

### **Policy Background**

*A European energy policy must pursue the objective of a sustainable, competitive and secure supply of energy. If the EU continues on its present course, this key objective will not be attained. In January 2007, the European Commission adopted an energy policy for Europe. This was supported by several documents on different aspects of energy and included an action plan to meet the major energy challenges Europe faces. Each European citizen must be informed of these challenges and the role they should play in meeting them.*

*Renewable energies help combat climate change while increasing security of supply.*

### **Key Issues**

Lithuania depends to a large extent on the Ignalina nuclear power plant which has been generating 75-88% of the total electricity over the period since 1993. In 2004, Unit 1 was closed, and the shutdown of Unit 2 is planned before 2010. In order to provide alternative sources of energy and electricity in particular Lithuania has set a national target of 12% RES by 2010 (8% in 2003). The implementation of a green certificate scheme was however postponed for 11 years. The biggest renewables potential in Lithuania can be found in the field of biomass..

### **Current national RES target**

At national level, it has been decided that the RES share of Lithuania's total energy consumption should reach 12% by 2010. The RES-E EU Directive has fixed an RES-E target of 7% of gross electricity consumption by 2010. For biofuels, the national targets are 2% by 2005, and 5.75% by 2010.

### **Progress towards meeting national targets**

In 2003, RES accounted for about 8% of the country's energy supply.

Between 1997 and 2004, an increase of 0.41% in the RES-E share of consumption was noted (3.71% in 2004 compared to 3.3% in 1997).

Biofuels accounted for 0.72% of Lithuania's consumption in 2005.

### **Main supporting policies**

The core mechanisms used in Lithuania to support RES-E are the following:

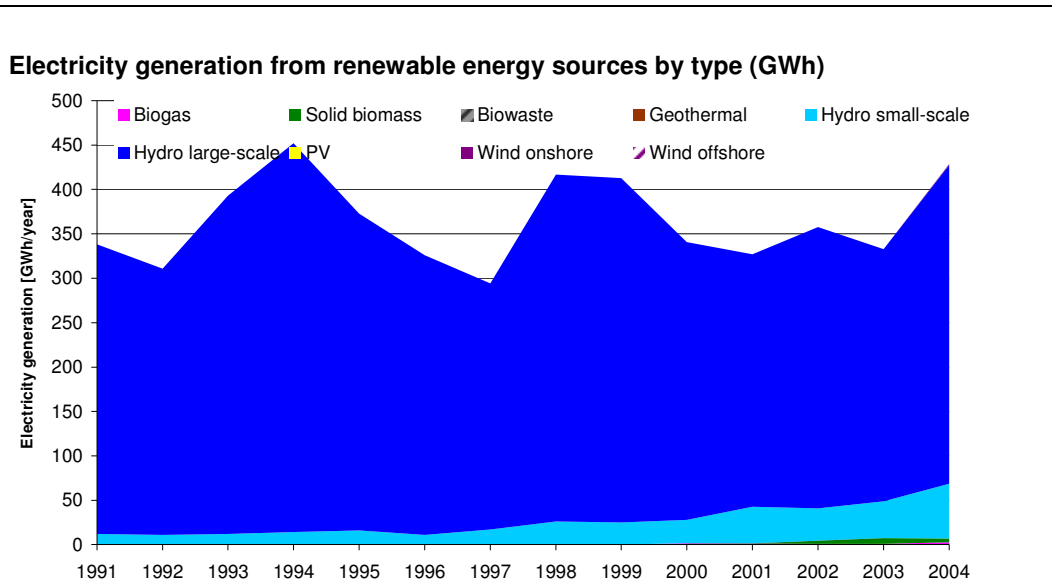
- *Feed-in tariffs:* In 2002, the National Control Commission for Prices and Energy approved the average purchase prices of green electricity. The tariffs are guaranteed for a fixed period of 10 years.
- *After 2010, a green certificate scheme* should be in place. The implementation of this mechanism has been postponed until 2021.

In order to promote biofuels, the Law on Excise Taxes (2001) provides for excise tax relief. Besides this, the Law on Pollution Tax (2002, 2005) further stimulates the uptake of biofuels.

Through the Law on Heat (2003), municipalities encourage the purchase of heat fed into heat supply systems produced from RES. Investment subsidies and loans on favourable terms are also made available by the Lithuanian Environmental Investment Fund.

### **Key renewable energy statistics**

*Electricity from RES:* In Lithuania, the RES-E market is dominated by hydro power. In 2004, this RES generated 421 GWh out of a total RES-E of 429 GWh. Small-scale hydro power is growing (average annual growth of 20% between 1997 and 2004), but the potential for hydro power in Lithuania is limited due to the topographical conditions. As an alternative, the Lithuanian government is promoting wind energy. The target capacity for 2010 is 200 MW from wind farms, 33 MW from biomass plants, and 132 MW from hydro power plants.



Source: European Commission  
[http://ec.europa.eu/energy/res/legislation/share\\_res\\_eu\\_en.htm](http://ec.europa.eu/energy/res/legislation/share_res_eu_en.htm)

*Biofuels:* Biofuel production accounted for 10 ktoe in 2005.

*Heating and cooling:* Biomass, in the form of firewood, wood chips and straw, generated 576 ktoe of RES-H in 2004. Since the construction of a 41 MW geothermal plant and some other smaller projects, geothermal heat is present on the market as well. Due to adverse climatic conditions, the potential for solar thermal heat is limited.

	Penetration 1997 (ktoe)	Penetration 2004 (ktoe)	Av. Annual growth [%]
Biomass heat	498	576	2%
Solar thermal heat	0	0	-
Geothermal heat incl. heat pumps	0	31	-

Source: European Commission  
[http://ec.europa.eu/energy/res/legislation/share\\_res\\_eu\\_en.htm](http://ec.europa.eu/energy/res/legislation/share_res_eu_en.htm)

**Good example: Project "FIRST STEP" (NNE5 2002/5)**

This project was an accompanying measure aimed at assisting research institutions established by the Lithuanian Scientific Society in their efforts to become a Centre of Competence for Self-Training. The objectives identified in the project were the promotion and dissemination of the self-training concept through conferences and networking, in collaboration with leading European Universities. One of the concrete outputs of the project has been the preparation and submission of proposals under the FP6 TREN 3rd and 4th calls. In particular a proposal presented under the last call (Selflex) was considered by the independent experts to be of very high quality and was retained and recommended for funding.

**For further information**

To find out more about renewables, go to: [http://ec.europa.eu/energy/res/index\\_en.htm](http://ec.europa.eu/energy/res/index_en.htm)  
[http://ec.europa.eu/energy/intelligent/index\\_en.html](http://ec.europa.eu/energy/intelligent/index_en.html)

To find out more about the current situation of renewables in the Member States, go to [http://ec.europa.eu/energy/res/legislation/electricity\\_member\\_states\\_en.htm](http://ec.europa.eu/energy/res/legislation/electricity_member_states_en.htm)  
[http://ec.europa.eu/energy/res/legislation/share\\_res\\_eu\\_en.htm](http://ec.europa.eu/energy/res/legislation/share_res_eu_en.htm)

To find out more about support measures, go to [http://ec.europa.eu/energy/res/legislation/support\\_electricity\\_en.htm](http://ec.europa.eu/energy/res/legislation/support_electricity_en.htm)

To find out about a project or contact an energy agency in your region, go to <http://www.managenergy.net/emap/maphome.html>

Further fact sheets on Lithuania and other Member States can be found on: [http://ec.europa.eu/energy/energy\\_policy/facts\\_en.htm](http://ec.europa.eu/energy/energy_policy/facts_en.htm)

### **What is meant by.....?**

*RES*: Renewable energy sources

*RES-E*: Electricity production from renewable energy sources

*RES-H*: Production of heat and cold from renewable energy sources

*Biofuels*: Mainly includes biodiesel and bioethanol

*Biomass*: Includes solid biomass, biowaste and biogas

*CHP*: Combined Heat and Power

*GWh*: gigawatthour

*ktoe*: Thousand tonnes of oil equivalent

*MW*: megawatt

*PV*: Photo-voltaic – technology for the production of electricity from solar energy

### **Disclaimer**

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