

Hungary

Key issues

In September 2012, the Czech-Slovak-Hungarian market coupling became operational, resulting in an increased price convergence towards regional markets. It also increased liquidity on the Hungarian power exchange, decreased price volatility and narrowed spreads on the national market. Efforts to extend market coupling to southern neighbours and successively couple with North-Western and South-Western European markets should be continued.

Key parameters for calculating network tariffs are set by the Ministry and seriously limit the NRA's ability to set network tariffs autonomously. The NRA should have effective powers to set network tariffs independently from the government. In addition, appeal procedures appear to be unsuited to ensure that regulatory decisions can be challenged effectively. The independence of the national regulatory authority should be strengthened.

Regulated energy prices were cut by 20% in 2013 and further cuts in the regulated price are occurring in 2014 for both electricity and gas. In combination with other regulatory measures (e.g. special taxes), and market interventions network operators and energy suppliers now suffer financial losses. The investment climate has deteriorated as a result of changes in the regulatory framework. As foreign utilities are selling their businesses to the Hungarian State, Hungary is on the trajectory to have a largely state owned energy sector. Overall, the country would benefit from adhering to a regulatory framework which is stable and conducive to investment and competition in the electricity and gas markets.

General overview

Gross energy consumption in 2012 amounted to 23.569 Mtoe²⁵⁶. Consumption decreased by 12.1% compared to 2008. The primary energy mix remained largely the same as in previous years, although demand dropped further for oil (to 25.22%) and natural gas (to 35.24%).

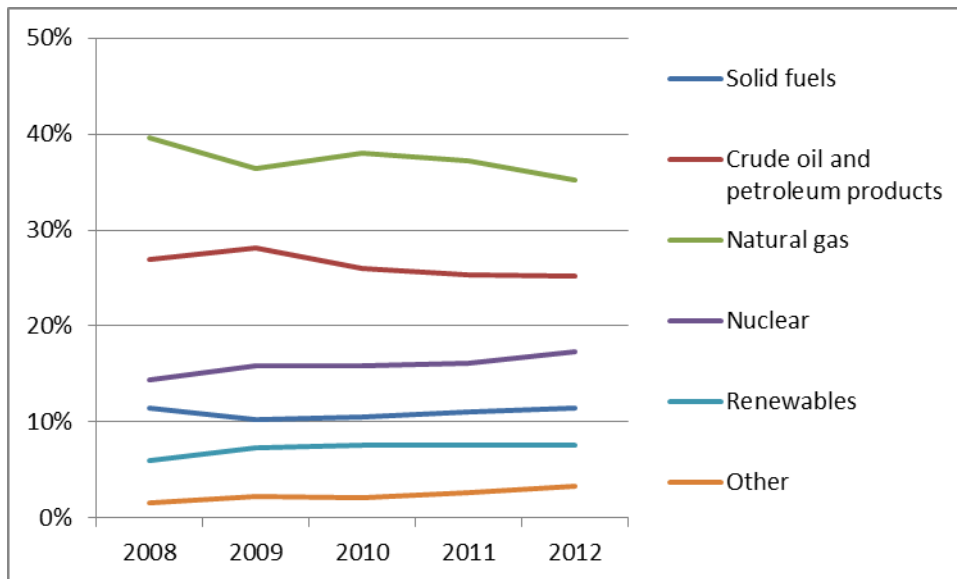
Directive 2009/28/EC requires from Hungary a 13% renewables share within the total gross energy consumption by 2020. However, this target was raised in Hungary's National Reform Programme to 14.65%; above the binding minimum target. The level of renewables in the overall energy production remained stable in 2012 (7.52%). The share of total renewable energy in the gross final energy consumption was 9.57% in 2012. In 2012, Hungary was on track of its national action plan trajectory for overall share of renewable energy in the final energy consumption and in heating sector. However, in 2012 Hungary was behind its national action plan trajectory in the electricity and transport sectors in which the share of renewable energy decreased in 2011 and 2012 (In the electricity sector the share of renewable energy in 2012 was below 2009 level). Limited progress has been made on development of a stable, efficient and reliable legal and regulatory framework for the support for renewable energy sources.

²⁵⁶ Eurostat.

In 2012, total power generation amounted to 34.6 TWh, significantly less than in 2008 (40.02 TWh). In parallel, net imports have been growing significantly, reaching 7.97 TWh in 2012, up from 3.90 TWh in 2008. Total gross electricity demand in 2012 was 39.95 TWh, slightly less than in 2008 (41.3 TWh)²⁵⁷.

Electricity generation from fossil fuels is decreasing. Due to market trends – and decreased profitability, natural gas constituted only 27.12% of total generation compared to around 40% prior to the economic crisis. Cogeneration²⁵⁸ represented 16.6% of gross electricity generation in 2011.

Figure 1: Gross inland consumption mix 2008-2012 (source: Eurostat)



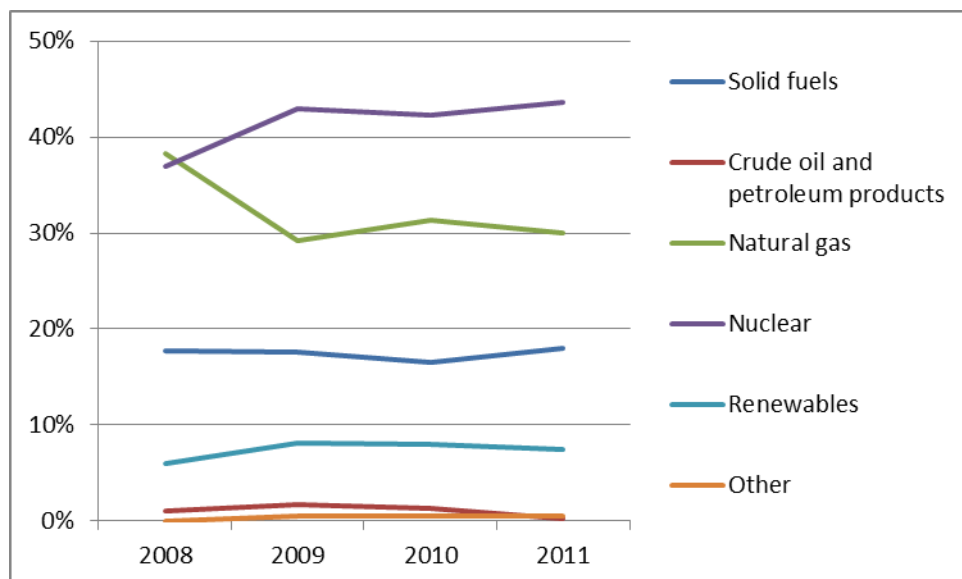
Natural gas consumption continues to sharply decrease, as it has in prior years, reaching 8.3 Mtoe in 2012. Domestic production accounted for 20.32% of total demand. E.ON Földgáz Trade (purchased by the state owned company MVM in 2013) has a long-term gas supply contract with Gazprom. In 2012 imports from the West (from Austria, HAG-pipeline) exceeded imports from the East (from Ukraine, Beregdaróc) while in 2013 imports from the East were higher again. A large share of the western entry capacity was contracted by E.ON for Russian imports. Small scale gas transit has occurred in the direction of Serbia, Romania and Croatia²⁵⁹.

²⁵⁷ HEA and MAVIR, Statistical Data of the Hungarian Power System 2012, 2012, http://www.mekh.hu/gcpdocs/86/MAVIR_MEKH_VER_statiztika_2012.pdf.

²⁵⁸ The share of electricity produced in combined heat and power plants (CHP).

²⁵⁹ FGSZ Zrt, Földgázszállító, Energikus Csoport 21. Szazadi Teljesitmeny, 2012, http://fgsz.hu/sites/default/files/documents/fgsz_eves_jelentes_2012_magyar.pdf.

Figure 2: Gross electricity generation mix 2008 - 2011 (source: EU Energy in Figures – Pocketbook 2012 and 2013)



Regulatory framework

General

The political and regulatory debate during 2012 and 2013 continued to focus on the price moratorium, on special utility sector taxes and since December 2012 on price cuts for household consumers. The Minister of National Development approved a price adjustment equal to annual inflation at the beginning of 2012. Nevertheless, the price rise in gas imports created a mismatch between the level of regulated retail prices and the wholesale import price.

The energy sector is subject to an energy tax, a differentiated profit tax and a crisis tax. The crisis tax was set on (generation and supply) energy companies' taxable revenue and was due to expire in 2013. However, the government at the same time imposed a new tax on infrastructure, set by the length of transmission and distribution lines and pipelines.

In 2013, regulated prices for household consumers in the gas and electricity sector were cut by 20% and further decreases were announced for 2014 (electricity by 5.7% and gas by 6.5%).

National Energy Regulator

The Hungarian Energy and Public Utility Regulatory Authority ("*Magyar Energetikai és Közmű-szabályozási Hivatal*") - HEA, called until 2013 the Hungarian Energy Office, HEO - is an independent body of the administration. In 2012, HEO employed 122 staff and had a EUR 12.68 million budget. Recently its staff and budget increased due to its widening responsibilities. At the end of 2013, the HEA staff was 235.

Since 1st January 2012, HEA is obliged to calculate gas tariffs using the methodology imposed by the Ministry.

Parliament adopted a new law increasing HEA's competence in the public utility realm. This new law foresees that some of the regulatory decisions (namely decisions on connection prices and system use charges) are made in the form of HEA regulation which cannot be appealed in regular courts, but only before the Constitutional court.

Unbundling

The electricity TSO, MAVIR Zrt., is owned by the state-owned company Magyar Villamos Művek Zrt. (Hungarian Electricity Ltd., MVM), a major player both in generation and on the wholesale markets. Mavir was certified by the Regulator in March 2012 as an independent transmission system operator (ITO). The gas TSO FGSZ Zrt. is owned by MOL (Magyar Olaj-és Gázipari Nyrt, MOL Hungarian Oil and Gas Plc.), a listed company, and is also certified as an ITO.

Wholesale markets

Electricity

The generation market is relatively concentrated within the hands of state-owned MVM.

Net imports have been growing steadily reaching 19.95% of gross demand in 2012. Hungary is also an important transit country connecting markets between the Balkans and Central Europe. Imports come from Slovakia, Austria and Ukraine (76.77% share of total imports), exports are the highest towards Croatia and Serbia (73.74%)²⁶⁰.

In September 2012, the Czech-Slovak-Hungarian market coupling became operational. This resulted in an increased price convergence towards regional markets and decreased price volatility, narrowing spreads on the national market. The market coupling was an essential factor in the liquidity increase of HUPX, the Hungarian power exchange, a subsidiary of MAVIR. Day-ahead turnover was 3.78, 6.32 and 9.07 TWh, in 2011, 2012 and 2013 respectively²⁶¹. Prices fell from EUR 55.81/MWh in 2011 to EUR 42.33/MWh in 2013. Trade in physical futures, launched only in 2011, has also seen steady growth.

Gas

In 2012, 20.32% of gas consumption was supplied by domestic sources, the rest being mainly imported from Russia. E.ON Földgáz Trade is a major player on the wholesale market. It was purchased by state-owned MVM in October 2013.

Gas wholesale market concentration has been decreasing for a couple of years primarily due to diversified imports and their increased share in the reduced domestic demand. In 2013, MVM increased further its presence on the wholesale market, in particular in imports previously

²⁶⁰HEA, <http://www.mekh.hu/statisztika/energia-statisztika/adatok-es-tablalatok/villamosenergia-ipari-tarsasagok-adatai.html>.

²⁶¹HUPX, HUPX Year 2012 in Detail., 2012, http://www.hupx.hu/media/HUPX_Year_2012_in_detail_Final_339.pdf and HUPX, HUPXDAM Annual Report 2013, 2013. http://www.hupx.hu/media/HUPX_DAM_ANNUAL_REPORT_2013_PUBLIC_404.pdf.

dominated by E.ON, GdF and MOL²⁶². The gas exchange market, CEEGEX, owned by MVM, became operational in early 2013.

Transit through Hungary comes from Russia via Ukraine flowing towards Serbia and Bosnia-Herzegovina²⁶³, with smaller scale exports to Romania and Croatia. Negotiations about reverse flow to Ukraine were actively conducted at the end of 2012, with gas flows starting in April 2013.

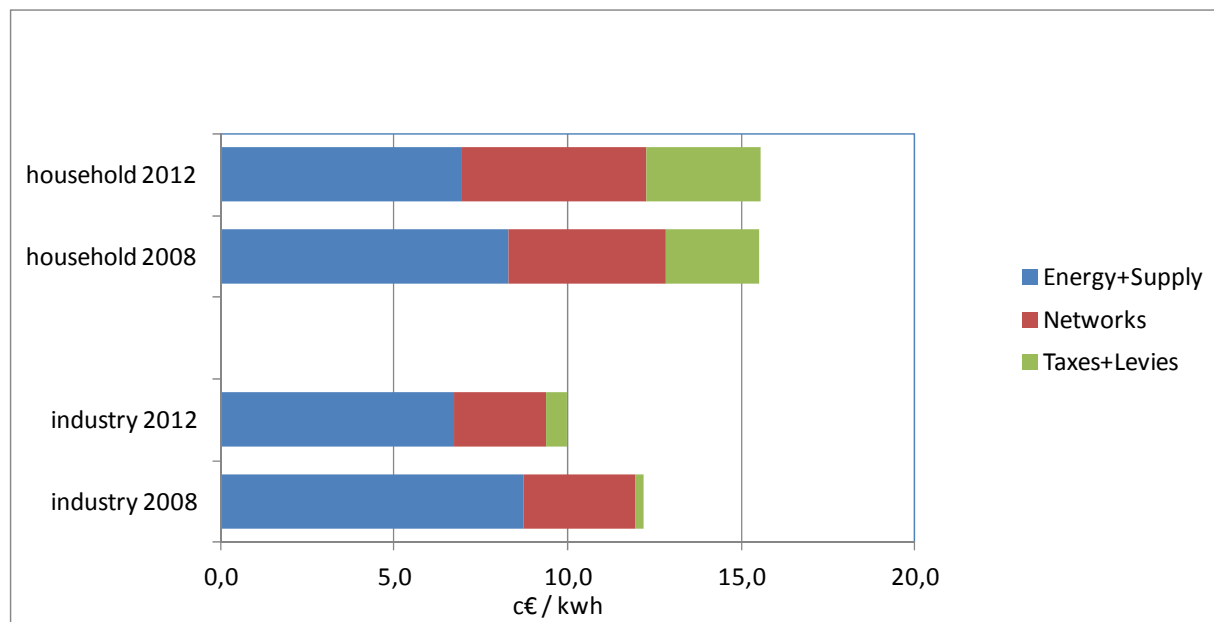
Retail markets

Electricity

In 2012, 12.19 TWh of electricity was purchased under regulated prices. Almost all households remain under the regulated price regime with four companies covering 67.93% of the retail market. The switching rate for household consumers remained low i.e 1.6%, up from 0.3% in 2011. Non-household consumers had higher switching rates with 13.3% of those customers switching supplier in 2012, up from 9.7% in 2011.

Household prices were composed of electricity and supply costs for 43%, network costs for 35%. VAT and other fees and costs make up the remaining 22% of the total price. Due to a decrease in the European wholesale prices, the price moratorium in 2010 did not have significant effects until 2012. In 2013, the 20% utility rate cut led to some distortions and increased the price divergence between wholesale and retail markets.

Figure 3: Electricity price change by component 2008 – 2012 (source: Eurostat, energy statistics)



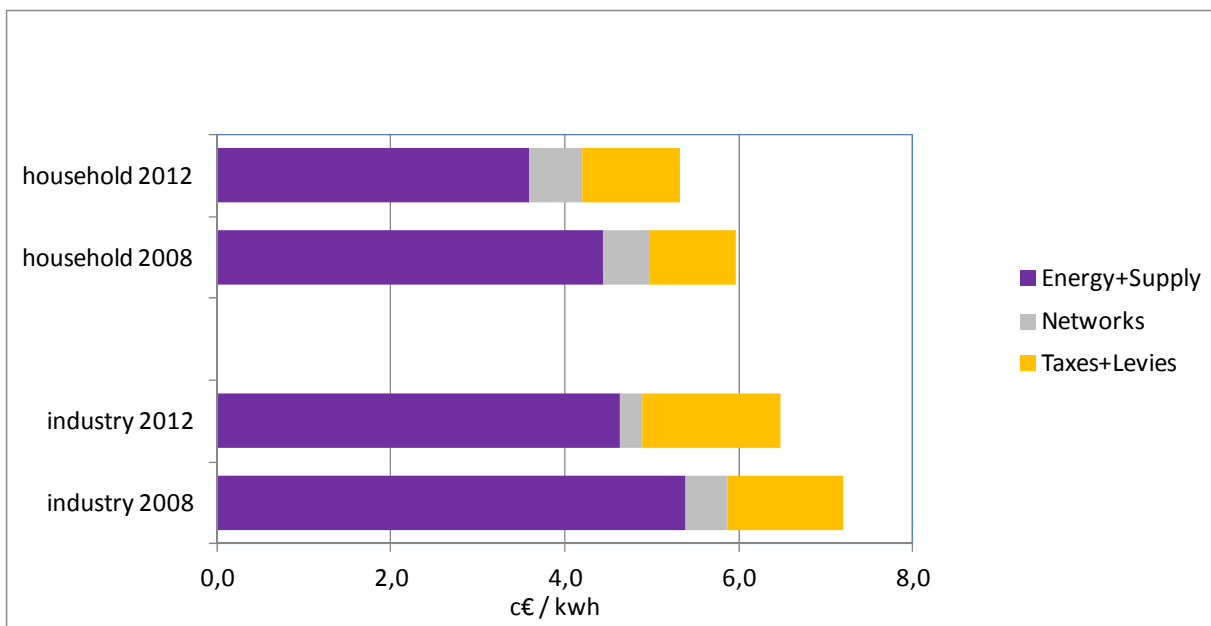
²⁶² MVM Csoport, MVM Csoport Eves Jelentes 2012, 2012, http://www.mvm.hu/hu/szakmai-informaciok/szakmai_kiadvanyok/eves-jelentes/Documents/MVM_EVES_2013_09_vegleges.pdf. Import capacity at HAG (Austria) interconnector was reallocated in favor of MVM by the Ministry's decision in 2011.

²⁶³ Data is not available for this transit to Serbia and Bosnia-Herzegovina, from other documents an educated estimate would be around 2 bcm. FGSZ Zrt. "Foldgaszallito, Eves Jelentes 2012, 2012. http://fgsz.hu/sites/default/files/documents/fgsz_eves_jelentes_2012_magyar.pdf.

Gas

In 2012, 3.66 bcm of natural gas was purchased under regulated prices, 88% of which were sold to household consumers. Almost all households remain under the regulated prices regime. The retail market is relatively concentrated with six companies covering almost the entire retail market (83.79%). The switching rate for household consumers was 1.5%, down from 10.4% in 2011. The high figure for 2010-2011 was probably due to the liquidation of EMFESZ, a supply company with considerable retail books. Data for 2012 is likely to be much more typical for the market. Industrial consumers on the wholesale markets switch more frequently (ratios for consumers equipped with metering devices above 20 m³/h vary between 18.2% and 31.5%). Non-household prices are only regulated for consumers with gas meters below 20 m³/h.

Figure 4: Natural gas price change by component 2008 – 2012 (source: EC, EPCR metadata)



Consumers

The overall assessment of the retail electricity market in Hungary is slightly below the EU average (71.5 points compared to 72). This is also reflected in the country's position in the EU ranking (17th position) and the ranking of 31 domestic services markets (20th position). Switching, ease of switching and overall consumer satisfaction are within the 5 lowest ratings in the EU, and the incidence of consumer problems is the 5th highest in the EU. Yet, trust in providers is above the EU average. The retail gas market ranks lowest in the EU (with a score of 65.9 points compared to the EU average of 74.1) and 28th among 31 domestic service markets. It has also seen a 4.9 point decrease in its score since 2012 (highest in the EU). The market scores lowest in the EU in terms of overall consumer satisfaction, and 2nd lowest on comparability of offers while the incidence of problems is the highest in the EU.

Consumer satisfaction with electricity services was down slightly in 2012, with gas services steeply below EU27 average²⁶⁴. Consumers can turn to both HEA and the Hungarian Authority for Consumer Protection (HACP) with their complaints. These institutions also provide dispute settlement opportunities.

Since 2008, the legislation recognises vulnerable consumers on a social and on a health-related basis. Depending on their category vulnerable consumers may benefit from deferred payment, prepayment options, individual assistance to help consumers understand their bills, consumers with disabilities whose life or health is directly jeopardized if disconnected from the electricity supply system, including any disruption in service, may not be disconnected in case of late payment or non-payment of charges, etc.

Infrastructure

Hungary has a robust infrastructure both in electricity and natural gas sectors. Due to important utility rate cuts in 2013 and extraordinary taxation on energy infrastructure, companies are dissuaded from making further investments. Investment levels within the electricity and gas sectors have decreased, and some non-essential assets have been mothballed. Development of infrastructure has been limited to state-owned actors (primarily MVM) mainly with the support from EU funds.

The Hungarian authorities should ensure a proper and timely adoption of the measures stemming from Regulation 347/2013 on the trans-European energy infrastructure, including the establishment of the one-stop-shop for Projects of Common Interest (PCIs) (due by 16 November 2013), and other measures foreseen for 2014 and 2015, including the publication of the manual on the permit granting process for project promoters, and the adoption of legislative and non-legislative measures streamlining the environmental assessment procedures.

Electricity

Hungarian electricity infrastructure is relatively strong, containing robust interconnections (equal to 30% of domestic installed capacity) with the neighbouring countries. The Hungarian network facilitates North-South transit flows between Central-Europe and the Balkans. It is involved in five PCIs under the guidelines for trans-European energy infrastructure: Two new 400kV interconnections with Slovakia are planned for 2018 and a 3rd one for 2021. Negotiations on a similar interconnection with Slovenia are under way and planned to be commissioned in 2016.

Gas

Hungary has almost finished its major interconnectivity programme launched in 2009. Interconnections with Romania and Croatia were commissioned in 2010 and 2011. It is involved in seven PCIs on the 2013 list. Negotiations about reverse flow in the former case (from Romania to Hungary, PCI), as well as on the HAG pipeline (from Hungary towards Austria) are under way. Construction of the Hungary-Slovakia pipeline is also under way (PCI) and has received funding from the European Energy Programme for Recovery from an amount of up to EUR 30 million. The

²⁶⁴ 10th Consumer Markets Scoreboard,
http://ec.europa.eu/consumers/consumer_evidence/consumer_scoreboards/10_edition/index_en.htm

Hungarian section of the South Stream pipeline is in the planning phase. Other PCIs with planned commissioning dates after 2017 (altogether five) and some minor improvements to facilitate better management of internal flows have been significantly postponed or cancelled due to the deteriorating investment climate.

Security of supply

Efforts in diversification of supply continue in both the electricity and gas sectors. Both trends rely on favourable regional economic processes and articulated policy efforts.

Electricity

Electricity imports from European markets are growing due to the phasing-out of domestic gas power generation. Cross-border capacities are adequate both for imports and North-South transit towards the Western Balkans. These achievements were fostered by the Czech-Slovak-Hungarian market coupling in autumn 2012, which resulted in increased price convergence towards regional markets and decreased price volatility on the domestic market.

Gas

Natural gas imports from Austria grew due to favourable price conditions, putting considerable pressure on Take-or-Pay clauses in the long-term contract with Gazprom. Increasing interconnectivity is one of the policy goals, reiterated by the National Energy Strategy. Romanian and Croatian interconnectors were built prior to 2012, but remained underutilised. At the same time imports from Austria were constrained by scarce pipeline capacity (4.6 bcma) in 2012. The construction of Hungarian-Slovak interconnector (max. capacity 5 bcma) in 2015 will further diversify transportation routes.

Key indicators

| Electricity | | Gas | |
|---|----------|--|----------|
| Number of companies representing at least 95% of net power generation | 32 | Number of entities bringing natural gas into country | 20 |
| Number of main power-generation companies | 4 | Number of main gas entities | 4 |
| Market share of the largest power-generation company | 47.10% | Market share of the largest entity bringing natural gas | 32.91% |
| Number of electricity retailers | 43 | Number of retailers selling natural gas to final customers | 30 |
| Number of main electricity retailers | 4 | Number of main natural gas retailers | 6 |
| Switching rates (households) | 1.6% | Switching rates for gas (households) | 1.5% |
| Regulated prices for households – electricity | Yes | Regulated prices for households – gas | Yes |
| Regulated prices for non-households – electricity | Yes | Regulated prices for non-households – gas | Yes |
| HHI in power-generation market | 2,296.85 | HHI in gas supply market | 1,494.26 |

| | | | |
|---|----------|--------------------------------------|----------|
| HHI in electricity retail market | 1,584.38 | HHI in gas retail market | 1,245.89 |
| Electricity market value ²⁶⁵ (bn€) | 2.758 | Gas market value ¹⁵ (bn€) | 2.327 |
| Installed generation capacity (MW) | 9,551 | | |
| Peak demand (2012, MW) | 6,016 | | |
| Number of smart meters installed | N/A | | |

²⁶⁵ Market value is an estimation of the size of the retail electricity and gas markets. It is calculated using data on electricity and gas consumption in the household and non-household sectors (average bands) and annual average retail prices.