



RENEWABLE ENERGY POLICY REVIEW

LATVIA

The supply system of primary energy resources in Latvia consists of 3 resources: natural gas, oil and biomass. The supply of natural gas has an increased risk level since it is possible to receive it only from one supplier.

Latvia has the largest share within the EU of renewable energy in its energy mix. Renewable energy sources make up one third of the energy mix in Latvia. Wood and water are the most widely used renewable energy resources: wood as fuel is used for district heating, both centralised and local, and for heating individual buildings. The share of renewable energy resources in electricity generation in Latvia is very significant: electricity generation is predominantly based on renewable sources (mainly hydro) and to a smaller degree on natural gas, resulting in low CO₂ emissions.

However, energy import dependency in Latvia is above the EU-27 average with oil and natural gas imported mainly from Russia.

KEY FIGURES:

- The **share of RES in primary energy consumption** was **29.31%** in 2007¹
- The share of **RES in gross electricity consumption** was 35.98% in 2007, compared to about 46 % in 2006
- **Biofuels** accounted for 0,22 % of the transport fuels in 2006 compared to 0,33 % in 2005²
Consumption of fossil fuels in transport in 2006 was 7,2 % higher than in the previous reporting period.
- Energy dependence rate amounted to 94% in Latvia in 2005.

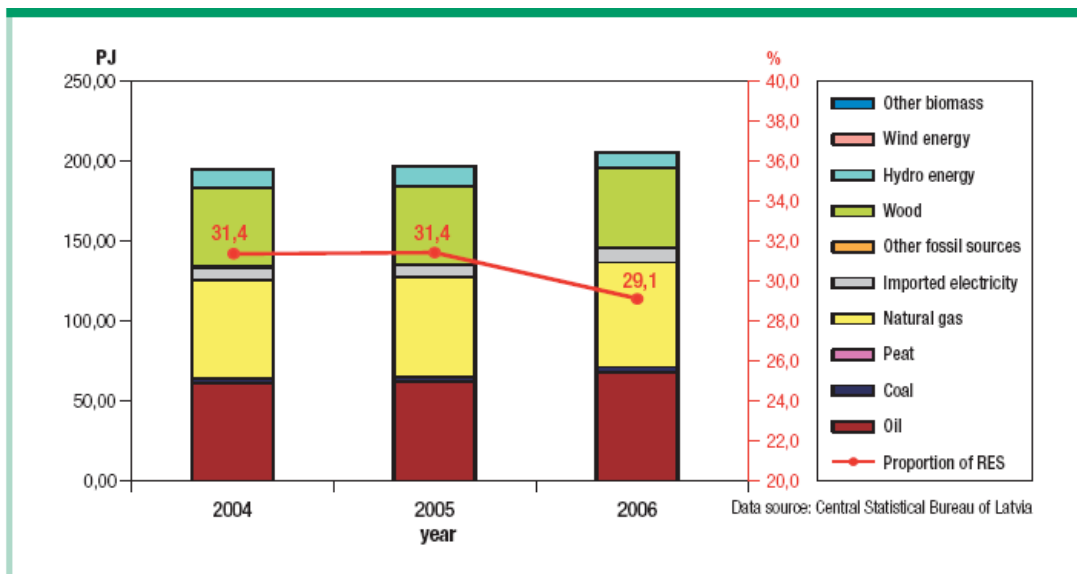
¹ EurObserv'er

² State Revenue Service's data

Technology-specific figures:

- **Hydro** sources are mainly used in the big hydroelectric power plants of the public stock company Latvenergo. In 2007, the total small hydroelectric capacity accounted for 25 MW, thus producing 39.6GWh of electricity.³
- In 2006, 71 % of the **biodiesel** and 93 % of the (100 %) **bioethanol** produced in Latvia was exported to other EU Member States. 100 % biodiesel can currently be purchased at 14 filling stations⁴.
- There are two **bioethanol** production plants, five biodiesel plants and seven rapeseed oil production plants operating in Latvia. Regarding the information given by Latvian Ministry of Agriculture over the next few years, at least six new biofuel production plants will be developed. The total annual capacity of biodiesel plants in Latvia in 2006 was around 11,000 t, while bioethanol production units had a capacity of 10,000 t. About 93% of the total produced bioethanol was exported in 2006. Biofuel consumption in 2007 was mainly composed by biodiesel that accounted for 1,705toe.⁵
- Primary energy production from **solid biomass** in 2007 was 1,538Mtoe, a little lower than the 1,592Mtoe of 2006.⁶

Share of RES in the Primary Energy in Latvia (2006)

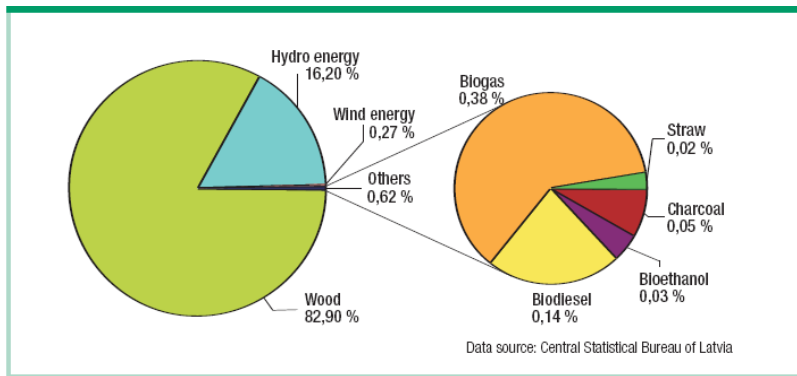


³ EurObserv 'er

⁴ Ministry of Economic Affairs

⁵ EurObserv 'er

⁶ EurObserv 'er



RES POLICY

RES TARGETS

Mandatory targets set by the Directive on the Promotion of the use of energy from renewable sources

- 23% share of RES on the final consumption of energy in 2020.
- At least 10% share of renewable energy in final consumption of energy in transport by 2020.

Indicative Target set by the RES- electricity European Directive from 2001⁷

- 49.3% share of RES on gross electricity consumption by 2010

Indicative Target set by the European Biofuels Directive from 2003⁸

- Biofuels consumption of 5.75% of petrol and diesel use for transport in 2010.

National Commitments

The Energy Development Guidelines for 2007-2016 have determined that the proportion of biofuel in transport must reach 10% in 2016 and 15% - in 2020, and the share of electricity produced in highly efficient CHP using biomass should reach 8 % by 2016.

Guidelines for Energy Sector Development 2007-2016 developed by the Ministry of Economics are the main mid-term energy policy planning document. It is in particular the principal policy document driving increases in efficient use of RES.

Cabinet Regulations No 503 were adopted in order to transpose the requirements of Directive 2001/77/EC on the promotion of electricity produced from renewable energy sources. They aim at

⁷ Directive 2001/77/EC on the promotion of electricity produced from renewable energy sources in the internal electricity market. Currently in force, sets targets up to 2010.

⁸ Directive 2003/30/EC on the promotion of the use of biofuels or other renewable fuels for transport. Currently in force, sets targets up to 2010, with indicative targets by 2005.

increasing the proportion of RES used in the country to targets set. For the period 2007-2010 the Regulations report the following amount of electricity generated from RES to be produced by Latvia:⁹

Type of Power Station	2007	2008	2009	2010
Hydro-power stations with capacity above 5 MW	41.28%	39.32%	37.35%	35.39%
Hydro-power stations with capacity up to 5 MW	1.04%	1.06%	1.08%	1.10%
Wind generators	1.48%	2.78%	4.08%	5.37%
Biogas power stations	0.38%	1.07%	1.77%	2.46%
Biomass power stations and power stations utilising biomass together with fossil fuel	0.44%	1.95%	3.46%	4.97%
Total	44.62%	46.18%	47,74%	49.30%

Progress towards the target:

Latvia is on track to meet its renewable electricity target. In 2006, the share of renewable energy resources in total electricity consumption was 46 %. This is 3.3 % less than the indicative target for the share of electricity produced from renewables in total electricity consumption set for 2010.

Support to RES-Electricity

Feed in tariffs

Till January 1st, 2003 Latvia had a feed-in tariff which was double the average electricity price and which could be purchased for a period of 8 years after grid-connection. This tariff was very successful in promoting RES, especially in the small hydro power sector, where the production increased from 2.5 to 30 GWh in the period from 1996 till 2001. The feed in system has been amended through regulation Nr.503 on Electricity Production from RES (in force since August 2007).

The new tariff-system differentiates between the specific RES and installed capacity. It provides particular regulations for electricity produced in CHP plants. There is a guaranteed purchase only for a fixed amount of RES-electricity.

⁹ http://ec.europa.eu/energy/renewables/electricity/ms_report_directive_2001_77_en.htm

The purchase price is calculated as a natural gas price multiplied by factor. Electricity prices are regulated by the Public Utilities Commission (PUC) on a regular basis with multiple distinctions both for the specific generation source and also for the different steps of the electricity market chain: generation, transmission, distribution and sale.

Resource	Technology	Support level [€cents/kWh]	Start year	Duration [years that an investor is entitled to support]
Wind	Power plants with capacity not over 0,25 MW	For the first 10 years from the beginning of PP operation - $C = \frac{T_g \times k}{9,2} \times 3,5$	2007	10 years
Wind	Power plants with capacity not over 0,25 MW	After 10 years from the beginning of PP operation $C = \frac{T_g \times k}{9,2} \times 2,6$		
Biomass	Power plants with electric capacity not over 4 MW	For the first 10 years from the beginning of PP operation $C = \frac{T_g \times k}{9,2} \times 4,5$	2007	10 years
Biomass	Power plants with electric capacity not over 4 MW	After 10 years from the beginning of PP operation $C = \frac{T_g \times k}{9,2} \times 3,4$		
Biogas	Power plants without any capacity limitations	For the first 10 years from the beginning of PP operation $C = \frac{T_g \times k}{9,2} \times 4,5$	2007	10 years

Biogas	Power plants without any capacity limitations	After 10 years from the beginning of PP operation $C = \frac{T_g \times k}{9,2} \times 3,4$		
Hydro	Power plants with capacity not over 5 MW	$C = \frac{T_g \times k}{9,2} \times 3,8$	2007	10 years

C = price of electricity without VAT

T_g = natural gas tariff approved by the Regulatory Authority (without VAT)

k = factor used for price differentiation depending on the installed capacity of the power plant (varies in the range from 1,240 to 0,965)

Latvia has a tendering scheme for wind farms.

However, there is a long way of procedures related to the different elements of the chain including cap in the generation power, finding the transmission and distribution grid.

Access to the grid

The general provisions of energy law also regulate access to the grid in Latvia. As RES-electricity does not have any priority of access, plant operators are entitled against the grid operator to the connection of their systems to the grid and to the transmission of electricity according to the principle of non-discrimination. In pursuance of the general provisions, the grid operator is obligated to expand the grid.¹⁰

Support for RES heat

Resource	Technology	Support level [Unit or %]	Duration [years that an investor is entitled to support]
Latvian Environmental Protection Fund	Fuel switch - from coal to biomass	Up to 40%	Open call of proposals once a year

¹⁰ Legal sources on renewable energy

Support to biofuels

The Latvian Ministry of Economics has developed an action plan to enact the Law on biofuel (in force since 1 April 2005).

Obligation

Resource	Quota in % (per year)	Year
Biodiesel	3.5	2007
Biodiesel	4.24	2008
Biodiesel	5	2009
Biodiesel	5.8	2010
Bioetanol	3.4	2007
Bioetanol	4.3	2008
Bioetanol	5.1	2009
Bioetanol	5.9	2010

Reduction of excise duties

2006 saw the adoption of a number of amendments to existing legislation on the production of and trade in biofuels. Under the amendments to the Law on excise duties adopted in 2006, the basic rate of duty for unleaded petrol is LVL 209/1000 litres and for diesel LVL 178/1000 litres. As an incentive, provision was made for the following duty reliefs on biofuels and mineral oil/biofuel blends.

1. application of a reduced rate of excise duty depending on the biofuel content of the fuel/blend:

· for unleaded petrol containing:

– 5 % by volume of dehydrated ethanol obtained from agricultural raw materials:

LVL 199/1000 litres;

– as from 1 July 2007: 85 % by volume dehydrated ethanol obtained from agricultural raw materials:

LVL 31,5/1000 litres;

· for diesel fuel, blended with rapeseed oil or rapeseed biodiesel, provided that the rapeseed oil or rapeseed biodiesel represents:

– from 5 up to (but not including) 30 % by volume of the total product volume: LVL 170/1000 litres;

– at least 30 % by volume of the total product volume: LVL 125/1000 litres;

2. application of a zero rate of duty (LVL 0/1000 litres) to rapeseed oil sold or used for heating or fuel and to biodiesel completely derived from rapeseed oil.

Fuel types with added biofuels enjoy a reduced rate of excise tax. Biofuel made entirely of rapeseed oil is exempted from excise tax)

Resource	Total support level (= tax exemption incl. reduction of VAT to be paid) [€cents/litre]	start year	Comments
Biodiesel	excise tax rate - 0	2004	Biodiesel is produced from rape oil

Biodiesel (if biodiesel is from 5 - 30%)	excise tax rate 220,5 €/1000 l	2004	Biodiesel is produced from rape oil
Biodiesel (if biodiesel is at least 30%)	excise tax rate 162,2 €/1000 l	2004	Biodiesel is produced from rape oil

Excise tax rate for all types of above mentioned biodiesels is 0/1000 l if biodiesels are used as combustible fuel not as motor fuel.

Direct State Aid to producers:

In Latvia the support is given direct to biofuel producers and the annual supported quota (subsidy) is granted in proportion to production capacity. The financially supported quota will be granted to enterprises until 2011. Annual subsidies are allocated to producers of biofuels proportionally to capacity:

Resource	Support level [Unit or %]	start year	End year	Comments
Biodiesel	270€/1000 l	2007, first half a year	2007, first half a year	State financial support for year 2007 (quota -25000000 l)
Biodiesel	370€/10000 l	2007, second half a year	2007, second half a year	State financial support for year 2007 (quota -25000000 l)
Bioethanol	327€/1000 l	2007, first half a year	2007, first half a year	State financial support for year 2007 (quota - 21518987 l)
Bioethanol	413€/1000 l	2007, second half a year	2007, second half a year	State financial support for year 2007 (quota - 21518987 l)

Reduced state fee to obtain licence

As an incentive to the production and use of biofuels, the state fee for obtaining a special permit (licence) to carry out the activity of excisable goods warehouse keeper or approved trader is reduced if that person's business is with biofuels to the exclusion of petroleum products.

Sources

European Commission Factsheets by Country

http://ec.europa.eu/energy/energy_policy/facts_en.htm

Member States Reports in the framework of the Directive 2001/77/EC on renewable electricity

http://ec.europa.eu/energy/res/legislation/electricity_member_states_en.htm

Member States Reports in the framework of the Directive 2003/30/EC on biofuels

http://ec.europa.eu/energy/res/legislation/biofuels_members_states_en.htm

EurObserv'er Barometer

<http://www.energies-renouvelables.org/observ-er/sig/eufores/sig.asp>

Ministry of Economy

<http://www.em.gov.lv/em/2nd/?lng=en&cat=3&lng=en>

Institute of Physical Energetic

<http://www.innovation.lv/fei>

EKODOMA

www.ekodoma.lv

Legal sources on renewable energy

<http://res-legal.eu>



In the framework of the EU co-funded project: RES 2020: Monitoring and Evaluation of the RES Directives implementation in EU27 and policy recommendations to 2020

Intelligent Energy  Europe

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