

Lithuania

Key issues

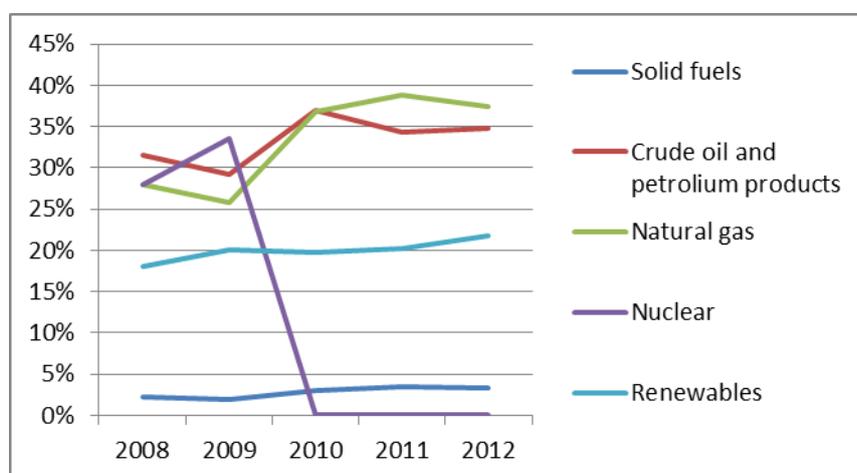
Lithuania remains highly dependent on electricity imports, particularly from the Russian Federation. Interconnectors with Sweden and Poland have to be completed so as to decrease the generation deficit and foster security of supply and wholesale market functioning. Lithuania should continue to promote competition through better integration of the Baltic energy markets.

Lithuania relies on Gazprom as its single source of gas supplies. Diversification of gas supply will be introduced by an LNG terminal in Klaipeda, expected to start operating in December 2014. It is important that the planned interconnector with Poland (GIPL) is also constructed in order to further diversify gas supplies to the country and the larger Baltic region.

1. General overview

The Lithuanian national gross final energy consumption in 2012 was 7.084 Mtoe³²⁹. It was based largely on natural gas (37%) and oil (35%). The renewables share increased from 18.0% to 21.7% between 2008 and 2012, and the country is currently very close to reaching the 2020 national renewable energy target of 23%³³⁰.

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



In 2012, the total power generation was 5.043 TWh³³¹, the largest part of it was derived from natural gas (63%). The major change in power generation occurred in 2010, when Ignalina Nuclear Power Plant was decommissioned and power generation in the country dropped by 63%. As a result Lithuania became dependent on electricity imports (in 2012 electricity import was 169.8% higher

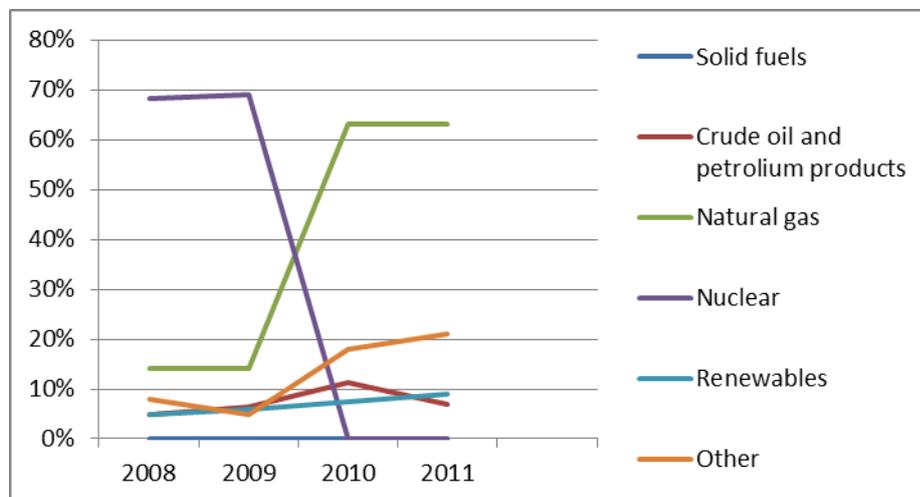
³²⁹Eurostat.

³³⁰Renewable Energy Directive 2009/28/EC.

³³¹Eurostat.

than gross inland production)³³². In 2012 Lithuania's electricity demand increased by 5.9% in comparison to the 2011 level³³³.

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



Cogeneration³³⁴ represented 37.5% of gross electricity generation in 2011³³⁵. In 2012 gross inland consumption of natural gas in Lithuania was 2.65 Mtoe³³⁶.

2. Regulatory framework

General

Lithuania has by now fully transposed the provisions of the Third Energy Package.

National Energy Regulator

In 2013, the Lithuanian Regulator, the National Commission for Energy Control and Prices (NCC), employed 83 staff members and an annual budget of almost EUR 2.78 million in 2013.

Unbundling

In the electricity sector, the ownership unbundling model was chosen for unbundling the state-owned TSO Litgrid AB, making use of the possibility provided for in Article 9(6) Electricity Directive to implement the ownership unbundling model by means of separate public bodies within the State. Litgrid AB received its final certification decision by NCC in August 2013. In 2013, there was one major DSO (LESTO AB) and six other smaller electricity DSOs.

The vertically integrated gas company Lietuvos Dujos AB submitted its unbundling plan to the NCC on 31 May 2012. On 1 August 2013 a newly established, legally unbundled company, Amber Grid AB,

³³² Statistics Lithuania, Energy Balance 2011, 2012.

³³³ ACER/CEER Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2012, November 2013.

³³⁴ The share of electricity produced in combined heat and power plants (CHP).

³³⁵ Eurostat.

³³⁶ Eurostat.

commenced operations as a TSO. Certification is to follow after implementing full ownership unbundling which is to take place by 31 October 2014. The planned implementation of ownership unbundling has been challenged by Gazprom (co-shareholder of Lietuvos Dujos AB and Amber Grid) and the case is currently in arbitration. In 2013, in the gas distribution sector Lietuvos Dujos AB had a market share of over 99%. Five other small gas DSOs were also active in the market.

3. Wholesale markets

Electricity

The closure of Ignalina NPP in 2009 created opportunities for new suppliers on the market with the bulk of the shortfall being replaced by imports from Russia. In 2013, there were six main electricity generating companies with 24 generating companies representing at least 95% of the national net electricity generation³³⁷.

The total installed capacity of the power plants in 2013 increased by 1.2% up to 4,304 MW, including an increase in thermal power plants and renewables³³⁸. Final electricity consumption decreased by 0.13%, from 9.659 TWh to 9.646 TWh³³⁹.

The Lithuanian Power Exchange operated by Baltpool commenced operation in Lithuania in January 2010. Trade is based on the Nord Pool Spot model since June 2012 when the administration of Lithuanian Power Exchange has been transferred to the power exchange operator for Nordic and Baltic countries – Nord Pool Spot AS licensed by the Norwegian energy regulator, with bilateral exchanges between producers, importers and suppliers. In 2013, the volume of electricity traded on the Lithuanian electricity market was circa 7.983 TWh with an average price of EUR 0.0489/kWh³⁴⁰.

Low liquidity and limited interconnection capacity in the region have caused price spikes to occur in the summer and autumn of 2013. In the short run, cooperation between the Baltic TSOs is necessary to better calculate available cross-border capacities. In the mid term the interconnector with Sweden is essential for better market functioning.

Gas

Lithuania does not have natural gas resources of its own. All its gas is imported from Russia via a single pipeline from Belarus. On the upstream gas market Gazprom is the only market player. Natural gas supply undertakings have an obligation to accumulate and store the natural gas reserves sufficient for vulnerable consumers to meet their gas demand in cases foreseen in Art. 8(1) of EU Regulation No. 994/2010. As a result, Inčukalns underground gas storage facility in Latvia stores gas reserves for Lithuanian gas supply companies amounting to 37 mcm on 1 September 2013. The new LNG terminal, which is planned to start its operation by December 2014, is intended to increase competition and security of supply. It will have an initial capacity of 2bcm which could be expanded to 4bcm. LNG supplies that are not immediately consumed are likely to be stored in Latvia as well.

³³⁷ Eurostat.

³³⁸ ENTSOE, YS&AR report, 2012.

³³⁹ NCC, http://www.regula.lt/en/publications/annual-report/NCC_report_for_2012_EN.pdf.

³⁴⁰ NCC, http://www.regula.lt/en/publications/annual-report/NCC_report_for_2012_EN.pdf.

For the Klaipeda LNG Terminal to fully exploit its role as a regional supplier it is necessary that the transmission grid is expanded, notably on the border with Latvia.

In 2013, Lithuania imported 2,701.5 mcm of natural gas which was 18.6% less than in 2012³⁴¹. During 2013, the main players in the gas market remained unchanged and included Lietuvos Dujos AB, Achema AB, Haupas UAB, Kaunas CHP Plant and Dujotekana UAB (the only one that purchases gas from OAO Gazprom via Gas Stream AG LT).

In 2013, the price of the imported gas was on average 5.4% lower than in 2012 and made EUR 359.5/tcm (the average price of the imported gas in 2012 was EUR 380.2/tcm)³⁴². A new gas exchange to organize secondary trade in natural gas, operated by Baltpool, was launched on 1 March 2012. In November 2012, NCC issued second gas exchange operator license for UAB GET Baltic. Trade on the UAB GET Baltic exchange since the beginning of 2013 resulted in a total traded volume in a 176 deals realized against an average price of EUR 334,91/tcm³⁴³.

4. Retail markets

Electricity

In 2013, the independent electricity suppliers supplied 5,646.0 GWh of electricity to customers; the public supplier AB LESTO supplied 2,582.7 GWh of electricity to the regulated customers and 478.1 GWh of electricity to the eligible customers. When 2013, is compared to 2012, the share of AB LESTO in the retail supply market decreased from 42.6% to 35.2%.

Changing electricity supplier in Lithuania was permitted but during 2013 no switches were made³⁴⁴. A cost-benefit analysis addressing smart meters has been carried out, but no formal decision or plans about smart meters roll-out has been made so far.

Today, end-user price regulation still exists for household consumers. Full liberalization is scheduled for the beginning of 2015. For industrial consumers, price regulation was fully removed at the beginning of 2013.

Power prices for households and industrial consumers have kept increasing during the recent years, mostly due to the transmission and commodity prices, but also because of public service obligation's component during 2012-2013. This component in electricity price includes: compensation to electricity generation company "Lietuvos energijos gamyba" AB, operating as reserve capacity; support to CHPs; promotion of renewables; and financing infrastructure of strategic importance.

³⁴¹Energy in Lithuania 2012, http://www.lei.lt/_img/_up/File/atvir/leidiniai/2013/Lietuvos_energetika-2012.pdf.

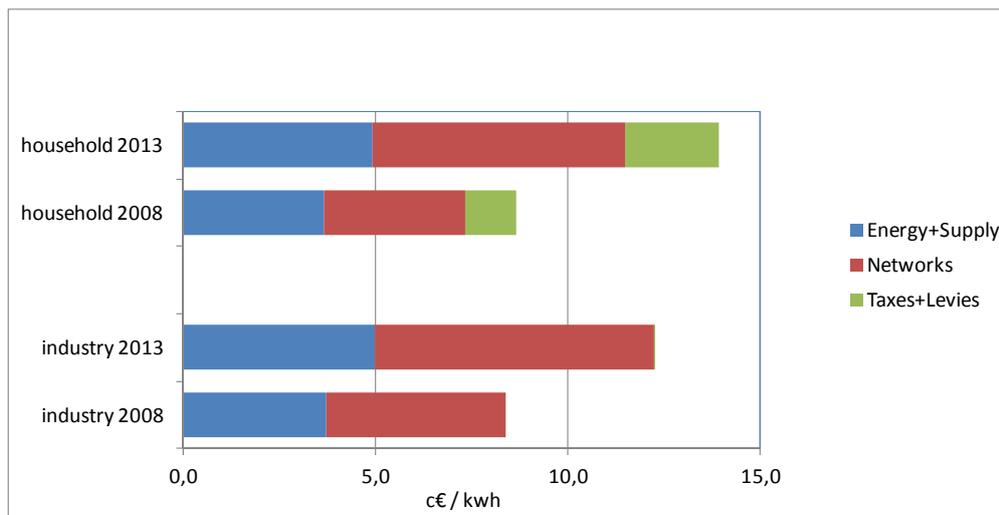
³⁴² NCC, http://www.regula.lt/en/publications/annual-report/NCC_report_for_2012_EN.pdf.

³⁴³ UAB GET Baltic,

https://www.getbaltic.lt/en/news/news_1/reportoftradeonnaturalgasexchangeoffourthquarterof2013hasbeenannounced

³⁴⁴ ACER/CEER Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2012, November 2013.

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



Gas

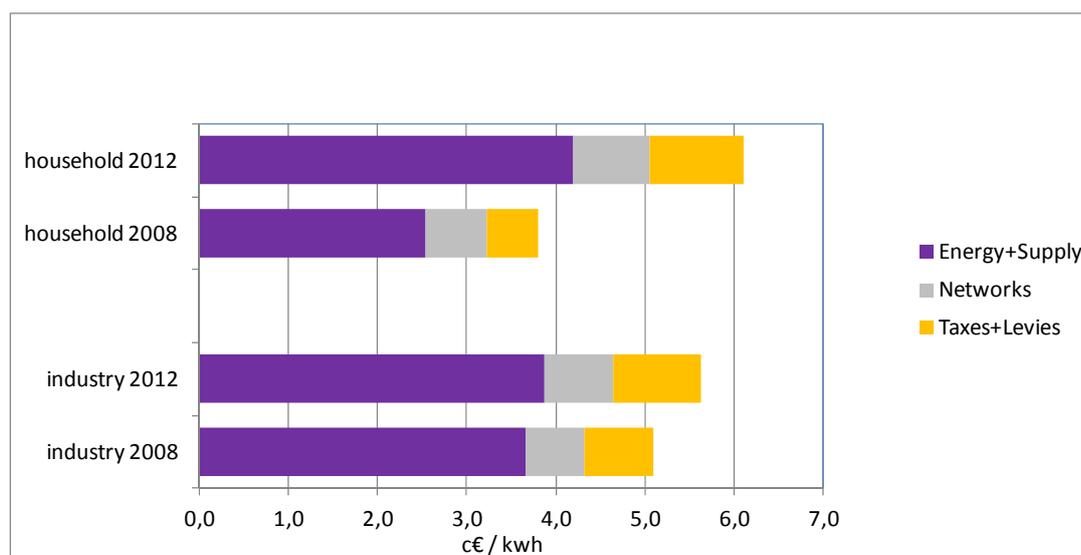
The functioning of the natural gas retail market is determined by the situation on the wholesale market. Theoretically, the market is 100% liberalised and customers are free to choose among gas suppliers, however during 2013 only modest interest in switching was observed.

Natural gas was supplied to customers by eight supply companies and in 2013 gas sales totalled 1,430.0 mcm. As compared with 2012, the sale of natural gas decreased by 11.4%³⁴⁵. Retail gas supply as well as the wholesale is dominated by one supplier (Lietuvos Dujos AB), which together with UAB Dujotekana holds 98.1% of natural gas supply market (Lietuvos Dujos AB - 69% and UAB Dujotekana - 29% accordingly)³⁴⁶. Other gas supply companies' joint market share is as low as 2% of the retail market. Gas prices for final consumers followed a similar trajectory to that of electricity prices.

³⁴⁵NCC data, April 2014.

³⁴⁶Eurostat, http://epp.eurostat.ec.europa.eu/statistics_explained/index.php/Electricity_market_indicators.

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



A cost-benefit analysis addressing smart meters in natural gas is being carried out by NCC, but no formal decision or plans about smart meters roll-out has been made so far³⁴⁷.

5. Consumers

The assessment of both the electricity and the gas retail markets in Lithuania is well above the EU average thus placing the country high in the EU ranking (6th and 2nd place, respectively). Both markets have considerably improved their performance since 2012 (by 4.6 points in the case of gas and 7.5 in the case of electricity, which represents the highest and 2nd highest increase EU-wide). The electricity market in the country shows the highest score in the EU as far as comparability is concerned while on the negative side the incidence of problems is the fourth highest in the EU and the scores on switching, ease of switching and choice of providers are below EU average. As far as the gas market is concerned, Lithuania has the second EU score on comparability and the 2nd highest on overall consumer satisfaction with respect to expectations.³⁴⁸

The NCC, the State Energy Inspectorate and the State Consumer Rights Protection Authority investigate individual consumer complaints. The number of complaints per thousand inhabitants in 2012 was more than three and was almost two times higher than in 2011³⁴⁹. It was documented by the NCC that 30 complaints concerning natural gas market³⁵⁰ were received during 2013.

The supply of natural gas is guaranteed as a matter of priority to those groups of vulnerable consumers — household customers and non-household customers — which consume less than

³⁴⁷ ACER/CEER Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2012, November 2013.

³⁴⁸ 10th Consumer Markets Scoreboard,

http://ec.europa.eu/consumers/consumer_evidence/consumer_scoreboards/10_edition/index_en.htm.

³⁴⁹ ACER/CEER Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2012, November 2013.

³⁵⁰ NCC, 2013 data.

20,000 cm of gas per year. According to the Law on Electricity, suppliers have to conclude agreements for supply of electricity at the public electricity price to consumers who have not chosen independent electricity supplier, also to socially vulnerable customers.

6. Infrastructure

The Lithuanian authorities have already established the one stop shop for Projects of Common Interest (PCI) as required by the TEN-E Regulation.

Electricity

Lithuania is not directly connected to the European grid and therefore is working in BEMIP towards the creation of the Baltic regional electricity market.

Two electricity projects are of key importance. The cross-border electricity transmission line "NordBalt" is the 700 MW capacity (400 kV) cable from Klaipeda (Lithuania) to Nybro (Sweden). This link is expected to increase possibilities for electricity trade, and by December 2015 and it will allow full integration of the Baltic and North European electricity markets.

Secondly, the cross-border electricity transmission line "LitPol Link", a PCI project, is the 500 MW capacity (400 kV) double circuit electricity transmission line from Alytus (Lithuania) to Elk (Poland). The interconnector will link the electric power systems of the Baltic States and Continental Europe and will create preconditions for electricity trade, and will enhance the security of electricity supply in Lithuania.

Gas

The Lithuanian gas network is connected to the Belarusian, Latvian and Russian Federation (Kaliningrad) gas systems. Enhancement of the Latvian-Lithuanian interconnection was successfully finalised in early 2013 by increasing the cross-border capacity to more than 6 mcm/day in both directions. Secondly, the new Klaipeda – Jurbarkas pipeline was constructed and made operational in 2013. It allows for looping the national gas transmission system and it will also ensure the efficient send-out from the LNG terminal in Klaipeda that is to become operational in December 2014.

The Lithuania-Poland gas interconnection ("GIPL") which is necessary to end pipeline-based the energy isolation of Lithuania and other Baltic States should be considered a top priority project. In 2013, its feasibility study was started and the project could be finalised by 2018. Furthermore, Lithuania should make efforts to upgrade the Klaipeda – Kursenai pipeline that is necessary to achieve the full 4bcm operation of the LNG terminal and for enhancing its interconnection with Latvia.

7. Security of supply

Electricity

After the shutdown of the Ignalina NPP, Lithuania has become an importer of electricity. The abovementioned NordBalt link and LitPol Link are necessary to integrate Lithuania into a common European electricity market, thus contributing to a more reliable electricity supply, more stable prices and enhanced competition on the Lithuanian market.

At present, the Lithuanian grid is operated in synchronous mode with the Russian and Belorussian 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.

As regards the local supply security, the total investments into the network infrastructure were increased by 9.59% to EUR 148.1 million in 2012.

Gas

To diversify the supply of gas, as per the approved National Energy Independence Strategy of 2012, Lithuania has determined the necessity for the LNG Terminal and interconnection with the gas network of Poland to enable access to the EU-wide natural gas system.

Making the LNG Terminal operational requires investment in the outdated gas transmission line extending in the northern part of Lithuania and also connecting Latvia (Klaipeda – Kursenai). The underground storage facility in Inčukalns (Latvia) is used for the supply security for vulnerable consumers of Lithuania in case of emergency. Analysis has revealed that the present status of the Lithuanian gas network failed to fulfil the EU requirements prescribed by the EU regulation No. 994/2010. The analyses of the N-1 rule showed a result equal to 31.4% while the requirement of regulation states that N-1 must be above 100% in order to have a secure network.

8. Key indicators

Electricity		Gas	
Number of companies representing at least 95% of net power generation	30	Number of entities bringing natural gas into country	5
Number of main power generation companies	6	Number of main gas entities	4
Market share of the largest power generation company	25%	Market share of the largest entity bringing natural gas	69%
Number of electricity retailers	27	Number of retailers selling natural gas to final customers	8
Number of main electricity retailers	5	Number of main natural gas retailers	2
Switching rates (entire retail market)	N/A	Switching rates for gas (entire retail market)	N/A
Regulated prices for households – electricity	Yes	Regulated prices for households – gas	Yes

Regulated prices for non-households – electricity	No	Regulated prices for non-households – gas	No
HHI in power-generation market	1162.6	HHI in gas supply market	>5000
HHI in electricity retail market	2124.4	HHI in gas retail market	>5000
Electricity market value ³⁵¹ (bn€)	0.733	Gas market value (bn€)	0.274
Installed generation capacity (2013, MW)	4,304		
Peak load (MW)	1,686		
Number of smart meters installed	N/A		

³⁵¹ 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.