



RENEWABLE ENERGY POLICY REVIEW

LUXEMBURG

Luxembourg is almost totally dependent on energy imports. Oil dominates in terms of primary energy supply, while natural gas has been gradually replacing solid fuels. The majority of energy imports are of oil and natural gas, with the latter contributing substantially to the electricity generation since 2002. The share of transport in total final energy consumption is around double that of the EU-27 average. Energy consumption and CO₂ emissions per capita are the highest in the EU-27. While the electricity production from small-scale hydro power has stabilised in recent years, the contributions from onshore wind, PV, and biogas have now started to increase.

KEY FIGURES

- The **share of RES in primary energy consumption** was of 3.51% in 2007.¹
- The **share of RES in the gross final energy consumption** was 0.9% in 2005.
- The **share of RES in the gross electricity consumption** was 3.10% in 2007.²
- The **share of all biofuels** in the transport sector in 2006 was 0.026% based on the energy content.
- Dependence on external energy supplies is of about 99% in 2005.

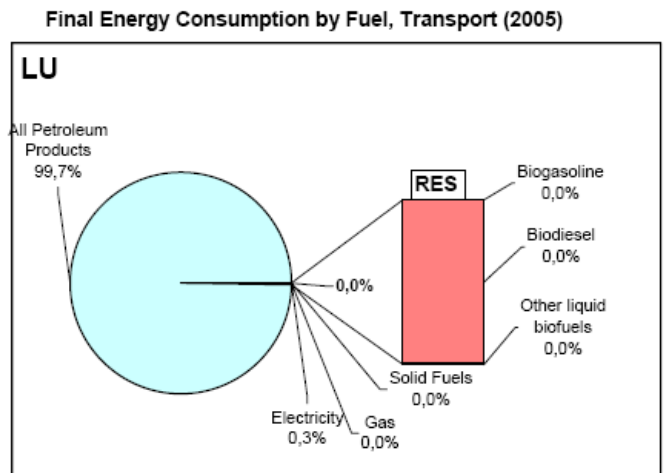
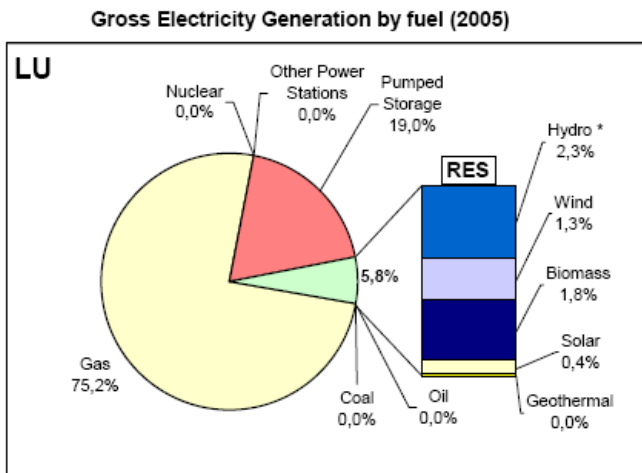
Technology Specific figures³:

In 2007, electricity production from biogas amounted to 36.6GWh, solid municipal waste to 24.3GWh, small hydro 111.3GWh and wind to 64GWh.

¹ EurObserv'er

² EurObserv'er

³ EurObserv'er



Source: Eurostat

* Not including generation from hydro pumped storage, but including electricity generation to pump water to storage. Municipal Solid Waste, Wood waste, Biogas included.

RES POLICY

RES TARGETS

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

- 11% 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 2001⁴

- 5.7 % share of RES on gross electricity consumption by 2010.

Indicative Target set by the European Biofuels Directive from 2003⁵

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

⁴ 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.

⁵ 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.

RES POLICY INSTRUMENTS

Support for RES electricity

Feed in tariff

The 1993 Framework Law defines the renewable electricity (RES-E) policy: feed-in tariffs are given to different types of RES-electricity technologies (namely, all renewable energy sources technologies, but geothermal). These tariffs were amended in February 2008. The new tariffs are in force for installations starting after the first January 2008. Tariffs are guaranteed over 15 years with simpler administrative procedures. They are differentiated according to technology and capacity. Some tariffs are degressive.

Tariffs for wind onshore since January 2008 are set at 82.7euros per MWh. For photovoltaic, this tariff is set for small PV panels (inferior or equal to 30kW) at 420 euros per MWh (with an annual degression rate of 3%) and for bigger panels (31kW-1000kW) at 370 euros per MWh.

Concerning small hydro, (up to 1MW installed capacity), tariff is set at 105 euros per MWh. For bigger systems (1 to 6MW), tariffs are set 85 euros per MWh.

Biogas feed-in tariffs amount to 150 euros per MWh for small systems (0 to 150kW), to 140 euros (151-300kW), to 130 euros (301- 500kW) and 120 euros (501 kW-2500kW).

For sewage treatment plants, 65 euros per MWh is the tariff. Concerning solid biomass, the tariff is set at 145 euros per MWh for small systems (0 to 1MW), and at 125 euros (1 to 5MW). Concerning waste wood, tariffs are set 130 euros for systems up to 1MW, and to 110 euros for systems between 1 and 5MW.

Investments subsidies

Subsidies are available to private companies (Framework Law of Economy Ministry- Framework Law of the Ministry of Middle Classes), communes (Environment Protection Fund of the Environment Ministry), farmers (Law from the Agriculture Ministry supporting rural development) and households (regulation of the 21st December 2007 of the Environment Ministry) investing in RES-E technologies.

In January 2008, new grants for households entered into force to promote RES- electricity: concerning wind onshore, investment aid amounts to 20% to 25% of the investment depending on the site's quality. Investment aid amounts to 30% of the investment for all PV panels. For small hydro, investment aid amounts to 20% of the investment costs. For sewage treatment plants, investment aid amounts to 90% of investment costs. Investment aid for biogas installation amounts to 50% and for solid biomass to and waste wood to 20 %.

Support for RES Heating

Premium

Since January 2008, a so-called "heat premium" (prime de chaleur) has been introduced. This premium differs according to technologies (solid biomass, biogas and waste wood) and is granted for each MWh commercialised. For biogas, waste wood and solid biomass, the producer gets 30 euros per MWh if certain conditions are fulfilled. The new tariffs can apply to existing biogas installation (existing before the 1st January 2008) in case of extension of capacity.

Investment subsidies

In January 2008, new grants for private households promoting RES-Heat entered into force (regulation from 21st December 2007). These investment subsidies promote the use of solar thermal panel (50% of investment costs), biomass boilers (25-30%), geothermal heat exchanger (50%), and geothermal heat pumps (40%).

Support for Biofuels

The government foresees in its 2006 action plan to promote the use of biofuels in order to reduce greenhouse gases emissions in the transport sector.

Tax exemptions are made available for biofuels for transport. The setting of maximum levels of tax exemption is foreseen (EUR 23 per 1000 litres of unleaded petrol and EUR 10 per 1000 litres of diesel).

Reduced excise tax

Budget Law 2006 introduced a new provision to reduce taxes on biofuels blended in petrol and diesel. The budget law stipulates that: « biofuels when blended to petrol or diesel can benefit from a reduced excise tax. This reduction can not go beyond 23 € for 1,000 litres for when blended with unleaded petrol and 10,00 € for 1000 litres. Concerning bioethanol, the blending must be at least 2.93% by volume and for biodiesel at least 2.17%. Pure vegetable oil will be tax-free from 2007 to encourage captive fleets to switch.

Obligation

The 2007 Budget law plans an obligation on fuel suppliers to incorporate in 2007 at least 2% biofuels in transport fuels consumed in Luxemburg (calculate by energy content). This obligation equals to a consumption of around 52 millions litres of biofuels combined with consumption in road transport estimated at 2.6 bn litres in 2007.

The budget law 2007 foresees a tax on oil suppliers which can not demonstrate that they've fulfilled their obligation (1,200 EUR/1,000 litres).

Sources:

Energy Agency from Luxemburg- Website

Powerpoint Presentation of the new feed in tariffs

http://www.ael.lu/cms/upload/downloads/home/aktuelles/080320/presentation_rgd080208.pdf

Regulation on new feed-in tariffs

<http://www.ael.lu/cms/upload/downloads/home/aktuelles/080320/RGD080208.pdf>

List of legislation affecting renewable energy sources in Luxemburg

http://fr.ael.lu/cms/front_content.php?idcat=27

Brochure on subsidies to private households

http://fr.ael.lu/cms/upload/downloads/home/dienstleistungen/privatpersonen/brochure_regimeaides.pdf

Subsidies for companies, private households and communes in Luxemburg

http://fr.ael.lu/cms/front_content.php?idcat=63

EurObserv'er Barometer


<http://www.eurobserv-er.org/>

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

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Drafted: March 2009