# Latvia

# **Key issues**

Improper functioning of the wholesale electricity market is the key issue for the power sector, along with the necessary renewal of outdated infrastructure. Electricity connections to Estonia are inadequate and challenges remain as regards smooth functioning of the regional electricity market. Active participation of Latvenergo to Nord Pool Spot market is necessary. The electricity retail market is not developing and the phasing out of regulated tariffs is one of the key measures to be implemented.

For gas, the focus needs to be on creating a functioning market. Crucial infrastructures for the diversification of supply need to be put in place. The Latvian Parliament adopted the amendments to end the emergent market derogations on 13 March 2014. However, its enforcement was postponed until 2017, meaning that the monopoly in the gas markets de facto continues. Unbundling of DSOs would support the transition as Latvia's gas infrastructure is integrated into the Baltic and EU gas systems. Latvia should urgently develop and implement clear rules for third party access to the Incukalns storage.

# **General overview**

Latvian national gross final energy consumption in 2012 amounted to 4.538 Mtoe<sup>310</sup>. The energy consumption mix has the highest renewables share (35.8%) in all three Baltic States<sup>311</sup>. The main renewable sources in Latvia are hydropower and biomass. The country's renewables target for 2020 is 40%, which is twice as high as the EU average of 20% and Latvia is currently on track to achieve it. Natural gas, oil and petroleum products also played an important role in gross energy consumption in 2012 with a share of 30% and 27% respectively (Figure 1)<sup>312</sup>.

<sup>&</sup>lt;sup>310</sup>Eurostat

<sup>311</sup> Eurostat

<sup>312</sup> Eurostat

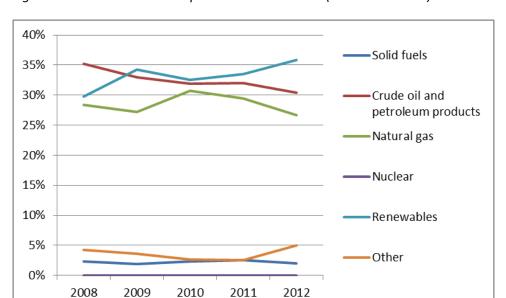


Figure 1: Gross inland consumption mix 2008 – 2012 (source: Eurostat)

In 2012, total power generation reached 6.17 TWh<sup>313</sup> with most derived from natural gas (55.1%). The remaining electricity production came from renewables<sup>314</sup>. The vast majority of electricity produced from RES today comes from the Daugava hydropower plants cascade, which consists of three large HPPs and in total generated 3.63 TWh of electricity, which constitutes 53% of the total electricity output in 2012<sup>315</sup>.

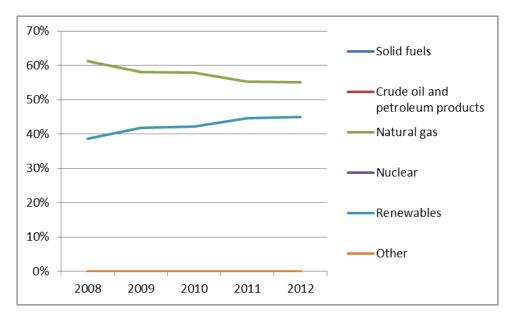


Figure 2: Gross electricity generation mix 2008 – 2012 (source: Eurostat)

<sup>&</sup>lt;sup>313</sup>Eurostat

<sup>314</sup> Eurostat

<sup>315</sup> http://latvenergo.lv/eng/about\_us/generation/hpps/.

# **Regulatory framework**

## **General**

Latvia was granted a derogation from the Third Energy Package as an emergent gas market. In March 2014 amendments to the Energy Law were adopted in the third and final reading. The gas market in Latvia will not be opened before April 2017, but a gradual liberalisation of the gas market is implemented in several stages starting from 4 April 2014. The liberalisation of the electricity retail market envisaged for 1 April 2014 was postponed until 1 January 2015. The market for industrial users is fully liberalised since November 2012.

# **National Energy Regulator**

The Latvian national regulator, the Public Utilities Commission (PUC), is a multi-sector regulator. PUC employed 120 staff members (21 of them responsible for energy) in 2013 and had a budget of around EUR 4.7 million.

## **Unbundling**

The electricity TSO is Augstspriegumatīkls JSC. Legally unbundled since 2005, it became an independent company in January 2012. The PUC has certified Augstspriegumatīkls JSC as an independent transmission system operator. The main DSO is Sadalestīkls JSC and there are another ten smaller local electricity distribution companies.

The gas TSO is Latvijas Gāze with E.ON and Gazprom owning the majority of its shares. Latvia has an explicit derogation from the Gas Directive exempting it from unbundling rules (Article 49). The certification of this gas TSO has therefore not taken place yet.

## Wholesale markets

# **Electricity**

The dominant electricity producer, Latvenergo AS, produced 89% of all power in 2012 and it was the only company with market share exceeding 5%. In total there were 17 companies in 2012, representing at least 95% of electricity generated 316.

In 2012, the total installed capacity of power plants in Latvia was 2,576 MW. Of this total, hydropower plants had an installed capacity of 1,576 MW, while combustible fuels power plants contributed 964 MW. The peak load was 1,368 MW<sup>317</sup> and electricity consumption increased by 1.6%, to 7,459 TWh<sup>318</sup>.

In November 2012, the electricity market for industrial users was fully liberalised. Latvia joined the regional Scandinavian — Baltic Nord Pool Spot market for electricity contracting in June 2013. However, performance was not as good as anticipated. The interconnector with Estonia was often congested, contributing to price spikes in the Latvian/Lithuanian price area. The largest electricity producer Latvenergo AS did not participate, which resulted in low activity on the spot market.

<sup>316</sup> Eurostat

<sup>&</sup>lt;sup>317</sup> ENTSOE, YS&AR report, 2012

<sup>&</sup>lt;sup>318</sup>Statistics Latvia, 2013. <a href="http://www.csb.gov.lv/en/notikumi/2012-export-energy-resources-has-grown-109-36464.html">http://www.csb.gov.lv/en/notikumi/2012-export-energy-resources-has-grown-109-36464.html</a>.

In 2013 the majority of demand was met by domestic generation (80.3%) and the remainder was imported (19.7%)<sup>319</sup>.

#### Gas

Latvia does not have its own natural gas resources and all gas consumed is imported from the Russian Federation. Latvijas Gāze JSC is the only player in the wholesale gas market with a market share of 100%<sup>320</sup>. In 2012 the average price of imported gas was EUR 31.7/MWh<sup>321</sup>.

Total consumption of gas in Latvia in 2012 was 1,508 mcm, a decrease of 6%, compared to 2011<sup>322</sup>. The reduction was due to lower heating demand (including cogeneration) and greater use of biomass.

Gas imported from Russia during the summer is stored at Inčukalns underground gas storage (UGS) facility. During the winter Latvia satisfies all its natural gas needs from Inčukalns UGS, which is also used to supply Estonia and to a lesser extent Lithuania.

## **Retail markets**

# **Electricity**

In 2012, most customers (90%) bought electricity from Latvenergo, which imports and exports electricity, and also fulfils the functions of the supplier of last resort as a public trader. Latvenergo supplied 6,708 GWh of electricity to Latvian consumers<sup>323</sup>, while the other five electricity retail market participants<sup>324</sup> supplied the remaining 10%.

Power prices for households and industrial consumers have been increasing in recent years, mostly due to an increase in commodity prices.

<sup>&</sup>lt;sup>319</sup>Statistics Latvia, 2013, <a href="http://www.csb.gov.lv/en/statistikas-temas/energy-key-indicators-30736.html">http://www.csb.gov.lv/en/statistikas-temas/energy-key-indicators-30736.html</a>.

http://epp.eurostat.ec.europa.eu/statistics explained/images/archive/1/19/20110407081503%21Number of main entities bringing gas into the country and their cumulative market share%2C 2009.png.

<sup>&</sup>lt;sup>321</sup>EC, Quarterly Report on European Gas Markets, 2012.

<sup>322</sup> Statistics Latvia, 2013, http://www.csb.gov.lv/en/notikumi/2012-export-energy-resources-has-grown-109-

<sup>&</sup>lt;sup>323</sup> Latvenergo data, http://www.latvenergo.lv/eng/about us/sales/.

<sup>324</sup> Eurostat

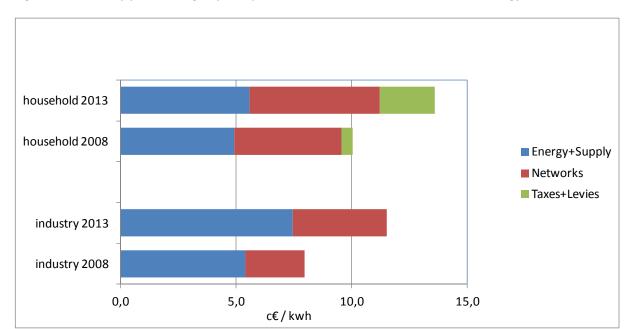


Figure 3: Electricity price change by component 2008 – 2013 (source: Eurostat, energy statistics)

It is possible to switch suppliers for industrial consumers, and in 2013 the switching rate for non-household customers was 15%. There are no legal provisions in place for smart metering and a cost-benefit analysis has not been conducted.

#### Gas

As in the wholesale market, Latvijas Gāze JSC is the only player in the gas retail market in Latvia. Switching supplier is therefore not an option. The price is indexed to oil derivatives.

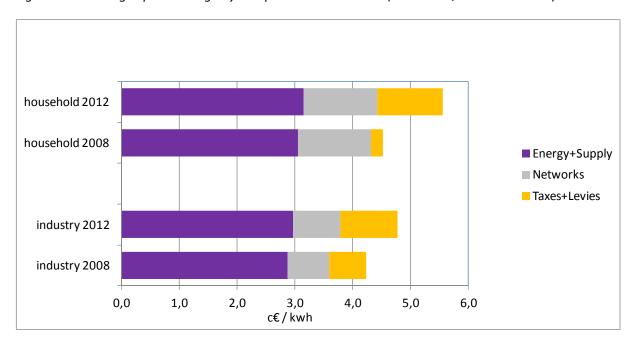


Figure 4: Natural gas price change by component 2008 – 2012 (source: EC, EPCR metadata)

<sup>&</sup>lt;sup>325</sup>ACER/CEER Annual Report on the Results of Monitoring the Internal Electricity and Natural Gas Markets in 2012, November 2013

Until the end of 2013 there was no formal decision and no plan to roll-out smart meters in the natural gas system.

## **Consumers**

Latvian consumers' assessment of the performance of their retail electricity market in 2013 is more than 3 points below the EU average (68.6 vs. 72.0), corresponding to 21<sup>th</sup> place EU-wide. The market is also around 10 points below the average for domestic services markets (second worst among 31 markets). The retail gas market is assessed somewhat above the EU average (75.4 vs. 74.1), corresponding to 13<sup>th</sup> place EU-wide, but has seen a decrease of 2.2 points<sup>326</sup> since 2012. For the retail electricity market, the country scores the lowest in the EU on comparability, 2<sup>nd</sup> lowest on ease of switching and choice and 5<sup>th</sup> lowest incidence of switching (provider or tariff plan). As for gas services, the country is in the 4 last positions of the EU ranking on comparability, choice of providers, incidence of switching and ease of switching while, on the positive side, the incidence of problems is the 5<sup>th</sup> lowest in the EU and the incidence of complaints is second lowest. <sup>327</sup>

According to the Law on Regulators of Public Utilities, PUC deals with customer complaints. Consumers can also approach the Consumer Rights Protection Centre for out-of-court dispute settlement. No particular actions to improve consumer access to information about the market and/or their rights have been taken recently. There is no clear definition of vulnerable consumers yet, but plans exist to introduce several measures to inform and support vulnerable consumers.

#### Infrastructure

The Latvian authorities should ensure a proper and timely adoption of the measures stemming from the TEN-E Regulation, 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**

There are currently no bottlenecks between Latvia and Lithuania. However, the interconnector between Latvia and Estonia is regularly congested. For historical reasons, the Latvian electricity system is heavily interconnected with the networks of Belarus, Russia, Estonia and Lithuania.

In March 2013, the three Baltic States' TSOs – Litgrid (Lithuania), AugstspriegumaTikls (Latvia) and Elering (Estonia) – signed an agreement on the principles of calculation and allocation of the cross-border capacity within the Baltic States and with third countries. The agreement contributes to a successful integration of the Baltic electricity markets.

As part of the NordBalt project, funded by the EEPR, the interconnector between Lithuania and Sweden and the transmission network in Latvia and Lithuania are reinforced, improving the supply

-

<sup>&</sup>lt;sup>326</sup> However the difference is not statistically significant

<sup>&</sup>lt;sup>327</sup> 10th Consumer Markets Scoreboard,

http://ec.europa.eu/consumers/consumer\_evidence/consumer\_scoreboards/10\_edition/index\_en.htm

reliability in the region. The project is expected to be completed by the end of 2018. The third interconnector between Latvia and Estonia, a Project of Common Interest under the guidelines for Trans-European infrastructure, will enhance security of supply, effectiveness of operation and competitiveness of energy markets in the entire Baltic region. The project is scheduled to be completed by 2020, but as this is the project that is expected the biggest beneficial impact on wholesale market functioning Latvia should assess ways to accelerate its construction.

## Gas

Latvia is dependent on gas imports from Russia for all of its gas consumption with no alternative suppliers or supply routes. The Latvian gas market is isolated from the rest of the EU and only has interconnection with Lithuania and Estonia.

The enhancement of the Latvian-Lithuanian interconnection was realized in early 2013 by increasing cross-border capacity to more than 6 mcm/day in both directions. Moreover, a further enhancement to 12 mcm/day on a 40-kilometer section between Daugmale and lecava is currently planned and has been granted PCI status under the guidelines for trans-European energy infrastructure. At the same time, the enhancement of the Estonia-Latvia interconnection is also part of the first PCI list.

# **Security of Supply**

# **Electricity**

Currently, in the event of failure of large generating units in Latvia and Lithuania, security of supply for the entire Baltic Region could be in danger. The infrastructure investments under construction will significantly increase security of supply, in particular the third interconnector to Estonia. In particular, the investments will have a positive effect on the voltage and stability level under stressed network conditions.

#### Gas

In 2012, the total consumption of natural gas in Latvia represented about 43% of transmission capacity, which means the natural gas delivery system is never over-loaded and can ensure a stable supply of natural gas to all consumers. According to 2012 data, the N-1 criterion equals 188.6%, implying that coverage of peak demand or supply deficit is ensured from an infrastructure perspective.

Gas supply is mainly secured by the Inčukalns UGS, where 4.47 bcm of gas can be stored (of which 2.32 bcm is active or regularly extracted). The capacity of the Inčukalns UGS can be increased to 3.2 bcm of active gas.

## **Key indicators**

Electricity		Gas	
Number of companies representing	17	Number of entities bringing natural	1
at least 95% of net power generation		gas into country	

Number of main power generation companies	1	Number of main gas entities	1
Market share of the largest power generation company	89%	Market share of the largest entity bringing natural gas	100%
Number of electricity retailers	6	Number of retailers selling natural gas to final customers	1
Number of main electricity retailers	2	Number of main natural gas retailers	1
Switching rates (entire electricity retail market)	0% households, 15% non- households	Switching rates for gas (entire retail market)	0
Regulated prices for households – electricity	Yes	Regulated prices for households – gas	es
Regulated prices for non-households – electricity	No	Regulated prices for non-households – gas	no
HHI in power generation market	7,932	HHI in gas supply market	10,000
HHI in electricity retail market	8,196	HHI in gas retail market	10,000
Electricity market value <sup>328</sup> (bn€)	0.512	Gas market value <sup>28</sup> (bn€)	0.165
Peak load (MW)	1,885		
Installed generation capacity (MW, 2011)	3,691		
Number of smart meters installed	N/A		

<sup>&</sup>lt;sup>328</sup>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.