

Estonia

Key issues

Following the successful establishment of the power grid connection Estlink2 – the second electricity interconnection with Finland – in March 2014, cooperation with Latvia (and Lithuania) on making available increased interconnection capacity – both through better use of existing capacity and by building a new interconnector – must now be accelerated with a view to improve electricity wholesale market functioning in the wider Baltic area.

Estonia's gas market remains isolated from the rest of Europe. Estonia should increase efforts to diversify its gas supplies, primarily through a regional Baltic LNG terminal and the construction of the BalticConnector. Preparations should also be made to the law to legally lay down the rules applicable after the end of this isolation and the related exemption from market opening.

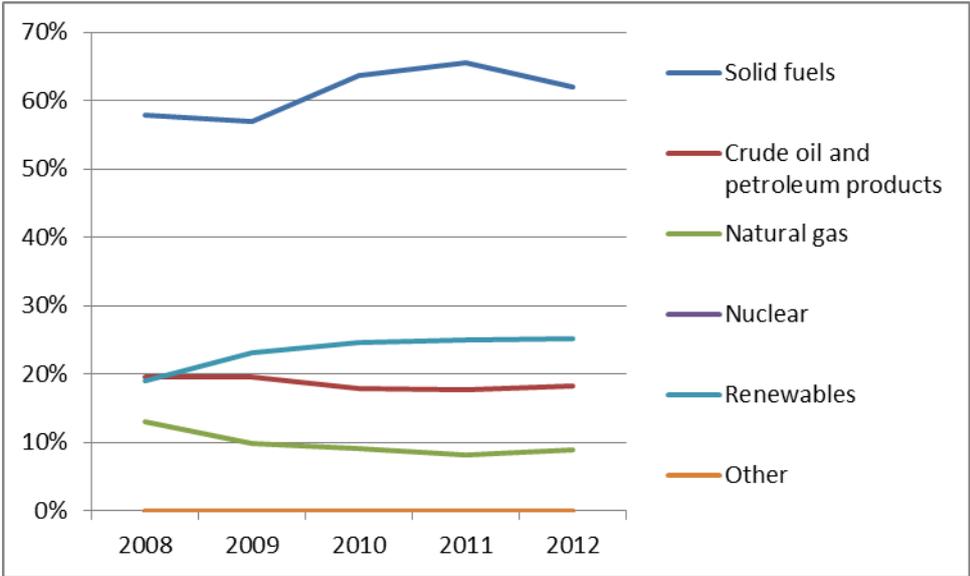
General overview

The Estonian national gross energy consumption in 2012 was 6.13 Mtoe¹⁴⁸. It was based largely on solid fuels (shale oil), less notable was crude oil, petroleum products and natural gas, while the share of renewables in gross final energy consumption in 2012 amounted to 25.2%¹⁴⁹. According to Eurostat, the renewables share between 2008 and 2012 grew from 19.0% to 25.2% accordingly. The Estonian renewables target for 2020 is 25%.

¹⁴⁸Eurostat.

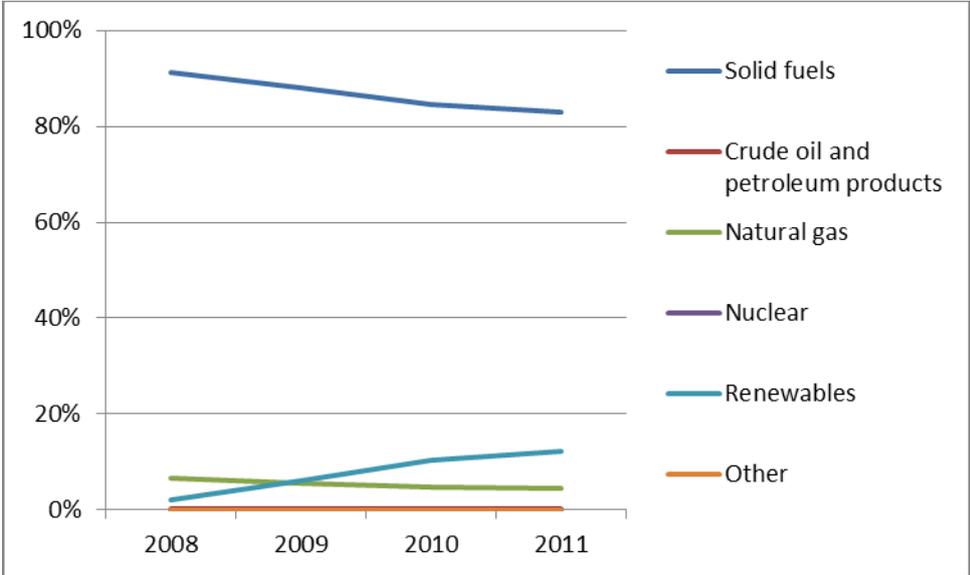
¹⁴⁹Eurostat.

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



In 2012, the total power generation was 11.967 TWh¹⁵⁰, a significant part of it was derived from solid fuels (81%). Renewables and natural gas took smaller parts, respectively 12.3%¹⁵¹ and 1.0%. Renewables increased from 2.1% to 12.3% (between 2008 and 2011). In 2012, the increase in Estonia’s electricity demand was higher than in the rest of the EU countries – 8.7% (in comparison to 2011 level)¹⁵².

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



¹⁵⁰Eurostat.

¹⁵¹Eurostat.

¹⁵²ACER/CEER, Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2012, November 2013.

Cogeneration¹⁵³ represented 9.75% of gross electricity generation in 2011¹⁵⁴. In 2012, the total import and consumption of natural gas in Estonia amounted to 0.545 Mtoe¹⁵⁵. Estonia has cross-border natural gas connections with Russia and Latvia only, and Russia (OAO Gazprom) is the sole supplier of gas to all three Baltic countries.

Regulatory framework

General

Estonia transposed fully the Third Energy Package Gas Directive in April 2014. In 2014, additional amendments will be enforced both in the Electricity Market Act and in the Natural Gas Market Act, which harmonise other requirements arising from the transposition of the Third Package into the Estonian legislation¹⁵⁶.

National Energy Regulator

The Estonian Competition Authority (ECA) acts as the regulator for several sectors. It employs 61 staff members (of which 21 work on energy issues) with an annual budget of almost EUR 1.83 million in 2012¹⁵⁷. The Commission questions whether the allocated human and financial resources are sufficient for ECA to carry out its regulatory tasks.

Unbundling

The electricity TSO, state-owned Elering AS, was certified by the ECA in December 2013 as compliant with the ownership unbundling rules. There is a single operator in gas, AS EG Võrguteenus, which provides transmission and distribution services and belongs to the vertically integrated gas supply company AS EestiGaas. Although art. 49 of Directive 2009/73/EC sets out an exemption for Estonia and does not require the unbundling of the transmission system, on 8 July 2012 the amendment to the Natural Gas Market Act chose not to apply the exemption in future, but selected the route of complete ownership unbundling. On 31 December 2012, the system operator EG Võrguteenus submitted to ECA the plan for the fulfilment of the requirements of the ownership unbundling that are planned to be finished by 1 January 2015.

Wholesale markets

Electricity

The 2012 load in the Estonian electricity system peaked at 1,572 MW (on 6 February 2012), while the installed capacity in the Estonian electricity system was 2,278 MW. Effective

¹⁵³ The share of electricity produced in combined heat and power plants (CHP).

¹⁵⁴ Eurostat.

¹⁵⁵ Eurostat.

¹⁵⁶ On 9 April 2014 Estonia notified new legislation for the transposition of the Gas Directive which is under assessment by the Commission in order to verify whether the Directive could now be considered fully transposed.

¹⁵⁷ http://www.konkurentsiamet.ee/public/Aastaraamat/ECA_Annual_Report_2012.pdf.

competition is limited by the dominant position of Eesti Energia AS, which accounted for 88% of the total electricity production in 2012¹⁵⁸.

There are 17 traders that operate through the Nord Pool Spot's Estonian price area and in total there are 201 eligible customers in Estonia who buy electricity either through bilateral contracts or from the power exchange. An average price in the Nord Pool Spot Estonian price area in 2012 was EUR 39.20/MWh, which is lower than the 2011 price by almost 10%¹⁵⁹. In 2012, the highest hourly price was EUR 183.48/MWh, while the lowest was EUR -7.06/MWh.

From 1 January 2013 Estonia's electricity market was completely opened and all customers are eligible consumers. An average price in the Nord Pool Spot Estonia price area in 2013 was EUR 43.14/MWh. In 2013, the highest hourly price was EUR 210.01/MWh, while the lowest was EUR 5.08/MWh.¹⁶⁰

Gas

Estonia imports natural gas exclusively from Gazprom. During winter, the Inčukalns gas storage facility in Latvia is used by Gazprom to supply Estonia. In 2012, gas imports amounted to 679 mcm (100% of gross inland consumption)¹⁶¹. In 2012, there was only one wholesale trader on the market – AS EestiGaas. An import license has been issued to other two companies: AS Nitrofert, which obtains gas only for its own needs, and to Baltic Energy Partners OÜ, which has not made any material gas imports so far.

As there is no competition between the sellers or traders, there is no organised gas hub. According to the contract, the import price of gas is calculated using a price formula based on the previous nine months heavy and light fuel oil average prices in USD/ton proceeding to the accounting month, taking into account the USD/EUR exchange rate.

Retail markets

Electricity

In 2012, the share of eligible consumption was 2.785 TWh, which equals to 37.6% of the final consumption of electricity (total consumption without network losses – 7.407 TWh)¹⁶². The largest share of 82.9% of electricity sales in 2012 was held by Eesti Energia AS, followed by Imatra Elekter AS with 2.7% and VKG Elektrivõrgud OÜ with 2.6%.Elektrum Eesti AS with

¹⁵⁸ Eurostat.

¹⁵⁹ http://www.ceer.eu/portal/page/portal/EER_HOME/EER_PUBLICATIONS/NATIONAL_REPORTS/National%20Reporting%202013/NR_En/C13_NR_Estonia-EN.pdf.

¹⁶⁰ <http://www.nordpoolspot.com/>.

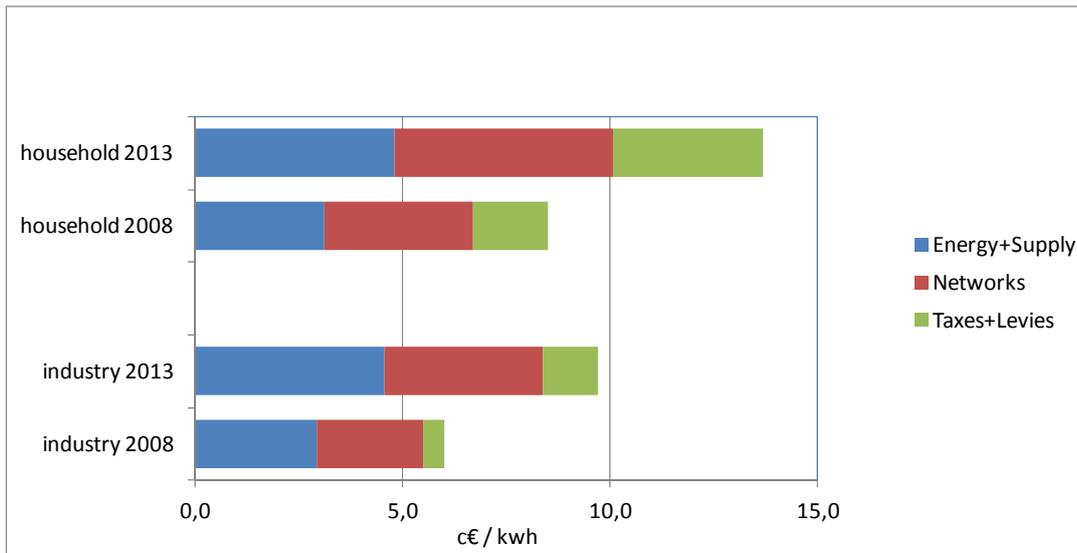
¹⁶¹ ECA, http://www.ceer.eu/portal/page/portal/EER_HOME/EER_PUBLICATIONS/NATIONAL_REPORTS/National%20Reporting%202013/NR_En/C13_NR_Estonia-EN.pdf.

¹⁶² ECA, http://www.ceer.eu/portal/page/portal/EER_HOME/EER_PUBLICATIONS/NATIONAL_REPORTS/National%20Reporting%202013/NR_En/C13_NR_Estonia-EN.pdf.

13.0% and 220 Energia OÜ with 1.5%. In 2012, the number of electricity retailers to final consumers was 42¹⁶³.

In 2012, there were five independent suppliers, who sold electricity to eligible consumers. Non-eligible consumers were obliged to buy electricity from regulated suppliers. According to the Electricity Market Act, in 2012 ECA approved the average selling price to non-eligible customers.

Figure 3: Electricity price change by component 2008 – 2013 (source: Eurostat, energy statistics)



As non-eligible customers did not have an option to change supplier, between year 2011 and 2012 there was no supplier switching¹⁶⁴. In 2013 there were 15 suppliers¹⁶⁵, who had an opportunity to sell electricity to consumers which now can change supplier.

The roll-out of smart meters is due to be dealt with in the next Energy Sector Development Plan 2030. The Estonian grid code determines that all consumers must be provided with a “remote reading device” by 2017. No cost-benefit analysis has yet been carried out.

Gas

Similar to the wholesale market, AS Eesti Gaas also has a dominant position in the retail market. Its retail market share in 2012 was 89.0%, while the remaining 11.0% was sold by another 27 licensed gas sellers. The number of customers in the retail market is approximately 42,000, of which 41,000 are households. In 2012, 1,913 customers switched (1,810 of these were households), or 4.5% of the customers.

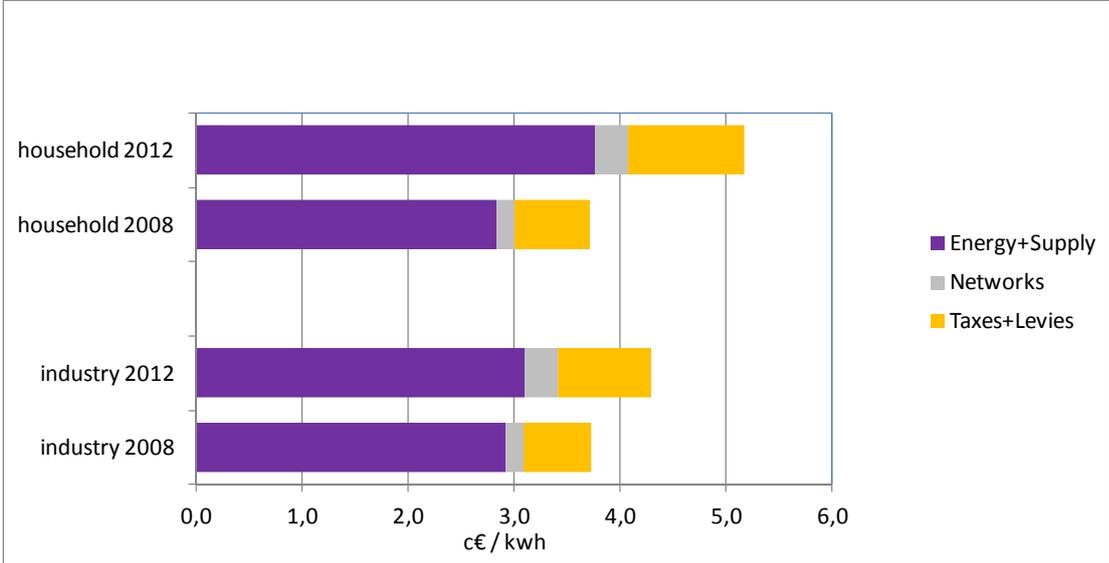
¹⁶³ Eurostat.

¹⁶⁴ ACER/CEER, Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2012, November 2013.

¹⁶⁵ <http://mtr.mkm.ee/>.

The import price of gas is calculated according to the changes in the average price of oil derivatives (heavy and light fuel oil), which drive the fluctuation of the gas price. End users pay the full import price, plus transportation cost and a regulated profit margin.

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



In 2013, the average gas retail price consisted of: energy and supply costs – 51%; network costs – 22%; VAT and other taxes – 26%¹⁶⁶. No formal decision and no plan to roll-out smart meters in natural gas system had been made by 2013¹⁶⁷.

Consumers

The retail gas market is assessed fourth highest in the EU (79.3 points compared to 74.1), with the fifth highest score on the overall consumer satisfaction. The incidence of problems is second lowest in the EU, following a small but steady decrease since 2010. However, consumer assessment of the choice of providers is the lowest in the EU, and switching rates are the second lowest (and have been falling since 2010).

In contrast to the gas market, the performance of the retail electricity market is assessed below the EU average (23th position with 66.2 points compared to 72.0) and the lowest among 31 domestic services markets. The performance of this market has seen the largest decrease of all electricity markets in the EU between 2012 and 2013 and the largest decrease among domestic services markets. Trust in providers and comparability are

¹⁶⁶ ACER/CEER Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2012, November 2013.

¹⁶⁷ ACER/CEER Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2012, November 2013.

particularly low, and the latter indicator has considerably decreased in score since 2012. On the other hand, however, the market scores high on switching (6th place out of 25).¹⁶⁸

ECA acts as an alternative dispute resolution body. Consumers can also contact the Consumer Protection Board of Estonia. In 2012, the Competition Authority received 82 complaints and inquiries concerning the electricity retail market and 19 inquiries concerning the natural gas retail market¹⁶⁹. There is no price comparison site available for the electricity and gas retail market.

In Estonia, during 2013, there was no definition of a “vulnerable consumer” in the electricity sector¹⁷⁰. Nevertheless interruption of electricity supply is very detailed regulated in the Electricity Market Act. The supply of electricity to household customers (household customer who heated residential space in full or primarily by electricity) in the winter period may be interrupted only after the consumer has been given 90 days to pay the bill. In the summer it is 15 days. As regards natural gas, the term “vulnerable consumer” is defined. The supply of natural gas to vulnerable customers (family or individual receiving subsistence benefits) may be interrupted only when the consumer has been given 45 days in the winter period to pay the bill. In the summer it is 7 days.

Infrastructure

Electricity

Estonia is interconnected to the EU electricity market through the Estlink1 and Estlink2 interconnectors with Finland and has recently joined the Nord Pool Spot by creating the Estonia price area for the day-ahead market, intraday and trading in the power exchange.

However, the limited capacity of the connection between Estonia and Latvia creates cross-border bottlenecks, which have an adverse impact on the electricity markets of Estonia and other Baltic States.

Gas

Estonia’s gas grid is connected to the Russian Federation gas system as well as to Latvia. There is no link with the rest of the EU gas market.

The BEMIP initiative is launched with a view to end the isolation of the Baltic region in general and Estonia in particular from the European market. Proposed investment projects include an interconnection between Lithuania and Poland, and a planned regional LNG

¹⁶⁸ 10th Consumer Markets Scoreboard,
http://ec.europa.eu/consumers/consumer_evidence/consumer_scoreboards/10_edition/index_en.htm

¹⁶⁹ ECA, http://www.ceer.eu/portal/page/portal/EER_HOME/EER_PUBLICATIONS/NATIONAL_REPORTS/National%20Reporting%202013/NR_En/C13_NR_Estonia-EN.pdf.

¹⁷⁰ CEER, National Indicators Database, 2013.

terminal. The BalticConnector is a proposed natural gas pipeline between Finland and Estonia, which would connect the Baltic and Finnish gas grids.

In 2013, it was decided that a regional Baltic LNG Terminal would be best placed on either the Finnish or the Estonian side of the Finnish gulf. It is important that the Baltic States reach a final agreement on the location of the terminal in order to start construction and introduce diversification of gas supplies as soon as possible.

Security of supply

Electricity

Estonia has sufficient production capacity to cover domestic electricity demand and for export to Latvia and Lithuania. The Estlink projects enhanced security of electricity supply and Estonia's independence of Russian supplies was increased. However, the Estonian grid continues to operate in synchronous mode with the Russian and Byelorussian grids. In 2012, negotiations were launched by the European Commission with the aim to conclude an Intergovernmental Agreement. Negotiations have been suspended at the request of the Baltic States pending their analysis of a study on the de-synchronisation of the Baltic grids and a move towards synchronisation with continental European grids.

Gas

Estonia has two interconnections with the Russian natural gas network (Värskä and Narva) and an interconnection with Latvia (Karksi). However, natural gas in the share of final consumption of energy in 2012 was only circa 5%. For the Estonian gas network criterion N-1 equals 104.5%, thus the coverage of infrastructural peak demand or the coverage of supply deficit is ensured¹⁷¹. However, given that the gas from the Latvian Incukalns storage facility is contracted from the same supplier, the de facto insecurity of supply continues to exist.

Key indicators

Electricity		Gas	
Number of companies representing at least 95% of net power generation	6	Number of entities bringing natural gas into country	1
Number of main power generation companies	1	Number of main gas entities	2
Market share of the largest power generation company	87.0%	Market share of the largest entity bringing natural gas	86.5%

¹⁷¹ http://www.ceer.eu/portal/page/portal/EER_HOME/EER_PUBLICATIONS/NATIONAL_REPORTS/National%20Reporting%202013/NR_En/C13_NR_Estonia-EN.pdf.

Number of electricity retailers	42	Number of retailers selling natural gas to final customers	27
Number of main electricity retailers	1	Number of main natural gas retailers	1
Switching rates (entire electricity retail market)	0	Switching rates for gas (entire retail market)	4.5
Regulated prices for households – electricity	Yes	Regulated prices for households – gas	No
Regulated prices for non-households – electricity	Yes	Regulated prices for non-households – gas	No
HHI in power-generation market	7,748	HHI in gas supply market	>8,500
HHI in electricity retail market	6,869	HHI in gas retail market	7,943
Electricity market value ¹⁷² (bn€)	0.427	Gas market value ³⁸ (bn€)	0.093
Peak load (MW, 2012)	1,572		
Installed generation capacity (MW, 2012)	2,647		
Number of smart meters installed	N/A		

¹⁷² 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.