LITHUANIA

Key Issues

→ As recommended by the Council, Lithuania should promote competition and improve connectivity with EU energy networks.

→ With regard to electricity, there is only limited competition in Lithuania and the market is concentrated. Lithuania has joined Nord Pool Spot, which might help to spur competition at the wholesale level, but Lithuania should still continue work in BEMIP towards the creation of a Baltic regional electricity market. While taking into account universal service obligation and effective protection of vulnerable customers, Lithuania should continue phasing out price regulation, as planned. It is essential to continue cooperation with the European Commission in negotiations with Russia and Belarus on electricity network operation in the Baltic States. Lithuania should complete the electricity interconnection with Sweden and develop cross-border interconnection with Poland, which could help reduce market concentration at wholesale and retail level.

→ With regard to gas, Lithuania relies on only one supply source. As a result, Lithuania should take the necessary measures to end isolation of its gas network from the EU, in particular by working in the context of the BEMIP initiative and diversification of supply with a regional LNG terminal in the Baltic States (which is planned for 2014) and interconnection with Poland.

→ Since the adoption of national legislation at the beginning of 2012, Lithuania has made some effort to strengthen its regulator. Further efforts are required to ensure independent, economic-based regulation.

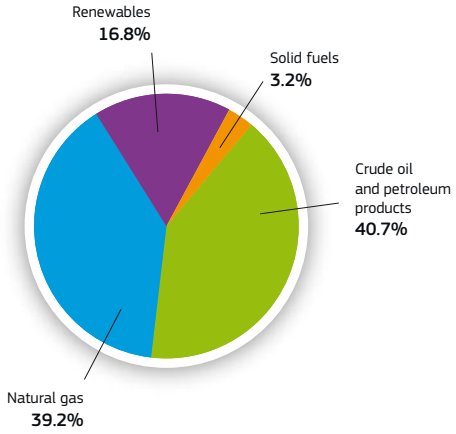
1. General overview

In 2010, oil and natural gas had almost the same share in the energy mix. Nuclear energy was still very important in 2009, but at the end of the year the second reactor of Ignalina nuclear power plant (NPP) was shut down as foreseen in Protocol n°4 on the Ignalina nuclear power plant in Lithuania attached to the Accession Treaty. With the decommissioning of the Ignalina NPP, which accounted for 80% of national electricity production, Lithuania has become the most dependent EU Member State on electricity supply from abroad. Currently up to 80% of Lithuanian primary energy mix is provided by import. This phasing out is planned to be offset mainly through an increased share of natural gas, but also through renewables (RES). In the electricity mix, the share of RES amounted to 29% in 2010 (from 9% in 2009). Lithuania has set a target of 23% of RES in gross final energy consumption by 2020. In 2010 this share was 19.7%. About 35% of the total electricity generation in 2010 was provided by cogeneration[1], while in 2005 this share was 15.5%, putting the country in a good position compared to other EU countries. In the mid-term Lithuania plans to build a new nuclear power plant at Visaginas, although a recent referendum shows growing popular resistance to nuclear power.

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

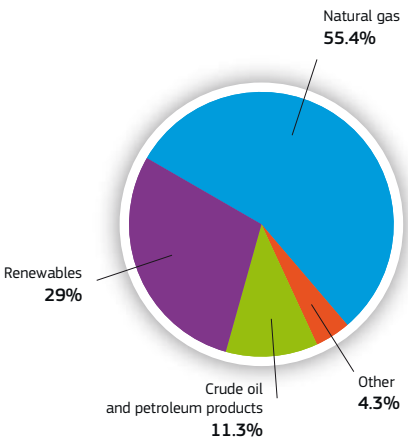
CHARTS 1 AND 2

Gross inland consumption (as % of total Mtoe) - 2010



Total Mtoe: 6.86

Gross electricity generation (as % of TWh) - 2010



Total TWh: 5.75

Source: Eurostat

2. Regulatory framework

2.1. General: Following the opening of infringement proceedings in September 2011 for non-transposition, Lithuania has notified full transposition of the Electricity Directive and partial transposition of the Gas Directive of the Third Package. As regards the Electricity Directive, the Commission is conducting a *prima-facie* examination of the completeness of the transposition based on the measures notified and other information provided in the proceedings. Lithuania, like Latvia, Estonia and Finland, has no interconnections with the EU gas network. It only has an interconnection to Latvia. Unlike the other three Member States, Lithuania did not request an explicit derogation pursuant to Article 49 of the Gas Directive during the Third Package negotiations.

2.2. National Energy Regulator: The Lithuanian regulator, the National Control Commission for Prices and Energy (NCC), in operation since 1997, employed 46 staff (of which only 15 work on the regulation of electricity and gas) with an annual budget of almost EUR 0.92 million in 2011. These are low figures compared to those of other Member States, even in relative terms.

2.3. Unbundling: In electricity the OU model was chosen for unbundling the state-owned TSO (Litgrid AB). There is one major DSO (AB LESTO) and five smaller DSOs in electricity. Both the TSO and the DSO were given additional time to complete their unbundling (until 31 October 2012, and 30 June 2012 respectively). The gas TSO is *Lietuvos Dujos* of which E.On, Gazprom and the Lithuanian Government are the main shareholders. *Lietuvos Dujos* submitted its unbundling plan to the NCC on 31 May 2012. In parallel, negotiations between Lithuania, Gazprom and E.ON are underway concerning ownership unbundling. In the gas distribution sector Lietuvos Dujos AB has a market share of 99%. Five other companies were entitled to engage in distribution activities, but they provided distribution services only to a few regions and their total distribution market share was 1%.

3. Wholesale markets

3.1. Electricity: The closure of Ignalina NPP in 2009 removed a monopoly power supplier and created room for new suppliers on the market. However, the Lithuanian electricity market is still concentrated. In 2010, INTER RAO Lietuva UAB and *Lietuvos Energija* AB each had a 40% share of the wholesale electricity market and 18 other market players had a combined market share of 20%. In 2011, INTER RAO Lietuva UAB had a share in energy exchange of 19.3% (sales share) and 44% (purchase share). *Lietuvos energija* had a share of 45.1% and 17.4% respectively. Nord Pool Spot started in Lithuania in June 2012. Since then, electricity trading is based on the Nord Pool Spot model, taking place on the Lithuanian electricity market and through bilateral exchanges between producers, importers and suppliers. In 2011 the average day-ahead **wholesale price** for baseload power was EUR 45.2/MWh (a decrease of 2.6% compared to 2010)[2]. In terms of **liquidity** concerned, 8 TWh were traded on the exchange in 2011 (75% of gross electricity consumption).

3.2. Gas: Lithuania does not have its own natural gas resources. All gas is imported from a single source - Russia (via a single pipeline from Belarus). In 2011 3.4 bcm of gas were imported. Correspondingly, competition has not developed in the wholesale sector of the natural gas market. All the natural gas is purchased from one company. Incumbent companies AB *'Lietuvos dujos'* (the largest player) and UAB *'Haupas'* purchase from Gazprom directly (as well as AB *'Achema'* and UAB *'Kauno termofikacijos elektrinė'*). UAB *'Dujotekana'* purchases from Gazprom via Gas Stream AG LT. Nevertheless, a gas exchange was launched on 1 March 2012. Wholesale trading of natural gas administered by exchange operator Baltpool takes place on the commodities exchange by trading natural gas or transferring the right to acquisition of natural gas. As trade on the natural gas exchange is local for the time being and just getting off the ground, no reference **wholesale price** can be given. Estimates of long-term prices for Russian gas result in an annual average of EUR 33.7/MWh for 2011 (an increase of 26.4% in relation to 2010).

4. Retail markets

4.1. Electricity: In 2010, Rytu Skirstomieji Tinklai AB and VST AB together supplied 65% of the market, with 59 independent suppliers having a combined market share of 35% (the number of independent suppliers had doubled in relation to 2009). At the end of 2010, *Rytų Skirstomieji Tinklai* AB and VST AB merged into one single operator, AB LESTO; and in 2011 LESTO supplied 53.1% of the market. Supplier switching among non-household consumers has been rising gradually since 2010. End-user price regulation still exists for household consumers, but will be fully removed for industrial consumers in 2013. By a decree of 2009 the Lithuanian Government instituted a plan for the gradual phasing out by January 2015 of regulated end-user tariffs for electricity. Regulated end-user tariffs will continue to apply to vulnerable customers only. **Power prices** for households and industrial consumers have been increasing in recent years, mostly due to the net commodity price in 2010, but also to public interest

2. *For a comparison with wholesale prices in neighbouring countries, please refer to Table 9 of this Staff Working Document, part II.*

services' supply in 2011-2012. The former is related to the closure of the Ignalina power plant and the switch to other sources of electricity. Lithuania also increased the rate of VAT from 19% to 21% in September 2009. In 2011 and in the first semester of 2012 the share of network costs in the power price for households (without taxes) was 55% while the share of energy and supply costs was 45%. In the case of industrial electricity prices, these proportions were 40% and 60% respectively. A cost-benefit analysis addressing smart meters is currently being carried out.

4.2. Gas: The functioning of the natural gas retail market is determined by the situation on the wholesale market. Theoretically, the market is 100% liberalised. In practice, as there is only one external gas supplier, no switching occurred in 2011. As in previous years, in 2011 customers were supplied with natural gas by the two main suppliers, *Lietuvos Dujos* AB and *Dujotekana* UAB. Gas quotas are allocated to those undertakings by a single external supplier (Gazprom RAB). There is therefore no competition between the main suppliers, which means that there is no real switching option. There are another five gas supply companies, whose combined market share is as low as 1.2% of the retail market. **Prices** for final consumers followed a similar trajectory to electricity prices. The increase in the price of natural gas and in VAT contributed to higher retail prices. A comparison of the development of estimated long-term gas import prices and retail prices highlights some **correlation** for industrial consumers. In 2009 there was a sharp drop in industrial retail prices, followed by a gradual increase in subsequent years. This corresponded closely to the movement of the import price of natural gas.

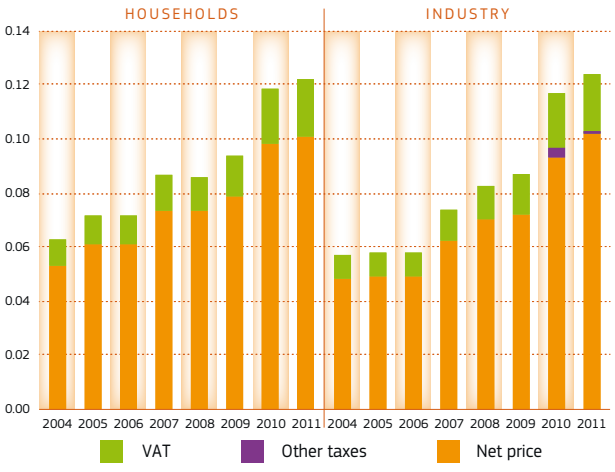
4.3. Consumers: The NCC, the State Energy Inspectorate and the State Consumer Rights Protection Authority investigate individual consumer complaints depending on the nature of the complaint. Lithuanian consumers rate the performance of their retail gas market 5th highest in the EU, with the highest score on comparability of all EU countries. The assessment of the retail electricity market is below the EU average (18th place out of 27), with the third highest percentage of consumers reporting a problem. Disputes are settled out of court by both authorities. The regulator established a single point of contact in March, 2012. As regards the definition of vulnerable consumers and measures to protect them, Lithuanian law provides that the non-interruptible 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 up to 20 thousand cubic metres of gas per year.

5. Infrastructure

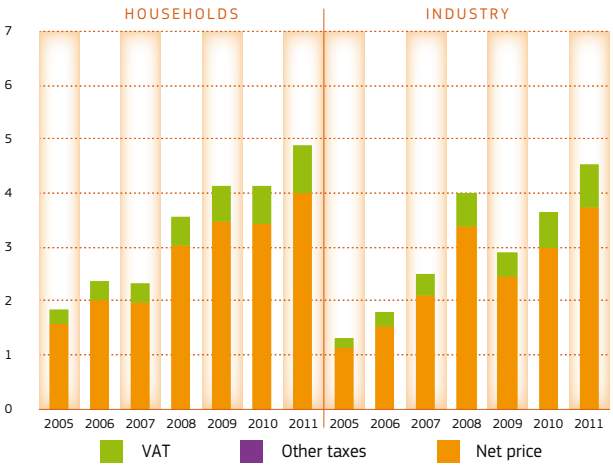
5.1. Electricity: Lithuania is not directly connected to the European grid and therefore should continue working in BEMIP towards the creation of a Baltic regional electricity market. Plans are in place to build the 700 MW Nordbalt interconnector to Sweden by 2015 as well as an interconnection to Poland by 2016. In 2011, NCC and TSO agreed on financing terms for NordBalt. The Baltic States operate within the BRELL synchronous system. Electricity flows changed after the shut-down of Ignalina NPP, resulting in congestion in Latvia-Estonia interconnections, especially during the summer.

CHARTS 3 AND 4

Electricity - Retail prices in Lithuania (in €/kWh)



Natural gas - Retail prices in Lithuania (in euro cent/kWh)



Source: Eurostat

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5.2. Gas: The grid is connected with the Belarusian, Latvian and Russian Federation (Kaliningrad enclave) gas systems. Work should continue in BEMIP to end the isolation of Lithuania's gas network from the EU. Investments in a Lithuanian-Polish interconnector and enhancement of the Latvian-Lithuanian interconnection have been submitted as potential projects of common interest in gas infrastructure. In June 2012 the Lithuanian Parliament adopted the law on the LNG Terminal, thus ensuring the required legal framework for the construction of an LNG Terminal.

LITHUANIA – KEY INDICATORS OF THE ELECTRICITY AND NATURAL GAS MARKETS

ELECTRICITY		GAS	
Number of companies representing at least 95% of net power generation	**17**	Number of entities bringing natural gas into country	**5**
Number of main power-generation companies (1)	**5**	Number of main gas entities (4)	**4**
Market share of the largest power-generation company	**35.4%**	Market share of the largest entity bringing natural gas	**50.5%**
Number of electricity retailers	**15**	Number of retailers selling natural gas to final customers	**5**
Number of main electricity retailers (2)	**3**	Number of main natural gas retailers (5)	**1**
Switching rates (entire electricity retail market)	**1.3%**	Switching rates for gas (entire retail market)	**0.0%**
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 (3)	**4092**	HHI in gas supply market (3)	**6 048**
HHI in electricity retail market (3)	**appr. 5 000**	HHI in gas retail market (3)	**appr. 6 000**
Electricity market value (bn €) (6)	**0.940**	Gas market value (bn €) (6)	**1.524**

Sources: Eurostat, CEER, National Regulatory Authority, EC calculations.

(1) Companies are considered as 'main' if they produce at least 5% of the national net electricity generation.

(2) Retailers are considered as 'main' if they sell at least 5% of the total national electricity consumption.

(3) The HHI (Herfindahl-Hirschman Index) is a commonly accepted measure of market concentration. It is calculated by squaring the market share of each firm competing in the market and then summing the resulting numbers (the higher the index, the more concentrated the market). Moderate concentration: 750-1 800; high concentration: 1 800-5 000; very high concentration: above 5 000.

(4) Entities are considered as 'main' if they deal with at least 5% of the natural gas (indigenous production or import).

(5) Retailers are considered as 'main' if they sell at least 5% of the total natural gas consumed by final customers.

(6) 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 and annual average retail prices.