EU member state to enter the domestic natural gas market with a simplified procedure.

The limited natural gas trading license for gas trade enables bilateral trading transactions between traders, and other types of transactions within the organised market. It does not, however, permit supplying customers. Taking the opportunity offered by the new license type, nearly ten new market participants could enter the domestic gas market last year. Their activity is expected to be apparent in 2014.

In the course of the year 2013, the former E.ON affiliate gas storage facility, and the former public utility wholesale gas trader – the latter having a special role in terms of price regulation and security of supply, possessing a long-term contract to Russian import sources – became affiliates of MVM Magyar Villamos Művek Zrt., i.e. they were transferred to public ownership.

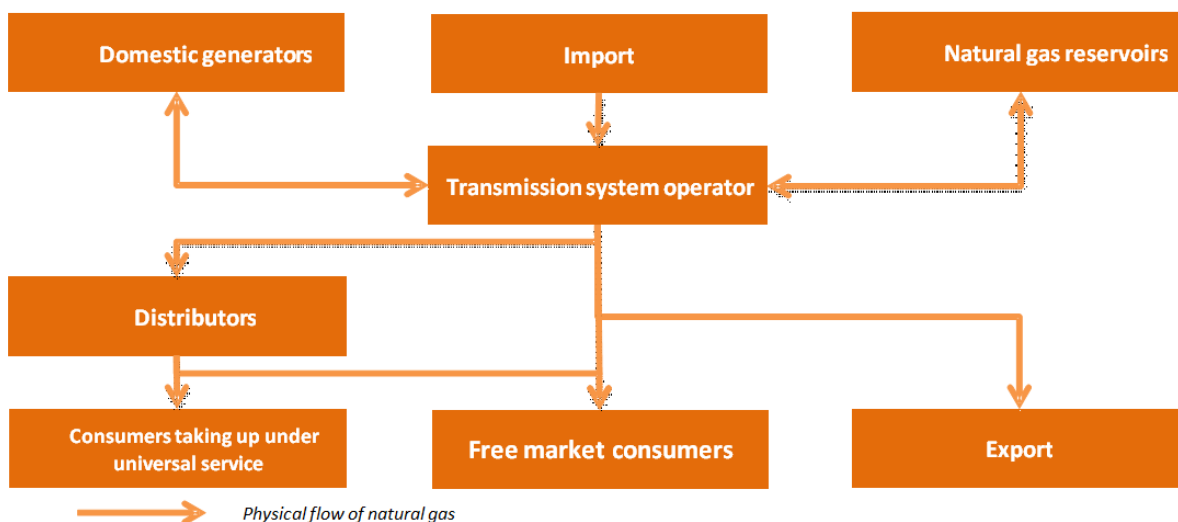
Households and small enterprises are predominantly supplied by universal service providers. The sources of these supplies are mainly secured by long-term contracts and storage facilities.

The Authority approved the sale of MOL Nyrt.'s formerly held share in MMBF Földgáztároló Zrt. (MMBF Natural Gas Storage Close Company Limited by Shares) (engaged in security and commercial gas storage), also approved their obtaining control and securing a warranty in the form of its fundamental assets necessary for its activity as licensee. As a result of the transaction, MFB Magyar Fejlesztési Bank Zrt. (Hungarian Development Bank Ltd.) obtained ownership by purchasing 51% of shares, while the remaining 21.46% of shares was purchased by Magyar Szénhidrogén Készletező Szövetség (Hungarian Hydrocarbon Stockpiling Association), which was already an owner of the license holder.

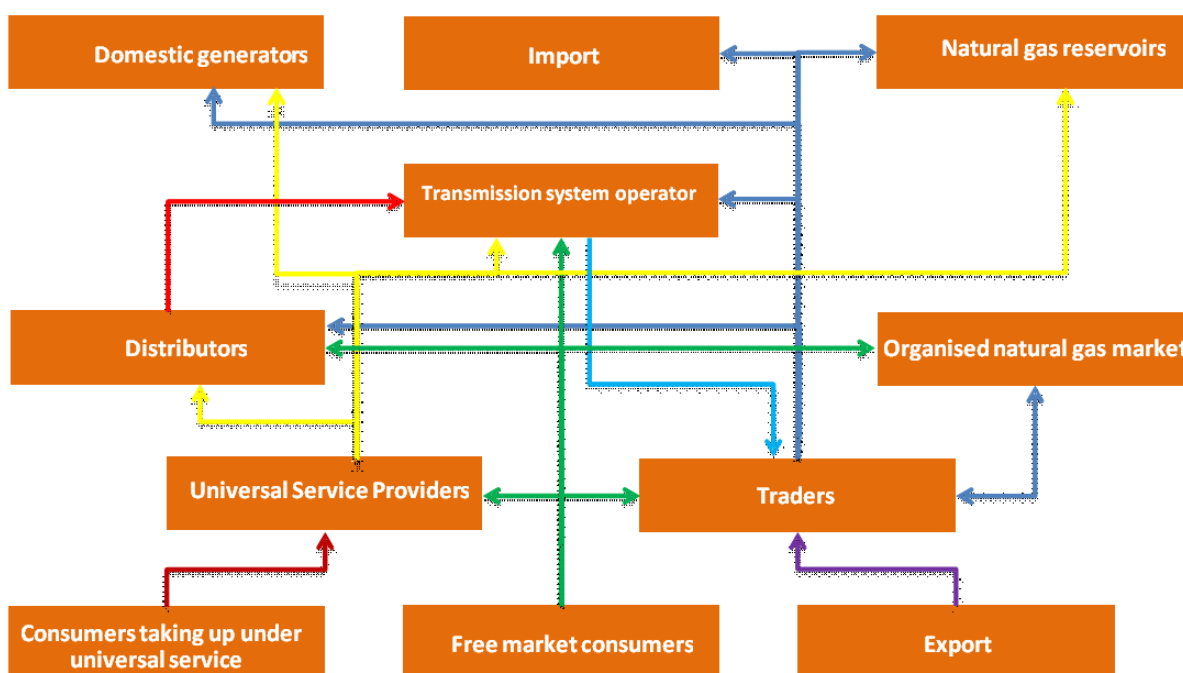
Transmission from Hungary to Ukraine at the Beregdaróc interconnection point was launched at the beginning of the 2013/2014 gas year (the second half of 2013). The Serbian, Croatian and Romanian interconnectors witnessed only exports from Hungary, even though the Croatian and Romanian cross-border pipelines were constructed so that they are suitable for bidirectional operation.

The expansion of existing cross-border capacities in the region, the Slovakian-Hungarian gas interconnector as well as new southward gas pipeline interconnections may improve the security of supply and contribute to the diversification of routes.

**Figure 11: Structure of the domestic natural gas market (physical flows)**



**Figure 12: Structure of the domestic natural gas market (financial flows)**



Seasonality in the gas consumption of households, i.e. increased gas demand during the winter heating period, requires that – in addition to the existing import sources and domestic production – supply is sourced from gas storage facilities filled during summer. In order to maintain the balance of the interoperable natural gas system, the transmission system operator, system operators and system users are in continuous cooperation.

With the primary purpose of supplying household customers, the minister in charge for energy policy determined the necessary strategic gas storage capacity in order to mitigate the negative effects of a potential import disruption. In 2013, the Authority granted permission to Magyar Földgáztároló Zrt. (Hungarian Gas Storage Ltd.) for strategic gas storage (in addition to commercial gas storage). Nevertheless, as per the decision of the Minister of National Development, MMBF Zrt. remains responsible for the strategic storage of natural gas.

Transmission, distribution and storage are monopoly activities, therefore strict rules have to be applied in accordance with European regulations, such as providing non-discriminatory access to infrastructure and separating these activities from production and trade.

### 3.1.2. Wholesale and retail trade

The composition of the supply source of natural gas in 2013 is presented in the table below.

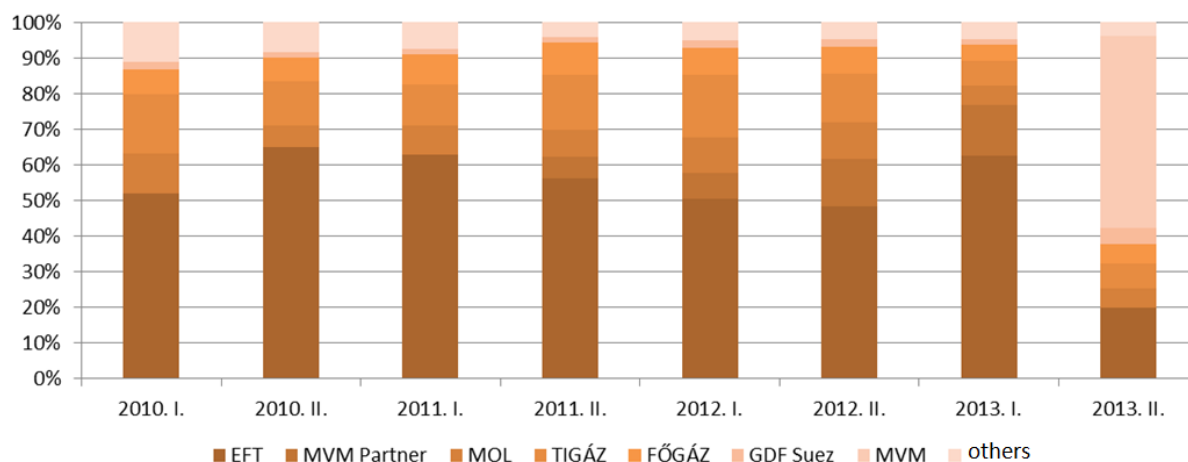
**Table 16: Natural gas supply source structure**

	Billion m <sup>3</sup>	%
<b>Annual import and domestic production:</b>	<b>10.12</b>	<b>100</b>
Domestic production:	1.95	19.3
Import:	8.17	80.7
- of which, from Eastern direction:	4.38	53.6
- of which, from Western direction:	3.79	46.4

Hungarian natural gas imports are predominantly of Russian origin, as much of the natural gas purchased at Baumgarten, Austria and delivered through the HAG pipeline, is also of Russian origin in terms of its molecular composition. The ratio of domestic production and import in aggregate supply has been around 20-80% for several years, with gradually decreasing domestic production. In 2013, Eastern import exceeded Western import.

Figure 13 illustrates how market shares (calculated based on purchased sources – import and production) altered as a result of organizational changes and of shifts of the market. By the second half of 2013, the market share of the MVM Group – calculated based on purchased sources – grew to 53.9% due to the purchase of E.ON Földgáz Trade Zrt. (EFT).

**Figure 13: Change in the market share of gas traders, based on the amount of purchased sources (2010–2013)\***



\* For 2013 II., the MVM figure involves MVM Partner and, from 1 September 2013, also Magyar Földgázkereskedő Zrt. (Hungarian Gas Trading Ltd.).

The Hungarian retail market has been characterised by a dual structure since market opening in 2004, composed of two distinct price segments: the regulated price and market price. The relative weight of the two segments in relation to each other was shifting continuously towards the free market with market opening. As of 1 July 2009, public utility service applying regulated prices – and having been available to all customers – was replaced by universal service, available to a more limited range of eligible customers.

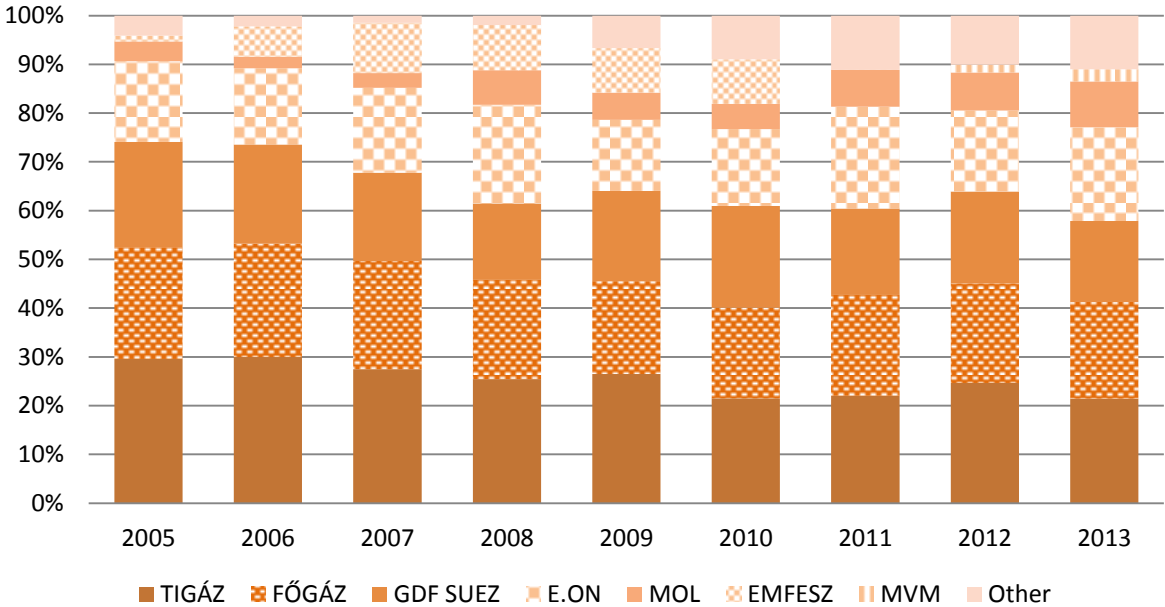
Customers eligible for universal service (household customers, other customers with purchased capacity below 20 m<sup>3</sup>/hour, local governments up to the capacity to supply the households of customers living in rented apartments of the local government) are still predominantly supplied by the universal service providers. Universal service providers are bound by natural gas sales and contracting obligations with eligible customers.

Non-eligible customers had either been purchased natural gas from the free market, or entered the free market only upon termination of their eligibility to universal service (customers with medium and small consumption and district heating producers). With the cessation of utility service, and later with the restriction of eligibility for universal service, customers with small and medium consumption patterns also selected their suppliers from natural gas traders.

Companies holding both universal service provider and trading licenses – Fővárosi Gázművek Zrt. (Budapest Gas Works Ltd.), E.ON Energiaszolgáltató Kft. (E.ON Energy Supply Ltd.), GDF SUEZ Energia Magyarország Zrt. (GDF SUEZ Energy Hungary Ltd.) and TIGÁZ Zrt. – have interest in the operation of the distribution networks through their subsidiaries or affiliates. Universal service providers are owned by multinational companies such as E.ON, RWE, Eni and GDF (in the case of Főgáz Zrt., it is the municipality of Budapest that has majority shares and not RWE). In 2013, 44 companies held licenses for natural gas trade, and sold natural gas predominantly to industrial customers or other gas traders.

GDF SUEZ and E.ON entered the gas market in the second half of 2013 and on 1 January 2014 respectively, with their trading companies focused exclusively on the supply of competitive market customers.

**Figure 14: Changes in shares of the investment groups on the basis of natural gas volume sold on the retail market (2005–2013)**



Compared with the previous year, the joint market share of the four main company groups (TIGÁZ, FŐGÁZ, E.ON, GDF SUEZ) stayed nearly the same. Their market position continued to be extremely strong since the majority of customers purchased natural gas within the framework of universal service. There are two other market participants with gradually increasing share in the natural gas market, namely MET Magyarország Zrt. (MET Hungary Ltd., formerly called as MOL Energiakereskedő Zrt. – MOL Energy Trading Ltd.) and MVM Zrt.

**Table 17: Market shares based on the number of consumers in December 2013**

Company/Number of customers	Universal service	Free market	Total	Share
TIGÁZ Zrt.	1,196,798	6,796	1,203,594	34.78%
Fővárosi Gázművek Zrt.	806,365	4,761	811,126	23.44%
GDF SUEZ Energia Magyarország Zrt.	760,119	4,472	764,591	22.09%
E.ON Energiaszolgáltató Kft., E.ON Földgáz Trade Zrt.	608,664	2,743	611,389	17.67%
Magyar Telekom Távközlési Nyrt.	0	67,587	67,587	1.95%
Other	340	2,088	2,446	0.07%
<b>Total</b>	<b>3,372,286</b>	<b>88,447</b>	<b>3,460,733</b>	<b>100%</b>

### 3.1.3. Market events

Domestic natural gas consumption follows – among others – changes in GDP and weather conditions (e.g. cold winter). It can be stated that with the termination of public utility structure and the introduction of the universal service on 1 July 2009 with a narrowed circle of eligible customers (households, small customers, public institutions), the segment with regulated price represents only 40% of the total gas consumption, while this share was 33.7% in 2013. Figures show that the total domestic natural gas consumption has been decreasing for years.

In 2013, domestic gas consumption was 9.2 billion m<sup>3</sup>. Household customers supplied by universal service consumed 3.1 billion m<sup>3</sup> gas in 2013, which is 4% less relative to the previous year, while 23% less than the consumption five years before.

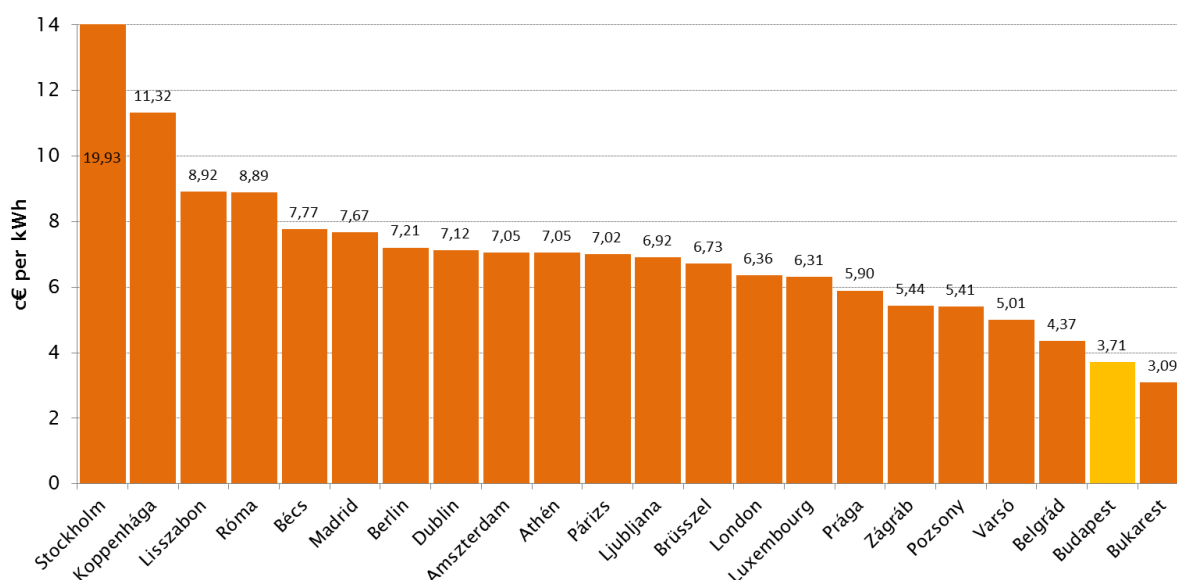
Contrary to previous years, when physical congestions were typical for the Eastern cross-border point, after 2011, in 2012 and 2013, congestion shifted to the Western cross-border point. In order to address the Western physical congestion, FGSZ Zrt. temporarily increased the capacity on Western import entry point from 12.1 million m<sup>3</sup>/day to 14.4 million m<sup>3</sup>/day from the end of 2011 in order to meet the seasonally fluctuating natural gas demand (typically high in winter) by expanding the compressor station. However, in summer, this increased capacity is available only in the form of interrupted capacity.

As for the direction of natural gas import, there was a change compared to years 2011 and 2012. In 2011, import from the Western direction (4.41 billion m<sup>3</sup>) exceeded import from the Eastern direction (3.6 billion m<sup>3</sup>). The ratio was similar in 2012 (4.6 billion m<sup>3</sup> from West, 3.58 billion m<sup>3</sup> from

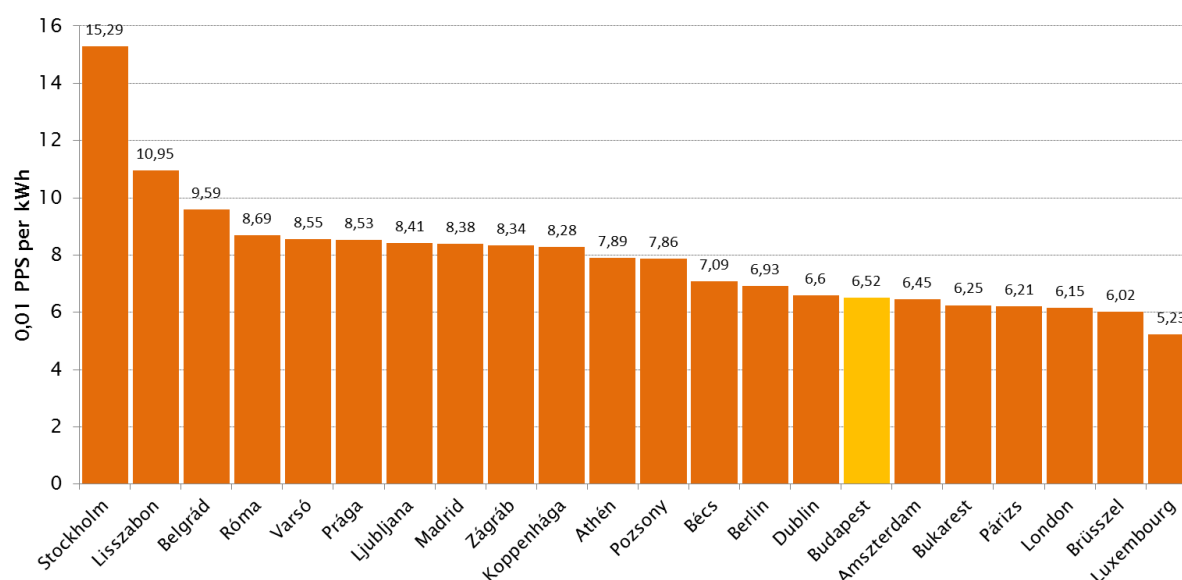
East). In 2013, import from the Eastern direction (4.38 billion m<sup>3</sup>) exceeded import from the Western direction (3.79 billion m<sup>3</sup>) again, as it was the case in 2010 and the previous years.

The Hungarian household price in December 2013 – according to the statistics of the Authority – was the second lowest natural gas price in the European Union after Romania. Calculated on purchasing power parity, however, it is in the mid-range.

**Figure 15: Mean natural gas prices for household consumers (EUR cent/kWh), December 2013**

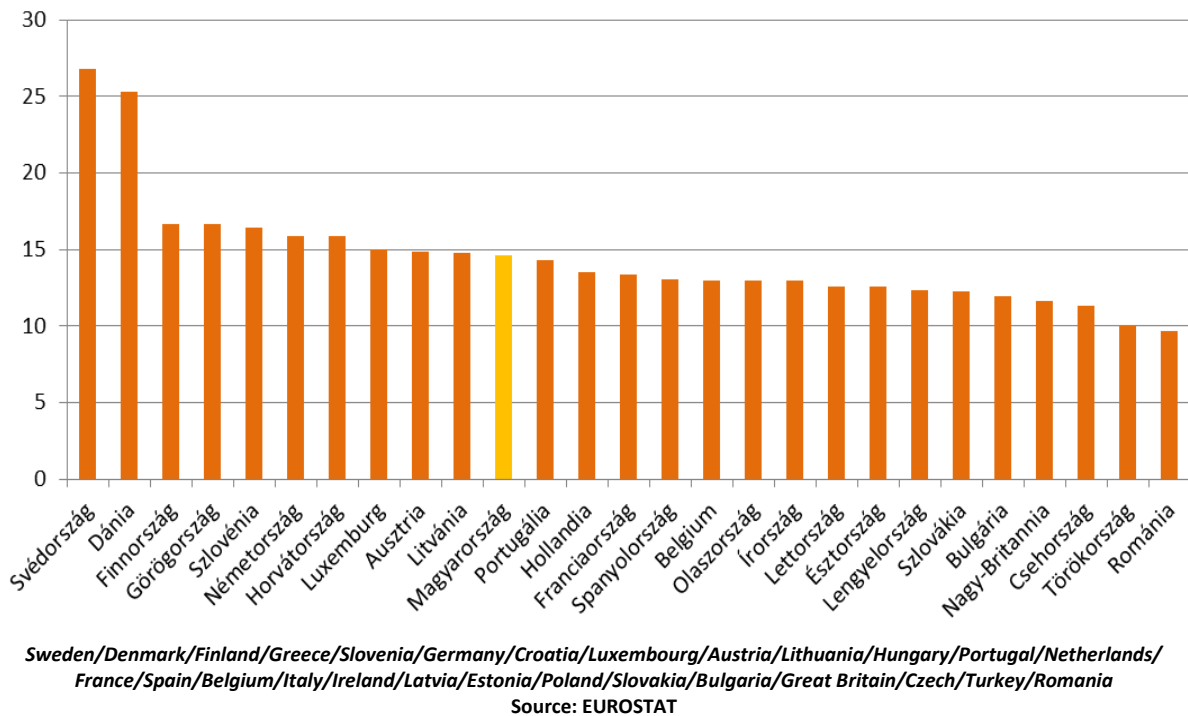


**Figure 16: Mean natural gas prices for household consumers based on purchasing power parity (0.01 PPS/kWh), December 2013**



For industrial customers, the Hungarian competitive market price for natural gas is in the EU mid-range, the mean price is above the EU average.

**Figure 17: Comparison of mean natural gas prices for industrial customers in Europe (10,000–100,000 GJ annual consumption; first half of 2013, EUR/GJ)**



### 3.1.4. Licensing and supervision

In line with the Gas Supply Act (GET), the Authority shall establish the conditions necessary for performing the activities of a natural gas market licensee and other related activities specified in a license issued by the Authority. The Authority shall monitor continuous compliance with the requirements laid down in the license, and apply legal consequences as appropriate.

The Authority adopted 158 resolutions and issued 27 orders in 2013. 5 operating licenses for gas trade and 9 limited natural gas trading licenses were issued during the year. The Authority – upon the request of license holder companies – withdrew 4 operating licenses for gas trading, while 1 license was withdrawn as a sanction within the framework of administrative authority procedure initiated by the Authority on its own motion. As a result, the number of natural gas trading licensees did not change in 2013, only the entities of natural gas market participants. (Licenses have been revised and modified 41 times in total. The Authority passed resolutions related to financial guarantees 39 times. In addition, the Authority passed decisions in 8 cases on compliance reports, in 10 cases on outsourcing and in 19 cases on the approval or modification of the general terms of business.)

General rules of natural gas transmission, and conditions to be met for issuing natural gas transmission licenses are listed in detail in the GET. Besides transmitting gas, the most important task of the natural gas transmission company is daily balancing. Pursuant to the law, the activity related to securing balancing gas is not deemed to be a commercial activity. The transmission system operator– during performing its tasks – operates an internet-based IT system that provides the data



flows necessary for maintaining the hydraulic balance of the interoperable natural gas system and for administering nominations and allocations.

The high pressure transmission pipeline system is operated by FGSZ Földgázszállító Zrt. FGSZ Zrt. is in possession of the transmission system operation license issued by the Authority. Considering that FGSZ Zrt. is the only transmission system operator at present, it performs the system operation tasks of the interoperable natural gas system.

Another natural gas transport license was issued by the Authority in 2011 to Magyar Gáz Tranzit Zrt. (Hungarian Gas Transit Ltd., hereinafter referred to as: MGT). The main function of the company is the construction of the new Slovakia-Hungary interconnection pipeline and, after obtaining the relevant license, its operation. The pipeline is expected to be commissioned in 2015.

Upon request from FGSZ Földgázszállító Zrt. as the transmission system operator licensee, the Authority conducted a public administration authority procedure in 2013 on two occasions in relation to the approval of the Operational and Commercial Code (hereinafter: ÜKSZ). The Authority approved the ÜKSZ with the detailed procedural order and rules included therein with modifications.

The GET provides the general rules of operation for natural gas distribution companies including licensing conditions and the obligation of the licensee for cooperation in order to ensure the development and operation of the interoperable natural gas system. The law lists the cases in detail when the distributor may refuse the connection of a customer or the commencement of distribution or the continuation of services to an already connected user. The gas distribution company keeps records on the gas customer locations in the distribution network, their typical and mandatory characteristics, and shall transfer such data upon request to the customer consuming gas at the given location or to the trader that supplies gas to him. The Gas Distribution Code sets the detailed rules on natural gas distribution services constituting the Annex of the government decree on the implementation of the GET.

Natural gas distribution systems are operated by 10 regional distributor companies. Most of the regional distribution activity – geographically divided – is carried out by 5 large companies of the above.

CEEGEX started its operation on 1 January 2013 as the licensee operating the organised natural gas market. In the course of the year 2013, the number of organised market participants reached 8, including foreign participants that obtained limited natural gas trading license in the preceding year.

### **3.1.5. Unbundling of operations**

Pursuant to the GET, unbundling of accounting is mandatory to all businesses in the natural gas sector, no exemption can be granted. If natural gas transmission, distribution and storage are conducted by a single vertically integrated company, the licensed operations shall be provided through a legally unbundled organisation with independent organisational chart and decision making, separated from other operations not directly related to them, except for:

- a) natural gas traders supplying less than 100,000 customers,
- b) piped PB gas service providers.

Under Section 6 of the government decree on the implementation of the GET, transmission operations should be carried out in an unbundled manner, in a separate organisational unit and by

an independent decision making process. System operation managers may not participate in any other gas sector activities (subject to licensing), either in a direct or indirect manner. With respect to the information flow, the system operator is required to perform its natural gas sector activity the same way for those in its ownership and for any other participant on the market.

FGSZ Zrt. is separated both physically (registered office, office building) , legally and with respect to its activity from any other business entity conducting activities in the natural gas sector. FGSZ Földgázszállító Zrt. operates according to the ITO (Independent Transmission Operator) model that ensures the materialization of unbundling operations in line with EU directives. The main principle of the model is that the company engaged in the transmission system operation activity, and which is part of a vertically integrated company group, shall be able to operate within the group in line with the regulations on the separation of production and commercial activities. Within the framework of the ITO model, FGSZ Zrt. shall remain unbundled both from parent and subsidiary companies.

MGT Zrt. is a legally separated company of Magyar Villamos Művek Zrt. MGT Zrt. also has to go through a verification procedure in accordance with the unbundling regulations of the EU in order to be allowed to start its operation activity.

Among the 10 natural gas distribution licensees, there are 5 major regional companies with more than 100 customers each. The 5 large companies completed legal unbundling already in 2007. As such, they perform gas distribution and trading in separate companies. 9 of the former public utility licensees applied for and were granted universal service provider licenses by the Authority. Most of them holds free market gas trade licenses as well. They perform these activities with unbundled accounting or they have created legally independent trade licensee within the company group.

### 3.2. Security of supply

The Authority is responsible for monitoring the security of natural gas supply, controlling sufficiency of natural gas sources and taking measures if any of these are insufficient.

In order to secure safe supply of natural gas, the Authority is continuously monitoring the situation on the Hungarian gas market, the activities and operations of individual participants, and prepares weekly forecasts in the heating season for the cases when unexpected disruptions of gas deliveries from the Ukrainian border occur or extreme weather conditions could be experienced. With the involvement of gas sector companies, the Authority prepared forecasts in the autumn of 2013, outlining various scenarios in order to model unexpected events more precisely. The forecast provides the opportunity for the Government for timely and appropriate interventions in order to secure undisturbed supply of natural gas to Hungary.

The highest natural gas consumption ever measured in Hungary was 89.5 million m<sup>3</sup>/ day (9 February 2005). In comparison, the highest natural gas consumption measured in 2013 was 52.0 million m<sup>3</sup>/ day (14 January 2013) while the second highest figure was 51.9 million m<sup>3</sup>/ day (25 January 2013). Compared to the figures above it can be seen that the current capacity of the domestic natural gas supply system is more than twice of these figures and thus the technical background to security of supply is appropriate.

**Table 18: Maximum technical capacity of the Hungarian natural gas supply system (million m<sup>3</sup>/day)**

<b>Domestic production</b>	<b>10.5</b>
<b>Import HAG (Western direction)</b>	<b>14.4</b>
<b>Import Beregszász (Eastern direction)</b>	<b>56.3</b>
<b>Import Csanádpalota (Southeastern direction)</b>	<b>4.8</b>
<b>Import Drávaszerdahely (Southwestern direction)</b>	<b>19.1</b>
<b>Commercial gas storage</b>	<b>60.1</b>
<b>Strategic gas storage</b>	<b>20.0</b>
<b>TOTAL</b>	<b>185.2</b>

Article 4 of Regulation No 994/2010/EU obliges member states to identify factors threatening security of supply, and in order to decrease the risks of security of supply to elaborate a Risk Assessment and a Prevention Action Plan based thereupon, as well as an Emergency Plan for mitigating the effects of possible crises.

Pursuant to the directives of the Decree, the Authority elaborated the Risk Assessment in detail in 2011 and sent it to the European Committee as required. One of the main elements of the Risk Assessment is the N-1 analysis. This analysis defines the largest independent natural gas infrastructure, and calculates the load (availability) of the remaining infrastructure in case of the failure of the largest infrastructure, and determines if the remaining infrastructure is suitable to meet the total gas demand of the country. The analysis showed that the N-1 indicator for Hungary was 105% in 2012 which met the requirements of the Decree. (The indicator is expected to be 124% in 2015 and 122% in 2020, thus the security of natural gas supply in Hungary will be adequate in the long run as well.) The Authority prepared and sent the Prevention Action Plan and Emergency Plan coordinated with the neighbouring member states to the European Committee by the specified deadline, until 3 December 2012.

### **3.2.1. Allocation of cross-border capacities and congestion management**

A cross-border gas pipeline is a transmission or distribution pipeline which crosses the border of Hungary and has gas metering station installed. Congestion (contractual and/or physical) occurs when demand for natural gas transmission exceeds transmission capacity.

Border crossing point capacities are shown in Table 18. In addition to the indicated import feed-in points, Hungary also has a natural gas transmission pipeline interconnection towards Serbia (with a capacity of 13.2 million m<sup>3</sup>/day) but this is only used for transit purposes.

Long term natural gas import contracts and their effect:

- Panrusgas                      9000    million m<sup>3</sup>/year                      until 2015
- E.On Ruhrgas                      500    million m<sup>3</sup>/year                      until 2015

The long-term transit contract concluded with Serbia will expire in 2017 and engages a pipeline transmission capacity of 12 million m<sup>3</sup>/day permanently.

Similar to the past two years, the Western HAG pipeline saw physical congestion in 2013 as well. In order to mitigate the congestion, FGSZ Zrt. has completed a compressor station expansion on the

Western import entry point which enabled to meet higher natural gas demand during the winter season (14.4 million m<sup>3</sup>/day).

### 3.2.2. Natural gas transmission

FGSZ Földgázszállító Zrt., the transmission system operator licensee owned by MOL is responsible for the operation of the natural gas system and the transmission network.

On 30 October 2013, the Authority rejected the ten-year network development plan submitted by the transmission system operator and obliged FGSZ Zrt. to revise the proposal.

As a result of pipeline developments carried out in 2010 by FGSZ Földgázszállító Zrt., import diversification possibilities have widened, thus increasing the security of supply. Pipelines built towards Romania and Croatia do not only enable gas trade to the neighbouring countries, but they are also parts of the North-South gas corridor, which from 2011 on, is considered to be a priority project by the European Commission. The new northern cross-border pipeline shall also be a part of the same gas corridor. Planning and construction works of this pipeline have already commenced. The Slovakian-Hungarian cross-border pipeline will have a capacity of 14.4 million m<sup>3</sup>/day.

Regulation No 994/2010/EU of the European Parliament and the Council concerning measures to safeguard security of gas supply and Article 7 of its Regulation on repealing the Council Directive 2004/67/EC stipulates obligation to build bidirectional capacity for all cross-border natural gas lines within the Union.

The Austrian-Hungarian HAG pipeline was built for being suitable for bidirectional transmission, just like the Croatian-Hungarian interconnector. The development required to make the Romanian-Hungarian interconnector capable of bidirectional transport (construction of a compressor station) is carried out by the Romanian transport system operator, Transgas.

Magyar Gáz Tranzit Zrt. (MGT Zrt., its majority indirectly in public ownership) also holds a license for natural gas transport. With this license, it can establish the Slovakian-Hungarian cross-border natural gas interconnector. The company will be eligible for obtaining the license for transmission system operation – also suitable for pipeline operation – after obtaining the specification on the unbundling of activities, said specification procedure still to be approved by the EU Committee. On 29 April 2013, the Authority sent its resolution proposal to the EU Committee on the exemption for complete ownership unbundling. The Committee approved this, but obliged the Authority to require significant additions. The transformation of ownership structure is currently in progress, with the objective of MGT Zrt. begins operation of the cross-border pipeline on 1 January 2015.

The Slovakian-Hungarian interconnector under construction shall be built by developing bidirectional natural gas transmission.

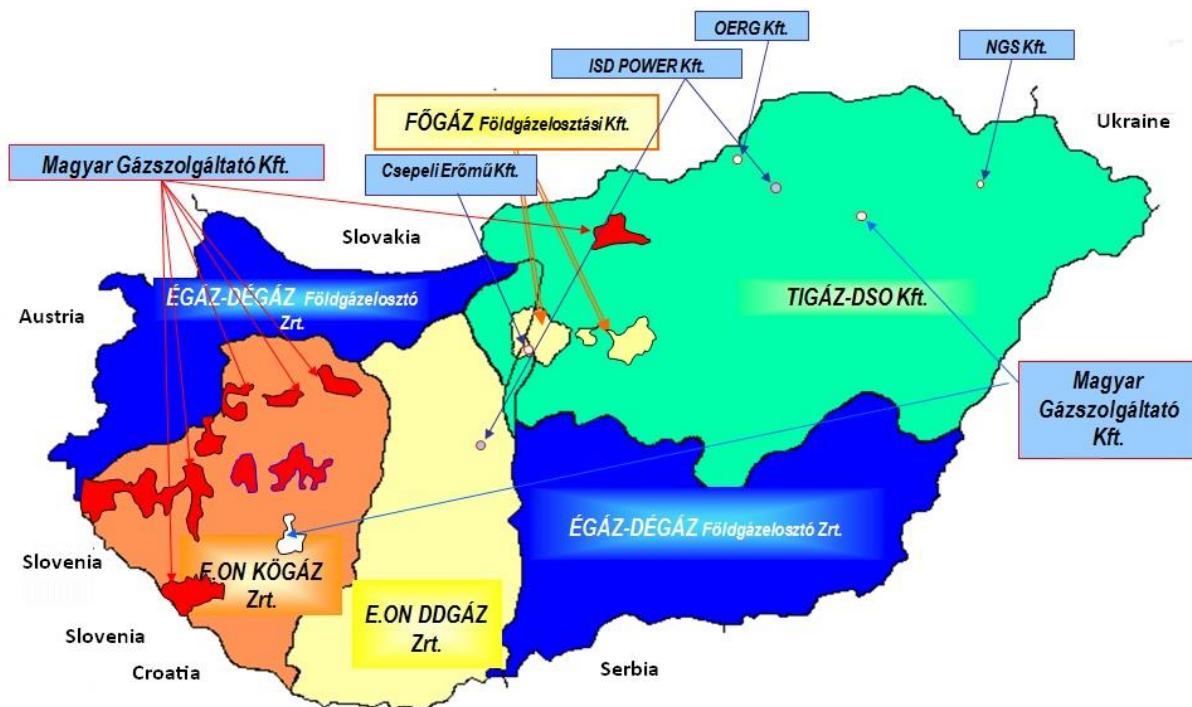
### 3.2.3. Natural gas distribution

There are ten gas distributor companies operating in Hungary:

- ÉGÁZ-DÉGÁZ Földgázelosztó Zrt. (GDF SUEZ affiliate),
- E.ON Dél-dunántúli Gázhálózati Zrt. (E.ON affiliate),
- E.ON Közép-dunántúli Gázhálózati Zrt. (E.ON affiliate),

- FŐGÁZ Földgázelosztási Kft. (Budapest Municipality–MVM affiliate),
- TIGÁZ-DSO Földgázelosztó Kft.,
- Csepeli Erőmű Kft.,
- ISD POWER Energiatermelő és Szolgáltató Kft.,
- Magyar Gázszolgáltató Kft.,
- NATURAL GAS SERVICE Ipari és Szolgáltató Kft. and
- OERG Kft.

**Figure 18: Natural Gas Distribution Companies in Hungary**



### 3.2.4. Natural gas storage

#### Strategic natural gas storage

Act XXVI of 2006 on the strategic stockpiling of natural gas adopted by the Parliament in March 2006, provided for the storage of 1.2 billion m<sup>3</sup> natural gas and the establishment of the necessary underground storage facility until 2010. Strategic natural gas reserves should be stored in storages with a withdrawal capacity of 20 million m<sup>3</sup>/day for a period of at least 45 days.

The strategic stockpiles set by the law serve exclusively for the security of supply of household and communal customers.

Strategic reserves did not have to be tapped due to emergency during the year 2013.

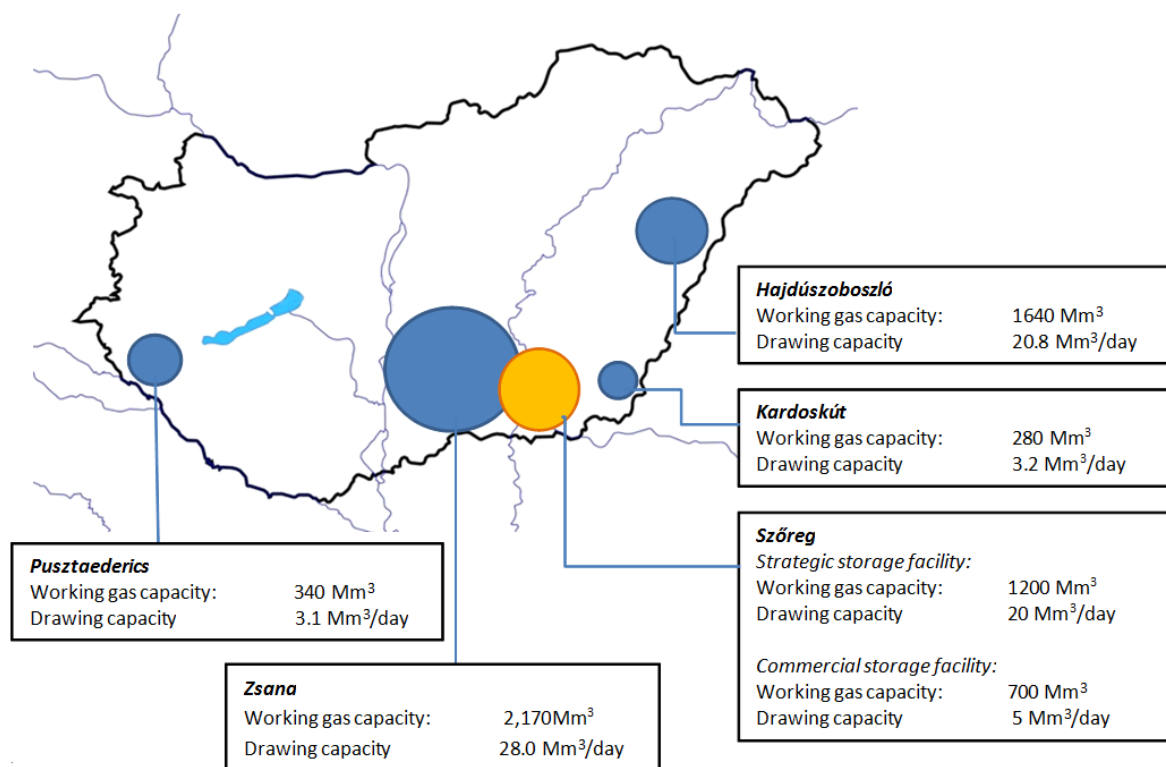
Decree No 13/2011. (IV. 7.) NFM and its amendment in 2013 temporarily decreased the working gas reserve of the strategic storage to 615 million m<sup>3</sup>. The released reserves shall be reinjected until 30 June 2015 according to the Decree.

On 25 July 2013, Magyar Földgáztároló Zrt. (formerly called as E.ON Földgáz Storage Zrt.) was also granted permission from the Authority for the strategic stockpiling of natural gas if the minister in charge of energy policy appoints said licensee to perform strategic gas storage.

### Commercial natural gas storage

Four of the five commercial gas storage facilities in Hungary were operated by Magyar Földgáztároló Zrt. (formerly called as E.ON Földgáz Storage Zrt.) in 2013. MMBF Zrt. applied for and was granted by the Authority a commercial gas storage license as well, which – besides the strategic supplies – allows for the storage of an additional 700 million m<sup>3</sup> of working gas in the Szőreg-I facility. This is associated with a 5 million m<sup>3</sup>/day commercial withdrawal capacity according to the license. Thus the fifth commercial gas storage is operating in the Szőreg-I facility.

**Figure 19: Location of underground gas storage facilities in Hungary and their working gas capacity**



It is important and reassuring with respect to security of supply that – at an appropriate filling level – two thirds of the domestic daily peak demand can be provided by the system from commercial storage facilities. The provisions of Regulation No 994/2010/EU announced on 12 November 2010 were implemented with related amendments in GET, and furthermore in Government Decree No 265/2009 (XII. 1.) on the restriction of supply and on the use of strategic reserves of natural gas, and other measures required in the event of any emergency in the supply of natural gas.

### 3.2.5. Specification of the gas limitation sequence

The Authority specifies a limitation sequence in September each year to be applied in case of supply disturbances by which the continuity of gas supply to certain customers can be secured with the limitation of certain customers. In the category to be limited first, the Authority qualifies all gas-fired power plants which are covered by legal requirements to stockpile liquid fuel stocks as alternative

energy sources sufficient to operate for 16 days continuously. Should the limitation of this category be insufficient, further customers may be limited according to the limitation sequence.

The limitation sequence has been prepared pursuant to Government Decree No 265/2009. (XII. 1.) on the limitation of natural gas consumption, the usage of strategic gas reserve and the other actions to be taken in case of a gas supply crisis, establishing eight categories for the limitation system. (XII. 1.) The needs of industrial users whose gas supply limitation could not be realised earlier within the time limits stipulated in the legislation were also settled by law, since their sudden shutdown caused large-scale technological damage. The situation of these customers is facilitated by the Amendment of Government Decree No 265/2009 [Gov. Decree No 293/2011, (XII. 22.)] which allows for them to submit an application to increase the time frame available for complying with the limitation requirements from 8 hours to 72 hours in such cases.

### **3.3. Price preparation, price regulation**

#### **3.3.1. System charges**

From 1 January 2013 – as a result of the 10% drop in the average price for household end-users – the rate of return on the supply of customers eligible to universal service, changed from 4.5% to 2.28%. As a result, compared with 2012 September prices, the average price for transport decreased by 12.41%, the average price of storage by 8.50%, and the average price of distribution by 10.20%.

The Authority adopted a resolution on 30 April 2013 on the division of booked gas storage capacities, according to the extent necessary for supplying customers eligible and not eligible to universal services, respectively.

As per the content of the status law on the Authority, the Authority was granted the right to issue decrees and was entitled to set system charges in a decree, the regulations for the incentives of increasing the quality of supply provided by the system operator through system charges, the system charges applicable depending on the quality of supply provided, and also the conditions for the application of system charges, the connection fees and the regulations of their application. In line with this, the Authority decrees effective from 1 July 2012 and 1 January 2013 that previously set gas transport, storage and distribution tariffs, were replaced by the MEKH decree no. 1/2013 (VII.11.) on gas system charges, the regulations for the incentives of increasing the quality of supply provided by the system operator through system charges, the system charges applicable depending on the quality of supply provided, and also the conditions for the application of system charges. The decree issued at that time already included the system charges as per the regular price adjustment of July, these were defined as follows.

Transport fees remained unchanged while for the storage fees – in line with previous practice – the costs of cushion gas coverage were taken into account among the costs calculated on the basis of different methodology. Apart from this, the costs of the cushion gas not paid during the previous year, are covered by the fees to be paid after the booked capacities for the supply of consumers non eligible to universal service. Furthermore, with respect to the usage of gas storage capacities and the heavy decrease of stored natural gas volume, the Authority has modified the (updated) modelled capacity booking and volume which was previously taken into account during the price regulation cycle.

When determining the distribution tariffs, the changes in the distributed quantities have been taken into account. Tariff charges could be minimised by means of abstracting the surcharge in the supply categories for customers eligible for universal services, thus the prices for them have not changed at all or have slightly changed as compared to the previous year. Due to decrease in the distributed quantity, a marked tariff increase could be experienced in case of customers not eligible for universal services.

As per the above, Decree No 43/2013 (VII.25.) of the Ministry of National Development on the criteria of determining gas connection fees and the elements of the connection fees, was announced on 25 July 2013, along with the MEKH decree no. 2/2013 (VII.25.) on the gas connection fees and the regulations of their application. The fees effective from this date were calculated by the Authority with a formula that was established in practice during 2012. The Authority – based on the results of a professional review carried out in 2013 – prepared legislation proposals by December 2013 in order to replace the current connection fee calculation practice. In line with the legal requirements, these were discussed with gas sector and advocacy organisations. The purpose of legislation change was the vast restructuring of the current system resulting in better utilisation of the existing infrastructure. It is expected to be effective from the first half of 2014.

An exceptional tariff was determined, effective from 1 November 2013, with regard to legal modifications due to the household end-user tariff cut by 11.1%. In case of transmission and storage, the rate of return related to the supply of customers eligible for universal services decreased from 2.28% to 0%. This involved a decrease relative to the July 2013 prices, while the rate of return did not change in the supply of customers not eligible for universal services, and consequently, prices did not change either. As for distribution, the above mentioned conditions on the rate of return also affected prices. Furthermore, due to legal modifications, the justified cost of the accounting difference is not taken into account from 1 November. As a result, tariffs to be paid for the supply of customers eligible for universal service decreased, while the tariffs to be paid for the supply of customers not eligible for universal service also decreased slightly.

**Table 19: Gas system charge trends from 2011 (data in HUF/m<sup>3</sup>)**

		From 01.01.2011	From 13.07.2011	From 01.07.2012	From 01.01.2013	From 26.07.2013	From 01.11.2013
<b>In the supply of customers eligible for universal services:</b>	Transmission	4.23	4.20	4.16	3.64	3.64	3.11
	Storage	10.15	11.05	11.06	10.12	11.18	10.02
	Distribution	17.78	16.43	16.44	14.77	15.07	11.22
	<b>Total</b>	<b>32.16</b>	<b>31.69</b>	<b>31.66</b>	<b>28.53</b>	<b>29.89</b>	<b>24.35</b>
<b>In the supply of customers not eligible for universal services:</b>	Transmission	5.22	5.20	5.16	5.16	5.16	5.16
	Storage	12.49	13.39	13.41	13.41	16.73	16.73
	Distribution	5.72	7.38	9.06	9.11	9.42	8.73
	<b>Total</b>	<b>23.43</b>	<b>25.97</b>	<b>27.62</b>	<b>27.67</b>	<b>31.30</b>	<b>30.61</b>
<b>Average system access fees:</b>	Transmission	4.71	4.68	4.63	4.23	4.23	4.58
	Storage	11.38	12.12	11.57	10.73	12.01	11.03
	Distribution	11.91	12.05	12.91	12.06	12.38	9.98
	<b>Total</b>	<b>28.00</b>	<b>28.86</b>	<b>29.11</b>	<b>27.01</b>	<b>28.62</b>	<b>25.60</b>

\* Calculation modelled for comparison, not the same as the transmission cost incorporated in the price of universal service



### 3.3.2. Price regulation framework for universal service

Customers eligible for universal service purchase natural gas on a regulated price. Customers eligible for the universal service are household customers, other customers with purchased capacity below 20 m<sup>3</sup>/hour, from 11 April 2013 the local governments up to the capacity to supply the households of customers living in the rented apartments of the local government.

Natural gas universal service price composes of the recognised price of natural gas as a product, the system charges (in contrast to universal service in the electricity sector), the wholesale margin and the universal service provider margin, as well as the financing costs of working gas.

#### Price regulation of natural gas offered for sale

The specific natural gas price applied in the price of universal service is determined based on the natural gas price formula set out in Decree No. 29/2009. (VI.29.) KHEM on the pricing of universal service in the gas market. This formula takes several factors into account. In the case of imported natural gas, the 70% weight of organised market (forward) prices and the 30% weight of the price of natural gas purchased by long-term contract remained unchanged in 2013.

In the case of storage gas, from April 2013, organised market prices were calculated with 90% weight and long term contract prices with 10% weight. Organised market prices are generally lower than prices set in the long term contract, therefore taking into account the organised market prices with a higher weight makes recognised gas price lower.

Keeping overhead costs low and further decreasing them made it necessary in 2013 as well that universal service providers have access to natural gas at a lower price than the price resulting from the formula set out by Decree No 29/2009 KHEM. This was facilitated by decreasing system charges and the price margin of universal service providers, and also by the low price set by the authority for domestic gas production from gas field set into production before 1 January 1998.

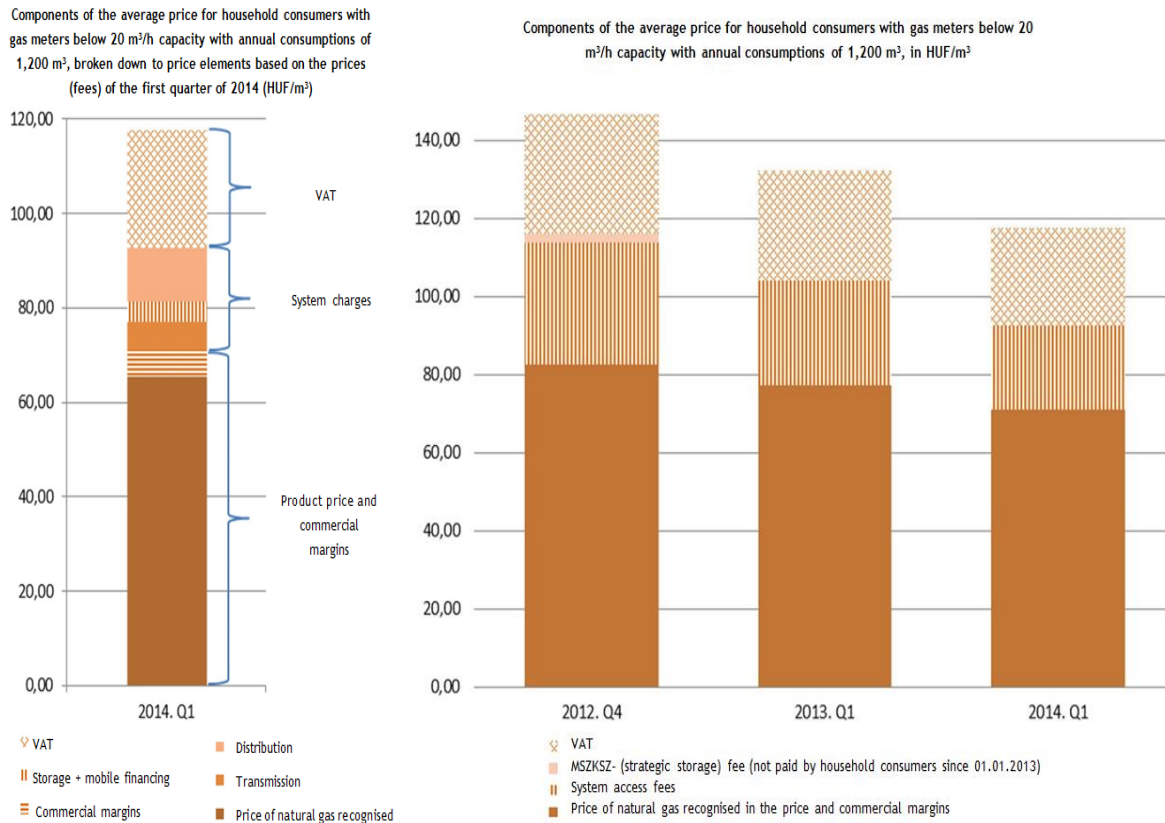
Except for the regulated price of domestic production, the purchase price of the different sources in the portfolio of universal service providers should be taken into account according to the formula set in the Decree No 29/2009 KHEM, regardless of the real purchase price.

The Authority prepared its proposal for the offer prices for the second, third and fourth quarter of 2013 and the first quarter of 2014 and sent it to the Ministry of National Development (NFM), in line with the regulations of the Decree No 19/2010 NFM.

## Changes in the end-user tariff of household customers supplied in the universal service

Tariffs for household consumers supplied in the universal service were cut on two occasions in 2013. From 1 January 2013, the base tariff of household consumers decreased by 10%, while the gas tariff by approximately 8.5%. These cuts, together with the exemption from paying strategic storage fee, resulted in a price cut of 10% in total.

**Figure 20: Average end-user price of household customers purchasing gas in the universal service (customer category I, with 1200 m<sup>3</sup>/year consumption) had the following components (HUF/m<sup>3</sup>)**

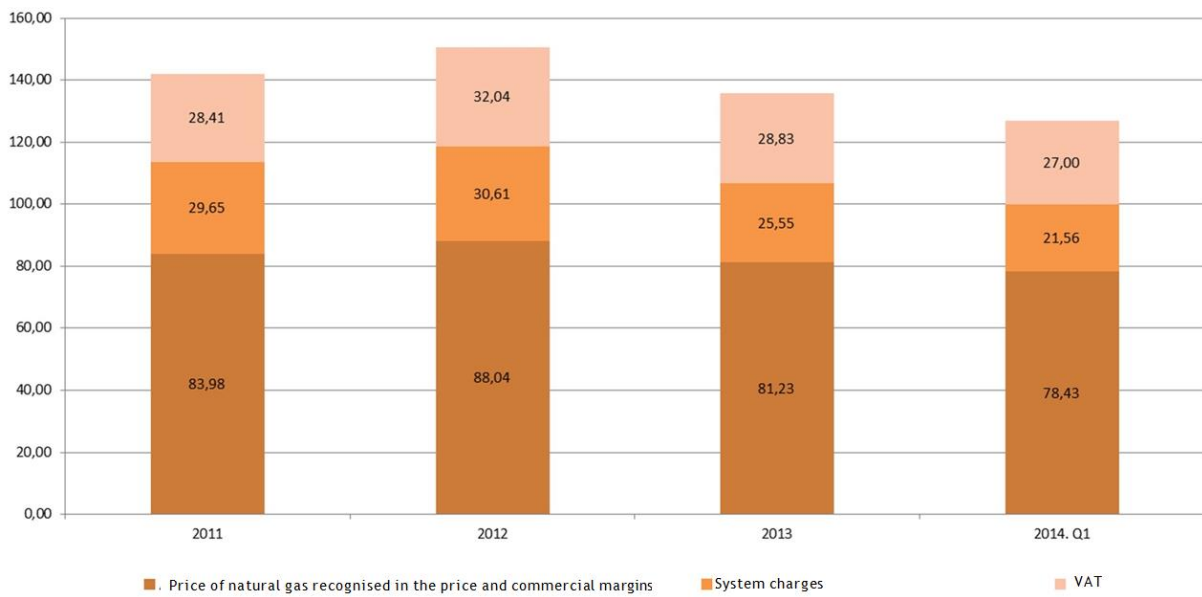


From 1 November 2013, tariffs for household consumers purchasing gas in the universal service were cut even further, by 11.1% compared to the prices effective on 1 January 2013. This already amounted to a 20% household gas price cut compared to 31 December 2012.

## Changes of universal service prices

The prices for non-household end users purchasing natural gas under universal service decreased due to the price cuts for household customers.

**Figure 21: Components of the average price for consumers with gas meter below 20 m<sup>3</sup>/h capacity (HUF/m<sup>3</sup>) (VAT and strategic storage fee / without MSZKSZ membership contribution)**



### 3.3.3. Involving certain forms of PB gas sale in the regulated price and its price cut

From 1 July 2013, PB gas sold in 11.5 kg PB gas cylinders, as well as PB gas sold through pipe or tank to household consumers, were involved in the regulated price system. By involving them in the regulated price system, the price of the affected PB gas products was cut by 10% compared to their sale price on 1 December 2012. Individual gas sector participants decreased their prices from 1 July 2013 compared to their former sale prices, while the prices to be applied by gas sector participants entering the market after 1 December 2012 were calculated and published by the Authority.

### 3.3.4. Revision of tangible assets and expenditures

Adapting to the four-year price regulation period, the Authority started preparation for the 2014-2017 price regulation cycle in 2013, by completing a procedure on the revision of tangible assets and expenditures. During this procedure, the justified costs were evaluated for transmission system operator and universal service provider licensees, and also for former public utility wholesale traders, as associated with the regulated activity. The evaluation covered a total of 21 license holders (13 system operators, 7 universal service providers, 1 former public utility wholesale trader). Along with the static, benchmark and transfer price analysis of justified costs, necessary for determining tariffs and price margin, the evaluation also covered the assessment of costs related to extra fee services. With regard to system access, the justified connection fees and the determination of justifiable rate of difference between the network and metered volumes were also covered. For gas distributor license holders, the asset value recognised in the price regulation was determined with a new methodology. The Authority also prepared its proposal for the return rate of capital costs recognisable in the case of individual license holders.

Also as in preparation for the price regulation cycle, the Authority compiled its proposal for framework decrees in the next price regulation cycle. In principle, these are in accordance with earlier framework decrees.

Act CCXXVII on the amendment of certain acts on energy was announced on 18 December 2013. This Act made Section 146/I of the Act XL of 2008 on natural gas supply effective from 1 January 2014 and

amended Paragraph (1) of Section 104/A of the same Act. As per these amendments, the price regulation cycle that started from 1 January 2010 was extended, and the decree – according to which, the Authority is obliged to inform the affected licensees about the revision of tangible assets and expenditures – was repealed. Thus, the revision of tangible assets and expenditures was not finished, nor the justified level of costs to be applied in the next price regulation cycle was determined.

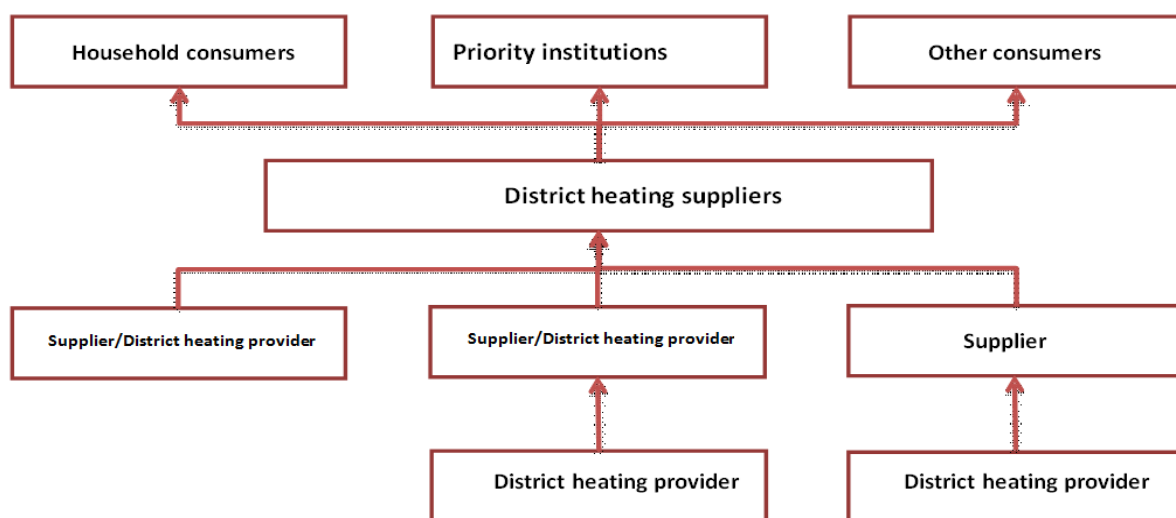
## 4. District heating generation, operation and regulation of district heating services

### 4.1. Operation of the district heating sector, its main characteristics

In Hungary, there are 650 thousand apartments in total supplied by district heating in 95 towns. Approximately 80% of the thermal energy sold by district heating suppliers are consumed by households (for heating and hot water consumption). The Authority is responsible for the licensing and supervision of district heating generators and suppliers.

District heating services are local public utility services. The simplified model of district heating supply is shown in the figure below.

*Figure 22: Simplified model of district heating supply in Hungary*



Sector participants are:

- district heating suppliers,
- district heating generators (who are generally suppliers, too) and
- district heating traders (who do not generate heat but buy that from generators and sell it to district heating suppliers).

The Authority issues district heating supplier licenses by towns. In general, one district heating supplier operates in each town. On the other hand, there are towns with more than one district heating supplier with operating license, and there are companies that are engaged in district heating supply in more than one town.

In the 95 towns, district heating is supplied by 91 companies with district heating supplier operating license, possessing 104 district heating supplier operating licenses in total.

In the case of cogeneration power plants (that generate heat and electricity together), the Authority issued operating licenses for district heating generation for the company as a whole. The number of operating licenses for district heating generation is 153, while the number of companies with operating licenses for district heating generation is 142.

District heating suppliers, if they are also engaged in district heating generation (in cogeneration and/or in a boiler) also hold district heating generation license for the municipality within their supply.

The number of district heating generation and district heating supplier licenses is 257 in total (153 and 104 respectively).

17 out of all district heating supplier license holders do not have own heat generation. They purchase 100% of the heat from traders (from other heat generation companies). There are 45 suppliers who supply customers exclusively from their own heat generation, i.e. without buying heat from other sources. The remaining 42 district heating supplier license holders supplies consumers from their own production and heat purchased from traders (other heat generation companies).

In 2013, there were two district heating seller licensees in operation which did not have own production and resold district heating purchased from producers to district heating suppliers.

Service providers purchase thermal energy from the district heating generator (heating plant or heating power plants) and/or produce it themselves in boilers, or, in increasing proportion, in cogeneration heat and power producing plants (e.g. with gas engines). The supplied thermal energy originated partially from cogeneration power plants in approximately 60 towns, producing heat and power together. The fuel used for district heating generation is predominantly natural gas.

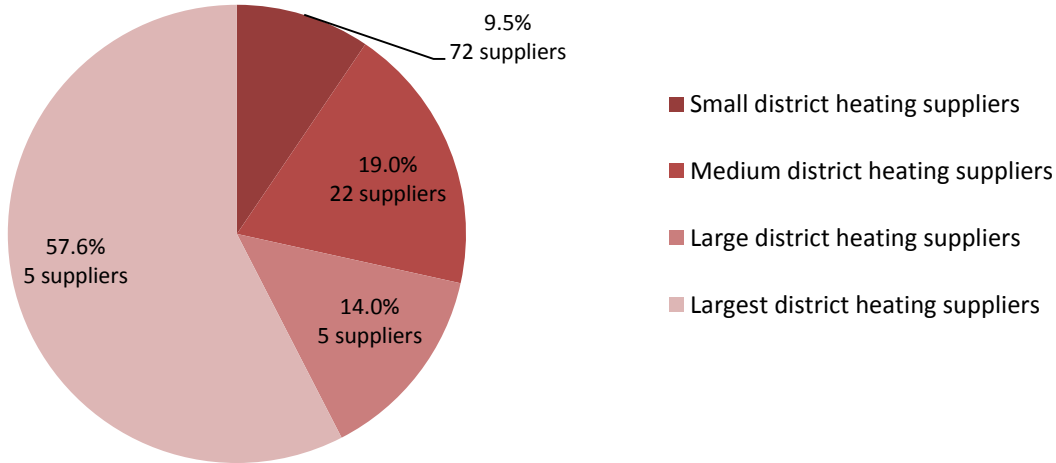
District heating supplier companies are mostly owned by municipalities, and in certain places the district heating generator (heating power plant subject to power license) also acquired a share in the service provider. In a few towns, the operation of the district heating supplier is accomplished by private companies through concession agreements.

There are 60 companies with district heating supplier license that are predominantly (with over 98% of the shares) owned by municipalities. There are 22 companies with mixed ownership (partly owned by municipalities), the others are non-municipality companies with district heating supplier license.

District heating suppliers are shown in Table 22 based on 2012 figures of sold thermal energy by district heating licensees.

The figure shows that 57.6% of the sold thermal energy was supplied by five district heating suppliers, while 72 district heating suppliers provide only for 9.5% of the total amount.

**Figure 23: Shares of district heating supplier licensees according to the annual amount of thermal energy sold in 2012**



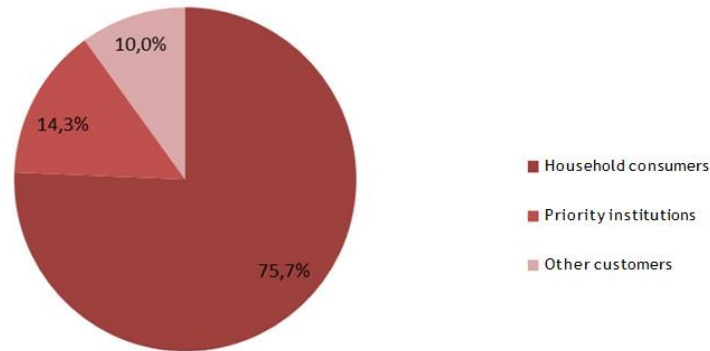
**Explanation:**  
 Categories and classifications in the table are as follows:

- Small district heating supplier: below 100 TJ thermal energy sold annually
- Medium district heating suppliers: between 100-500 TJ thermal energy sold annually
- Large district heating suppliers: between 500-1000 TJ thermal energy sold annually
- Largest district heating suppliers: above 1000 TJ thermal energy sold annually.

Heat volumes (TJ; %) sold in district heating supply based on 2012 are shown in Figure 24, and the proportion of apartments by consumption purpose is shown in Figure 25.

The volume of thermal energy sold by district heating suppliers is 29 PJ, 76% of which is used by household customers. Households use this district heating primarily for heating (and to a smaller extent, for hot water consumption).

**Figure 24: Heat volumes sold in district heating supply (TJ; %) in 2012**



**Figure 25: Proportion of apartments by consumption purpose of district heating (units) in 2012**

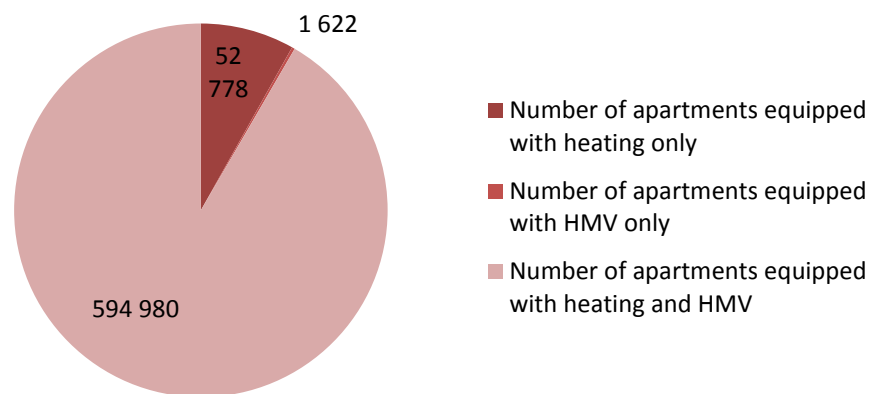
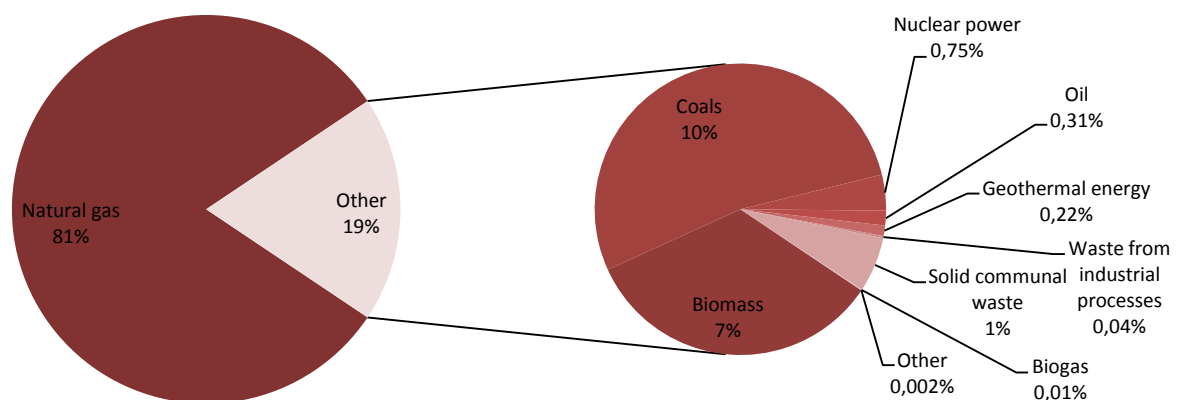


Figure 26 shows the share of fuels used in district heating generation. 81% of district heating generation is produced from natural gas, the share of biomass is 7%.

**Figure 26: Share of fuels used in district heating generation in 2012**



## 4.2. Licensing and supervision

District heating generation and supply are operations subject to licensing; the establishment of district heating generation units is also subject to licensing above a heat output of 5 MW. Both the operating license of district heating suppliers and the establishment and operating licenses of district heating generators producing heat in other ways than co-generation (heat generation in boilers) are issued by the Authority.

The Authority issued 67 resolutions related to district heating in 2013. The issued resolutions are shown in the following table by license types.

**Table 20:** Resolutions issued for district heating generation and supply in 2013

Issue, amendment and withdrawal of licenses for district heating suppliers and district heating producers in 2013	cases
Issue of operating licenses for district heating suppliers	7
Issue of operating licenses for district heating generation	18
Withdrawal of operating licenses of district heating suppliers	2
Withdrawal of operating licenses of district heating generation	4
Amendment of operating licenses of district heating suppliers	10
Amendment of operating licenses of district heating generation	20
Issue of establishment license for district heating generation	6
Total	67

In 2013, the Authority checked the data of 131 plant sites of nearly one hundred district heating generation licensees and compared data in the licenses with main figures of the yearly data supply, with the aim to find out whether the data in the licenses are up to date and in conformity with the real situation. As a result of the checkups, the Authority called 10 district heating producers to submit a request for operating license, and 14 district heating producers to amend their licenses.

The Authority conducted field checkups at three companies engaged in district heating generation. Out of these, one company had a facility that did not have operating license for district heating generation. The Authority called upon the production company to submit a request for operating license immediately.

In the cases of conflict of interests between district heating supplier and district heating generator licensees, the Authority acted as a mediator in order to ensure the security of supply, facilitating mutual agreement between the parties. The Authority provided proposals to municipalities and the affected parties on several occasions to resolve their problems related to district heating supply.

The Authority is in continuous cooperation with the Ministry of National Development in preparing the Action Plan for District Heating Development, laying the base for the development of the district heating sector, and the answers to be given to pilot requests received from the European Commission.

## 4.3 Security of supply

In the cases when the district heating supplier purchases the majority of the heat from a thermal power plant, disputes between the service provider and the power plant may endanger the security of district heating supply. In such disputes, the Authority acted as a mediator successfully on several



occasions. In recent years, the growing trend has been that efforts are made by municipalities to arrange district heating generation by the municipality through its own business or service provider.

#### 4.4 Price preparation, price regulation

The Authority, developing its market supervisory function with regard to market trends in Hungary, initiated 72 authority procedures in total, in order to make companies strictly observe the legal regulations on the separation of accounting. To date, 62 of these procedures have been closed. In the administrative procedures initiated by the Authority, the affected licensees prepared accounting reports in compliance with legal regulations, based on the information provided by the Authority.

The Authority completed its obligatory tasks on price preparation and district heating subsidy by the deadline (31 August).

During the preparation of price and subsidy, the Authority prescribed new data supply to licensees, with special regard to gas contracts for the 2013/2014 gas year. Based on the supplied data and the methodology outlined in the law, the Authority determines the rate of justified cost and justified revenue individually, i.e. separately for all of the nearly 200 licensees. When determining the prices, the Authority acted in accordance with the regulations outlined in the Decree no. 50/2011 (IX.30.) NFM on the determination of district heating sold to district heating suppliers, the prices of district heating supply provided to household customers and separate institutions.

The Authority continuously monitors the payments of district heating supply subsidies. In this process, it compares monthly data sent by MAVIR Zrt. with the data reported to the Authority by the licensees, as well as those prescribed by the law. If the Authority encounters any difference in the payments from those prescribed by the law or from the data supply of MAVIR Zrt., it settles the issue with a procedure initiated on its own motion, but it may also initiate a procedure upon request from the licensees. In this topic, the Authority issued 4 resolutions in 2013.

From 1 January 2013, the Authority has a new task, namely to consider the approval of exemption from the reimbursement of the revenue above the profit limit. Essentially, the Authority – considering certain affecting factors to be present – may exempt the seller or the district heating supplier (hereinafter jointly referred to as: applicant) from its reimbursement obligation if the applicant – within 15 days from filing the annual report – certifies in a request submitted to the Authority that its profit above the profit limitation has been spent on an activated or not activated investment started in the year concerned, or wishes to spend it on an investment activated by the end of the third year from submitting the request, which investment

- incentivises the secure production or supply of district heating at the lowest cost, the improvement of management efficiency, the efficient use of capacities, the continuous improvement of service quality or savings on district heating;
- energy production in cogeneration or with renewable energy sources has a visible environmental or energy saving benefit or decreases carbon dioxide emissions;
- it proves to be practical in terms of land development, environmental, energy efficiency or air quality protection;
- absolutely necessary in order to ensure continuous and undisturbed district heating production or supply, or to eliminate threats to the security of supply.

If the Authority establishes with regard to the applicant – based on the annual report and business plan attached by the applicant, or the annual amount spent or planned to be spent on the investment, or the schedule of the planned investment and other documents – that

- the conditions for the exemption are partly or entirely fulfilled, it partially or completely approves the request, and may prescribe further conditions in order to be in compliance with the conditions of exemption, or

– the conditions for the exemption are not fulfilled, it rejects the request for exemption and applies the regulations on reimbursement.

The own sources used for activated investment projects (related to district heating supply and generation) in the year concerned, has to be equal or higher than the sum of profit exempt from reimbursement and amortization in the year concerned. The own resource spent on an investment in progress, but not activated during the year concerned – due to delays in the investment – can be considered equally as that of the year concerned, as long as the applicant certifies that it is used for the investment in a request to the Authority. In such case, the non-activated investment which had been considered earlier, cannot be considered again in the year of activation.

If the Authority establishes during its inspection that the investment stated in the request has not been completed, or it has not been completed the same way as in the resolution of the Authority, it obliges the applicant to refund from its own resources spent on the investment, up to the amount reaching the profit limit. Furthermore, it can impose a fine according to the Gov. Decree No 157/2005. (VIII.15.) on the implementation of Act XVIII of 2005.

In this topic, the Authority received 16 requests in 2013. Of these, one has been rejected, in twelve cases the procedure finished with an approving resolution, while three procedures are still in progress.

## **5. Operation and regulation of the water utility supply**

### **5.1. Operation of water utility supply**

The Authority was continuously monitoring the financial and technical conditions of the water utility supply sector in 2013, as well as the effect of legislations that came into effect in the year concerned. Before 31 December 2011, when the Vksztv. came into effect, there were 373 water utility companies operating in Hungary.

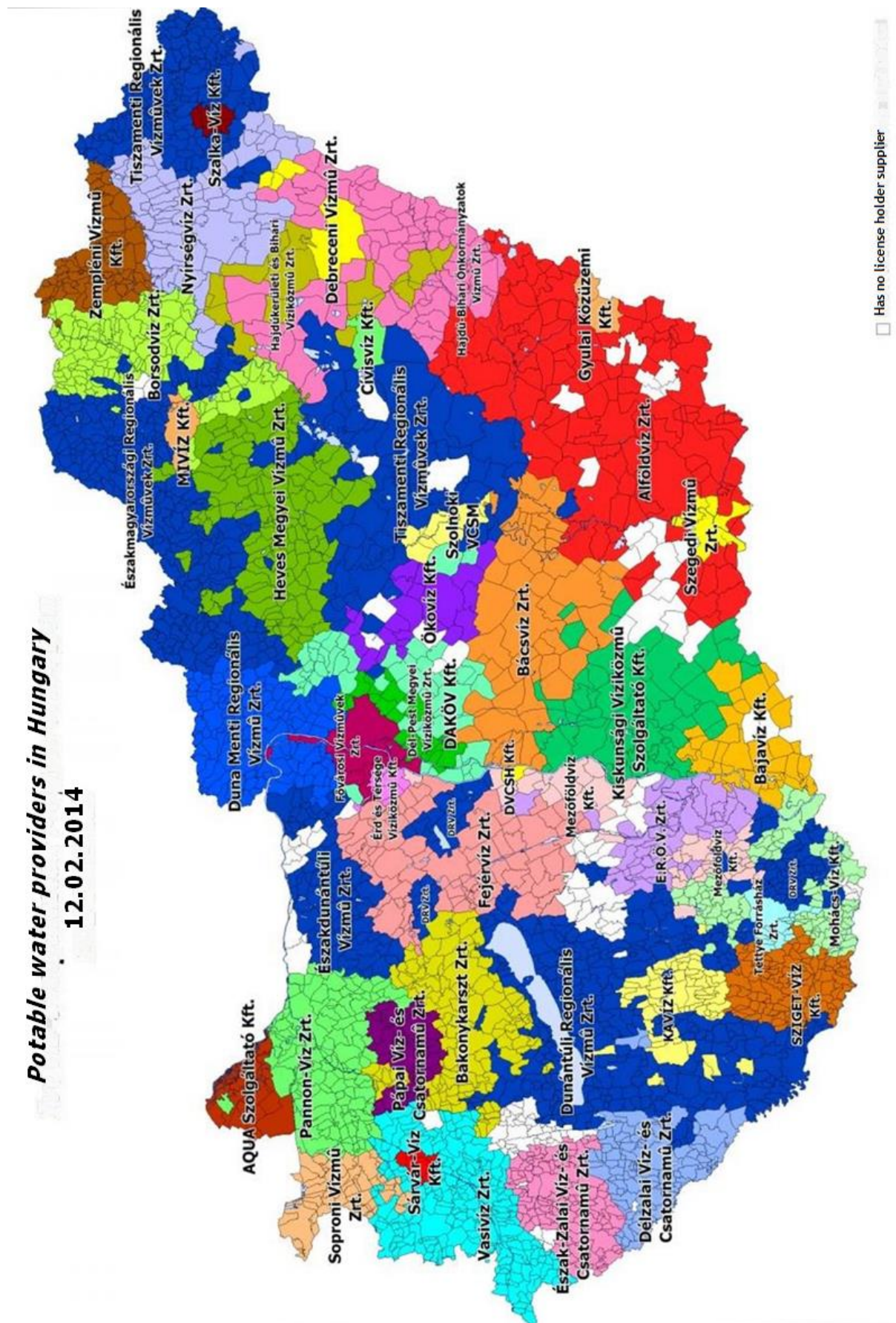
In line with the provisions of the Vksztv., the integration started in 2012 between water utility companies with different management structure, with different economic and financial background and various contractual background. As a result of the process, only 240 water utility companies were in operation by the end of 2012.

This trend continued in the year 2013. Until 31 May 2013, 83 water utility companies submitted request for operating license to the Authority, planning to operate as service providers. With the procedures closed, 46 companies obtained the license necessary for continuing operation.

From the experience of licensing procedure for operation, it can be stated that in 2014 we do not expect any transformation similar in scale to the previous one in the water utility sector.

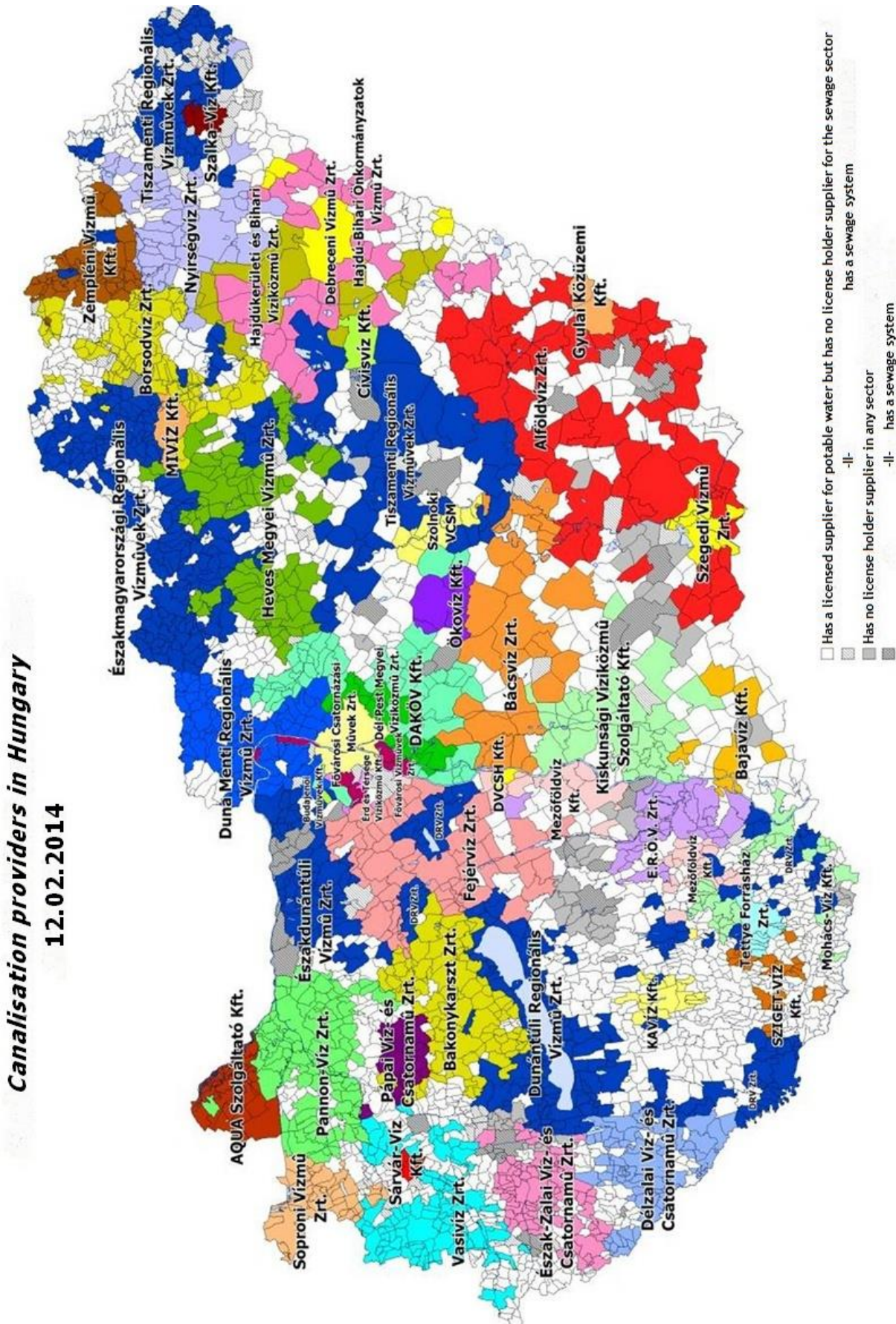
The regional distribution of water utility companies that were granted water utility operating license, is shown in the maps below by water utility sectors.

Figure 27: Service providers engaged in utility drinking water supply in Hungary



Source: MaVíz – [www.maviz.org](http://www.maviz.org)

Figure 28: Service providers engaged in utility waste water collection and treatment in Hungary



Source: MaVíz – [www.maviz.org](http://www.maviz.org)

While in 2012 the average number of supplied municipalities per each water utility company was very low, only 8-9 on average, by January 2014 this figure had risen to 69-70 supplied municipalities. As for customer equivalent (CE), in 2012 the average figure was 40,000 CE per water utility company. In comparison, this figure had risen to 302,800 CE by January 2014. (Without the Budapest figures, the average was 35,000 CE in 2012 and 226,000 CE in 2014.)

As a result of the integration, a water utility service system has been created that provides nearly uniform service quality and efficient, secure and continuous operation, which was defined as a fundamental aim of the Vksztv. By the end of 2013, water utility service is provided predominantly by utility companies of municipality or public ownership, or the joint ownership thereof, in line with the prescriptions of the Vksztv. and Act CXCVI of 2011 on national assets. Out of the 46 service providers with water utility operating license, 18 companies are fully owned by local municipalities. The other water utility companies are in mixed ownership: public ownership, local municipalities and private ownership can also be found. It has to be noted that the State has more than 90% ownership share in the five regional water utility companies.

**Table 21: Ownership structure of the water utility sector**

Name of asset	Content of asset	Person and ownership ratio of the owner
Water utility companies	Ownership of the water utility system	Predominantly municipality, partially public ownership; expropriation can be requested in 2014 for the water utility companies still in private ownership that have not been handed over
Water utility companies in possession of an operating license	Ownership of utility drinking water supply and utility waste water collection and treatment	Of the 46 water utility companies, 11% is in public ownership, 69% is in municipality ownership while 20% is in private and mixed ownership.
System independent water utility elements	A component that can be separated from the water utility without destruction (e.g. pump, metering device, control and instrumentation equipment)	Public, municipality and water utility company ownership
Water utility investments	The establishment of new water utilities, or utilities already constructed but waiting to be commissioned	Public, municipality, water utility company and private ownership

In line with the regulations of the Vksztv., in 2013 the ownership right of water utilities not in public or municipality ownership, has been transferred or assigned. Part of the water utility assets in public ownership have been assessed through appraisal during the procedure of obtaining the operating license for public water utility service providers. This process will continue in 2014 and 2015: the appraisal has to be carried out for the whole water utility assets by 31 December 2015 according to the regulations of the Vksztv.

**Table 22: Main figures of the 46 service providers possessing a water utility operating license**

Number of consumer locations – utility drinking water supply	3.4	million consumers
Number of consumer locations – utility waste water collection and treatment	2.6	million consumers
Drinking water production volume	1 447	million m <sup>3</sup>
Drinking water sale volume	1 528	million m <sup>3</sup>
Billed, collected waste water volume	939	million m <sup>3</sup>
Length of water utility network – excluding connections	50	thousand km
Length of waste water utility network – excluding connections	42	thousand km
Revenue – utility drinking water supply	98.9	billion HUF
Revenue – utility waste water collection and treatment	101.6	billion HUF
Number of employees	28	thousand persons

## 5.2. Licensing and supervision

### 5.2.1. Licensing

As per the regulations of the Vksztv., service providers with the intention of treating with water utility supply activity in the second half of 2013 as well, had to submit a request to the Authority until 31 May 2013 for operating license. Works related to licensing had already started before the requests were submitted. The Authority issued several recommendations on its website in order to facilitate that public water utility service providers submit a well-formed request which is in compliance with legal requirements. The Authority elaborated an internal procedure, in order to ensure that licensing procedures are managed in a uniform and uncomplicated manner. Furthermore, it guaranteed cost-saving and efficient work with the extensive use of information technology devices.

The Authority examined the 84 requests for water utility operating license submitted until the deadline set by the law, amounting to several hundred pages of documentation with the principle that only those water utility companies shall be given a license that are capable of providing efficient utility service of adequate quality as prescribed by the law. At the end of the procedure, the Authority issued water utility service operating license to 46 water utility companies.

As a result of the integration experienced in the sector, several new operation contract was concluded between those in charge of the supply and the public water utility service providers. As such, running the approximately 250 procedures for the approval of these contracts represented a significant task.

### 5.2.2. Supervision

#### Price supervision procedures

In the first quarter of 2013, the Authority had checked the observation of regulations related to the prices of water utility service at those public water utility service providers where – from the result of preliminary data supply – it was suspected that in 2012 they applied prices were not in compliance with the relevant legal regulations. The Authority initiated price supervision procedure against 79 public water utility service provider in total, which affected 113 municipalities and 425,000

customers. As such, the supervision procedures affected 3.5% of municipalities in Hungary and 23% of the population.

As a result of the supervision procedures carried out, the Authority discovered violation of the law in 47 cases, and prohibited the public water utility service provider from applying the prices against the law, and, at the same time, obliged it to apply lawful prices and refund the extra, unlawfully gained revenue to the customers harmed.

The identified violations of the law can be classified as follows:

- raising water utility service fees at a rate exceeding the 4.2% permitted by the law,
- modification of the water utility service fee structure.

According to the result of follow-up revisions held in the second half of 2013, refunds have been paid in all cases.

### **Supervision of submitting the operating license for public water utility service provider and service provider activity without license**

The greatest inspection campaign of the Authority in the second half of 2013 was to reveal public water utility service provider activities being carried out without having submitted the request for the operating license of public water utility service providers.

Having requested preliminary data supply from 1400 municipalities, the Authority initiated 70 revisions based on the received information, affecting 90 municipalities and 23 service providers. In these cases, it seemed possible that a business entity provides water utility service that had not submitted a request for operating license to the Authority.

Based on the received statements, the Authority identified 11 business entities that carried out public water utility service provider activity in 26 municipalities by breaking the regulations of the Vksztv. Closing the revisions and based on the violations discovered during the licensing procedures for public water utility service providers, in December 2013 the Authority prohibited 13 business entities from performing the public water utility service provider activity. Parallel to the prohibition resolution – the supply being public interest – the Authority ensured the restriction from participating in public affairs.

Based on the revisions, it can be stated that the number of municipalities affected by operation without license, was less than 2% of the total number of municipalities in Hungary. More than 98% of the companies responsible for the supply fulfilled their obligations listed in the Vksztv, they ensured that water utility tasks related to the utility drinking water supply and the utility waste water collection and treatment are completed.

### **5.3. Security of supply**

In the interest of secure public water supply the Authority continuously examines the situation of the Hungarian water utility sector, especially the activities of certain public water utility service providers and those responsible for the supply. Should the security of supply be endangered for any reason, the Authority takes the necessary measures without delay to serve the public interest in supply; as an ultimate solution appoints a public operator to manage a specific water utility system.

The Authority initiated 133 procedures in 2013 for the appointment of a public operator in order to ensure that water utility service is provided in all municipalities of the country in line with the regulations of the Vksztv.



## **5.4. Price preparation, price regulation**

### **5.4.1. Situation of the water utility sector with respect to price preparation**

As mentioned above, the water utility market is highly dissected due to the former regulation environment. The number of market participants was outstandingly high even in the beginning of the year 2013. This fundamentally affected price preparation as well. Currently there are significant differences in prices, pricing methodologies and price structures of the service providers. These resulted primarily from the fragmented market structure and the lack of uniform pricing principles. Prices used to be determined in a different way by each water utility company, municipality, water utility service sector, and also within these categories, very often several factors were applied (single-factor/multi-factor pricing; gauge of the connection meter device; price categories according to the entity of the customer, etc.).

After the Vksztv. entered into force on 31 December 2011, the integration process started in 2012 which continued at a fast pace in 2013 as well. The goal of integration is to provide for a water utility supply in a determined form, based on an operational agreement defined by law, in nearly similar supply quality and with efficient and continuous operation. The established uniform regulation environment formed this way has a fundamental effect on pricing as well. As a result of the integration the principle of regionality and solidarity can prevail, while the prohibition of cross-financing is enforced. From the customer point of view of, the goal is to provide high quality drinking water at affordable price, at high service quality standards while the obligations of water utility suppliers are clearly defined. Examining the expected trends of customer prices, integration will help solidarity, which allows for the elimination of the present price differences between suppliers.

As of 1 January 2012, the Vksztv. amended Act LXXXVII of 1990 on price setting, terminating the competency of local governments and that of the minister in charge for water management to determine prices. Because of the changing competencies it was also necessary to amend Government Decree No 212/2010. (VII.1.) on the scope of duties and powers of certain ministers and the state secretary in charge of the Prime Minister's Office. 1.) As such, as of 27 June 2012 the supervision of public water services became the responsibility and competency of the Minister of National Development.

The Vksztv. fixed the prices by quasi freezing the prices applied by the individual public water utility service providers on 31 December 2011 until 31 December 2013, not leaving the possibility for the entities planning to take over the service to raise the charges. Service price can only be applied within the frame set by the law. This says that the gross price applied on 31 December 2011 can only be raised by a maximum of 4.2%, until the ministerial price decree enters into force, setting the prices of water utility supply and the starting date of their application.

### **5.4.2. Fees of services not provided previously**

In those areas where an investment project is carried out which results in that a new water utility service becomes available to customers in the municipality which was not provided previously, the Authority – in accordance with the Minister – sets the service price upon request from the supplier. During 2013, the Authority received requests for setting the price of service not provided previously with regard to approximately 50 municipalities. Most of these have been submitted to the Ministry or the clarification of the status in the procedures is in progress.

### **5.4.3. Price preparation**

The Authority sends its proposal concerning the applicable prices to the Minister by 15 October each year, the first such occasion being 15 October 2014. Accordingly, the regulation of prices applied by public water utility service providers starts in 2014 – but the prices determined will be effective as of 2015. However, in order to complete the task the Authority already started to elaborate the price regulation concept and its methodology already in 2012.

Pursuant to the provisions of the Vksztv., a division compatible with the structure of the Authority, in charge of supervision and regulation of the public water service sector was developed within the Authority in 2012, which in 2013 continued its authority activities in accordance with the new regulations.

## **6. Preparations for setting the utility prices for public waste management services**

In 2013 the Authority started the status evaluation of the public waste management services and started to build databases necessary for the price supervision and price preparation activity. As a first step, the Authority approached the municipalities to request a comprehensive data package and contacted the public waste management services during the summer, which was mainly aimed at assessing the coverage of utility service areas in Hungary. Data is requested from waste management utilities in electronic form.

The Authority paid special attention to complaints and announcements from households, customer protection inspectorates and ministries. By October, these amounted to 164 cases. Based on the above, the Authority conducted fee supervision procedures against 24 public waste management service provider companies. In the course of this work, a close working connection was established with both the lawmakers and Országos Hulladékgazdálkodási Ügynökség Nonprofit Kft. (National Waste Management Agency Non-profit Ltd., hereinafter OHÜ). The Authority held correspondence on several occasions with the National Consumer protection Authority, the Ministry of National Development and OHÜ, in the topic of competency issues and managing complaint cases.

The Authority also started to prepare the regulation of public waste management services fees which is in the decree competency of the Minister of National Development. As a result of changes in the legislation during the year, the Authority only has to make a proposal on public waste management services fees on the first occasion only in 2014. Based on this proposal, the Minister of National Development can issue a decree.

A new task in 2013 was to examine the justified extra costs of public utility suppliers appointed based on the regulations on non-regular waste collection, as well as giving opinion on the related requests for subsidies. The Authority published on its website the documents needed for the examination of justified extra costs, as well as the methodology of the examination.

### **6.1. Revisions related to the public waste management service**

#### **6.1.1. Number of inspections and their results**

The Authority initiated authority inspections against 28 public waste management service providers in 2013 in order to examine the lawfulness of public waste management service fees, affecting 2,828,800 inhabitants of 197 municipalities in total.

As a result of the procedures, the Authority terminated the authority procedure with a warrant on two occasions, since it found out that it was not the inspected utility company who actually provided the public utility service in the examined municipalities. In eight cases it was established that the service provider applied a price compliant to the law in the examined period. As such – since no violation of the law was revealed by the authority inspection – the procedure was terminated with a warrant.

As a result of inspections in 2013, in three procedures the Authority established in a resolution that the service provider applied unlawful price in the examined period. Furthermore, it obliged the service provider to refund the revenues gained with the application of unlawful prices. In other two procedures, the finalisation of the resolution is in progress.

Procedures are in progress in other 13 cases, while in the rest of procedures the Authority is awaiting the missing documents based on which it will make a sanctioning resolution or the termination warrant of the procedure.

### **6.1.2. Types of identified violations**

The Authority established during the procedure that the public utility service provider did not determine the billed fees in the first half of 2013 according to the applied fees but took the fee set in the decree/contract as a basis, or the utility company rose the fees exceeding the 4.2% rate in 2013.

For consumers not defined as natural persons (i.e. public institutions) the applied fee exceeded the 4.2% rise rate. In the resolutions, the violation largely resulted from the fact that service providers applied lower fees on 31 December 2012 than defined in the municipality decree effective on that day, but they effectuated the fee rise for the year 2013 relative to the fee defined in the decree.

## 7. Customer protection

The Authority in particular is responsible for improving customer protection by monitoring the activities of service providers, investigating customer and user complaints and, as an independent regulatory body, setting out requirements.

### 7.1. Service quality

#### 7.1.1. Electricity market

According to the Authority's practice, service quality regulation is based on four pillars. These four pillars vary considerably in terms of the specifics of the areas under regulation, the method of regulation, and the consequences of non-compliance with requirements. Accordingly, separate regulation applies to service continuity, customer relations, Guarantee Services and voltage quality.

In order to learn about the results achieved through service quality regulation, the Authority conducted the satisfaction survey of distribution license holders' and universal service provider license holders' customers for the seventeenth time in 2013. The survey draws upon the feedback of 7,600 household and 2,600 non-household consumers. The survey methodology was identical to the procedure used in 2012, thus the results can be directly compared.

Feedbacks on distribution activities have been collected in regard to two major areas. Firstly, the quality of electricity transmission (including e.g. the continuity of supply, perception and evaluation of voltage fluctuations among household and non-household customers, breakdown recovery) and, secondly, customer relations (including e.g. technical administration) have been examined. The deficiencies of electricity supply and the lengthiness of repairing network impairments are still considered problematic areas by the respondents, although results show continuous improvement each year. Approximately 40-44% of respondents have experienced short and 31-34% longer voltage loss, while 20-24% have experienced voltage fluctuations and 10-12% network impairments, which are the best results of the last three years.

As to universal service, the survey focused on the examination of customer relations management regarding household and non-household customers, including invoicing, complaint management and other customer service activities, as well as communication and information provision. Although the majority of respondents would opt for telephone customer service, in practice consumers use personal, online and, as a third option, telephone customer service, which explains the lower level of satisfaction in case of the latter. Users found elaborateness and long waiting time the most critical issues.

Results regarding the comprehensibility of invoices have shown a slight but continuous improvement in user perception during the last few years. Seventy-six percent of responding consumers nationally deemed the level of invoice comprehensibility good, while 24% expressly stated to have difficulties interpreting invoices. The implementation of statutory provisions regarding the employment of a unified invoice format passed last year is expected to result in a considerable improvement in terms of invoice comprehensibility in the future.

## Continuity and reliability of services, breakdowns

Financial incentives on the continuous improvement of supply service quality to be provided by the electricity industry distributor license holders are based on the minimum quality requirements concerning the failure indicators related to the average frequency and duration of long-term, non-scheduled breakdowns, and the quotient of non-supplied and available electricity.

Based on the VET, the Authority may specify the minimum quality requirements and expected quality level of activities conducted by license holders in regulation, which – in order to offset the impacts of extreme weather conditions – have been established on the basis of three-year averages, thus allowing the handling of exceptions beyond the control of license holders. In its resolution, the Authority imposed the percentage value of expected improvement for each year with regard to three further quality indicators in addition to the minimum quality requirements specified for the internationally recognised indicators which constitute the basis of the financial incentives for the quality of service to be provided by the license holders.

The Authority evaluated the electricity supply reliability levels of 2012 on 20 June 2013. Based on the evaluation, all but one license holders fulfilled the minimum requirements specified by the Authority considering the three-year average between 2010 and 2012. The Authority found that in regard to national figures the years' long improving tendency of all the three indicators used to survey the continuity of electricity supply continued in 2012. On average, users experienced long-term voltage losses on 1.16 occasions last year as opposed to 1.21 in 2011. In 2012 users spent 76 minutes without electricity supply on average per capita, which corresponds to the 2011 result. Similarly to previous years, the breakdown indicator has slightly improved in 2012. Domestic data have ranked in the middle range on international results for years.

From among distributor license holders, in 2012 E.ON Tiszántúli Áramhálózati Zrt. (E.ON Tisztántúl Power Network Ltd.) was not able to fulfil the requirement regarding the average duration of supply interruption, and exceeded the level determined by the Authority by 0.02%, which still falls within the 5% toleration range, thus no fee reduction from distributor charges was necessary. All the other license holders met the minimum requirements in respect of each indicator. In terms of expected quality indicators – for which no direct sanctions are imposed in case of non-compliance – distributors usually fail to meet the requirements. The Authority will intensify its efforts to promote the fulfilment of expected quality indicators in the future. The evaluation of the 2012 performance of distributor license holders is available on the Authority's website.

## Customer relations service quality

Customer service quality, the other pillar of assessing service quality, was re-regulated in 2008, accommodating the provisions of the VET taking effect at that time.

The system of indicators created to regulate customer relations service quality was set up in a pyramid structure of successive requirements. In this pyramid structure, the lowest level consists of monitoring-type indicators not associated with either a minimum quality requirement or any expected service levels. The function of these indicators is to serve the survey and comparison of license holders and their activities, and they may constitute the basis for an eventual regulation in the future.

The middle level of the regulatory pyramid consists of indicators for which the Authority determined an expected service level, partly based on legal provisions. Non-compliance with these requirements may result in the application of sanctions, following a posterior authority inspection. The top of the

regulatory system includes indicators which are associated both with a minimum quality requirement and an expected service level determined by the Authority. Depending on its extent, non-compliance with the latter may result in imposing of a fine in two phases up to the amount of 100 million HUF per indicator. The evaluation of customer relations service quality indicators for universal service providers for the 2010 and 2011 years has been carried out in 2013, under which severe deficiencies have been assessed in the case of 2 license holders. After finalising the evaluation, results are published on the Authority's website.

### Guaranteed services

Based on the annual data supply concerning the minimum quality requirements for individual users, the system of the so-called Guaranteed Services (GSZ), the evaluation of the license holders' statutory activities in 2012 was completed in 2013. The GSZ Resolutions of the Authority issued in 2003 were renewed in line with the new legislation of 2008 for electricity distributor, universal service provider and trader license holders. In response to the increasing number of breakdowns due to extreme weather conditions, the Authority laid down the detailed rules of GSZ requirement II titled 'Elimination of electricity interruption at multiple user locations' for distributor license holders in November 2009 following several months of negotiations. Here the duration of periods after which users are eligible for financial compensation for long-term electricity outages due to extreme weather conditions were defined.

**Table 23: Consolidated figures of Guaranteed Services**

License holder	Number of cases related to GSZ, pce	Number of non-performed cases, pce	Total number of penalties paid automatically, pce	Total number of penalties paid, pce	Total amount penalties paid, HUF
ELMŰ Hálózati Kft.	2,528,270	4,882	4,934	4,934	29,470,000
ÉMÁSZ Hálózati Kft.	1,965,445	635	635	635	4,508,000
EDF DÉMÁSZ Hálózati Elosztó Kft.	1,287,385	3,422	3,691	3,691	26,456,800
E.ON Dél-dunántúli Áramhálózati Zrt.	1,113,645	4,670	5,211	5,211	30,197,000
E.ON Észak-dunántúli Áramhálózati Zrt.	2,547,517	6,663	9,764	9,764	55,682,000
E.ON Tiszántúli Áramhálózati Zrt.	1,920,575	3,618	4,413	4,413	25,436,000
<b>Distributors in total</b>	<b>11,362,837</b>	<b>23,890</b>	<b>28,648</b>	<b>28,648</b>	<b>171,749,800</b>
EDF DÉMÁSZ Zrt.	68,485	2,219	2,219	2,219	13,550,000
ELMŰ Nyrt.	1,572,213	7,824	7,821	7,821	45,825,000
ÉMÁSZ Nyrt.	342,085	2,725	2,725	2,725	15,140,000
E.ON Energiaszolgáltató Kft.	430,363	790	790	790	4,685,000
<b>Universal service providers in total</b>	<b>2,413,146</b>	<b>13,558</b>	<b>13,555</b>	<b>13,555</b>	<b>79,200,000</b>
<b>Total:</b>	<b>13,775,983</b>	<b>37,448</b>	<b>42,203</b>	<b>42,203</b>	<b>250,949,800</b>

Taking into account the time needed for preparing the information technology systems of distributor license holders, the requirement of automatic payments – not initiated on the request of users – has been introduced gradually, starting in 2009. As a last step, penalty payment from 1 January 2011 for all requirements for electricity distributor, universal service provider and trader license holders has become automatic. Pursuant to the GSZ Resolution, in case of non-compliance distributor license

holders and universal service providers are obliged to pay penalty to all the users affected by non-compliance, if failing to fulfil 13 and 5 minimum requirements, respectively.

In 2012 the number of non-performed cases identified by distributors (23,890) decreased considerably, to nearly half as compared to 2011. There has been a continuous improvement in the ratio of performed and non-performed cases nationally since 2009, amounting to 119.92% in 2012. The ratio exceeding 100% was a result of the multiple penalty payment obligation stipulated under GSZ requirement XI. Due to non-compliance with requirements, from among the distributor license holders E.ON Észak-dunántúli Áramhálózati Zrt. (E.ON Northern Transdanubian Power Network Ltd.), and from among universal service providers ELMŰ Nyrt. paid outstanding amounts to their users. The evaluation of the distribution license holders' 2012 performance is available on the Authority's website.

### Voltage quality

The implementation of measurements with 400 voltage quality meters at the distributor license holders in a rotational arrangement initiated earlier by the Authority launched the development of a uniform voltage quality monitoring culture in Hungary. Based on the experiences, the goal of 'Professional recommendations on the establishment of a uniform voltage quality monitoring system' published by the Authority on 7 April 2008 was the promotion and further development of the already established voltage quality metering culture. The reporting obligations and annual evaluation are intended to facilitate the continuous monitoring and development of measurements.

Under the voltage quality monitoring scheme, 1,489 metering equipments were involved in the measurements in 2012 at low voltage levels – with an average utilisation rate of 2 months per year –, representing a 36% growth in comparison to the previous year. The increase of the number and utilisation rate of metering instruments has been continuous. As to low voltage measurements, 1.35% of the country's 10,420 measurement points have been permanently supplied with non-standard voltage levels, which is a significant improvement in comparison to 6% in 2011, especially in consideration of the fact that the number of measurement points has increased tenfold. Taking into account that many of the distributors carried out measurements at the locations deemed to be problematic, this value characterises not only the distribution network quality but also the efficient positioning of the metering equipments. The voltage value exceeded the standard  $\pm 10\%$  tolerance level in 0.27% of the performed measurements, which means an improvement as compared to the 2011 value.

The annual utilisation rate of the medium-level voltage metering network of 267 devices is 10.88 months on average. Medium-level voltage measurements have been improved since 2011 as a fourth distributor license holder joined the previous three and launched its monitoring measurements on its medium voltage network. As in 2011, in the case of E.ON Észak-dunántúli Áramhálózati Zrt. the duration of measurements during the year can be considered nearly continuous in 2012. The duration of measurements has shown a continuous increase in the case of the other two E.ON distributor license holders, as well. Medium-level voltage measurements account for nearly 48% of all metering duration nationally. In the case of measurements exceeding 2.08 million hours, the duration of performance falling outside the standard  $\pm 10\%$  tolerance level during 100% of measurements have increased from 63 hours in 2011 to 243.5 in 2012. Although this result is negligible in comparison to the total measurement duration, the cause of fourfold increase may be advisable.



Further information on the voltage supplied may be available from the report on the number of users permanently supplied with non-standard voltage levels. From the 2011 report, the resolution issued by the Authority on the ‘Determination of minimum quality requirements regarding individual users’ in 2009 (hereinafter referred to as GSZ (Guaranteed Services Resolution)) has required the provision of data relating to GSZ section “IX. Voltage at the connection point of low-voltage location of use” according to the time of currency. As a result, the number and efficiency of resolving voltage-related user complaints filed during the reporting year and the previous years can also be assessed.

Pursuant to the Authority’s Guaranteed Services Resolution, distributor license holders automatically pay penalty to customers supplied with voltage of non-standard quality according to measurements. The frequency of penalty payment increases according to the duration of the unresolved voltage problem. Due to non-standard voltage supply, 27.62 million HUF was paid in total by distributor license holders to users nationally in 2012, which represents an 8.1% decrease in comparison to the amount of penalties paid in 2011. This may result from the decrease of non-performed cases or the more efficient resolution to ongoing cases.

Taking into account economic aspects as well, both the Authority and the distributor license holders aim at further increasing the number of voltage quality monitoring measurements in order to ensure high levels of supply, boost user satisfaction and reduce the number of user complaints.

### **7.1.2. Natural gas market**

As to the natural gas industry, service quality regulation consists of three pillars according to the practice employed by the Authority. These three pillars vary considerably in terms of the specifics of the area regulated, the method of regulation, and the consequences of non-compliance. Consequently, separate regulation applies to customer relations, service continuity, and Guaranteed Services.

In order to assess the results achieved through service quality regulation, the Authority conducted the satisfaction survey for distributor license holders’ and universal service provider license holders’ customers for the seventeenth time in 2013. In collecting the data, 7,200 household customers and 2,400 industrial users have been polled nationally. The survey methodology was identical to the procedure used in 2012, thus the results can be directly compared. On the basis of the consolidated figures, it can be stated that 2013 was not essentially different from earlier years in terms of user experience.

From among distribution activities, the survey focused on service quality, technical administration, information provision, measurement of consumption and evaluation of environmental impacts, and the consumers’ feedback on the quality of natural gas supplied. From among universal service-related activities, consumers evaluated the quality of invoicing, complaint management, customer service and information provision. As to distribution services, the basic requirement of household and non-household customers is a continuous, good quality natural gas supply. Overall, consumers were satisfied with the continuity of natural gas supply and trusted the accuracy of consumption measurement, as well. In this regard the confidence index has improved. However, the quality of information disclosure regarding natural gas supply outages has been heavily criticised.

As to the universal service relating to natural gas supply, online accessibility is more and more important in terms of customer service and has become equally popular to personal customer service. Respondents found telephone customer service more satisfactory than a year before. Personal customer service has been heavily criticised due to lengthy waiting periods. The survey

found that customers do not follow the news and releases issued by service providers, but are much more interested in customer protection-related information, which the majority of customers found satisfactory.

While in 2010 only 66% of respondents formed a positive opinion on the universal service providers' bills, this number changed to 72% in 2011 and 73% in 2012. According to the 2013 results, 59% of respondents found the invoice satisfactory. Users unsatisfied with invoicing stated that they had difficulties interpreting the data indicated on the bill. Among other problems, many respondents mentioned the concise invoice format. The implementation of statutory provisions regarding the employment of a unified invoice format passed last year is expected to result in a considerable improvement in terms of invoice comprehensibility in the future.

### **Customer relations service quality**

The Authority issued resolutions concerning the expected service quality standards and minimum quality requirements of customer relations in 2009. No legal changes took place in 2012 which would have required the adoption of new resolutions. Negotiations necessary for clarifying and interpreting previously issued resolutions have been carried out between the Authority and the license holders.

The system of indicators created to regulate customer relations service quality was set up in a pyramid structure of successive requirements. In this pyramid structure, the lowest level consists of monitoring-type indicators not associated with either a minimum quality requirement or any expected service levels. The function of these indicators is to serve the survey and comparison of license holders and their activities, and they may constitute the basis for an eventual regulation in the future. The middle level of the regulatory pyramid consists of indicators for which the Authority determined an expected service level, partly based on legal provisions. Non-compliance with these requirements may result in the application of sanctions, following a posterior authority inspection. The top of the regulatory system includes indicators which are associated both with a minimum quality requirement and an expected service level determined by the Authority. Depending on its extent, non-compliance with the latter may result in imposing of a fine in two phases up to the amount of HUF 100 million per indicator. The evaluation of the level of customer relations service quality in 2010, 2011 and 2012 has not been performed in 2013 due to the significantly increased priority of resolving consumer complaints but is expected to be performed in the first half of 2014.

### **Guaranteed Services**

The second pillar of service quality regulation was introduced in the natural gas industry in 2010. Considering the novelty of the rules, the Authority paid special attention and care to establish the directions of regulation and negotiations with license holders and customer protection organisations. As a result, the issuance of the resolutions was preceded by discussions held in three rounds. As a last step of the regulatory process, the Authority issued 16 resolutions for the license holders of the natural gas sector related to the Guaranteed Services. License holders were required to supply data on their performance relating to Guaranteed Services in 2011 for the first time. Pursuant to the resolutions, the payment of penalties has been automatic within the sector as of 1 January 2012, except for one indicator, in the case of which payment of penalties became automatic as of 1 January 2013.

Based on the data supplied in regard to the 2012 year, the Authority prepared the so-called evaluation of Guaranteed Services – containing minimum requirements – for natural gas distributor license holders and universal service providers concerning individual users. The Authority issued its

Guaranteed Services Resolutions in November 2010 in accordance with distribution, trade and universal service provision activities. GSZ requirements I-V and VII-X came to effect as of 1 January 2012, whereas GSZ requirements VI and XI, and US requirement II entered into force as of 1 January 2013. Pursuant to the GSZ Resolution, in case of non-compliance distributor license holders and universal service providers are obliged to pay penalty to all the users affected by non-compliance, if failing to fulfil 9 and 5 minimum requirements, respectively.

Based on 2012 consolidated figures, the number of GSZ-related cases of distributor license holders shows a 40% drop in comparison to 2011 results, while the decrease in the number of non-performed cases is even more impressive, totalling 60%. Similarly to distributor license holders, in the case of universal service providers the number of GSZ-related cases has decreased by 40% in comparison to the previous year (2011); in the case of TIGÁZ Zrt. the number of cases has increased.

In comparison to 2011 results, the number of non-performed cases resulting in penalty payment has increased considerably, to 68%, in the case of distributor license holders. In the case of universal service providers, however, only 3.34% of non-performed cases have resulted in penalty payment. As to distributor license holders, in 2012 automatic penalty payments have been made in 866 cases (after the pertaining provisions have entered into force) and in 147 cases in the case of universal service providers.

**Table 24: Consolidated figures of Guaranteed Services**

License holder	Number of cases related to GSZ, pce	Number of non-performed cases, pce	Total number of penalties paid automatically, pce	Total number of penalties paid, pce	Total amount penalties paid, HUF
E.ON Dél-dunántúli Gázhálózati Zrt.	111,772	591	431	433	2,245,000
ÉGÁZ-DÉGÁZ Földgázelosztó Zrt.	131,544	41	11	11	55,000
FŐGÁZ Földgázelosztási Kft.	56,302	0	0	0	0
E.ON Közép-dunántúli Gázhálózati Zrt.	121,915	635	424	425	2,225,000
Magyar Gázszolgáltató Kft.	6,805	0	0	0	0
TIGÁZ-DSO Földgázelosztó Kft.	106,392	11	0	0	0
<b>Distributors in total:</b>	<b>534,730</b>	<b>1,278</b>	<b>866</b>	<b>869</b>	<b>4,525,000</b>
GDF SUEZ Energia Magyarország Zrt.	144,506	6,053	0	88	440,000
Fővárosi Gázművek Zrt.	115,553	46	11	69	345,000
TIGÁZ Tiszántúli Gázszolgáltató Zrt.	333,371	4,777	90	165	825,000
E.ON Energiaszolgáltató Kft.	86,786	155	46	46	230,000
<b>Universal service providers in total</b>	<b>680,216</b>	<b>11,028</b>	<b>147</b>	<b>368</b>	<b>1,840,000</b>
<b>Total:</b>	<b>1,214,946</b>	<b>12,306</b>	<b>1,013</b>	<b>1,237</b>	<b>6,365,000</b>

In 2012 the highest number of non-performed cases of universal service providers related to GSZ section 'Data supply on documented request', thus the development of their management systems remains an issue of high significance and priority. Distributor license holders achieved a considerable improvement relating to requirement 'Application of dates agreed' as the number of non-performances has dropped to less than third as compared to the previous year. However, the highest number of non-performances are still relating to this requirement.

## 7.2. User complaints

Due to the division of powers, a part of household customer complaints – mostly relating to invoicing, settlement and measurement – was transferred under the competence of the Hungarian Authority for Consumer protection (NFH) as of 1 January 2008. The number of complaints relating to contract violations has been steadily growing since 2007. However, the investigation of these issues falls under the competence of the Authority and not the NFH. It is important to note that, following the division of powers, the number of complaints from public (non-private person) users falling under the competence of the Authority also increased.

An increasing ratio of complaints is related to the failure of or delay in changing traders, overdue invoicing after changing traders, and complaints relating to settlement disputes with the former trader. Since in addition to the specific user these issues usually affect several license holders, their investigation is more complex and lengthy, requiring a deeper knowledge of the system. Complaints related to switching off of taking points taking up electricity without contracting and the invoicing of electricity and natural gas taken without contracting still need to be dealt with.

Following a dramatic increase in 2007, the number of customer complaints falling under the competence of the Authority has temporarily dropped during the past five years due to the division of powers with NFH, but shows a continuous increase.

**Table 25: Customer complaints**

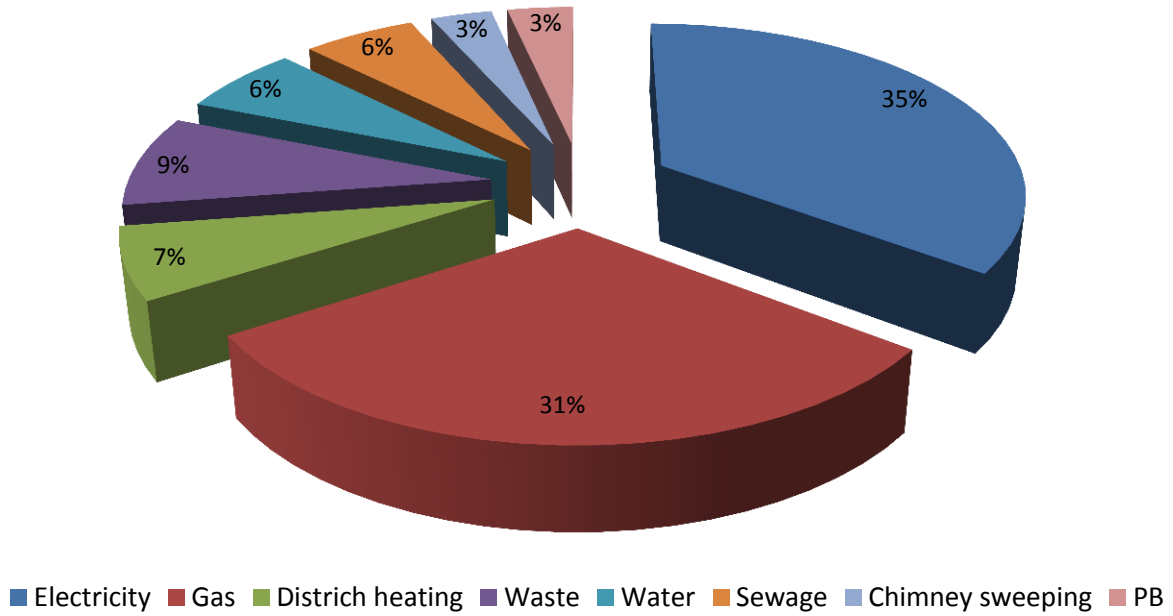
	2007	2008	2009	2010	2011	2012	2013
<b>Complaints in total</b>	<b>2,197</b>	<b>865</b>	<b>894</b>	<b>1,320</b>	<b>2,657</b>	<b>3,390</b>	<b>4,900</b>
Other cases	942	647	655	493	185	22	919
Handled by the Authority	3,139	1,512	1,549	1,813	2,842	3,412	5,819
Handed over to NFH	–	329	328	420	307	245	596
<b>Total</b>	<b>3,139</b>	<b>1,841</b>	<b>1,877</b>	<b>2,233</b>	<b>3,149</b>	<b>3,657</b>	<b>6,415</b>

Beside written complaints, in accordance with today's technological developments, complaints are also frequently filed electronically, while information requests are mostly received by the Authority via email. In addition to written communication, a considerable number of telephone calls and personal visits to the ground floor reception room of the Authority have been recorded. The Authority receives approximately 150 personal visits annually.

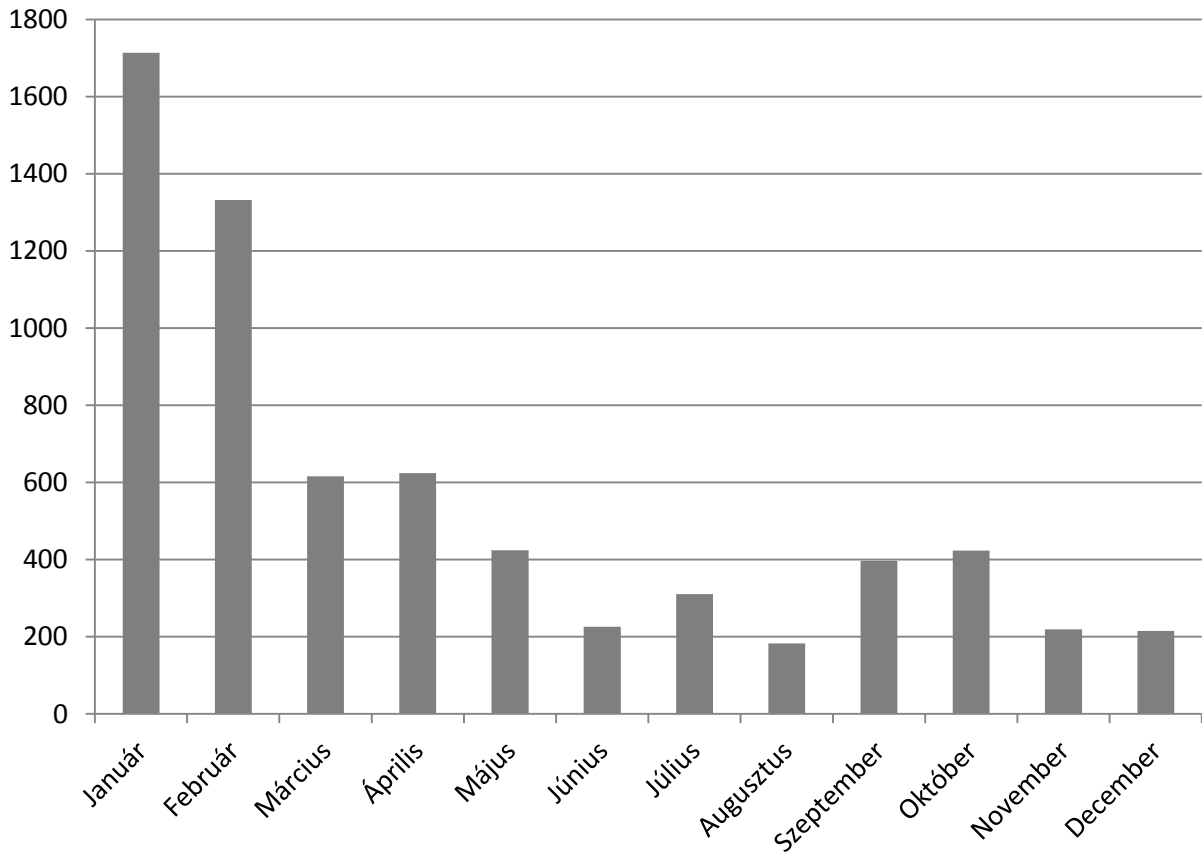
The Authority recognised that consumers expect objective information on the utility cost reduction decreed by the Parliament and launched a call centre to provide consumers with accurate and up-to-date information on utility cost reduction.

In 2013 6,682 consumers contacted the Authority for information on utility cost reduction. In most cases, the reason for contacting the Authority was that users have not perceived the influence of utility cost reduction and held that the service provider had not applied the reduction when invoicing. Furthermore, consumers requested the Authority's assistance with the examination or interpretation of specific invoices in a number of cases.

**Figure 29: Information requests according to utility type**



**Figure 30: Information requests regarding utility cost reduction per month**



**January/February/March/April/June/July/August/September/October/November/December**

The Authority published utility cost reduction-related information on its website to inform consumers of utility cost reduction-related measures, regulatory provisions, and the level of utility cost reduction for users. This information enabled consumers to check for themselves if the procedures employed and invoices issued by service providers are accurate.

Of the 4,900 complaints mentioned above, 2,509 concerned license holders in the natural gas, and 2,151 in electricity industry. The Authority instituted official public administration proceedings in each case.

### **7.3. Approval of codes**

Due to regulatory changes, the distributor and universal service provider license holders were obliged to submit their general terms of business for approval during 2013. The aim for this was in all cases to adapt general terms of business to current legislative requirements in effect. Applications for the amendment of general terms of business in the case of universal service providers have been approved in all cases after obtaining the opinion of the National Authority for Consumer protection. In accordance with the above, 10 resolutions to amend existing general terms of business have been issued in 2013 for the electricity market. Regarding the natural gas sector, the Authority issued resolutions to amend existing general terms of business to 1 universal service provider and 3 distribution license holders in 2013.

### **7.4. Inspections**

In the case of electricity distributor license holders, the Authority examined the continuity of supply and, in the case of electricity and natural gas distributors and universal service providers, the reliability of data supplied regarding Guaranteed Services by conducting several on-the-spot inspections in 2013. As to the continuity of electricity supply, on-the-spot inspections have been carried out at each licensed electricity distributor following previous years' practice. As to Guaranteed Services, in 2013 the Authority conducted inspections at two electricity distributors and one universal service provider, and, as a progress in comparison to previous years' practice, also started carrying out inspections in relation to the natural gas sector, first in the case of two distributor license holders. Following the inspections, the Authority found that the data supply of all but one license holders has been in compliance with relevant provisions.

## 8. Support systems

### 8.1 Feed-in tariff system

In order to promote environmental protection, customer supply, saving in primary energy resources and expanding the available energy resource portfolio, Hungary supports renewable energy production and the use of waste as an energy source.

One incentive of promoting electricity generation from wastes is the feed-in tariff (hereinafter referred to as: FiT) system, in which electricity may be sold at a price above the market price, determined by legal regulations.

#### 8.1.1. Operational framework of the feed-in tariff system

The framework of the domestic application of the feed-in tariff system is shown in the summary below:

<b>Act LXXXVI of 2007 on electricity (hereinafter referred to as: VET)</b>
<b>Gov. Decree No 389/2007 (XII. 23.) on the feed-in obligation and feed-in tariff of electricity produced from renewable energy resources or from waste and electricity generated in co-generation facilities (hereinafter referred to as: FiT decree)</b>
<b>Decree No 63/2013 (X. 29.) NFM on the distribution of electricity subject to feed-in obligation by the transmission system operator and on the method of determining prices to be applied in the course of distribution (hereinafter referred to as: Distribution decree)</b>

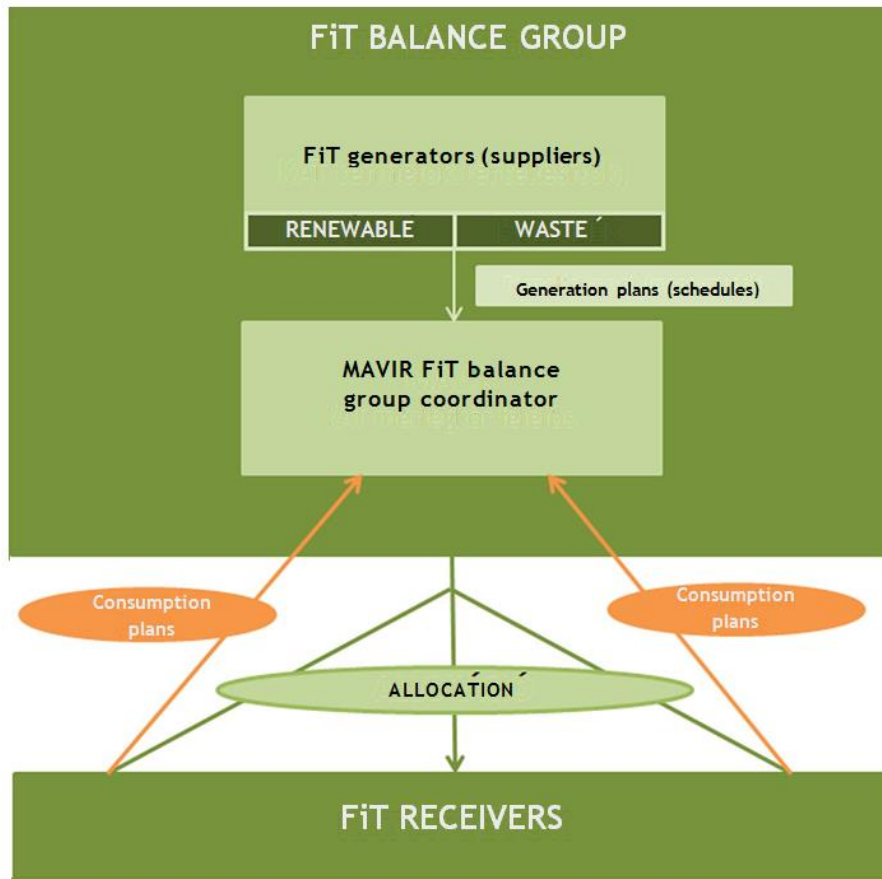
In line with the VET and upon the producer's request the Authority determines the feed-in volume and the feed-in period of generated renewable or waste based electricity. The eligibility for selling within the FiT scheme expires at the end of the determined period or when the license holder used up the determined volume. By defining the feed-in volume and period it is guaranteed that the producer only receives support until the investment costs are recovered. In case of biomass and biogas power plants, the benchmark feed-in period is 15 years, and 5 years for power plants using landfill gas. If the power plant receives any other subsidy, the takeover period is shortened proportionately. Regarding other technologies the Authority determines the feed-in period and feed-in volume in each case individually.

The feed-in tariff is different for renewable and for waste-based electricity generation, furthermore the tariffs are differentiated by size (rated capacity), by date of eligibility (before or after 1 January 2008), by time zone (peak, off-peak or night times) as well as by technology (photovoltaic or wind power).

The basis of the operation of the FiT scheme is the FiT balance group, which has been in place in its current form since 2008. The VET stipulates that power plants within the FiT scheme form a separate balance group which is operated by MAVIR Zrt. as the recipient.

The tasks of transmission system operator (receiver) are to operate the FiT balance group, including balancing the deviations from the schedule as well as the distributing and the accounting of the feed-in electricity within the FiT scheme. The operation of the system in the year 2013 is shown on the graph below.

**Figure 31: The operation of the FiT balance group (until end 2013)**



Electricity producers (seller) subject to obligatory feed-in – provided they fulfil other requirements defined by law – entitled to join the FiT balance group. MAVIR Zrt, as the FiT balance group manager, signs a balance group membership contract with the sellers. MAVIR Zrt., as the receiver pays the feed-in tariff to the producer for the electricity sold into the balance group. Until the end of 2013 the receiver allocated the electricity and its costs proportionally based on consumption (in case of electricity importers, proportionally to the imported volume) among the FiT receivers. All electricity traders were under the FiT scheme (except universal service providers as of 1 January 2013) as well as producers selling directly to customers and customers importing electricity directly. The reallocated costs of green electricity are incorporated into the FiT receiver’s portfolio; therefore the FiT support costs are eventually devolved to the customers.

The universal service providers were exempted from the feed-in tariff system applicable to electric power generated from renewable energy as of 1 January 2013, to reduce their electricity purchase costs (pursuant to the amendment of the VET effective as of 1 January 2013). As of 1 October 2013, electricity traders not qualified as universal service providers have also been exempted in relation to the volume of electricity sold to customers eligible for universal service,

- for whom the electricity trading service was provided according to the ministerial decree on the pricing of universal services
- at prices not exceeding the universal service fees corresponding to the given point of delivery, and below these fees at least for one fee item, and
- for whom the availability of services to be used by customers supplied under universal service according to the government decree on the implementation of certain regulations of the act on electricity was ensured.



## The FiT model modified as of 1 January 2014 in relation to recipients

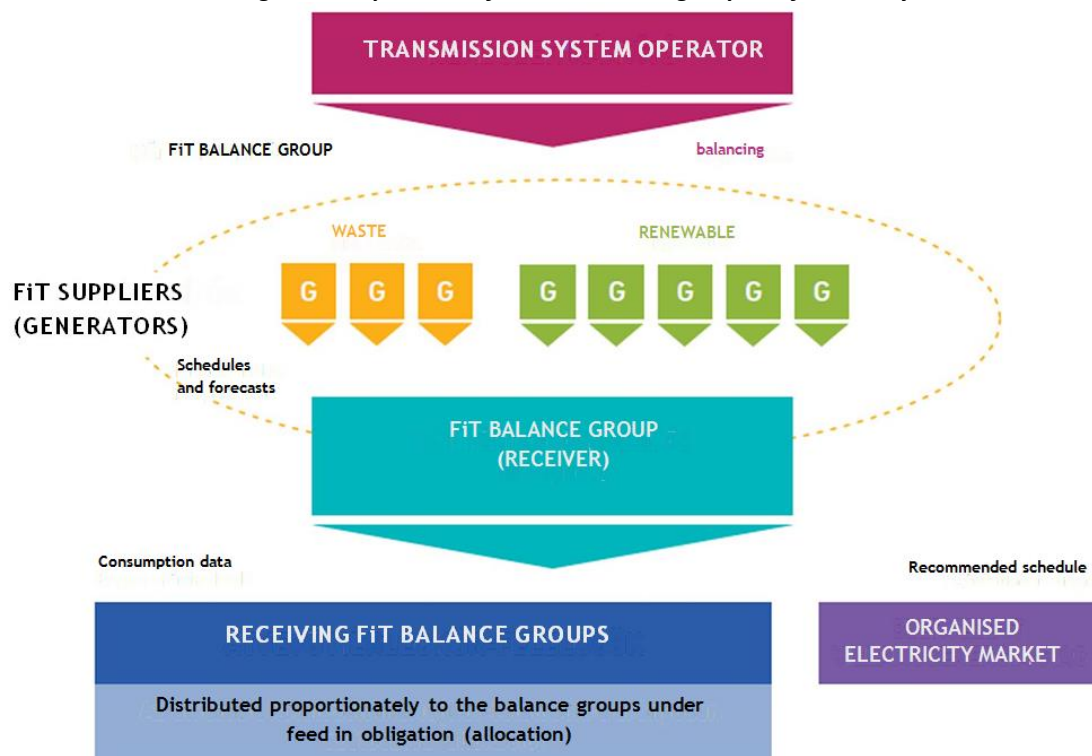
The additional cost (subsidy content) of electricity taken over under the feed-in tariff system is distributed over the balance group coordinators under the feed-in tariff system in relation to the electricity allocated to them. The volume of electricity more or less constant over time, taken from FiT traders (the so-called “base load”) is distributed over balance group coordinators under the feed-in tariff system proportionately to the consumption in their balance group areas not eligible for universal services (allocation). The consumption eligible for universal services supplied by the electricity traders is only exempted from allocation if

- the electricity trading service was ensured according to the ministerial decree on the pricing of universal services
- at prices not exceeding the universal service fees corresponding to the given point of delivery, and below these fees at least for one fee item, and
- if the availability of services to be used by customers supplied under universal service according to the government decree on the implementation of certain regulations of the act on electricity was ensured.

The remaining volume of electricity to be distributed will be sold on the organised electricity market (HUPX), which is MAVIR’s task. The additional costs may be allocated to balance group coordinators under feed in obligation in the form of bilateral agreements, upon voluntary agreement by the parties.

The most important objective of the model is the reduction of balancing energy costs through reduction of the time between planning and generation (allocation based on daily timetable regarding the volume resold over HUPX) and thereby the achievement of cost-efficient operation. A further objective was the market integration of electricity under the feed-in tariff system.

**Figure 32: Operation of the FiT balance group as of 1 January 2014**



Source: MAVIR Zrt.

### 8.1.2. Data of the FiT system in 2013

In 2013, in the course of FiT, the authorised electricity generators sold electricity amounting to 1,868.14 GWh (of which 1,862.21 was renewable based and 5.27 GWh was waste based) showing a slight increase in comparison to the previous year.

The renewable-based electricity sales within the FiT system increased slightly to 1,862.51 GWh from 1,861.53 GWh in 2012. The largest decrease occurred in case of coal-biomass co-fired power plants and wind turbines (sales dropped by approximately 50%). In the former case, causes to quote were the expiry of FiT eligibilities as were the less favourable wind conditions for the latter. The decrease was however compensated by the increase of pure biomass firing, especially due to the power plant of Pannon-Hő Kft. at Pécs, which started operations at the end of 2012. In addition, the generation of landfill gas power plants and particularly that of photovoltaic plants also showed growths, but their overall impact is not significant as yet.

**Table 26: Electricity sold within the FiT scheme (GWh)**

	2012	2013	Change (GWh)	Change (%)
Wind power	742.49	687.12	-55.37	-7.46%
Hydro power, of which:	203.14	204.17	1.02	0.50%
Hydroelectric power plants with capacities of 5 MW or below	35.85	58.63	22.79	63.57%
Hydroelectric power plants with capacities above 5 MW	167.30	145.53	-21.77	-13.01%
Biomass firing (pure)	600.48	728.15	127.67	21.26%
Coal-biomass combined firing	151.31	74.50	-76.81	-50.76%
Biogas	118.29	118.25	-0.04	-0.03%
Landfill gas	44.26	47.71	3.45	7.79%
Sewage gas	1.23	0.98	-0.25	-20.46%
Solar energy	0.33	1.34	1.01	305.10%
<b>Total renewable</b>	<b>1,861.53</b>	<b>1,862.21</b>	<b>0.68</b>	<b>0.04%</b>
Waste	5.23	5.27	0.04	0.75%
Alternative fuel <sup>11</sup>	0.19	0.66	0.46	236.50%
<b>Total renewables, wastes and alternative fuels:</b>	<b>1,866.96</b>	<b>1,868.14</b>	<b>1.18</b>	<b>0.06%</b>

By the end of 2013, the total installed capacity of the power plants – renewables, wastes and alternative fuels – within the FiT scheme reached 580.87 MW (with the renewable generation capacity within the FiT scheme being 579.64 MW)<sup>12</sup>.

The capacity of co-firing power plants selling under FiT decreased considerably. This is because only Mátra Power Plant was a co-firing FiT seller in 2013 as the Vértés Power Plant, while it operated under FiT in 2012, it sold its entire capacity on the free market in 2013.

It must be noted that during the year 2013, power plants of combined firing were reintroduced to the feed-in tariff system due to legislative changes, indicating a likely turnaround of the decreasing tendency in the future.

<sup>11</sup> Non-renewable and non-waste energy resources in the power plants otherwise using renewable energy resources or waste products. If their share in the case of the given power plant does not exceed 10% of the full fuel consumption, then these will also fall under feed-in obligation (at lower prices).

<sup>12</sup> In case of power plants using combined firing, the installed capacity was taken into account as a proportion of the biomass used and the electricity sold under FiT.

An increase in capacity was observed due to newly entering power plants in cases of landfill gas and solar energy. In case of wind-power plants the capacity of those supplying in the framework of the feed-in tariff system is practically unchanged, the decrease can be attributed to the less favourable wind conditions.

The Authority issued permits for capacities adding to 330 MW in the previous years; these power plants have almost all been built. The erection of new wind turbines (except for units not connected to the grid as well as household-sized small power plants) is possible only through applications; growth therefore can only be expected in case such tenders are called for. The major capacity data for certain technologies are shown in the following table.

**Table 27: Installed capacities of power plants under FiT at the end of the year concerned (MW)**

	2012	2013	Changes	Change (%)
Wind power	324.45	324.45	0.00	0.00%
Hydro power, of which:	53.88	57.04	3.16	5.87%
Hydroelectric power plants with capacities of 5 MW or below	12.98	16.14	3.16	24.37%
Hydroelectric power plants with capacities above 5 MW	40.90	40.90	0.00	0.00%
Biomass firing (pure)	137.67	137.52	-0.15	-0.11%
Coal-biomass combined firing <sup>13</sup>	35.04	13.08	-21.96	-62.67%
Biogas	29.55	33.64	4.09	13.83%
Landfill gas	9.02	11.49	2.46	27.29%
Sewage gas	0.33	0.33	0.00	0.00%
Solar energy	0.40	2.09	1.70	424.94%
Total renewable	590.34	579.64	-10.70	-1.81%
Waste	1.06	1.06	0.00	0.00%
Alternative fuel	0.03	0.18	0.15	503.54%
Total renewables, wastes and alternative fuels	591.43	580.87	-10.55	-1.78%

In conformity with the legislative requirements, the Authority increased the acceptance prices in 2013 (at a rate equal to retrospective inflation rate of 5.8% of 2012 as well as to its value reduced by one percentage point<sup>14</sup>) in case of electricity generated from renewable energy resources and wastes. At the end of 2013 the Authority repeated the correction described above.

Considering the average of the monthly consumer price indices gazetted for the months of January – October 2013 the acceptance prices increased by 1.95% and this value decreased by one percentage point, i.e. by 0.95% as of 1 January 2014.<sup>15</sup>

The following tables show the trend of amounts, average acceptance prices and “subsidies”<sup>16</sup> paid to the generators within the framework of FiT system with respect to 2012 and 2013. The amounts paid to renewable, waste and alternative fuel based generators showed a slight increase due to inflationary indexation.

<sup>13</sup> As a proportion of the biomass used and the electricity sold under FiT.

<sup>14</sup> Increase by the inflation rate took place in case of power plants having acquired FiT eligibility before 1 January 2008 or submitted their complete FiT application latest by this date (except for hydroelectric power plants above 5 MW). In case of other power plants, the acceptance prices increased by inflation minus one percentage point.

<sup>15</sup> See the actual prices on the website <http://www.mekh.hu/hatosagi-arak-2/villamos-energia/kotelezo-atvetel.html>.

<sup>16</sup> The FiT “allowance” is the product of the difference between the feed-in obligation price and the day-ahead market average price on the organised electricity market (HUPX) and the volume of electricity sold.

**Table 28: Amounts paid within the framework of FiT (Billion HUF)**

	2012	2013	Changes (Billion HUF)	Change (%)
Wind power	23.69	23.20	-0.50	-2.09%
Hydro power, of which:	3.99	4.54	0.55	13.67%
Hydroelectric power plants with capacities of 5 MW or below	1.11	1.90	0.79	70.92%
Hydroelectric power plants with capacities above 5 MW	2.88	2.64	-0.24	-8.39%
Biomass firing (pure)	18.97	24.30	5.33	28.09%
Coal-biomass combined firing	4.85	2.45	-2.40	-49.45%
Biogas	3.72	3.91	0.18	4.91%
Landfill gas	1.32	1.49	0.17	12.91%
Sewage gas	0.04	0.03	-0.01	-16.11%
Solar energy	0.01	0.04	0.03	324.49%
Total renewable	56.60	59.96	3.36	5.93%
Waste	0.14	0.14	0.01	5.79%
Alternative fuel	0.00	0.01	0.01	246.41%
Total renewables, wastes and alternative fuels	56.74	60.11	3.37	5.95%

**Table 29: Average acceptance prices (HUF/kWh)**

	2012	2013	Changes (HUF/kWh)	Change (%)
Wind power	31.91	33.76	1.85	5.80%
Hydro power, of which:	19.65	22.22	2.57	13.10%
Hydroelectric power plants with capacities of 5 MW or below	30.98	32.37	1.39	4.49%
Hydroelectric power plants with capacities above 5 MW	17.22	18.14	0.91	5.31%
Biomass firing (pure)	31.59	33.37	1.78	5.63%
Coal-biomass combined firing	32.09	32.94	0.85	2.66%
Biogas	31.48	33.04	1.56	4.95%
Landfill gas	29.73	31.14	1.41	4.75%
Sewage gas	32.23	33.99	1.76	5.47%
Solar energy	30.71	32.18	1.47	4.79%
Total renewable	30.40	32.20	1.79	5.89%
Waste	25.87	27.16	1.29	5.00%
Alternative fuel	17.58	18.10	0.52	2.94%
Total renewables, wastes and alternative fuels	30.39	32.18	1.79	5.88%

In case of hydro power, the greater increase of the average acceptance price was caused by the share of sales by the hydroelectric power plants with capacities less than 5 MW eligible for a higher average acceptance price increased.

The “allowance” provided for the generators in the price of FiT electric power was calculated as the difference between the supported FiT price and the day-ahead market average price on the organised electricity market (HUPX). The source of “support” is provided by the feed-in tariff system receivers, to whom MAVIR Zrt. – in line with rules and regulations – reallocates the electricity and the related costs.

**Table 30: FiT „allowance” (Billion HUF)**

	2012	2013	Changes (Billion HUF)	Change (%)
Wind power	12.73	14.68	1.95	15.36%
Hydro power, of which:	0.96	1.97	1.01	105.15%
Hydroelectric power plants with capacities of 5 MW or below	0.57	1.16	0.59	104.39%
Hydroelectric power plants with capacities above 5 MW	0.39	0.81	0.42	106.26%
Biomass firing (pure)	9.82	14.99	5.16	52.57%
Coal-biomass combined firing	2.59	1.51	-1.08	-41.81%
Biogas	1.88	2.35	0.48	25.46%
Landfill gas	0.66	0.89	0.23	35.38%
Sewage gas	0.02	0.02	0.00	0.15%
Solar energy	0.005	0.02	0.02	427.20%
<b>Total renewable</b>	<b>28.66</b>	<b>36.43</b>	<b>7.77</b>	<b>27.12%</b>
Waste	0.06	0.08	0.02	35.72%
Alternative fuel	0.0004	0.0036	0.00	825.27%
<b>Total renewables, wastes and alternative fuels</b>	<b>28.71</b>	<b>36.51</b>	<b>7.80</b>	<b>27.15%</b>

In 2013, the renewable and waste based generators received “subsidies” of 36.43 billion HUF, showing a significant increase (27%) in comparison to the “subsidy amount” in 2012. This increase is only partly explained by the increase of the FiT payments. The reference HUPX day-ahead average price was 15.01 HUF/kWh for 2012 and 12.63 HUF/kWh for 2013. This is a significant decrease (~16%) which increased the gap between the acceptance price and the market price. From this amount the support due to electricity generated from renewable energy resources amounts to 36.43 billion HUF and that due to electricity generated from waste amounts to 0.08 billion HUF (80 million HUF).

## 8.2 Subsidisation of transition costs

On 9 November 2005, the European Commission (hereinafter referred to as: Commission) started an investigation based on Paragraph (2) of Article 88 of EC Treaty in relation to the Hungarian long term electricity generation and capacity booking agreements (hereinafter referred to as: HTM) to determine whether these constitute prohibited state aid. On 4 June 2008, the Commission adopted a decision, ordering the cancellation of all HTMs and ordering the repayment of prohibited state aid by the power plants concerned.

In 2008, the National Assembly passed the Act LXX of 2008 on certain issues related to electricity (hereinafter referred to as: the HTM Act), which provided for the termination of all HTM-s up to 31 December 2008 and the method of determination how reimbursement of illegal state support should be completed. Based on this, the amount of state support due back will be reduced by the amount of the cost of transition, but the remaining transition cost will not be paid after consideration. The transition cost refers to the initially estimated (and continuously corrected) amount of investments not returning in relation to HTMs during the market operation after termination of HTMs.

The Government Decree No 149/2010 (IV. 29.) on the feed-in obligation and feed-in tariff of electricity produced from renewable energy resources or from waste and electricity generated in co-generation facilities (hereinafter referred to as: HTM decree) defined the methodology for calculating the actual amounts of prohibited state aids that needed to be reimbursed, and the stranded costs compensation scheme due to the termination of the HTMs.

The methodology for calculating compensation amounts for stranded costs in accordance with the provisions of the HTM Decree and the relevant figures were approved by the European Commission in its decision 'State Aid N 691/2009 – Hungarian stranded costs compensation scheme', dated 27 April 2010. On 7 May 2010, the Authority issued a decision regarding the affected power plants with the subject 'Establishment of the recoverable amounts of state aid provided under the Agreement'.

The Authority shall monitor the rate of return of the power plants concerned up to the date when the HTM was to be terminated and shall prepare afterwards a consolidated account for each of the generators. Provided the investments related to the HTMs pay off or a transition cost is incurred which was offset without eligibility pursuant to the HTM Act, the Authority shall establish an obligation of reimbursement of the government subsidies for the power generator.

According to the HTM Decree, the Authority shall, until the end of the compensation period, inform the NFM once a year, not later than 30 April after the year concerned, on the trends observed in the payback of the affected power generators (Budapesti Power Plant, Dunamenti Power Plant and Pannon Thermal Power Plant).

The Authority submitted the 2012 report to the NFM by the given deadline.

### **8.3 Supporting discounted electricity price for employees or former employees of the electricity sector, based on the relevant legislation (the so called C-tariff)**

From 2008 onwards, the discount in the purchase price of electricity for employees of the electricity sector has to be covered by universal contribution from all customers (hereinafter referred to as: pensioner penny). The pensioner penny in 2010 was 0.09 HUF/kWh, reduced to 0.07 HUF/kWh as of 1 January 2011 and was not changed until 31 October 2013. As of 1 November 2013, household customers have been exempted from the payment of the pensioner penny, this latter being paid only by the non-household customers. It has since been increased to 0.2 HUF/kWh. The income from the pensioner penny payments are accounted in a separate account; this income is redistributed by MAVIR Zrt. to universal service providers.

### **8.4 Subsidising the restructuring process of the coal industry**

The restructuring process of the coal industry (coal penny) is related to the Márkushegy coal mine supplying the necessary volume of coal to the Oroszlány Power Plant owned by Vértési Erőmű Zrt. This is Hungary's last underground coal mine.

Gov. Decree No 278/2007 (X. 20.) laying down the detailed rules for determining and managing coal industry restructuring support (hereinafter referred to as: coal penny decree) defines two types of subsidies to restructure coal industry in its Paragraph (1) of Section 3:

- The exceptional support based on Article 4 of the 2010/787/EU Council Decision (hereinafter CD) calculated based on the difference between income and the costs incurred by closing the coal producing units, not relating to the ongoing production, and
- the closure aid as defined by Article 3 of the CD, calculated based on the current production losses legitimately incurred at the coal producing units.

The exceptional support provides coverage for the costs of closing the mine (including severance payment costs). According to Paragraph (2) of Section 3 of the coal penny decree, it is necessary to monitor whether the revenue and the expenditure of the shutdown are reasonable. The monitoring is conducted by the Authority, which then provides a disbursement recommendation to the Minister of National Development.

For the years 2011 and 2012, Vértési Erőmű Zrt. received the following subsidies based on the resolutions of the minister:

**Table 31: Subsidising the restructuring process of the coal industry, Million HUF**

	<b>Plant closure subsidy</b>	<b>Extraordinary subsidy</b>
<b>2011</b>	6,284	0
<b>2012</b>	5,846	280
<b>Total</b>	12,130	280

The size of funds available to finance the restructuring process of the coal industry was as follows in 2013:

- From 1 January 2013 to 3 April 2013: 0.19 Ft/kWh<sup>17</sup>;
- From 4 April to 31 October 2013: 0.08 Ft/kWh<sup>18</sup>;
- it is 0.17 HUF/kWh as of 1 November 2013.

As of 1 November 2013, this fund is not paid collectively by all electricity consumers, but by non-household electricity consumers only.

## 8.5 Subsidising combined generation restructuring

The fund indicated on electricity bills is a ‘combined generation restructuring support’ (hereinafter referred to as: district heating penny) that contributes to the district heating budget established for supporting district heating suppliers. The extent of the district heating penny in 2013 evolved as follows (see Paragraph (4) of Section 148 of the VET :

- From 1 January 2013 to 3 April 2013: 1.20 HUF/kWh – for all electricity consumers,
- From 4 April to 31 October 2013: 1.31 HUF/kWh – for all electricity consumers,
- From 1 November 2013: 1.71 HUF/kWh – for non-household electricity consumers only.

At the same time, not only customers of electricity have contributed to the funds of district heating.

According to Paragraph (15)–(16) of Section 141/B of the GET, the resolutions empower the Minister of National Development to determine a cogeneration restructuring contribution for the licensees conducting gas production in Hungary. Therefore, according to Decree No 19/2010 (XII. 3.) NFM on

<sup>17</sup> See Paragraph (2) of Section 61 of Act CCIV of 2012 on the 2 central budget of Hungary for the year 2013.

<sup>18</sup> As of 4 April 2013, the size of the fund is found in Paragraph (2) of Section 148 of the VET, i.e. Act LXXXVI of 2007 on electricity.

the volumes and prices of natural gas sources offered for sale to universal service providers and of nationally produced natural gas, as well as on the scope of parties entitled and obliged to use it (hereinafter referred to as: offer decree), its attachment 6 has established a payment obligation of 0.087 HUF/MJ for the first quarter of 2013. The legal regulation did not contain further such regulations for the rest of the year.

Furthermore, the Minister of National Development – based on the aforementioned empowerment effective as of 1 July 2013 – was also empowered to determine a cogeneration restructuring contribution for the licensees which – in order to ensure the security of supply of district heating consumers, for the purpose of sales offers to district heating and thermal cogeneration companies – have been supplied from the natural gas security reserves as determined in the ministerial decree on the size, sales and replenishment of the natural gas security reserves. The extent of this is contained in the offer decree, in a total value of 9.2 billion HUF in the second half of the year as at 1 July 2013 (its monthly extent varied between 1.5 and 1.6 billion HUF). Later, on 14 September, the amount stipulated in the offer decree was amended to zero, with retroactive effect for the month of August as well. The funds missing from the district heating budget will be replenished according to the regulation set forth in 2014.

The particular district heating suppliers are eligible for support unless their legitimate income covers their legitimate expenditure. In this case, this support will compensate for the annual difference between the income and the justifiable expenditure. The district heating suppliers may claim this support after the heat volume provided to the household sector. The EU legislation does not permit support for non-household district heating.

## **8.6 Allowance for large families**

The allowance for large families targeting household customers with a <math>20 \text{ m}^3/\text{h}</math> gas-meter who are not community customers and have at least three children entitles the target customers to an annual allowance of 6,840 MJ ( $200 \text{ m}^3$ ) per child and an additional 10,250 MJ ( $300 \text{ m}^3$ ) natural gas allowance at price category I. rates (above the volume of 41,040 MJ [ $1200 \text{ m}^3$ ]). For community customers, the allowance is calculated on a HUF/year/child basis that can be accessed through the residential community representative.

The legislative environment to simplify the application procedure for the large family allowance discount was elaborated within the Magyar Program in 2012. The Authority was represented in the purpose-established workgroup that provided the new legislative framework, primarily working on price regulation and customer protection by providing consistency between the Hungarian State Treasury and natural gas universal service providers.

The simplification of the application procedure now makes it possible for a household to receive the benefit, even if the meter is registered to a person other than the family allowance receiver, the only condition of entitlement being these two persons living in a common household.

As of 1 January 2013, it is no longer necessary to apply annually for the allowance, the eligibility for the allowance is obtained with the family allowance, with the restriction that if there are any changes in the eligibility for this allowance, the person eligible for the benefits is required to report the changes to the Hungarian State Treasury within 15 days.



## ANNEX

### List of Abbreviations

*ACER*: Agency for the Cooperation of Energy Regulators

*CAO*: Central Allocation Office GmbH

*CEE* region: Central and Eastern European region

*CEER*: Council of European Energy Regulators

*ERRA*: Energy Regulators Regional Association

*Offer price decree*: Decree No 19/2010 (XII. 3.) NFM on the volumes and prices of natural gas sources offered for sale to universal service providers and of nationally produced natural gas, as well as on the scope of parties entitled and obliged to use it

*EÉT*: Council of Energy Interest Representation

*ENTSO-E*: European Network of Transmission System Operators for Electricity

*CE*: Customer equivalent – an indicator that uniformly represents the number of customers having resort to water utility supply (by water utility sectors taking into account also the capacity demand of customers).

*GET, Gas Supply Act*: Act XL of 2008 on natural gas supply

*GET enforcement decree*: Government Decree No 19/2009 (I. 30.) on the implementation of the provisions laid down in Act XL of 2008 on natural gas supply

*GVH*: Hungarian Competition Authority

*IEA*: International Energy Agency

*Authority*: Magyar Energetikai és Közmű-szabályozási Hivatal (Hungarian Energy and Public Utility Regulatory Authority)

*HTM*: long term electric power generation and generator capacity booking agreements in Hungary

*HTM Act*: Act LXX of 2008 on certain issues related to electric power

*HTM Decree*: Government Decree No 149/2010. (IV. 29.) on the stranded cost compensation scheme of on natural gas supply

*Minister*: Minister of National Development

*FiT*: feed-in tariff system

*FiT-quote*: quantity of electricity subject to the feed-in tariff system

*NFM*: Ministry of National Development

*OSAP*: National Statistical Data Collection Program

*Tszt.*: Act XVIII of 2005 on district heating services

*Tszt. enforcement decree*: Governmental decree No. 157/2005 (VIII.15.) on the implementation of Act XVIII of 2005 on district heating services

*TVT*: Act LXVII of 2008 on boosting the competitiveness of district heating services

*Competition Act*: Act LVII of 1996 on the prohibition of unfair and restrictive market practices

*VET*: Act LXXXVI of 2007 on electricity

*VET Vhr.*: Government Decree No 273/2007. (X. 19.) on the implementation of certain provisions laid down in Act LXXXVI of 2007 on electricity

## Key legal regulations related to the activities of the Authority

Act LXXXVII of 1990	on price setting
Act III of 1993	on social administration and social benefits
Act XLVI of 1993	on statistics
Act XLVIII of 1993	on mining
Act CLV of 1997	on the protection of customers
Act LXXXVIII of 2003	on energy tax
Act CXXVII of 2003	on excise tax and laying down special rules for the marketing of excise products
Act CXL of 2004	on the general rules of administrative proceedings and services
Act XVIII of 2005	on district heating services
Act XXVI of 2006	on strategic stockpiling of natural gas
Act LXXXVI of 2007	on electricity
Act XL of 2008	on natural gas supply
Act XLVII of 2008	on prohibiting unfair commercial practices against customers
Act LXVII of 2008	on boosting the competitiveness of district heating services
Act LXX of 2008	on certain issues related to electricity
Act CLV of 2009	on the protection of classified information
Act XLIII of 2010	on the central state administration bodies and the legal status of members of Government and Secretaries of State
Act CXXX of 2010	on legislation
Act CXII of 2011	on informational self-determination and freedom of information
Act CXCIV of 2011	on public finances
Act CXCIX of 2011	on public officials
Act CCIX of 2011	on public water services
Act I of 2012	on the labour code
Act CLXVIII of 2012	on public utility tax
Act CLXXXV of 2012	on waste
Act CCXVII of 2012	on the participation in the community trade system of greenhouse gases and in the implementation of the effort sharing decision
Act XXII of 2013	on the Hungarian Energy and Public Utility Regulatory Authority
Act XXIII of 2013	on minimum stocks of imported crude oil and petroleum products

Act LIV of 2013	on the application of utility price cuts
Act CXXV of 2013	on the qualification of public waste management service providing activity
Act CXXXIV of 2013	on the provision of certain public utility services and the related legislative amendments
Act CLXV of 2013	on complaints and public interest disclosures
Act CLXXXVIII of 2013	on a standard image of utility invoices
Gov. Decree No 170/1993. (XII.3.)	on the implementation of Act XLVI of 1993 on statistics
Gov. Decree No 157/2005. (VIII.15.)	on the implementation of Act XVIII of 2005 on district heating services
Gov. Decree No 225/2007. (VIII.31.)	on the National Authority for Consumer Protection
Gov. Decree No 273/2007. (X.19.)	on the implementation of certain provisions laid down in Act LXXXVI of 2007 on electricity
Gov. Decree No 278/2007 (X. 20.)	on laying down the detailed rules for determining and managing coal industry restructuring support
Gov. Decree No 285/2007. (X. 29.)	on the measures to be taken in case of severe disturbances in the electricity system and in emergency situations of electricity supply
Gov. Decree No 289/2007. (X.31.)	on social subsidies of household piped gas consumption and use of district heating services
Gov. Decree No 382/2007. (XII.23.)	on building construction licensing in the electricity sector
Gov. Decree No 389/2007	on the feed-in obligation and feed-in tariff of electricity produced from renewable energy resources or from waste and electricity generated in co-generation facilities
Gov. Decree No 64/2008. (III. 28.)	on the detailed professional rules of setting the fee of municipal waste management public services
Gov. Decree No 19/2009. (I.30.)	on the implementation of the provisions of Act XL of 2008 on natural gas supply
Gov. Decree No 76/2009. (IV.8.)	on the procedures of the spatial planning authority
Gov. Decree No 288/2009. (XII.15.)	on data collection and transfer by the National Statistical Data Collection Programme
Gov. Decree No 48/2010. (II.26.)	on the procedure to be applied due to the existence of a situation threatening natural gas supply of users in case the operation of the natural gas trader becomes impossible
Gov. Decree No 368/2011 (XII.31.)	on the execution of the public finances act
Gov. Decree No 370/2011 (XII.31.)	on the public budgetary organisations internal control system and internal audit
Gov. Decree No 313/2012. (XI.8.)	on the Documentation Center for Buildings and Construction, and the National Register of Buildings
Gov. Decree No 438/2012 (XII.29.)	on waste management activity of public utilities and concerning the requirements of providing waste management public service

Gov. Decree No 58/2013 (II.27.)	on the implementation of certain provisions of Act CCIX of 2011 on Water Utility Supply
Gov. Decree No 292/2013 (VII. 26.)	on the rules of non-regular transport of waste and appointing the organs of the state acting in this regard
Gov. Decree No 309/2013 (VIII. 16.)	on the guarantee of origin of electricity produced from renewable energy sources or from cogeneration with high efficiency
Gov. Decree No 317/2013 (VIII. 28.)	on the selection of municipal waste management service providers and the contract on the municipal waste management service
Gov. Decree No 324/2013 (VIII. 29.)	on the uniform electronic public utility registry
Gov. Decree No 341/2013 (IX. 25.)	on the executive measures of free allocation of emission allowances for power plants on the basis of Act CCXVII of 2012 on the participation in the scheme for greenhouse gas emission allowance trading within the Community and in the implementation of the Effort Sharing Decision
Gov. Decree No 360/2013 (X. 11.)	on the identification, designation and protection of the critical energetic systems and facilities
Gov. Decree No 511/2013. (XII. 29.)	on the rules regarding the non-regular chimney sweeping utility service and the appointment of the government bodies acting in this regard
Gov. Decree No 541/2013 (XII. 30.)	on the identification, designation and protection of critical water management system components and water facilities
Decree No 86/2003. (XII.16.) GKM	on the rules of data supply by the respective natural gas companies
Decree No 91/2007 (XI.20.) GKM	on the rate of administration service fees of the Hungarian Energy Office and laying down the rules of paying administration services and supervision fees
Decree No 110/2007 (XII. 23.) GKM	on the method of calculation to determine the amount of electricity and useful heat co-generated by high efficiency effective thermal energy
Decree No 116/2007 (XII. 29.) GKM	on the electricity purchase discounts to be used in relation to present or past employment in the electricity sector
Decree No 19/2010 (XII. 3.) NFM	on the volumes and prices of natural gas sources offered for sale to universal service providers and of domestically produced natural gas, as well as on the scope of parties entitled and obliged to use it
Decree No 4/2011 (I. 31.) NFM	on the pricing of universal provision of electricity
Decree No 50/2011 (IX. 30.) NFM	on determining the prices of district heat sold to district heating suppliers, the prices of district heating supply provided to residential customers and specially treated institutions
Decree No 51/2011 (IX.30.) NFM	on district heating subsidies
Decree No 64/2011 (XI.30.) NFM	on the rules of establishing and applying electricity system charges

Decree No 76/2011 (XII.21.) NFM	on the technical and financial conditions of connection to the public electricity network
Decree No 1/2012 (I. 20.) NFM	on the calculation methodology of the ratio of energy produced of renewable energy sources
Decree No 36/2012 (VI. 8.) NFM	on the detailed rules governing the use of funds allocated to the priorities of the Environment and Energy Operational Programme and on certain titles of support
Decree No 60/2012 (XI. 8.) NFM	on the frameworks of the pricing mechanism with respect to electricity system charges
Decree No 78/2012 (XII. 22.) NFM	on the amendment of certain ministerial decrees relating to pricing mechanisms in the field of energy
Decree No 4/2013 (II. 4.) NFM	on the frameworks of the pricing mechanism with respect to electricity system charges
Decree No 24/2013. (V. 29.) NFM	on the rules of asset evaluation of communal water system and the data to be submitted for public interest by communal water providers
Decree No 52/2013 (IX. 13.) NFM	on the services to be provided by the electricity distributor and the universal service provider for a special fee and free of charge
Decree No 63/2013. (X. 29.) GKM	on the distribution of electricity subject to feed-in obligation to the transmission system operator and on the method of determining prices to be applied in the course of distribution
Decree No 61/2009 (XII. 14.) IRM	on drawing up the rules of law
Decree No 6/2008 (VI. 18.) KHEM	on certain data to be supplied in relation to the control, operation and use of the electricity system
Decree No 17/2008 (VIII. 1.) KHEM	on the range of and charges for the services that may be provided by the electricity distribution network licensees and the universal service provider upon the users' demand against a special fee
Decree No 27/2009 (VI. 25.) KHEM	on the detailed rules for reimbursement of deficiencies in revenue incurred by the wholesale trading licensee pursuant to Act XLII of 2003 on natural gas supply
Decree No 28/2009 (VI. 25.) KHEM	on determining the tariff rates related to universal service provision on the natural gas market
Decree No 29/2009 (VI. 25.) KHEM	on pricing with respect to universal service provision on the natural gas market
Decree No 31/2009 (VI.25.) KHEM	establishing the natural gas transmission system charges
Decree No 33/2009 (VI.30.) KHEM	on the conditions for the announcement of tender to establish wind power capacities and minimum requirements of contents in such tenders as well as on the rules of procedure in tendering
Decree No 36/2009 (VII. 22.) KHEM	on the considerations to be taken into account in the course of setting the prices for the connection to district heating services, district heating charges for households and the prices applied in the contract between the district heating

	generator and district heating service provider; and on the scope of data to be submitted on a mandatory basis for the purposes of proceedings conducted by the Hungarian Energy Office
Decree No 31/2010 (IV.15.) KHEM	on the visual appearance of billing documents applied by the universal service provider of electricity and natural gas
Gov. Res. No 1586/2012 (XII.15.)	on the reduction of household electricity, natural gas and end users' district heating charges.
MEKH Directive No 1/2013 (VII. 25.)	on the Bylaws of the Hungarian Energy and Public Utility Regulatory Authority
MEKH Decree No 1/2013 (VII. 11.)	on gas system charges, the regulations for the incentives of increasing the quality of supply provided by the system operator through system charges, the system charges applicable depending on the quality of supply provided, and the conditions for the application of system charges
MEKH Decree No 4/2013 (X. 16.)	on the electricity system charges and the rules regarding the application thereof
MEKH Decree No 1/2013 (VII.11.)	on gas system charges, the regulations for the incentives of increasing the quality of supply provided by the system operator through system charges, the system charges applicable depending on the quality of supply provided, and the conditions for the application of system charges
MEKH Decree No 2/2013 (VII. 25.)	on the gas connection fees and the regulations of their application
MEKH Decree No 3/2013 (VIII. 7.)	on the replacement of the Hungarian Energy and Public Utility Regulatory Authority's president with respect to issuing the Decree
MEKH Decree No 4/2013 (X. 16.)	on the electricity system charges and the rules regarding the application thereof
MEKH Decree No 6/2013 (XII. 16.)	on the amendment of MEKH Decree No 1/2013 (VII.11.) on gas system charges, the regulations for the incentives of increasing the quality of supply provided by the system operator through system charges, the system charges applicable depending on the quality of supply provided, and the conditions for the application of system charges
MEKH Decree No 6/2013 (XII. 16.)	on the amendment of MEKH Decree No 1/2013 (VII.11.) on gas system charges, the regulations for the incentives of increasing the quality of supply provided by the system operator through system charges, the system charges applicable depending on the quality of supply provided, and the conditions for the application of system charges

## EU Directives and Regulations

**Directive 2004/8/EC of the European Parliament and of the Council of 11 February 2004** on the promotion of cogeneration based on a useful heat demand in the internal energy market and amending Directive 92/42/EEC

**Directive 2005/89/EC of the European Parliament and of the Council of 18 January 2006** concerning measures to safeguard security of electricity supply and infrastructure investment

**Directive 2006/32/EC of the European Parliament and of the Council of 5 April 2006** on energy end-use efficiency and energy services and repealing Council Directive 93/76/EEC

**Directive 2008/92/EC of the European Parliament and of the Council of 22 October 2008** concerning a Community procedure to improve the transparency of gas and electricity prices charged to industrial end-users

**Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009** on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC

**Directive 2009/29/EC of the European Parliament and of the Council of 23 April 2009** amending Directive 2003/87/EC so as to improve and extend the greenhouse gas emission allowance trading scheme of the Community

**Directive 2009/31/EC of the European Parliament and of the Council of 23 April 2009** on the geological storage of carbon dioxide and amending Council Directive 85/337/EEC, European Parliament and Council Directives 2000/60/EC, 2001/80/EC, 2004/35/EC, 2006/12/EC, 2008/1/EC and Regulation (EC) No 1013/2006

**Directive 2009/72/EC of the European Parliament and of the Council of 13 July 2009** concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC

**Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009** concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC

**Directive 2012/27/EU of the European Parliament and of the Council of 25 October 2012** on energy efficiency, amending Directives 2009/125/EC and 2010/30/EU and repealing Directives 2004/8/EC and 2006/32/EC

**Regulation (EC) No 713/2009 of the European Parliament and of the Council of 13 July 2009** establishing an Agency for the Cooperation of Energy Regulators

**Regulation (EC) No 714/2009 of the European Parliament and of the Council of 13 July 2009** on conditions for access to the network for cross-border exchanges in electricity and repealing Regulation (EC) No 1228/2003

**Regulation (EC) No 715/2009 of the European Parliament and of the Council of 13 July 2009** on conditions for access to the natural gas transmission networks and repealing Regulation (EC) No 1775/2005

**Regulation (EU) No 994/2010 of the European Parliament and of the Council of 20 October 2010** concerning measures to safeguard security of gas supply and repealing Council Directive 2004/67/EC

**Regulation (EU) No 1227/2011 of the European Parliament and the Council** on the integrity and transparency of wholesale energy markets

**Commission Decision 2008/952/EC of 19 November 2008** establishing detailed guidelines for the implementation and application of Annex II to Directive 2004/8/EC of the European Parliament and of the Council



**Decision No 406/2009/EC of the European Parliament and of the Council** on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020

**Decision No 994/2012/EU of the European Parliament and of the Council** of 25 October 2012 establishing an information exchange mechanism with regard to intergovernmental agreements between Member States and third countries in the field of energy

# Organisational structure of the Authority

