PROGRESS REPORT OF THE REPUBLIC OF LITHUANIA ON THE PROMOTION AND USE OF RENEWABLE ENERGY SOURCES

2013

Table of contents

Introduction

Lithuania's 2013 Progress Report on the promotion and use of renewable energy sources ('this report') has been drawn up pursuant to Articles 5 and 22 of Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC (OJ 2009 L 140, p. 16).

Consumption of energy from renewable sources in energy-consuming sectors and its share in gross final energy consumption were calculated using the Methodology for calculating the share of renewable energy in gross final energy consumption. This methodology is provided in the Annex to the Procedure for the submission to the European Commission of the Progress Report on the promotion and use of renewable energy sources, approved by Government Resolution No 1314 of 15 September 2010 (*Valstybės žinios* (Official Gazette) 2010, No 113-5757).

This report relies on information and data provided by the Lithuanian Department of Statistics, Ministry of Energy of the Republic of Lithuania, Ministry of the Environment of the Republic of Lithuania, Ministry of Transport and Communications of the Republic of Lithuania, Ministry of Education and Science of the Republic of Lithuania, Ministry of the Economy of the Republic of Lithuania and Ministry of Agriculture of the Republic of Lithuania as well as enterprises, institutions and organisations subordinate to them.

1. Sectoral and overall shares and actual consumption of energy from renewable sources in the preceding two years *(Article 22(1)(a) of Directive 2009/28/EC)*

***Table 1*:** Sectoral (electricity, heating and cooling, and transport) and overall shares of energy from renewable sources

	2011	**2012**
Energy from renewable sources – heating and cooling (%)	33.68	35.41
Energy from renewable sources – electricity (%)	9.0	10.9
Energy from renewable sources – transport (%)	3.7	4.8
Overall share of energy from renewable sources (%)	20.23	21.72

Table 1a: **Calculation table for the renewable energy contribution of each sector to final energy consumption (ktoe), 2011-2012**

	2011	**2012**
(A) Gross final consumption of energy from renewable sources in the heating and cooling sector	872	937
(B) Gross final consumption of RES electricity	84	103
(C) Gross final consumption of energy from renewable sources in the transport sector	46	62
(D) Total consumption of energy from renewable sources	1002	1102
(E) Transfer of renewable energy to other Member States	0	0
(F) Transfer of renewable energy from other Member States and third countries	0	0
(G) Renewable energy consumption adjusted for target *(D)-(E)+(F)*	1002	1102

***Table 1.b*: Total actual contribution (installed capacity, gross electricity generation) from each renewable energy technology in Lithuania to meeting the binding 2020 targets and the indicative interim trajectory for shares of energy from renewable sources in the electricity sector**

	2011		2012	
	MW	**GWh**	**MW**	**GWh**
Hydro*:	**876**	**425**	**876**	**430**
non-pumped	116	419	116	425
<1MW	18	54	18	55
1MW–10 MW	8	20	8	21
>10MW	90	345	90	349
pumped				
mixed	-	-	-	-
Geothermal	**-**	**-**	**-**	**-**
Solar:	**-**	**-**	**7**	**2**
photovoltaic	-	-	7	2
concentrated solar power	-	-	-	-
Tide, wave, ocean	**-**	**-**	**-**	**-**
Wind*:	**202**	**409**	**275**	**562**
onshore	**-**	**-**	**-**	**-**
offshore	-	-	-	-
Biomass:	**33**	**158**	**53**	**218**
solid biomass	18	121	38	116
biogas	15	37	15	42
bioliquids	-	-	-	-
TOTAL	**1 111**	**992**	**1 211**	**1 212**
of which in CHP				

* Normalised in line with Directive 2009/28/EC and Eurostat

***Table 1c*: Total actual contribution (final energy consumption) from each renewable energy technology in Lithuania to meeting the binding 2020 targets and the indicative interim trajectory for shares of energy from renewable sources in the heating and cooling sector (ktoe)**

	2011	2012
Geothermal (excluding low-temperature geothermal heat in heat pump applications)	**2**	**2**
Solar	**-**	**-**
Biomass:	**871**	**935**
solid biomass	867	931
biogas	4	4
bioliquids	-	-
Energy from renewable sources, obtained using heat pumps: - of which aerothermal - of which geothermal - of which hydrothermal	-	-
TOTAL	**873**	**937**
Of which district heating	22%	26%
Of which biomass in households	64%	60%

Table 1d: **Total actual contribution from each renewable energy technology in Lithuania to meeting the binding 2020 targets and the indicative interim trajectory for shares of energy from renewable resources in the transport sector (ktoe)**

	2011	2012
Bioethanol/ bio-ETBE	**10**	**9**
	10	9
of which imported	6	7
Biodiesel	**35**	**52**
of which biofuels Article 21(2)	35	52
of which imported	30	33
Hydrogen from renewables	**-**	**-**
Electricity from renewables	**-**	**-**
of which road transport	-	-
of which non-road transport	-	-
Others (such as biogas, vegetable oils, etc.) – please specify	**-**	**-**
of which biofuels Article 21(2)	-	-
TOTAL	**45**	**61**

2. Measures taken in the preceding two years and/or planned at national level to promote the growth of energy from renewable sources taking into account the indicative trajectory for achieving the national RES targets as outlined in the National Renewable Energy Action Plan. ***(Article 22(1)(a) of Directive 2009/28/EC))***

Table 2. Overview of all policies and measures

Name and reference of the measure	Type of measure	Expected result	Targeted group and or activity	Existing or planned	Start and end dates of the measure
2011-2012					
1. (A) National Strategy for the development of energy from renewable sources, approved by Government Resolution No 789 of 21 June 2010 (Žin. (Official Gazette) 2010, No 73-3725) (B) Plan of implementing measures 2010-2015 for the National Strategy for the development of energy from renewable sources, approved by Order No 1-180 of the Minister for Energy of 23 June 2010 (Žin. 2010, No 78-4030). The main objective: by way of increasing the share of energy from renewable sources in the national energy balance, to maximise the use of domestic sources in meeting the energy demands in the electricity, heat and transport sectors, to stop using imported polluting fossil fuel, thus enhancing energy security and energy independence, and to contribute to international efforts to reduce greenhouse gas emissions.	Regulatory	Wider use of energy from renewable sources	Energy producers and consumers, public and local authorities, institutions of science and higher education	Existing	(A) 2010-2020 (B) 2010-2015
2. Law No XI-1375 on energy from renewable sources (Žin. 2011, No 62-2936) The objective of this law is to ensure sustainable development of the use of energy from renewable sources, to promote further development and introduction of new technologies as well as consumption of produced energy, in particular with regard to the international commitments of the Republic of Lithuania, the objectives of environmental protection, saving of fossil energy sources, reduction of reliance on fossil sources of energy and energy import and other goals of the State energy policy, taking into consideration the energy security and reliability requirements and the principles of the protection of consumer rights and lawful interests in the accessibility, adequacy and sufficiency of renewable energy sources.	Regulatory	Wider use of energy from renewable sources	Energy producers and consumers, governmental and local authorities	Existing	Since 2011
3. Law No X1-2023 on the market in energy resources (Zin. 2012, No 63-3164; 2013, No 78-3938) The purpose of this Law is to: 1. establish the legal framework for the organisation, administration, regulation, supervision and monitoring of the Lithuanian market in energy resources, and govern relations between stakeholders in the centralised trading of biofuel and the trade in natural gas and secondary instruments safeguarding	Regulatory	Increased transparency in biofuel trading, increased competitiveness, creation of legal framework for trade in energy resources	Energy producers, biofuel vendors	Existing	Since 5 May 2012

Name and reference of the measure	Type of measure	Expected result	Targeted group and or activity	Existing or planned	Start and end dates of the measure
against energy price fluctuations. 2. This Law applies to trade in the energy resources insofar as this is not governed by the Law on electricity, the Law on natural gas, the Law on energy from renewable sources and/or other laws which lay down specific requirements to be met by the trade in energy or energy resources. 3. When acquiring energy resources to produce electricity and/or heat, the energy exchange method of acquiring energy resources for the production of electricity and/or heat laid down in this Law or in legislation adopted for its implementation has priority over other methods of acquiring energy resources laid down in other legal acts. Methods of acquiring energy resources provided for in other legal acts are applicable where it is economically more advantageous to acquire energy resources for electricity and/or heat production by such methods or where, for objective reasons, it was not possible to acquire the required amount of the type of biofuel concerned, or a proportion thereof, or if energy undertakings are subject to binding statutory requirements regarding the source and/or method of acquiring energy resources.					
4. The prices of buying-in of electricity from renewable energy sources (A) National Control Commission for Prices and Energy [VKEKK] Resolution No 7 of 11 February 2002 on the pricing of public-interest services in the electricity sector (Žin. 2002, No 16-648; Inf. pr. 2008, No 16-217 and No 77-1002; Žin. 2009, No 108-4576) laid down the average prices for the buying-in of electricity generated using renewable and waste energy sources, as well as the conditions for applying those prices. (B) VKEKK Resolution No O3-23 of 6 February 2012 laying down the tariffs for 2012 for electricity and biogas produced from renewable energy sources (Žin. 2012, No 18-844)	Financial	Increase in electricity generation from renewable energy sources	Producers of electricity from renewable energy sources	Existing	(A) Since 2002 Buying-in tariffs applied until 2012
	Financial	Increase in electricity generation from renewable energy sources	Producers of electricity from renewable energy sources	Existing	(B) Since 10 February 2012 Buying-in tariffs applied in 2012

Name and reference of the measure	Type of measure	Expected result	Targeted group and or activity	Existing or planned	Start and end dates of the measure
5. Reduced grid connection rates for power plants using renewable energy sources (A) Procedure for the promotion of the generation and purchasing of electricity generated using sources of renewable energy, adopted by Government Resolution No 1474 of 5 December 2001 approving the legislation necessary for the implementation of the Law on electricity (Žin. 2004, No 9-228; 2006, No 100-3862).	Financial	Increase in electricity generation from renewable energy sources	Producers of electricity from renewable energy sources	Existing	(A) 2004-2012
(B) The Procedure for promoting the use of renewable energy sources to produce energy, approved by Government Resolution No 827 of 4 July 2012 approving a procedure for the use of renewable energy sources to produce energy (Žin. 2012, No 81-4239), stipulates that electricity producers are to be reimbursed grid connection costs for plants using renewable energy sources, such costs being apportioned between the electricity producer and the grid operator in the manner, subject to the conditions and to the extent provided for in the Law on energy from renewable sources. Reimbursement of costs of connecting power plants to electricity grids applies to all electricity producers using only renewable energy sources, except in the cases specified in the Law on energy from renewable sources and cases where fossil fuel is used at a power plant to the extent necessary for its operation and/or to ensure the functioning of the electricity production process.	Financial	Increase in electricity generation from renewable energy sources	Producers of electricity from renewable energy sources	Existing	(B) from 2012
(C) Article 21 of Law No XI-1375 on energy from renewable sources, adopted on 12 May 2011 (Žin. 2011, No 62-2936), states that connection of power plants to electricity grids is a public-interest service and the costs associated with connecting power plants to electricity grids are to be apportioned amongst the producer and the grid operator, having regard to grid ownership boundaries. Costs are to be distributed in the following proportions: • where the installed capacity of the producer's power plant being connected exceeds 350 kW, the producer is to pay 40% of the grid connection costs and the connecting operator is to pay 60% of the connection costs; • where the installed capacity of the producer's power plant being connected exceeds 30 kW but is not above 350 kW, the producer is to pay 20% of the grid connection costs and the connecting operator is to pay 80% of the connection costs; • where the installed capacity of the producer's power plant being connected does not exceed 30 kW, the producer's plant is to be connected free of charge and the connecting operator is to pay 100% of the connection costs.	Financial	Increase in the use of electricity generation from renewable sources of energy	Producers of electricity from renewable sources of energy	Existing	(C) from 2011 (D) from 2011; Chapter IV from 2012

Name and reference of the measure	Type of measure	Expected result	Targeted group and or activity	Existing or planned	Start and end dates of the measure
(D) VKEKK Resolution No O3-235 of 29 July 2011 (Žin. 2011, No 101-4777) approved the Methodology for setting tariffs for connecting electricity installations to the electricity grid, which lays down the arrangements for setting tariffs for connecting electricity installations to the electricity grid.					
6. Priority transport of RES electricity in transmission and distribution systems (A) Under Article 17 of Law No XI-1375 on energy from renewable sources (Žin. 2011, No 62-2936), electricity grid operators must give priority to the acceptance, transmission and/or distribution at transparent and non-discriminatory rates of the full amount of RES electricity offered by a producer. Such priority with regard to the acceptance, transmission and/or distribution of electricity is conferred on producers in relation to electricity produced by other electricity producers using non-renewable energy sources.	Regulatory	Increase in electricity generation from renewable energy sources	Transmission system operator and distribution system operator, RES electricity producers	Existing	(A) from 2011

Name and reference of the measure	Type of measure	Expected result	Targeted group and or activity	Existing or planned	Start and end dates of the measure
7. Compulsory blending of biofuels into mineral fuels (A) Order No 147 of the Minister for the Economy of 26 April 2001 approving the Rules for trade in petroleum products, biofuels, bio-oils and other combustible liquid products in the Republic of Lithuania (Žin. 2001, No 37-1269; 2005, No 35-1158; 2008, No 70-2669)	Regulatory	Growth in use of renewable energy sources in the transport sector	Suppliers of petroleum products	Implemented	(A) from 2005 to January 2011
(B) Order No 1-346 of the Minister for Energy of 14 December 2010 approving the Rules for trade in petroleum products, biofuels, bio-oils and other combustible liquid products in the Republic of Lithuania (Žin. 2010, No 148-7625).	Regulatory	Growth in use of renewable energy sources in the transport sector	Suppliers of petroleum products	Existing	(B) from 2011
(C) Order No 1-348/D1-1014/3-742 of the Minister for Energy, the Minister for the Environment and the Minister for Transport and Communications of 22 December 2010 approving the Mandatory Quality Parameters for petroleum products, biofuels and liquid fuel consumed in the Republic of Lithuania (Žin. 2010, No 153-7849; 2011, No 71-3430; 2012, No 54-2698). Fuels sold on the domestic market must meet the following requirements with regard to their content and quality: 95 RON motor spirit must be produced using the additive bio-ethyl tertiary butyl ether (bio-ETBE), the proportion of which when blended with petrol must be at least 10% but not more than 22% by volume;	Regulatory	Growth in use of renewable energy sources in the transport sector	Suppliers of petroleum products	Existing	(C) from 2011

Name and reference of the measure	Type of measure	Expected result	Targeted group and or activity	Existing or planned	Start and end dates of the measure
95 RON motor spirit produced without bio-ETBE must have a bioethanol content of between 5% and 10% by volume. The mandatory proportion of bioethanol in 95 RON motor spirit is 5% (with a permitted tolerance of ±0.5%) by volume. The permitted tolerance for bioethanol in ethanol automotive fuel (E85) is ±0.5% by volume; 98 RON motor spirit need not be directly blended with bioethanol; diesel must contain 7% biofuels by volume (with a permitted tolerance of minus 1% until 31 December 2012 and minus 0.5% from 1 January 2013). In winter, class 1 and 2 Arctic diesel need not contain biofuels; the proportion of biofuels in class 1 or 2 Arctic diesel between 10 and 30 November and between 1 and 20 March may be lower than the mandatory percentage, and the cold filter plugging point and cloud point may be higher than specified for that class of diesel; the maximum permitted petrol vapour pressure for petrol between 1 and 20 May and between 10 and 30 September may lie between the maximum permitted vapour pressures laid down for classes of petrol blends for the summer season and for the cold season.					
8. Excise duty relief on biofuels Law No XI-722 of 1 April 2010 amending the Law on excise duties (Žin. 2010, No 45-2174) lays down the following excise relief for energy products made from or with the addition of materials of biological origin: • for energy products in which the percentage of additives of biological origin exceeds the percentage required by legislation in petroleum products supplied to the domestic market, the rate of excise duty is reduced in proportion to the percentage of additives of biological origin exceeding the percentage of additives of biological origin required by legislation; • for energy products in which the percentage of additives of biological origin is 30% or more, the rate of excise duty is reduced in proportion to the percentage of additives of biological origin in the product, or the product is exempt from excise duty if it is made only from materials of biological origin.	Financial	Increase in production of energy products containing materials of biological origin	Producers of energy products	Existing	Since 2010
9. Funding of biofuel production Pursuant to the Rules on the funding of biofuel production development, approved by Order No 3D-417 of the Minister for Agriculture of 25 July 2008 (Žin. 2008, No 88-3551; 2009, No 110-4686; 2011, No 78-3848; No 111-5238), a portion of the price of rapeseed oil intended for the production of rapeseed methyl(ethyl)ester (RME) and a portion of the price of rapeseed and	Financial	Increase in agricultural produce used in the production of biofuel	Biofuel producers	Existing	Since 2008

Name and reference of the measure	Type of measure	Expected result	Targeted group and or activity	Existing or planned	Start and end dates of the measure
cereal grain (hereinafter referred to as 'raw material') purchased for the production of dehydrated ethanol is offset from State budget funds in the form of State aid. Aid beneficiaries receive compensatory payments towards the raw material acquisition (cultivation) costs incurred between 1 January and 15 November of the current year: LTL 160/t for rapeseed and LTL 114/t for cereal grain.					
10. Relief from environmental pollution tax Pursuant to Article 5(3) and (4) of the Law on environmental pollution tax (Žin. 1999, No 47-1469; 2002, No 13-474; 2005, No 47-1560), taxpayers polluting the environment from mobile and/or stationary pollution sources are exempt from the environmental pollution tax if they use biofuels for energy and transport in their operations and produce supporting documentary evidence: 1) natural and legal persons causing environmental pollution from vehicles running on transport biofuel meeting the standards laid down are exempt from the tax on environmental pollution from mobile pollution sources if they provide documents confirming the use of transport biofuel;	Financial	Increase in consumption of biofuel for transport	Biofuel consumers (from mobile pollution sources)	Existing	Since 2003
2) natural and legal persons who have produced documents confirming the use of biofuel are exempt from tax on environmental pollution from stationary pollution sources in respect of emissions resulting from the use of biofuel. Tax on environmental pollution from stationary pollution sources is to be paid by operators in the energy industry using fuel-burning installations with a rated thermal input greater than 50 MW; as well as: ● Operators using at least one solid fuel fired boiler having a furnace with a thermal input of 0.5 MW or more, use a stationary combustion source having a thermal input of 1.0 MW or more: applicable until 16 July 2011; ● Operators using a fuel-burning installation having a thermal input of 1.0 MW or more: applicable from 16 July 2011 to 1 February 2012; ● Operators using a fuel-burning installation having a thermal input of 20.0 MW or more: Applicable from 1 February 2012. Also natural and legal persons causing environmental pollution who are required by the Government or government-authorised bodies to hold a pollution permit.	Financial	Increased biofuel consumption	Biofuel consumers (from stationary pollution sources)	Existing	Since 2006
11. European Union structural assistance	Financial	Construction and upgrading of	Energy producers	Existing	Since 2010

Name and reference of the measure	Type of measure	Expected result	Targeted group and or activity	Existing or planned	Start and end dates of the measure
Annex to the Promotion of Cohesion OP approved by Government Resolution No 787 of 23 July 2008 (Žin. 2008, No 95-3720, No 142-5628; 2009, No 36-1388, No 68-2773; 2010, No 68-3408). Schedule of Conditions for the financing of projects under Measure VP3-3.4-ŪM-02-K 'Use of renewable energy sources in energy production' approved by Order No 4-442 of the Minister for the Economy of 29 September 2008 (Žin. 2008, No 117-4460; 2011, No 22-1075, No 116-5502 and No 123-5838; 2012, No 38-1906). Schedule of Conditions for the financing of projects under Measure VP3-3.4-ŪM-06-V 'Use of renewable energy sources in energy production' approved by Order No 4-922 of the Minister for the Economy of 20 September 2012 (Žin. 2012, No 111-5658).		facilities which use renewable energy sources to produce energy			
12. National Forestry Sector Development Programme 2012-20 Drawn up in view of the fact that forests are becoming increasingly significant owing to their multiple benefits for the state, society, the country's economy and people. Forests help ensure landscape stability and environmental quality, and safeguard biodiversity. They provide timber and other forest products satisfy society's ecological, economic and social needs. Moreover, forests constitute an essential factor in maintaining ecological balance and provide habitats for many species of fauna and flora, halt soil erosion, absorb carbon dioxide and cleanse the air, accumulate carbon in biomass thereby reducing the amount of greenhouse gases in the atmosphere, protect ground and surface waters and provide people with opportunities for recreation.	Regulatory	Increased amount of felling waste and unsaleable small timber used as biofuel: 2015 – 300 000 m^3; 2020 – 500 000 m^3	State forest enterprises; private forest owners	Existing	2012-20
13. Lithuanian Environmental Investment Fund (A) Law on environmental pollution tax (Žin. 2002, No 13-474; 2010, No 145-7426). Procedure for implementing and monitoring investment projects financed from the funds of the Lithuanian Environmental Investment Fund programme, approved by Order No 437 of the Minister for Environment of 29 August 2003 (Žin. 2003, No 85-3890; 2010, No 112-5700; 2011, No 46-2206 and No 126-5995).	Financial	Construction of facilities which use renewable energy sources to produce energy	Energy producers	Existing	(A) Since 2000

Name and reference of the measure	Type of measure	Expected result	Targeted group and or activity	Existing or planned	Start and end dates of the measure
(B) Law on financial instruments for climate change management (Žin. 2009, No 87-3662; 2012, No 63-3168) Procedure for the use of funds from the Special Programme for Climate Change, approved by Order No Dl-275 of the Minister for the Environment of 6 April 2010 (Žin. 2010, No 42-2040; 2011, No 99-4668, No 131-6254; 2012, No 8-297, No 30-1416, No 88-4630, No 109-5538, No 136-7002).	Financial	Construction of facilities which use renewable energy sources to produce energy	Energy producers	Existing	(B) Since 2009
14. Lithuanian Rural Development Programme 2007-2013 Subsidies are provided under measures included in the Lithuanian Rural Development Programme for 2007–2013. Aid intensity varies from 40% to 65% of eligible project costs. The maximum amount of support for a project depends on the measure and ranges from EUR 40 000 to EUR 2.8 million.	Financial	Electricity generation at wind power plants, biogas production	Farmers	Existing	2007-2013
15. 'Renewable energy sources in Lithuania' website This website, available in both Lithuanian and English, is a joint project by the Lithuanian Energy Agency, the Lithuanian Ministry of Energy and Danish Energy Management A/S, a Danish consultancy. The website presents up-to-date information on the legal framework for renewable energy sources (RES) in Lithuania and the funding mechanisms. It offers calculators that help determine possible energy outputs from specific RES and estimate the energy requirement. The website has an interactive map of the RES power plants operating on Lithuanian territory which allows user-friendly searching by location or specific RES type. It also provides statistics on RES use in Lithuania and the European Union. *http:www.avei.lt*	Informational	Public awareness raising	Energy producers and consumers, scientific and higher education institutions, public and local authorities	Existing	Since 2011
16. Lithuanian State geological survey programme for 2011-2015 Order No D1-743 of the Minister for the Environment of 8 September 2010 (Žin. 2010, No 109-5612) approved the Lithuanian State geological survey programme for 2011-2015 'Survey of the spatial, renewable and non-traditional subsoil resources (geological resources)'. One of the targets is to evaluate the scope for exploiting spatial, renewable and non-traditional subsoil resources.	Informational	Evaluation of the scope for exploiting spatial, renewable and non-traditional subsoil resources	State authorities	Existing	Since 2010

Name and reference of the measure	Type of measure	Expected result	Targeted group and or activity	Existing or planned	Start and end dates of the measure
17. The 2007-10 Programme for the development of industrial biotechnology in Lithuania, approved by Government Resolution No 1050 of 24 October 2006 (Žin. 2006, No 114-4359) includes the following measures: 1) search for new biofuel components, pursue technological research into second-generation biofuel production; 2) develop technologies for the production of new types of biodiesel and bio-oil using bio-catalysts; 3) develop technologies for the rational use of by-products of transport biofuel production.	Regulatory	Development of industrial biotechnology	Technology developers	Implemented	2007-2010
The 'Development of technologies for second-generation biofuel production and improvement of existing technologies' measure of the 2011–13 Programme for the development of industrial biotechnology in Lithuania, approved by Order No 4-118 of the Minister for the Economy of 3 March 2011 (Žin. 2011, No 28-1361).	Regulatory	Development of industrial biotechnology	Technology developers	Existing	2011-2013
18. Support mechanisms for electricity generated from renewable energy sources by promoting the introduction of the most efficient technologies Since 2011, the VKEKK has drafted and approved 18 pieces of legislation implementing the provisions of the Law on energy from renewable sources, the most important of which are: 1) Resolution No O3-160 of 30 June 2011 (Žin. 2011, No 83-4084; 2012, 67-3462), amending the Procedure and conditions for the buying-in of heat from independent heat producers; 2) Resolution No O3-279 (Žin. 2012, No 115-5858 and No 152-7819), approving the Methodology for the pricing of public-interest services in the energy sector; 3) Resolution No O3-230 of 29 July 2011 (Žin. 2011, No 101-4775; 2012, No 15-686), approving the Methodology for setting tariffs for the buying-in of biogas for natural gas systems; 4) Resolution No O3-229 of 29 July 2011 (Žin. 2011, No 101-4774; 2012, No 111-5673, No 154-7979), approving the Regulations for auctions held for the allocation of promotional quotas; 5) Resolution No O3-233 of 29 July 2011 (Žin. 2011, No 101-4776; 2012, No 15-685, No 72-3778), approving the Methodology for setting tariffs for electricity generated using renewable energy sources; 6) Resolution No O3-235 of 29 July 2011 (Žin. 2011, No 101-4777; 2012, No 108-5510), approving the Methodology for setting tariffs for connecting electricity installations to the electricity grid; 7) Resolution No O3-249 of 26 September 2011 (Žin. 2011, No 78-714)	Financial	Growth in energy production from renewable energy sources	Producers of energy from renewable sources	Existing	Since 2011

Name and reference of the measure	Type of measure	Expected result	Targeted group and or activity	Existing or planned	Start and end dates of the measure
determining the maximum level of the fixed tariff.					
19. Ensuring power grid access and grid optimisation (A) Order No 1-282 of the Minister for Energy of 8 October 2010 amending Order No 1-214 of the Minister for Energy of 24 November 2009 drawing up the List of public-interest services in the electricity sector (Žin. 2010, No 122-6226) stipulates that public-interest services in the electricity sector include preparation of distribution systems for the integration of production from renewable energy sources. (B) VKEKK Resolution No O3-193 of 25 July 2011 approved the Requirements relating to the Procedure for the use of electricity grids (Žin. 2011, No 100-4737), which lay down the general principles and procedure for the development of the Procedure for grid use.	Regulatory	Improved access to the electricity grid for installations generating electricity from renewable energy sources	Transmission system and distribution system operators	Existing	Since 2011
20. Reservation of electricity grid capacity In the Procedure for the promotion of the use of renewable energy sources in energy production, approved by Government Resolution No 827 of 4 July 2012 (Žin. 2012, No 81-4239), it is specified that electricity grid operators are to reserve capacity in the electricity grids which they manage insofar as is required for the connection of electricity generating plants that use renewable energy sources and for the transport of electricity generated at such plants. The costs incurred by electricity grid operators as a result of reserving electricity grid capacity for the connection of power plants that use renewable energy sources are considered to be additional costs for grid operators relating to the development of the use of renewable energy sources, and they are to be approved by the VKEKK in the manner and under the conditions laid down by law. The AB LITGRID procedure for the use of electricity grids by power generators was endorsed by the VKEKK Resolution No 03-159 of 18 June 2012. The AB LESTO procedure for the use of electricity grids by power generators was endorsed by the VKEKK Resolution No 03-201 of 27 July 2012.	Financial	Ensuring electricity grid capacity for the transport of electricity generated from renewable energy sources	RES energy producers	Existing	Since 2012
21. Electricity balancing and reservation of electricity generating plant capacity In the Procedure for the promotion of the use of renewable energy sources in energy production, approved by Government Resolution No 827 of 4 July 2012 (Žin. 2012, No 81-4239), it is specified that, during the promotion period, electricity producers using renewable energy sources to generate electricity are exempt from the liability to reserve generating capacity at their plants and to balance the electricity generated.	Regulatory	Increased generation of electricity from renewable energy sources	RES energy producers	Existing	Since 2012

Name and reference of the measure	Type of measure	Expected result	Targeted group and or activity	Existing or planned	Start and end dates of the measure
22. Promotion of the use of renewable energy sources in the production of heating and cooling energy In the Procedure for the promotion of the use of renewable energy sources in energy production, approved by Government Resolution No 827 of 4 July 2012 (Žin. 2012, No 81-4239), provision is made for promoting heating and cooling energy produced using renewable energy sources. The State (municipalities) are to promote, in the manner and under the conditions laid down in the Law on energy from renewable sources and the Law on the heat sector and in legislation implementing those laws, the production of heat and cooling energy from renewable energy sources, *inter alia* by planning and implementing the heat and cooling energy production development plan and ensuring the mandatory connection of heat energy production facilities to the heat transmission system and that priority is given to the buying-in of heat energy produced from renewable energy sources.	Regulatory	Wider use of renewable energy sources	Electricity generators and consumers, central and local government bodies	Existing	Since 2012
23. Buying-in of surplus electricity In the Procedure for the promotion of the use of renewable energy sources in energy production, approved by Government Resolution No 827 of 4 July 2012 (Žin. 2012, No 81-4239), it is specified that any electricity which has been produced at power plants in an electricity user's electricity network where renewable energy sources are used to generate electricity and has been fed into the electricity network and remains after electricity consumption to meet own and/or business needs ('surplus electricity') is to be traded in the manner and under the conditions laid down in the Procedure. An electricity user's electricity network is considered to comprise all electrical installations operated by the user which are intended for the use and/or for the production of electricity to meet own needs and are connected to the electricity distribution system at a single connection point. The installed capacity of power plants in an electricity user's electricity network must not exceed the capacity which the user is authorised by the electricity grid operator to use. A maximum of 50% of the electricity generated in power plants in an electricity user's electricity network where renewable energy sources are used to generate electricity per calendar year may be regarded as surplus electricity. Surplus electricity is to be purchased at rates fixed by the VKEKKs and applicable to the purchase of surplus electricity for a maximum of 12 years.	Financial	Increased generation of electricity from renewable energy sources	RES electricity producers	Existing	Since 2012
24. Priority transport of electricity In the Procedure for the promotion of the use of renewable energy sources in energy production, approved by Government Resolution No 827 of 4 July 2012 (Žin. 2012, No 81-4239), it is specified that all electricity generated from renewable energy sources fed into electricity grids is to be transported on a priority basis, irrespective of any other promotional measure applicable to the	Regulatory	Wider use of renewable energy sources	RES energy producers	Existing	Since 2012

Name and reference of the measure	Type of measure	Expected result	Targeted group and or activity	Existing or planned	Start and end dates of the measure
electricity generator or the duration of the promotion period.					
25. Financial instruments promoting the use of felling waste in energy generation In order to create more favourable conditions for the preparation and storage of felling waste, the Rules on felling, approved by Order No D1-79 of the Minister for the Environment of 27 January 2010, were amended by Order No D1-195 of the Minister for the Environment of 4 March 2011 (Žin. 2011, No 30-1412) by adding new paragraphs 48 and 49 providing for the storage of felling waste in specially designated locations and the grubbing-up of stumps in certain forest types and stands. In order to promote the use of felling waste, the Ministry of the Environment issued Order No D1-317 of the Minister for the Environment of 18 April 2011 amending the Rules on the drawing-up of forest management schemes and the preparation of internal forest management projects (Žin. 2011, No 49-2408), which amended the Rules for the preparation of internal forest management projects approved by Order No D1-406 of the Minister for the Environment of 1 September 2006 approving the Rules on the drawing-up of forest management schemes and the preparation of internal forest management projects, stipulating that the design part of an internal forest management project is to include an estimate of the amount of potentially usable felling waste	Financial	Development of biomass use in energy production	Forest owners, managers and users	Existing	Since 2011
26. Methodology for calculating the amount of greenhouse gas emissions resulting from the production and use of transport fuels, biofuels and other liquid bio-products Order No D1-2 of the Minister for the Environment of 3 January 2011 (Žin. 2011, No 2-83) approved the Rules for calculating the effect of greenhouse gas emissions resulting from the production and use of biofuels, liquid bio-products and comparative fossil fuel, setting the conditions and methods for the calculation of the comparative effect (the amount of atmospheric emissions of CO_2) of the burning of fossil fuel or of biofuels or liquid bio-products emitting the same amount of energy. Order No 3-100 of the Minister for Transport and Communications of 21 February 2011 (Žin. 2011, No 232-1110) approved the Procedure for setting the energy efficiency and environmental requirements applicable when purchasing vehicles and specifying the cases when they must be applied, which sets out the methodology for estimating the energy and environmental impacts during the vehicle service period.	Regulatory	Production of biofuel and liquid bio-products meeting the sustainability criteria	State authorities, producers of biofuel and liquid bio-products	Existing	Since 2011
27. The Rules on the provision of guarantees of origin for electricity generated from renewable energy sources, approved by Order No 4-346 of the Minister for the Economy of 7 October 2005 (Žin. 2005, No. 122-4375; 2006, No 42-1534),	Regulatory	Issuing of guarantees of origin for electricity generated from	Persons generating electricity in power plants	Existing	Since 2005

Name and reference of the measure	Type of measure	Expected result	Targeted group and or activity	Existing or planned	Start and end dates of the measure
lay down the general criteria, conditions, requirements and procedures relating to the issuing of guarantees of origin provided for electricity generated from renewable energy sources.		renewable energy sources	using renewable energy sources		
28. Technical conditions (rules) governing the connection of biogas supply systems to the natural gas network and connection tariffs applicable to biogas. By Order No 03-230 of 29 July 2011 (Žin. 2011. No 101-4775; 2012, No 15-686), the VKEKK approved the Methodology for setting tariffs for the purchase of biogas for natural gas systems, which governs the setting of fixed tariffs for the purchase of biogas for natural gas transmission and/or distribution systems. This methodology is intended to establish transparent, objective and non-discriminatory principles for setting these tariffs.	Regulatory	Creation of conditions for feeding gas from renewable energy sources into natural gas grids	Gas transmission and distribution system operators	Existing	Since 2011
Methodology for determining connection costs for new natural gas users, new natural gas systems and biogas power plants, approved by VKEKK Order No 03-256 of 21 September 2012 (Žin. 2012, No 111-5669).	Financial	Creation of conditions for feeding gas from renewable energy sources into natural gas grids	Gas transmission and distribution system operators	Existing	Since 2012
29. Promotion of the use of renewable energy sources to produce biogas In the Procedure for promoting the use of renewable energy sources to produce energy, approved by Government Resolution No 827 of 4 July 2012 (Žin. 2012, No 81-4239), it is specified that biogas production is to be promoted by apportioning the cost of connecting biogas production facilities to gas systems between the biogas producer and the gas system operator. Relief in respect of the cost of connecting biogas production facilities to gas systems is available to all biogas producers, irrespective of what other promotional measures apply to them.	Regulatory	Promotion of biogas production	Biogas producers	Existing	Since 2012

Name and reference of the measure	Type of measure	Expected result	Targeted group and or activity	Existing or planned	Start and end dates of the measure
30. Drawing-up and approval of methodology for the separation of the biodegradable fraction of municipal waste, having regard to the renewable portion of energy produced from municipal waste Procedure for determining the composition of mixed municipal wastes intended for disposal in regional non-hazardous waste landfills and assessing the amounts of biodegradable municipal wastes disposed of therein, approved by Order No D1-661 of the Minister for the Environment of 31 August 2011. This procedure lays down the arrangements for assessing the composition of mixed municipal wastes being sent for disposal in regional non-hazardous waste landfills and the amounts of biodegradable municipal wastes disposed of therein so as to determine the extent to which targets for reducing the amount of biodegradable municipal wastes sent to landfill have been met; reports are to be submitted on the composition of the mixed wastes sent for disposal in regional non-hazardous waste landfills and the amounts of biodegradable municipal wastes disposed of therein.	Regulatory	Development of use of municipal waste to produce energy	Investors	Existing	Since 2012
Methodology for the separation of the biodegradable fraction of industrial and municipal waste having regard to the renewable portion of the energy produced from industrial and municipal waste, approved by Order No D1-810 of the Minister for the Environment of 4 October 2012 (Žin. 2012, No 118-5958)	Regulatory	Development of use of municipal waste to produce energy	Investors	Existing	Since 2012
31. Support measures promoting the use of vehicles powered by electricity or pure biofuels The Ministry of Transport and Communications put forward proposals for allocation of EU structural funding for the 2007-13 period to the implementation of a new comprehensive measure for the development of environment-friendly public transport. Government Resolution No 712 of 2 June 2010 amending Government Resolution No 787 of 23 July 2008 approving the Annex to the Promotion of Cohesion OP (Žin. 2010, No 68-3408) approved measure VP3-3.3-SM-01-V 'Comprehensive development of environment-friendly public transport'. Under this measure, support is available for the acquisition of environment-friendly public transport vehicles (trolleybuses and buses powered by gas or electricity or fitted with hybrid engines).	Financial	Increased use of electric vehicles	Manufacturers and users of vehicles	Existing	Since 2010

Name and reference of the measure	Type of measure	Expected result	Targeted group and or activity	Existing or planned	Start and end dates of the measure
32. Procedure for the certification of installers of equipment and systems using renewable energy sources and installer training programmes Order No 1-228 of the Minister for Energy of 16 September 2011 (Žin. 2011, No 115-5432) approved the Guidelines on arrangements for the training and certification of specialists installing facilities for the production of energy from renewable sources, which lay down the professional training and qualification requirements for specialists installing facilities for the production of energy from renewable sources (installers). In accordance with these Guidelines, a draft of the Procedure for the training and certification of specialists installing facilities for the production of energy from renewable sources will be drawn up in 2012 (Žin. 2012, No 106-5396).	Regulatory	Draft procedure for the training and certification of specialists installing facilities for the production of energy from renewable sources	Installers of equipment and systems using renewable energy sources	Existing	From 1 January 2012 to 12 September 2012
The Procedure for the training and certification of specialists installing facilities for the production of energy from renewable sources was approved by Order No 1-172 of the Minster for Energy of 6 September 2012 (Žin. 2012, No 106-5396). It lays down the procedure for the training and certification of specialist installers, these being natural persons responsible for the installation (including start-up and alignment) of facilities for the production of energy from renewable sources ('installers') in accordance with Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009.	Regulatory	Draft procedure for the training and certification of specialists installing facilities for the production of energy from renewable sources	Installers of equipment and systems using renewable energy sources	Existing	Since 2012
33 Promotion of, and support for, research in the field of renewable energy sources Under the action plan for implementing the 2010-20 Lithuanian Strategy for Innovation in the 2010-13 period, approved by Order No 4-750/V-1692 of the Minister for the Economy and the Minister for Education of 7 October 2010 (Žin. 2010, No 121-6192); the Ministry of the Economy, the Ministry of Energy and the Ministry of Transport and Communications are to carry out a comprehensive study of the prospects for developing electric vehicles in transport by the end of 2012 (Measure 3.1.11). To this end, a working group was set up, pursuant to Order No 3-265 of the Minister for Transport and Communications of 5 May 2011 on the setting-up of a working group, to coordinate the comprehensive study of the prospects for developing the use of electric vehicles in transport and to address other issues relating to electric vehicles.	Informational	Comprehensive study of the prospects for developing the use of electric vehicles in transport completed	Research establishments	Existing	Since 2010
34. 'Energy of the Future' national research programme The purpose of the programme is to address the most pressing scientific issues	Informational	Resolution of the country's energy problems	Research establishments	Existing	2010-2014

Name and reference of the measure	Type of measure	Expected result	Targeted group and or activity	Existing or planned	Start and end dates of the measure
confronting Lithuania: energy security, how to increase energy efficiency, energy production in the future and how to improve supply technologies and optimise their application in the country's energy industry.					
35. Simplification of the construction permit issuing procedures for smaller and decentralised installations generating energy from renewable energy sources, with respect to the specificity of different RES technologies. The following legislation provides for simplification of procedures for issuing permits: 1) Law No XI-619 amending Articles 2, 4, 15, 19, 20, 21, 22, 23, 24, 26, 31 and 37 of the Law on territorial planning (Žin. 2009, No 159-7205), adopted in 2009; 2) Construction Technical Regulation STR1.01.07:2010 'Simple structures', approved by Order No D1-812 of the Minister for the Environment of 29 September 2010 (Žin. 2010, No 115-5903); 3) Law No XI-1375 on energy from renewable sources, adopted on 12 May 2011 (Žin. 2011, No 62-2936); 4) Construction Technical Regulation STR1.01.07:2010 'Simple structures', approved by Order No D1-578 of the Minister for the Environment of 19 July 2011 (Žin. 2011, No 96-4531)	Regulatory	Improvements to the conditions for issuing construction permits	Investors	Existing	Since 2010
36. Construction technical regulation laying down requirements for low-energy buildings Order No Dl-462 of the Minister for the Environment of 7 June 2011 amending Order No Dl-624 of the Minister for the Environment of December 2005 approving Construction Technical Regulation STR 2.01.09:2005 'Energy performance of buildings. Certification of energy performance' (Žin. 2010, No 73-3521) added definitions of the terms 'low-energy buildings' and 'near-zero-energy buildings'. Buildings are assigned to one of nine energy performance classes: A++, A+, A, B, C, D, E, F, G, the highest being A++.	Regulatory	Increased energy efficiency	Developers, investors	Existing	Since 2012
37. The opportunities for statistical transfers and implementation of joint projects between Lithuania and other Member States of the European Union in Lithuania were analysed and the potential for such projects was determined In 2011, a survey entitled 'Evaluation of international cooperation in promoting the use of energy from renewable sources', commissioned by the Ministry of Energy, was carried out to analyse the potential and costs of joint projects between Lithuania and other Member States of the European Union. The survey found that the greatest potential for implementing joint projects in Lithuania was to be found in district heating systems where the annual heat demand does not exceed 50 GWh.	Informational	Evaluation of the opportunities and potential for joint projects of all types relating to the production of electricity, heat or cooling from renewable energy sources	State authorities, investors	Existing	2011
38. An analysis of household final energy consumption was carried out	Informational	Collection of data on the consumption	State and local authorities,	Existing	2009-2012

Name and reference of the measure	Type of measure	Expected result	Targeted group and or activity	Existing or planned	Start and end dates of the measure
To obtain a more accurate picture of the share of household final energy consumption in the national fuel and energy balance, the Lithuanian Department of Statistics in 2010 conducted an analysis of energy consumption by households in 2009.		of renewable energy sources	investors		
39. Analysis of the promotion of the demand for energy from renewable sources The Lithuanian Energy Institute's project entitled 'Economic substantiation of the promotion of demand for renewable energy sources' won a competition in the field of the humanities and social sciences. The list of successful projects was approved by Order No V-60 of the Chairman of the Lithuanian Research Council of 11 May 2011	Informational	Collection of data on the consumption of renewable energy sources and incentives	Public and local authorities, investors	Planned	2011-2012

2013					
1. Rules on the issuing of permits for activity in the electricity sector (draft drawn up) The Rules on the issuing of permits for activity in the electricity sector lay down the procedures for issuing, suspending, reinstating and withdrawing permits for activity in the electricity sector, as well as general criteria, conditions and requirements relating to activity for which a permit is required. http://www.lrs.lt/pls/proj/dokpaieska.showdoc-_l?p_id=184154&p_query=&p_tr2=&p_org=15&p_fix=n&p_gov=n	Regulatory	Improvement of conditions for the issuing of development permits	RES electricity producers	Planned	From 2013
2 Draft Order of the Minister for Energy approving the Rules on guarantees of origin for electricity produced from renewable energy sources The Rules on guarantees of origin for electricity produced from renewable energy sources lay down the criteria, conditions and requirements relating to the issue, transfer and withdrawal of guarantees of origin for electricity produced from renewable energy sources and arrangements for the monitoring and control of the use of guarantees of origin. http://www.lrs.lt/pls/proj/dokpaieska.showdoc_1?p_id=153363&p_query=&p_tr2=&p_org=7331&p_fix=y	Regulatory	Issuing of guarantees of origin to electricity producers using renewable energy sources	Persons generating electricity in a power plant using renewable energy sources	Planned	2012 to present
3. Reimbursement of expenditure relating to the development of photovoltaic power plant projects The Procedures for the reimbursement of expenditure relating to the development of photovoltaic power plant projects, approved by Government Resolution No 594 of 26 June 2013 (Žin. 2013, No 70-3537) lay down arrangements for reimbursing expenditure relating to the development of photovoltaic power plant projects in the case of persons holding authorisations to develop electricity-generating capacity by building a photovoltaic power plant that were issued in accordance with the law, on the basis not of auctions but of applications submitted before the Law amending Articles 2, 11, 13, 14, 16, 20 and 21 of the Law on energy from renewable sources (Žin. 2013, No 12-560) entered into force.	Financial	Reimbursement of expenditure relating to the development of photovoltaic power plant projects	Persons holding permits to develop RES electricity generation capacities by building power plants	Existing	From 2013

2.a. Information on progress made in evaluating and improving administrative procedures to remove regulatory and non-regulatory barriers to the development of renewable energy *(Article 22(1)(e) of Directive 2009/28/EC))*.

Changes relating to the simplification of administrative procedures aimed at promoting the development of energy from renewable sources are governed by the following legislation:

1. Law No XI-619 amending Articles 2, 4, 15, 19, 20, 21, 22, 23, 24, 26, 31 and 37 of the Law on territorial planning (Žin. 2009, No 159-7205), adopted in 2009, approving simplified territorial planning requirements for the construction of power plants of low installed capacity using renewable energy sources. No detailed plans are required in the following cases:

- when constructing single wind turbines with capacities not exceeding 250kW in rural areas and towns provided that the distance from the installation point of the turbine to the boundary of the land plot is not less than 1.5 times the maximum height of the wind turbine;
- when constructing groups of wind turbines (two or more turbines) for which special plans should be prepared in accordance with the procedure established by legal acts;
- when constructing solar power plants whose total installed capacity does not exceed 100 kW;
- for biogas production installations with total capacities of up to 1 MW to be constructed within land plots of existing livestock farming buildings.

Additionally, the said law simplified the procedure for the approval of detailed plans. It stipulates that, if the municipal council or the director of the municipal administration authorised by the municipal council refuses to approve a detailed plan, a reasoned response must be delivered in writing to the planning organiser within 20 working days of the submission of the detailed plan. Where the municipal council or municipal administration director authorised by the municipal council does not approve a detailed plan within the prescribed period and fails to present a reasoned response regarding the non-approval of the plan, the detailed plan shall be approved in accordance with the detailed planning approval procedure set out in the Procedure for detailed plan approval in cases where a municipal council or municipal administration director authorised by the municipal council does not approve a detailed plan within the prescribed period, approved by Government Resolution No 825 of 13 July 2011 (Žin. 2011, No 89-4251).

The municipality is to compensate the detailed planning organiser for any loss resulting from failure to approve a detailed plan within the set time limits in accordance with the procedure prescribed by law.

In order to simplify, speed up and boost the effectiveness of the territorial planning process, the Lithuanian Parliament (Seimas) on 27 June 2013 adopted Law No XII-407 amending the Law on territorial planning (Žin. 2013, No 76-3824), which substantially modified the existing legal framework for territorial planning. The provisions of this Law that are to enter into force on 1 January 2014 have been aligned with the provisions of the Law on energy from renewable sources, rendering the amendment to Article 22 of the Law on territorial planning superfluous.

2. On 29 September 2010, Order No D1-812 of the Minister for the Environment of 12 May 2011 approved the Construction Technical Regulation STR1.01.07:2010 'Simple structures' (Žin. 2010, No 115-5903), which lays down simplified requirements for the design and construction of low-capacity wind turbines (up to 30 kW), classifying them as simple structures that do not require a construction permit.

3. Article 16 of Law No XI-1375 on Energy from Renewable Sources, adopted on 12 May 2011 (Žin. 2011, No 62-2936), stipulates that permits for the development of capacities for electricity generation from renewable energy sources are to be issued to producers intending to develop power plants (except for hydroelectric dams) with an installed capacity not exceeding 350 kW and not greater than the permissible capacity at the nearest distribution grid connection point, and for biogas power plants built near livestock and poultry farming establishments, landfills and sewage treatment plants with up to 1.2 MW of installed capacity under the simplified procedures in accordance with the Rules for issuing permits for activities in the electricity sector, approved by Order No 380 of the Minister for the Economy of 18 December 2001 (Žin.

2001, No 110-4010; 2009, No 63-2522), and on the basis of objective and non-discriminatory principles. Article 16(4) of this Law was amended on 1 February 2013 (Žin. 2013, No 12-560). It has been worded in such a way that a permit to develop electricity generation capacities is not necessary if the producer intends to develop electricity generation capacities with an installed capacity not exceeding 10 kW and to use them to generate electricity solely for its own use and to meet its own needs. Producers intending to develop electricity generation capacities with an installed capacity not exceeding 10 kW and to use them to generate electricity only for their own use and to meet their own needs must inform the grid operator of their intention in accordance with the procedure laid down by the Government or the body authorised by the Government.

Under Article 16(6) of that Law, the Ministry of Energy must, within 30 calendar days of the receipt of the necessary documentation, issue the energy producer with a permit to develop capacity for generating electricity from renewable energy sources or deliver a reasoned written refusal to issue such a permit.

Article 49 of the same law lays down simplified requirements for the design and construction of low-installed-capacity power plants using renewable energy sources:

- no detailed plans or changes to the main land use designation are required for the design and construction of power plants with a low installed capacity (up to 350 kW), except for hydroelectric dams, provided that this does not contradict the local management and use regulations;
- for the construction of single wind turbines with an installed capacity of not more than 350 kW and/or photovoltaic plants in rural areas, it shall not be necessary to change the land use designation, to prepare detailed plans or to change the solutions proposed in a master plan, provided that this does not contradict the local management and use regulations;
- wind turbines, photovoltaic plants, solar heat collectors, and heat pumps with an installed capacity of less than 30 kW shall not be subject to the land designation compliance requirements, the environmental impact assessment procedure or the requirement to obtain a construction permit, or to carry out an assessment of impact on public health;
- solar power plants, solar heat collectors, wind turbines of up to 30 kW in installed capacity that do not exceed the noise level permitted by legislation and heat pumps fitted on buildings or integrated into buildings shall be installed without a construction permit.

Article 14 of the Law on energy from renewable sources provides that power plants with an installed capacity of up to 350 kW and not greater than the permitted capacity at the nearest distribution grid connection point, except for biogas power plants built near livestock and poultry farming establishments, landfills and sewage treatment plants, for which the capacity is unlimited, are to be connected to the power grids immediately upon installation of a production and consumption meter if the energy producer conforms to the simplified connection conditions issued by the grid operator. Contracts for power grid connection shall be concluded with such producers without requiring a financial guarantee for the producer's obligations with respect to the power grid operator regarding the development of capacities for electricity generation from renewable energy sources. This article was repealed on 1 February 2013 (Žin. 2013, No 12-560).

Article 51 of the said law provides that State and local government bodies, institutions and enterprises are, within their competence, to develop, provide and make public information on the procedure for issuing permits, licences or attestations, the procedure for processing certification applications for renewable energy installations and the assistance available to applicants.

2.b. Information on the measures for ensuring the transmission and distribution of electricity produced from renewable energy sources and for improving the framework or rules for bearing and sharing costs relating to grid connections and grid reinforcements *(Article 22(1)(f) of Directive 2009/28/EC)*

Electricity transmission and distribution

1. The issues of the transmission and distribution of electricity produced from renewable energy sources are governed by the Law on energy from renewable sources (Žin. 2011, No 62-2936).

Article 17 of the law provides that the power grid operator must preferentially accept, transmit and/or distribute at transparent and non-discriminatory rates the full amount of electricity from renewable energy

sources offered by the producer. The producer is guaranteed the right of preferential acceptance, transmission and/or distribution of electricity in relation to electricity generated by other electricity producers who use non-renewable energy sources.

Transmission of electricity produced from renewable energy sources through the power grid may be restricted or temporarily suspended in the case of an emergency in the power system or for other technical reasons, where electricity transmission capacity is limited on a non-discriminatory basis. The losses incurred by an energy producer as a result of such restriction shall not be compensated, unless the circumstances leading to such restrictions arise through the grid operator's fault or the right to damages arises on other statutory grounds.

If the grid operator takes measures to substantially limit the use of renewable energy sources in order to ensure the safe operation of the State power system and security of electricity supply, the grid operator shall immediately inform the competent authority of the relevant measures, the extent and the reasons for their application and indicate what corrective measures will be taken to prevent improper restrictions.

Article 19 of this Law stipulates that the power grid operator shall have the right to regulate the amount of electricity produced and supplied to the power networks by wind turbines with an installed capacity above 350 kW and hydropower plants with an installed capacity above 5 MW in the following cases:

1) if failure to take such actions would result in an overload of the power networks that receive the electricity generated by the power plant;
2) *force majeure*;
3) in an attempt to avoid an emergency in the power grid or electricity system or to respond to an emergency in the power grid or electricity system;
4) other cases specified in laws.

Where it is established that the power grid operator operated, maintained, managed and/or developed the power grid inappropriately (i.e. the power grid operator is at fault) and this calls for regulatory measures, the power grid operator shall cover the direct losses and lost income of the producers that were unable to produce and/or to supply electricity to the power networks as a result of such regulation.

2. Provisions on electricity grid capacity reservation are set out in Chapter VII of the Procedure for the promotion of the use of renewable energy sources to produce energy, approved by Government Resolution No 827 of 4 July 2012 (Žin. 2012, No 81-4239). Paragraph 29 of the Procedure specifies that operators are to reserve grid capacity which they manage on the electricity grid in so far as this is necessary to connect power plants using renewable energy sources and to transport the electricity produced in them.

Chapter IX of the Procedure specifies that all electricity generated from renewable energy sources fed into electricity grids is to be transported on a priority basis, irrespective of any other promotional measure applicable to the electricity generator or the duration of the promotion period.

Sharing the costs of grid connection

Matters relating to the sharing of grid connection costs are governed by the following legislation:

1. Order No 1-214 of the Minister for Energy of 24 November 2009 drawing up the List of public-interest services in the electricity sector (Žin. 2009, No 140-6158), which stipulates that the connection of power generating installations using wind, biomass, solar or hydro energy for electricity production to the transmission or distribution networks is a public-interest service in the electricity sector;

2. The Procedure for the promotion of the generation and purchasing of electricity generated using renewable energy sources, adopted by Government Resolution No 1474 of 5 December 2001 approving the legislation necessary for the implementation of the Law on Electricity (Žin. 2001, No 104-373; 2004, No 9-228; 2006, No 100-3862), which stipulates that producers whose power plants use renewable energy sources to generate electricity shall benefit from a 40% reduction in the fee for connection to an electricity distribution network, which shall be covered by the operator of the distribution network. This Procedure was repealed on 13 July 2012 by Procedure No 827 on the promotion of the use of renewable energy sources to produce energy (Žin.

2012, No 81-4239), which lays down the general criteria, requirements, procedures and conditions for the application of promotion measures under the support scheme for the use of renewable energy sources in Lithuania to produce energy.

3. In Chapter VI of the Procedure for the promotion of the use of renewable energy sources to produce energy it is laid down that:

● the costs of connecting power plants using renewable energy sources to electricity grids are to be reimbursed to electricity generators by apportioning these costs between the electricity generator and the electricity grid operator in accordance with the procedure, subject to the conditions and to the extent laid down in the Law on Energy from Renewable Energy Sources;

● the reimbursement of electricity grid connection costs applies to all electricity generators using only renewable energy sources, except in the cases specified in the Law on energy from renewable sources and cases where fossil fuel is used at a power plant to the extent necessary for its operation and/or to ensure the functioning of the electricity production process;

● electricity generators are subject to such conditions relating to the reimbursement of the cost of connecting power plants using renewable energy sources to the electricity grid as apply on the date on which the permit to develop the electricity generation capacities is issued to the generator;

● reimbursement of the costs of connecting power plants where renewable energy sources are used to generate electricity to the electricity grids are considered to be a public-interest service provided by the electricity grid operator in the electricity sector.

In Chapter VII, paragraph 38, of the Procedure, it is laid down that costs incurred by electricity grid operators as a result of reserving electricity grid capacity for the connection of power plants that use renewable energy sources are considered to be additional costs for grid operators relating to the development of the use of renewable energy sources, and they are to be approved by the VKEKK in the manner and under the conditions laid down by law.

4. Article 21 of the Law on energy from renewable sources, which states that the connection of power plants to the electricity grid is a public-interest service and that the costs associated with connecting power plants to the electricity grid are to be apportioned between the producer and the grid operator, having regard to the grid ownership boundaries. The costs are to be apportioned as follows:

- where the installed capacity of the power plant being connected exceeds 350 kW, the producer is to pay 40% of the costs of connecting to the grid, and the connecting operator is to cover 60% of the connection costs;
- where the installed capacity of the power plant being connected exceeds 30 kW but is not above 350 kW, the producer is to pay 20% of the costs of connection to the grid, and the connecting operator is to cover 80% of the connection costs;
- where the installed capacity of the power plant being connected does not exceed 30 kW, the producer's plant shall be connected free of charge and the connecting operator is to cover 100% of the connection costs.

This paragraph was amended on 17 January 2013 (Žin. 2013, No 12-560) and worded in such a way that costs are apportioned as follows:

- where the installed capacity of the power plant being connected exceeds 350 kW, the producer is to pay 40% of the costs of connecting to the grid, and the connecting operator is to pay 60% of the connection costs;
- where the installed capacity of the power plant to be connected does not exceed 350 kW, the producer is to pay 20% of the cost of connecting to the grid, and the connecting operator is to pay 80% of the connection costs.

The price for power plant connection to the power grid is equal to the price of the work performed by the successful tenderer in the public procurement procedure for producer power plant connection to the power

grid. Where the producer selects another economically suitable power plant connection point, thus increasing the costs of power plant connection to the grid, the reasonable cost increase shall be covered by the producer.

If the power grid operator, at its own discretion, selects from a range of technologically equivalent alternatives a grid connection point for the power plant that is less economically advantageous, the grid operator must cover all reasonable additional costs incurred by the producer as a result.

5. The Methodology for setting the tariffs for connecting electricity installations to the power grid, approved by VKEKK Resolution No O3-235 of 29 July 2011 (Žin. 2011, No 101-4777), which governs the procedure for setting the tariffs for connecting electricity installations to the power grid.

6. The Requirements for the Procedure for the use of the power grid, approved by VKEKK Resolution No O3-193 of 25 July 2011 (Žin. 2011, No 100-4737), which govern the general principles and procedure for the development of the procedure for grid use.

7. It is specified in Chapter XI, paragraph 51, of the Procedure for the promotion of the use of renewable energy sources to produce energy, approved by Government Resolution No 827 of 4 July 2012 (Žin. 2012, No 81-4239), that the production of biogas is to be promoted by apportioning the cost of connecting biogas production facilities to the gas system between the biogas producer and the gas system operator. It is specified in paragraph 52 that a reduction in the cost of connecting biogas production facilities to the gas system is open to all biogas producers, irrespective of what other promotional measures apply to them.

Cost-sharing in optimising the power grid

The following legislation governs cost-sharing in optimising the power grid:

1. Order No 1-214 of the Minister for Energy of 24 November 2009 drawing up the List of public-interest services in the electricity sector (Žin. 2009, No 140-6158; 2010, No 122-6226), which stipulates that the preparation (renovation, optimisation) of distribution networks for the integration of the production of energy from renewable sources is a public-interest service in the electricity sector. This Order was repealed on 17 April 2013 (Žin. 2013, No 39-1930).

2. Law No XI-1375 on energy from renewable sources (Žin. 2011, No 62-2936; 2013, No 12-560), Article 14 of which states that the grid operator must also connect the energy producer's power plant to the power grid in the event that such a connection is only available when electricity networks are technically upgraded, optimised, expanded, increased in capacity or otherwise reconstructed.

Article 18 of this Law states that after the producer and power grid operator enter into a contract on the service of power plant connection to the grid, the grid operator shall, with regard to the current technical condition of the grid, take all reasonable measures to optimise, expand and/or reconstruct the networks managed by the grid operator, including the installations and facilities necessary for grid operation, and to increase power grid capacity in order to ensure safe and reliable reception, transmission and distribution of the electricity generated from renewable energy sources. If there is data confirming the assumption that the power grid operator has defaulted on its obligations, the producers shall have the right to demand that the power grid operator present information on the reasons for and the extent of failure by the power grid operator to discharge its obligation to optimise and expand its power grid system and increase the capacity of the power grid.

Article 21 of this Law stipulates that the producer shall compensate the power grid operator up to 10% of its costs of power grid optimisation, development and/or reconstruction, including the costs of installation and facility acquisition necessary for the operation thereof, in order to ensure safe and reliable reception, transmission and distribution of the electricity generated from renewable energy sources. The limit on the grid optimisation costs incurred by the producer shall not apply in the case of grid connection of a power plant that does not benefit from a support scheme or individual incentives under it.

3. Information on the support schemes and other measures currently in place that are applied to promote energy from renewable sources and the developments in the measures used with respect to those set out in the National Renewable Energy Action Plan. ***(Article 22(1)(b) of Directive 2009/28/EC))*****.**

This section describes all the financial support schemes and instruments for the promotion of energy produced from renewable energy sources applied in 2011-12.

Public-interest services

By Order No 1-214 of 24 November 2009 establishing a list of public-interest services in the electricity sector (Žin. 2009, No 140-6158), the Minister for Energy designated public-interest services in the electricity sector. The following are public-interest services in the electricity sector:

- electricity generation:
- using renewable energy sources;
- co-generation at combined power and heat cycle plants where they supply heat to urban district heating networks;
- connection of power generating installations using wind, biomass, solar or hydro energy to the transmission or distribution power networks.

Order No 1-282 of the Minister for Energy of 8 October 2010 amending Order No 1-214 of the Minister for Energy of 24 November 2009 establishing a list of public-interest services in the electricity sector (Žin. 2010, No 122-6226) added to the List of public-interest services in the electricity sector the following services relating to the use of renewable energy sources in electricity production:

- balancing of electricity produced from renewable energy sources carried out by the transmission system operator;
- distribution network preparation for the integration of production from renewable energy sources;

Below is a detailed review of the public-interest services performed in 2011-2012 and the relevant results.

Feed-in prices

Electricity generated from renewable energy sources is bought in at the average prices set by the National Control Commission for Prices and Energy [VKEKK] under the conditions governing their application. Electricity produced from renewable energy sources and supplied to networks is bought in by the transmission system operator.

In 2011, the average feed-in prices for electricity generated from renewable and waste energy sources were approved pursuant to VKEKK Resolution No 7 of 11 February 2002 on the prices of public-interest services in the electricity sector (Žin. 2002, No 16-648; Inf. pr., 2008, No 16-217; No 77-1002; 2009, No 108-4576).

VKEKK Resolution No 03-23 of 6 February 2012 laying down tariffs for 2012 for electricity and biogas produced from renewable energy sources (Žin. 2012, No 18-844) approved fixed tariffs for 2012 for power plants with an installed capacity of 30 kW of less (referred to as 'Feed-in tariffs' in the table) and the maximum possible levels of fixed tariffs for producers taking part in auctions (referred to as 'Maximum tariffs' in the table).

Table 3 shows the prices applied in 2011 and 2012.

Table 3. Feed-in and maximum tariffs for electricity generated from renewable energy sources in 2011-2012

	2011		2012	
	LTL cents/kWh	EUR cents*/kWh	LTL cents/kWh	EUR cents*/kWh
Hydropower plants				
ĮG** ≤ 30 kW Feed-in tariff	26	7.53	28	8.11
30 < ĮG ≤ 350kW Maximum tariff			27	7.82
350 < ĮG ≤ 1000 kW Maximum tariff			27	7.82
ĮG > 1000 kW Maximum tariff			22	6.37
Wind power plants				
ĮG ≤ 30 kW Feed-in tariff	30	8.69	37	10.72
30 < ĮG ≤ 350kW Maximum tariff			36	10.43
ĮG > 350 kW Maximum tariff			28	8.11
Biomass power plants				
ĮG ≤ 30 kW Feed-in tariff	30	8.69	50	14.48
30 < ĮG ≤ 350kW Maximum tariff			45	13.03
350 < ĮG ≤ 5000 kW Maximum tariff			45	13.03
ĮG > 5000 kW Maximum tariff			37	10.72
Biogas power plants				
ĮG ≤ 30 kW Feed-in tariff	30	8.69	64	18.54
30 < ĮG ≤ 350kW Maximum tariff			58	16.80
350 < ĮG ≤ 1000 kW Maximum tariff			58	16.80
ĮG > 1000 kW Maximum tariff			48	13.90
Solar power plant (integrated into building)***				
ĮG ≤ 30 kW Feed-in tariff	163	47.21	180	52.13
30 < ĮG ≤ 100kW Maximum tariff			166	48.08
100 < ĮG ≤ 350kW Maximum tariff	156	45.18	128	37.07
ĮG ≤ 350kW Maximum tariff				
100 < ĮG ≤ 1000kW Maximum tariff				
ĮG ≤ 1000kW Maximum tariff	151	43.73		
Solar power plant (not integrated into building)				
ĮG ≤ 30 kW Feed-in tariff	163	47.21	144	41.71
30 < ĮG ≤ 100 kW Maximum tariff			133	38.52
100 < ĮG ≤ 350kW Maximum tariff	156	45.18	104	30.12
ĮG ≤ 350kW Maximum tariff				
100 < ĮG ≤ 1000kW Maximum tariff				
ĮG ≤ 1000kW Maximum tariff	151	43.73		

*LTL 1: EUR 3.4528

** ĮG – installed capacity (kW)

*** where power plant is mounted on building, serving as part of its surface and replacing its roof or wall areas

The average feed-in prices for electricity generated by other plants using renewable energy sources are established by a separate decision of the National Control Commission for Prices and Energy. Average prices may also be differentiated by mutual agreement.

Table 4 shows the total supported production of electricity from renewable energy sources (MWh) in 2011-12 and the support granted (LTL '000).

Table 4. Supported electricity production from renewable energy sources in 2011-12 and support granted

	2011		2012	
	produced, MWh	support, LTL '000	produced, MWh	support, LTL '000
Transmission network (wind power plants)	**370 077**	**53 661**	**374 556**	**54 311**
Distribution network	**328 920**	**44 191**	**380 506**	**54 064**
Small hydro-power plants	90 093	9 460	95 900	10 070
Small wind power plants	90 504	13 123	94 975	13 771
Small solar power plants	76	112	2 096	3 031
Large biofuel power plants	**109 121**	**15 823**	111 401	16 153
Small biofuel power plants	**39 126**	**5 673**	76 134	11 039
TOTAL	**698 997**	**97 852**	**755 062**	**108 375**

Promotion quotas

The system of promotion quotas has introduced competition amongst power plants generating electricity from renewable energy sources.

Promotion quotas for the different types of renewable energy sources (biofuel, wind, photovoltaics and hydropower) are distributed by auction amongst producers meeting the various criteria in terms of technical capacity and type of power plant.

Promotion quotas and auction regions are established and approved by the Lithuanian Government. Auctions are organised in electricity grid connection regions separately for each group of producers within the time limits and in accordance with the procedure laid down by the National Control Commission for Prices and Energy.

Government Resolution No 810 of 4 July 2012 approving quotas for promoting the use of renewable energy sources to generate electricity and approving auction regions (Žin. 2012, No 80-4169) approved the list of auction regions for the distribution of quotas for promoting the use of renewable energy sources to generate electricity and the promotion quotas assigned to them. That list lays down the following capacity quotas and regions:

● The auction region for promotion quotas for wind power plants is the whole of Lithuania. The promotion quota for the auction region is 260 MW (including 210 MW for power plants to be connected to the transmission system and 50 MW for power plants to be connected to the distribution system), excluding small power plants with an installed capacity of 30 kW or less.

● The auction region for promotion quotas for photovoltaic power plants is the whole of Lithuania. The promotion quota for the auction region is 10 MW, excluding small power plants with an installed capacity of 30 kW or less.

● The auction region for promotion quotas for hydropower plants is the whole of Lithuania. The auction region quota is 14 MW.

● The auction region for promotion quotas for power plants burning liquid or solid biofuels is the whole of Lithuania. The promotion quota for the auction region is 230 MW (if power plants where it is planned to burn suitable industrial and/or municipal waste to produce energy take part in auctions, the capacity corresponding to biofuel use is calculated as the product of the power plant's installed capacity and the percentage biodegradable fraction of the waste).

● The auction region for promotion quotas for biogas-fired power plants is the whole of Lithuania. The promotion quota for the auction region is 75 MW.

Reduced grid connection rates

The Procedure for the promotion of the generation and purchasing of electricity generated renewable energy sources, adopted by Government Resolution No 1474 of 5 December 2001 (Žin. 2001, No 104-3713; 2004, No 9-228; 2006, No 100-3862), which stipulates that producers whose power plants use renewable energy sources to generate energy shall benefit from a 40% reduction in the fee for the connection to an electricity distribution network, which shall be covered by the operator of the distribution network. This Procedure was repealed by Government Resolution No 827 of 4 July 2012 approving a procedure for the promotion of the use of renewable energy sources to produce energy (from 12 July 2012) (Žin. 2012, No 81-4239).

Under the Procedure for the promotion of the use of renewable energy sources to produce energy, electricity producers are to be reimbursed for the costs of connecting power plants using renewable energy sources to the electricity grid by apportioning such costs between the electricity producer and the electricity grid operator in the manner, subject to the conditions and to the extent provided for in the Law on energy from renewable sources. Reimbursement of costs of connecting power plants to electricity grids applies to all electricity producers using only renewable energy sources, except in the cases specified in the Law on energy from renewable sources and cases where fossil fuel is used at a power plant to the extent necessary for its operation.

Law No XI-1375 of 12 May 2011 on energy from renewable sources (Žin. 2011, No 62-2936) specifies that the costs associated with connecting power plants to the electricity grid are to be apportioned between the producer and the grid operator, having regard to grid ownership boundaries. Costs are to be apportioned as follows:

● where the installed capacity of the power plant being connected exceeds 350 kW, the producer is to pay 40% of the grid connection costs and the connecting operator is to pay 60% of the connection costs;

● where the installed capacity of the power plant being connected exceeds 30 kW but is not above 350 kW, the producer is to pay 20% of the grid connection costs and the connecting operator is to pay 80% of the connection costs;

● where the installed capacity of the producer's power plant being connected does not exceed 30 kW, the producer's plant is to be connected free of charge and the connecting operator is to pay 100% of the connection costs.

Costs are not apportioned in this way where the producer itself connects a power plant to the electricity grid in accordance with the procedure laid down by law.

Under VKEKK Resolution No O3-278 of 30 September 2011 determining the funds and prices for public-interest services (Žin. 2011, No 79-742), LTL 0.168 million (EUR 48 700) was allocated to the grid operator in 2012 for the connection of electricity generation installations using renewable energy sources, as well as for the optimisation, development and/or redesign of the distribution system in connection with the acceptance and distribution of electricity generated by producers using renewable energy sources.

European Union structural assistance in 2007-2013

Government Resolution No 787 of 23 July 2008 approving the Annex to the Promotion of Cohesion OP approved measure VP3-3.4-ŪM-02-K 'Use of renewable energy sources in energy production' (projects selected by means of competitive bidding). Support totalling LTL 239.93 million (EUR 69.5 million) was allocated for the measure. There is also measure VP3-3.4-ŪM-06-V 'Use of renewable energy sources for energy production' (projects selected using the state planning method).

It is planned to provide support for the following under these measures

- modernisation of boilers that supply heat to the heat supply systems, i.e. replacing the fuel used with biomass;
- modernisation of cogeneration plants that supply heat to heat supply systems, i.e. replacing the fuel used with biomass;
- construction of new boilers using renewable energy sources and their connection to heat supply systems ('heat supply system' includes a system of heat consumption);

- construction of new efficient cogeneration plants using renewable energy sources, except for landfill gas (biogas resulting from spontaneous decomposition of organic substances present in landfill waste) and their connection to heat supply systems ('heat supply system' includes a system of heat consumption).

In the 2011-12 period, EU support totalling LTL 74.7 million (EUR 21.64 million) was paid out for projects under measure VP3-3.4-ŪM-02-K. No payments were made in respect of projects selected by the state planning method under measure VP3-3.4-OM-06-V.

It was ensured that all economic operators had equal and non-discriminatory access to state aid. In the case of competitive bidding procedures, participation was open to any operator meeting the requirements of the Schedule of conditions for project financing approved by Order No 4-442 of the Minister for the Economy of 29 September 2008 and agreed with all interested bodies; applications were evaluated on the basis of a well-founded methodology that had been agreed with all convergent authorities. In the case of the state planning measure, the Schedule of conditions for project financing was approved by Order No 4-922 of the Minister for the Economy of 20 September 2012, referring to the implementing provisions of the 2008-12 National Energy Strategy implementation plan approved by Government Resolution No 1442 of 27 December 2007 (Žin. 2008, No 4-131; 2012, No 884592), with which all projects selected by the state planning method had to comply.

Lithuanian Rural Development Programme 2007-2013

The measures under Lithuanian Rural Development Programme 2007-2013 (hereinafter referred to as 'Programme') promotes the use of energy from renewable sources. The level of support varies from 40% to 65% of eligible project costs. The maximum amount of support for a project depends on the facility and can vary from EUR 40 000 to EUR 2.8 million. The following activities are funded under the measures of the Programme:

- Measure 6 of Axis I 'Modernisation of agricultural holdings'. The following can be funded under this measure:
  - The production of biogas from farm waste. The biogas produced can be used only for the needs of the holding.
  - cultivation of short-rotation plantations;
  - construction of small-capacity (up to 250 kW) wind power plants.
- Measure 1 of Axis III 'Transition to non-agricultural activities' and Measure 2 of Axis III 'Support to business start-up and development'. These measures fund the following activities:
  - operation of installations producing energy and electricity (from renewable energy sources) including gas turbines, biodiesel plants, biogas and biomass boilers, wind power plants, hydropower plants, solar battery and collector systems, geothermal installations and other installations using renewable energy sources (when not less than 50% of the energy is produced for sale);
  - operation of installations producing biogas and biofuel from renewable and waste energy sources (when not less than 50% of the gas or fuel is produced for sale);
  - disposal of non-hazardous waste by incineration (when heat, electricity or steam is produced) or by other methods, when compost, electricity, alternative fuel, biogas, ash or other by-products are produced for subsequent use, as well as disposal of straw and hay waste when alternative fuel (granules) is produced from a mix which is includes as one of its components straw, hay, grass or other substances (when not less than 50% of production is produced for sale).

In 2011-2012, 120 projects received LTL 94 million (EUR 27.22 million) in support under the measures 'Modernisation of agricultural holdings', 'Transition to non-agricultural activities' and 'Support to business start-up and development'.

Lithuanian Environmental Investment Fund

The Lithuanian Environmental Investment Fund (LAAIF) provides subsidies in accordance with the Procedure for the implementation and supervision of investment projects financed from the funds of the Programme of the Lithuanian Environmental Investment Fund, approved by Order No 437 of the Minister for the Environment of 29 August 2003 (Žin. 2003, No 85-3890; 2010, No 112-5700; 2011, No 46-2206 and No 126-5995) as well as the 'funding axes' approved by the Minister for the Environment on an annual basis, i.e. the document indicating the types of project to be funded by the LAAIF and the amount of subsidy granted to projects of each type, as well as the methods used for the submission and selection of applications.

The maximum amount of subsidy per applicant is LTL 690 000; however the subsidy for a project may not exceed 80% of all eligible costs. A lower amount of the subsidy available may be set in the funding axes.

60% of the subsidy allocated is paid out if the applicant has acquired, assembled and launched according to the designation the installations envisaged in the project and has submitted a payment request to the LAAIF. Subsequently, 40% of the subsidy granted is paid out after the applicant has submitted to the LAAIF the performance results of the installations that were acquired with support funds for the first year, indicating the actual environmental effect.

In 2011, the following projects relating to the production of energy from renewable sources were financed: two biofuel-burning boiler-houses (total installed capacity – 0.16 MW; support granted – LTL 72 284.73 (EUR 20 935)); one solar power plant (total installed capacity – 0.015 MW; support granted – LTL 107 820.00 (EUR 31 227).

In 2012, the following projects relating to the production of energy from renewable sources were financed: three biofuel-burning boiler-houses (total installed capacity – 23.75 MW; support granted – LTL 1 550 739.6 (EUR 449 125)).

The Lithuanian Environmental Investment Fund makes subsidies available in accordance with the Procedure for the use of funding under the Special Climate Change Programme, approved by Order No Dl-275 of the Minister for the Environment of 6 April 2010 (Žin. 2010, No 42-2040; 2011, No 99-4668, No 131-6254; 2012, No 8-297, No 30-1416, No 88-4630, No 109-5538, No 136-7002) and the 'funding axes' approved annually by the Minister for the Environment, i.e. the document indicating the funding axes for which the funds available under the Special Climate Change Programme are to be used, the amounts to be allocated to the measures concerned and the methods by which applications are to be submitted and selected.

Under the Special Climate Change Programme, the project-funding methods are as follows: subsidies, loans and investment in capital. In the 2011-12 period, subsidies were the main form of financing projects designed to promote the use of renewable energy sources.

The maximum subsidy per applicant not engaged in commercial activity is LTL 5 000 000; the maximum amount per applicant engaged in commercial activity is LTL 690 000. However, the amount of subsidy for a project may not exceed 80% of the total eligible project expenditure. The estimates for the use of funding under the Special Climate Change Programme, or the plan detailing those estimates, may specify a different amount of subsidy to be allocated.

In the case of projects whose implementation has resulted in a quantifiable reduction in greenhouse gas emissions, except for small-scale projects (a small-scale project is a project for which funding of up to LTL 50 000 is requested or a project implemented in multi-apartment buildings under financing measures included in the estimates for the use of funding under the Special Climate Change Programme), the maximum amount of subsidy allocated is limited by an environmental performance criterion: the amount of funding may not exceed LTL 0.5 per kg CO_2 equivalent reduction per project (LTL 1 per 2 kg CO_2 equivalent reduction per project). The plan detailing the estimates for the use of funds available under the Special Climate Change Programme may specify other environmental performance criteria which limit the amount of subsidy. In the case of small-scale projects, a maximum subsidy amount is set which corresponds to one unit of capacity for the technology deployed, or size or area. The maximum subsidy amounts approved by the Ministry of the Environment are published on the websites of the Ministry of the Environment and of the competent body (the LAAIF).

Project costs are to be paid and projects are to be monitored as specified in the funding agreement, if no agreement has been concluded, in the Procedure for the use of funds available under the Special Climate Change Programme. Project expenditure may be paid in the form of reimbursements or by the clearance of accounts method. At the request of an applicant, the LAAIF may decide to make an advance payment of up to 30% of the subsidy. The amount paid as an advance is deducted accordingly from the other payments.

The first invitation to apply for aid under the Special Climate Change Programme was published in 2011. The following funding measures were established to promote the use of renewable energy sources: installation of biofuel-fired boilers with a capacity of between 500 kW and 5 MW for district heating in municipalities with a total population not exceeding 100 000, and biofuel-fired boilers of up to 500 kW capacity in public buildings. In 2012, the applications submitted were evaluated and successful applications were selected, financing agreements were signed with selected applicants, and district heating boilers were purchased.

It is planned that – by 2015 – 28 projects will be implemented under the 'Installation of biofuel-fired boilers with a capacity of between 500 kW and 5 MW for district heating in municipalities with a total population not exceeding 100 000' funding measure, the total capacity of the planned boiler-houses for the production of heat being 78.85 MW. The total amount of subsidy allocated to all the projects is LTL 39.34 million (EUR 11.39 million). Under the 'Installation of biofuel-fired boilers of up to 500 kW capacity in public buildings' funding measure, 79 projects are planned, and LTL 25.61 million (EUR 7.42 million) of funding has been allocated. The total capacity of the planned boiler-houses for the production of heat is 22.27 MW. The projects funded under the Special Climate Change Programme are currently at the implementation stage; the subsidies have not yet been paid out in full.

Environmental pollution tax relief

Pursuant to paragraphs 3 and 4 of Article 5 of the Law on Pollution Tax (Žin. 1999, No 47-1469; 2002, No 13-474; 2005, No 47-1560), taxpayers polluting the environment from mobile and/or stationary sources of pollution are exempt from environmental pollution tax, provided that they use biofuels for energy and transport in their operations and produce supporting documentary evidence:

1) the exemption from tax on environmental pollution from mobile pollution sources applies to natural and legal persons polluting the environment from vehicles running on biofuel meeting the set standards, if they provide documents attesting to the use of biofuel;

2) natural and legal persons having produced the documents attesting to the use of biofuel are exempt from tax on pollution from stationary pollution sources in respect of emissions into the air resulting from the use of biofuel.

The tax on pollution from stationary pollution sources is payable by operators in the energy industry using fuel-burning installations with a nominal thermal capacity greater than 50 MW; operators using installations with a thermal input of 20.0 MW or more. Also by natural and legal persons polluting the environment who are required to hold a pollution permit as laid down by the Government or a government-authorised body.

Excise duty relief for biofuels

Law No XI-722 of 1 April 2010 amending the Law on Excise Duties (Žin. 2010, No 45-2174) provides for excise duty relief as follows for energy products made from or with the addition of biomaterials:

- for energy products that exceed the mandatory percentage of additives of biological origin laid down by law for petroleum products supplied to the country's domestic market, the rate of excise duty is reduced by a proportion corresponding to the percentage of additives of biological origin in excess of the mandatory percentage laid down by law;
- for energy products in which the proportion of additives of biological origin is 30% or higher, the excise duty rate is reduced by a proportion corresponding to the percentage of additives of biological origin in the product. Where products are manufactured only from biomaterials, they are exempt from excise duties.

According to data presented by the State Tax Inspectorate under the Ministry of Finance, an excise duty reduction totalling LTL 3.84 million (EUR 1.11 million) was granted in respect of biofuels sold on the domestic market in 2011. The distribution of the excise duty reduction by product was as follows: LTL 2.18 million (EUR 0.63) for bioethanol added to engine petrol; LTL 1.65 million (EUR 0.48 million) for bioethanol (E-15 petrol); LTL 114 (EUR 33) for fatty acid methyl ester (FAME) added to diesel; LTL 9 858 (EUR 2 855) for bio-gasoil.

An excise duty reduction totalling LTL 3.70 million (EUR 1.07 million) was granted in respect of biofuels sold on the domestic market in 2012. The distribution of the excise duty reduction by product was as follows: LTL 1.91 million (EUR 0.55 million) for bioethanol added to engine petrol; LTL 1.49 million (EUR 0.43 million) for bioethanol (E-15 petrol); LTL 97 667 (EUR 28 286) for fatty acid methyl ester (FAME) added to diesel; LTL 201 856 (EUR 58 462) for bio-gasoil.

Funding the development of biofuel production

The Rules on the funding of the development of biofuel production, approved by Order No 3D-417 of the Minister for Agriculture of 25 July 2008 (Žin. 2008, No 88-3551; 2009, No 110-4686; 2011, No 78-3848), provide for compensation of biofuel producers for the raw material acquired to produce rapeseed oil, rapeseed methyl(ethyl)ester and dehydrated ethanol. The support amounts to LTL 160/t (EUR 46/t) for rapeseed and LTL 114/t (EUR 33/t) for cereal grain.

LTL 21.619 million (EUR 6.26) was allocated for compensatory payments from the State Budget in 2011. 138 036 tonnes of rapeseed and 117 930 tonnes of cereal grain were bought for biofuel production.

LTL 27.749 million (EUR 8.04) was allocated for compensatory payments from the State Budget in 2012. 165 383 tonnes of rapeseed and 65 722 tonnes of cereal grain were bought for biofuel production.

State aid to reimburse part of the price of rapeseed oil intended for the production of rapeseed methyl (ethyl) ester (RME) and rapeseed and cereal grain purchased for the production of dehydrated ethanol is granted from the State budget.

3.1. Information on how supported electricity is allocated to final customers for the purposes of Article 3(9) of Directive 2009/72/EC *(Article 22(1)(b) of Directive 2009/28/EC))*

698 997 MWh of supported electricity generated from renewable energy sources was supplied to the electricity grid (final consumers) in 2011, and 755 062 MWh in 2012.

Suppliers inform final customers about the electricity supplied pursuant to the Rules on the provision of information concerning energy activities to State institutions, bodies and third parties, approved by Order No 1-145 of the Minister for Energy of 19 May 2010 (Žin. 2010, No 59-2923; 2011, No 130-6178; 2012, No 145-7484). The information provided is verified by the State Energy Inspectorate under the Ministry of Energy.

4. Information on how support schemes have been structured to take into account renewable energy applications that give additional benefits in relation to other, comparable applications, but may also have higher costs, including biofuels made from wastes, residues, non-food cellulosic material, and ligno-cellulosic material *(Article 22(1)c of Directive 2009/28/EC))*.

No support schemes for biofuel production from wastes, residues, non-food cellulosic material or ligno-cellulosic material were applied in 2011-12.

5. Information on the system of guarantees of origin for energy from renewable energy sources and measures taken to ensure the reliability of the system and protect it against fraud *(Article 22(1)d of Directive 2009/28/EC))*

Matters pertaining to guarantees of origin are addressed in the following legislation:

1. Law No XI-1375 on energy from renewable sources:

Articles 28-29 of the Law stipulate that:

- An energy supplier shall, in accordance with the procedure prescribed in the legislation and within its remit, provide its final customers with information on the share or the amount of energy from renewable sources in the energy supplied by the supplier. This share or amount of supplied energy shall be calculated on the basis of the amount of energy from renewable energy sources for which a guarantee of origin has been issued.
- Guarantees of origin shall be issued, transferred and cancelled electronically. Guarantees of origin must be accurate, reliable and protected against forgery.
- The guarantee of origin shall be issued for one unit of energy, one MWh. One generated unit of energy from renewable energy sources may be issued just one guarantee of origin, taking into account the same unit of energy only once.
- The guarantee of origin may be used within 12 months from the moment of production of the respective energy unit. A guarantee not used during that period loses its validity.
- The transfer of guarantees of origin together with or separately from the physical transfer of electricity shall not affect the decision to use statistical transfers of energy, joint projects or joint support schemes.
- The Republic of Lithuania recognises the guarantees of origin issued by other Member States. A guarantee of origin may not be recognised only due to reasonable doubts as to its accuracy, reliability or authenticity.

2. The Rules for the provision of guarantees of origin for electricity generated from renewable energy sources, approved by Order No 4-346 of the Minster for the Economy of 7 October 2005 (Žin. 2005, No 122-4375; 2006, No 42-1534).

The following actions have been performed in order to ensure the reliability of the system of guarantees:

2.1. The transmission system operator *AB Litgrid* has been appointed as a body administering guarantees of origin. The transmission system operator monitors fulfilment of undertakings to provide public-interest services. This ensures that the guarantees of origin of a producer whose electricity was bought in under the support scheme are marked as used.

To ensure the independence of the transmission system operator, the electricity sector was reorganised in 2010 by separating, in terms of ownership, the operator from the activities of electricity supply and production.

2.2. The database of guarantees of origin has been set up to administer the system of guarantees of origin. The following information is registered, collected and stored in the database of guarantees of origin (http://www.litgrid.eu/go.php/kilm_gar_registr):

- The name and address of the participant, the name, surname, position, telephone number and email address of the competent person, the licence or permit number held by the participant (for producers – the number of the electricity generation permit or the permit to increase electricity generation capacities; for suppliers – the supplier licence number and the number of the permit to import electricity), and the participant code assigned upon registration.
- Information on the facilities held by the participant that produce electricity from energy from renewable sources (the facility address, the total/aggregate installed capacity of all generators, the technology used to generate electricity, the type(-s) of energy sources, and the facility code).
- Information on the participant's guarantees of origin (the start and end dates of electricity generation; the date of issue of the guarantee of origin; information on certificates issued under these guarantees of origin; the amount of energy produced from renewable energy sources; the amount of electricity generated from renewable energy sources that is sold/bought; the amount of electricity generated using renewable energy sources promoted under the procedure established by the Lithuanian Government or a Government-authorised institution; the guarantee of origin code assigned to the guarantee of origin).

2.3. The information provided by producers is checked by the State Energy Inspectorate under the Ministry of Energy. The information is checked in the course of scheduled checks as well as at the request of the institution administering the guarantees of origin.

3. On 30 August 2012, a draft order of the Minister for Energy approving the rules on the provision of guarantees of origin for electricity generated from renewable energy sources was submitted: (http://www.lrs.lt/pls/proj/dokpaieska.showdoc_l?p_id=153363&p_query=&p_tr2=&p_org=7_331&p_fix=y). The rules on the provision of guarantees of origin for electricity generated from renewable energy sources lay down the criteria, conditions and requirements for the issue, transfer and cancellation of guarantees of origin for electricity generated from renewable energy sources and arrangements for monitoring and controlling the use of guarantees of origin.

6. Information on developments in the availability and use of biomass resources for energy purposes during the preceding two years *(Article 22(1)(g) of Directive 2009/28/EC))*

***Table 5*:** Biomass supply for energy production in 2011 and 2012

	Amount of domestic raw material (*)		**Primary energy produced from domestic raw materials (ktoe)**		**Amount of raw materials imported from EU (*)**		**Primary energy produced from raw materials imported from EU (ktoe)**		**Amount of raw materials imported from outside the EU(*)**		**Primary energy produced from raw materials imported from outside EU (ktoe)**	
	2011	**2012**	**2011**	**2012**	**2011**	**2012**	**2011**	**2012**	**2011**	**2012**	**2011**	**2012**
Biomass supply for heating and electricity:												
Direct supply of wood biomass from forests and other wooded land for energy production												
Felling waste from State forests	155	169										
Fuel wood from State forests	527.3	550.4										
Indirect supply of wood biomass for energy production												
Residues and by-products from timber industry etc. – sawdust briquettes, granules												
Energy crops												
Biogas	4.5	4.8	2.16	2.3								
Fast-growing trees	7.5	10	2.14	2.86								
Agricultural by-products / processed residues and fisheries by-products												
Straw	13.9	14.2	5.9	6.0								
Biogas from manure, waste of vegetable and animal origin and treatment facility sludge												
Biodegradable fraction of household solid waste, including biological waste												
Biomass from waste (household, industrial, etc.)	186.8				16.1				0		0	
Landfill gas	526.8	400	0.6	0.4								
Biomass supply for transport:												

Most common arable crops for biofuels **Rape:**	260	315	69.6	84.39								
seed					9.29	0.008			26.10	0		
oil					0.09	4.06			14.91	33.28		
Cereals	65	79	12.06	14.72					26.93	11.93		

** Amount of raw material is given in m^3 for biomass from forestry and in thousands of tonnes for biomass from agriculture and fisheries*

*** Amount of domestic raw materials and primary energy from domestic raw material - data from Ministry of Agriculture; amount of imported raw material - data from main biofuel producers. UAB Kurana submitted data only for 2012, and UAB Arvi cukrus has not submitted data.*

Table 5a. Use of agricultural land in Lithuania for growing crops for energy production, 2011-2012

Land use	**Area (ha)**	
	2011	**2012**
1. Land used for most common arable crops:	**146 860**	**177 320**
Rape	125 200	150 980
Cereals	21 660	26 340
2. Land used for fast-growing trees	**1 500**	**2 000**
Willow	1 500	2 000
TOTAL	**148 360**	**179 320**

Over the 2011-2012 period, the total area of agricultural land used in Lithuania for growing crops for energy production (rape, cereals) increased by 30 960 ha. This included a 30 460 ha increase in the area used for growing the most common arable crops (rape, cereals). The area planted with willow trees grown to meet energy needs increased by 500 ha, from 1 500 ha to 2 000 ha.

7. Information on changes in commodity prices and land use during the preceding two years associated with increased use of biomass and other forms of energy from renewable sources *(Article 22(1)(h) of Directive 2009/28/EC)*

Land use changes in 2011-2012 did not have any impact on commodity prices for the following reasons:

1) there was no change in the use of the arable farmland which was used to grow crops for use in energy production in 2009 and 2010. Available arable agricultural land was used for cultivation;

2) in 2011 and 2012, there was 87 900 ha of unused agricultural land in Lithuania which could also have been used to grow food and feed crops or energy crops.

Information on the national land reserves is published by the National Land Service under the Ministry of Agriculture. The national land reserve reports for 2011 and 2012 can be accessed via the following links:

http://www.nzt.lt/get_file.php?file=WmFhWG1NU1ltdHlacUpkbGxKNlRsSmlsbW8lMkJVeDI1MkJobTZTYX1tUFdsR0pocjVlZGxKNXV6cGVabEtuSVlHckx4cUdibkpyRlpuRlZhcG1hbEpuR11XR29iWnVSbTJ1ZG1XYVZac2hpWXBpU2FlRmhscEZvYWNaWWxMOW95TU9nYUoxcnFwUlZhOGlhbzJ1a21wVlR4cFdvblY3STBXeWNuWidEbOdlZWlRJTNEJTNE

http://195.182.79.30/get_file.php?file=azZabG1KbVlsOXhtcUdSbHlKNW9sSm1sYm8lMkZHeDI2aHhhU1N5cEhXeFdKbHI1bWRscDZYem15WmxLbWNZSlBMbUtGdm5KYkdtbXZKY01PWllwR1hvMlNjYTUzRGNHeVVhMlJwWjVwamw1V1RhWjVnbXBLYVdKcVNtOHFWMEptWVlxdVhWNVNibTlGbm9wYWF4cEtVMkpObW1xREp4VzZlbDNPVm9HZyUzRA

8. Information on the development and share of biofuels made from wastes, residues, non-food cellulosic material, and ligno-cellulosic material *(Article 22(1)(i) of Directive 2009/28/EC))*

Biofuel from wastes, residues, non-food cellulosic material and ligno-cellulosic material was not produced or used in 2011-2012.

9. Information on the estimated impacts of the production of biofuels and bioliquids on biodiversity, water resources, water quality and soil quality in the preceding two years (*Article 22 (1)(j) of Directive 2009/28/EC))*

Data submitted by the Ministry of the Environment's regional environmental protection departments (RAAD) on environmental impact assessment (EIA) procedures for biofuels and bioliquids in 2011-12: Marijampolė RAAD area. UAB Ugira, J. Dailidės g. 10, Marijampolė, is implementing a project entitled 'Feasibility study for producing diesel fuel from by-products, secondary raw materials and non-hazardous waste in the village of Mokolai in Šunskai civil parish, Marijampolė municipality'. EIA mandatory. A programme was submitted (under cover of a letter dated 17 August 2010 from Marijampolė RAAD, ref. MRS-1350). On 20 September 2011, UAB Ugira announced that this activity would be renamed 'Technology park for research and development for environment-friendly alternative energy production from by-products and secondary raw materials' and implemented at Karolaukio g. 5, Nendriniškiai, Marijampolė municipality. No report on the planned economic activity has been submitted to the RAAD.

2. Marijampolė RAAD area. Planned production of liquid biofuel from animal fats at a biodiesel or fatty acid methyl ester (FAME) production plant. UAB Arvi cukrus. EIA optional, according to screening opinion MRS-813 of 27 August 2009. The firm will not be implementing this activity; the IPPC permit for producing biodiesel from rape has been cancelled. The firm's activity comprises the drying and storage of agricultural produce.

3. Kaunas RAAD area. Processing of waste from the production units of ŽŪB Pauliukai (Jonava District) into biogas and its combustion in a cogeneration plant at Pauliukai, Jonava District; developer ŽŪB Pauliukai. EIA optional, according to screening opinion No Rl 2-1034/57 of 6 April 2011.

4. Kaunas RAAD area. Biogas production and use in energy production at Lukšiai, Jonava District; developer UAB Bio gamykla. EIA optional, according to screening opinion No 103/(PAV)-D2-2660 of 23 November 2012.

5. Alytus RAAD area: EIA screening carried out in 2011 for the construction of an efficient biogas-fired cogeneration plant, resulting in the adoption of screening opinion No ARV2-5-694 of 6 May 2011. The planned economic activity, namely the production of heat and power from biogas in an efficient biogas-fired cogeneration plant (as a result of installing a biogas-fired cogenerator at Druskininkai district boiler-house) at Pramonės g. 7, Druskininkai, and the installation of biogas reactors and ancillary components (10 bioreactors) at Savanoriai in Druskininkai municipality. Green biomass (maize silage or sugar beet) will be used to produce biogas in the biogas reactors. Green biomass purchased from farmers will be used to produce biogas in sealed anaerobic reactors. The biogas production process at Savanoriai will use about 4 200 m^3 of surface run-off per year; in the event of a shortage of run-off, water which it is planned to extract from a bore-hole on the land parcel may be used. Water will be used in the biogas reactors to homogenise the maize silage/sugar beet. Before the biogas production plant is started up for the first time, the system will be filled with the required amount of water, which will then circulate through the system continuously. The maize silage and/or sugar beet will be mixed with water in raw material dosing units, and the homogenised silage will be processed in the biogas reactors. The water will be drained from the processed maize silage/sugar beet in a separator and returned to the system.

6. Vilnius RAAD area: EIA screening of planned economic activity was carried out in respect of a project entitled 'Biogas production and use in energy production' at Subatiškė in Švenčioniai District in 2011. UAB D&D Group is planning to produce biogas from biomass (maize silage) in a biogas production plant and sell it to UAB Enga. UAB Enga is planning to use the biogas to produce power and heat in a cogeneration plant with a capacity of up to 1 MW that has been built on the same parcel of land. The heat will be used for heating the biogas production facilities and buildings. The power will be used to meet own needs, and the surplus will be sold to electricity distribution grids. It is planned to process 9 570 tonnes of maize silage per year. EIA optional. Letter dated 11 February 2011 from Vilnius RAAD, ref. VR-1.7-233.

7. Vilnius RAAD area: an EIA programme was implemented in 2011 in the village of Vėjinė, Švenčionėliai civil parish, Švenčioniai District, and an EIA report was submitted on the construction by UAB Vėjinė of a biogas-fired cogeneration plant and the modernisation of existing animal housing whilst increasing the number of animals (pigs). UAB Vėjinė intends to increase the number of animals up to the design capacity, i.e. 14 783 pigs. It is planned to build a cogeneration plant to produce heat and power from biogas. The main

raw material used by the cogeneration plant is slurry, manure and maize silage. The programme was approved by Vilnius RAAD by letter dated 2 March 2011, ref. VR-1.7-340. Activity permitted in accordance with submitted EIA report (letter dated 25 October 2011 from Vilniaus RAAD, ref. VR-1.7-1854).

10. Estimated net greenhouse gas emission savings due to the use of energy from renewable sources (*Article 22 (1)(k) of Directive 2009/28/EC))*

Table 6: Net greenhouse gas (GHG) emission savings due to use of energy from renewable sources ('000 tonnes CO_2eq), 2011-2012

Environmental aspects	2011	2012
	'000 t CO_2eq	
Total net GHG emission savings due to use of energy from renewable sources	***1427.56***	***1624.29***
- Net GHG emission savings due to use of electricity from renewable sources*	861.3	924.2*
- Net GHG emission savings due to use of energy from renewable sources in heating and cooling*	400.5	485.05*
- Net GHG emission savings due to use of energy from renewable sources in transport**	165.76	215.04*

* Preliminary data for 2012. More accurate data will be provided in the 2015 report.

Over the 2011-2012 period, total net GHG emission savings rose by 13.8%, from 1 427 560 tonnes CO_2 eq. to 1 624 290 tonnes CO_2 eq.

11. Report (*for the preceding two years*) on and estimate (*for the years up to 2020*) of excess/deficit production of energy from renewable sources compared to the indicative trajectory which could be transferred to/from other Member States and/or third countries, as well as estimated potential for joint projects until 2020 (*Article 22(1)(l) and (m) of Directive 2009/28/EC))*.

In 2011-2012, Lithuania did not make any statistical transfers of energy from renewable sources to or from Member States and/or third countries (see Table 1a).

By 2020, a statistical excess of the amount of renewable energy sources is expected in Lithuania. The excess forecasts remain unchanged from those presented in the National Renewable Energy Action Plan.

In 2011, the survey 'Evaluation of international cooperation in promoting the use of energy from renewable sources', commissioned by the Lithuanian Ministry of Energy, was carried out to analyse the potential and costs of the joint projects of Lithuania and other Member States of the European Union. The survey found that the largest potential for the implementation of joint projects in Lithuania is to be found in district heating systems where the annual heat demand does not exceed 50 GWh.

On 28 February 2011 Lithuania signed a memorandum of understanding with Luxembourg concerning cooperation in the sphere of energy from renewable sources, including the opportunities for statistical transfers and joint projects.

11.1. Details of statistical transfers, joint projects and joint support scheme decision rules

Article 66(3) of Law No XI-1375 on energy from renewable sources stipulates that the rules on statistical transfers of renewable energy sources and on the implementation of joint projects are to be drawn up by 31 December 2012.

12. Information on how the share of biodegradable waste in waste used for producing energy has been estimated, and what steps have been taken to improve and verify such estimates. (*Article 22(1)(n) of Directive 2009/28/EC))*

The calculation of the biodegradable share of waste used for energy production is governed by the following legislation:

1. Order No Dl-810 of the Minister for the Environment of 4 October 2012 approving a methodology for separating the biological fraction of industrial and municipal waste, having regard to the renewable share of energy produced from industrial and municipal waste (Žin. 2012, No 118-5958). Compliance with the methodology is monitored by the Environment Ministry's regional environmental protection departments.

The purpose of the methodology is to establish a procedure for determining the biodegradable fraction of municipal and/or industrial waste (waste generated by manufacturing and other economic activity) used to produce energy from renewable sources.

The biodegradable fraction of municipal waste and/or waste generated by manufacturing or other economic activity is a renewable source.

Procedure for determining the biodegradable fraction of municipal waste and waste generated by manufacturing and other economic activity:

● economic operators producing solid recovered fuel from municipal waste and/or waste generated by manufacturing and other economic activity, are to determine the biodegradable fraction by applying the calculation methods specified in Lithuanian Standard LST EN 15440:2011 'Solid recovered fuel. Method of determining the amount of biomass';

● economic operators using the biodegradable fraction of municipal waste or waste generated by manufacturing and other economic activity to produce biogas are to determine the share of energy from renewable sources on the basis of the amount of biogas produced;

● economic operators using municipal waste or waste generated by manufacturing and other economic activity to produce energy are to determine the biodegradable fraction of the waste by applying the calculation methods specified in Lithuanian Standard LST EN 15440:2011 'Solid recovered fuel. Method of determining the amount of biomass'.

2. The Procedure for determining the composition of mixed municipal waste going to regional non-hazardous waste landfills and for estimating its biodegradable municipal waste content, approved by Order No D1-661 of the Minister for the Environment of 31 August 2011 (Žin. 2011, No 109-5148).

This Procedure stipulates that the composition of mixed municipal waste going to regional non-hazardous waste landfills must be determined in 2012, 2013, 2016, 2018 and 2020, four times per year. The determination of the composition of mixed municipal waste going to landfills is to be organised by the operator of the relevant regional landfill for non-hazardous waste.

The determination of the composition of mixed municipal waste going to landfills must be planned, taking weather conditions into consideration. It must not be carried out when it is raining or snowing, when strong winds are blowing or under other adverse weather conditions, also in the cases when mixed municipal waste is soaked or frozen or there are other factors that would significantly affect the results of determining the composition of municipal waste.

One refuse collection vehicle from each municipal waste landfill operator is selected for the purpose of determining the composition of mixed municipal waste with the intention to represent the waste management system of every municipality. In municipalities of a municipal waste management region having a population above 100 000, a sample of at least 0.5 t of mixed municipal waste is taken, while in the municipalities with a population smaller than 100 000 the mixed municipal waste sample should be at least 0.3 t. The minimum sample of 0.5 t or 0.3 t of mixed municipal waste is taken from five places of a waste heap discharged by the refuse collection vehicle (≈0.1 t or ≈0.06 t from each place).

The following municipal wastes are separated from a sample of at least 0.5 t or 0.3 t of mixed municipal waste into clean containers or other forms of storage: paper and cardboard waste, including packaging, green waste, wood waste including packaging, biodegradable food production waste, natural fibre tissue waste, other biodegradable municipal waste, plastic waste including packaging, combined packaging waste, metal waste including packaging, glass waste including packaging, inert waste (ceramics, concrete, stones etc.), other non-hazardous waste discharged in the regional non-hazardous landfill by accident, electric and electronic equipment waste discharged in a regional non-hazardous waste landfill by accident, battery and accumulator waste and other hazardous waste discharged in the landfill by accident, other municipal waste. Following the sorting of the minimum waste sample of 0.5 t or 0.3 t, containers or other means of storage are weighed and, after subtracting the weight of the empty containers or other means of storage, the weight of every type of municipal waste (in kg) is calculated and the report on the determination of the composition of mixed municipal waste going to landfills is filled in.

On the basis of the data from the reports on landfill waste management inventory (composition determination), the landfill operator shall biannually perform the assessment of the amount of the biodegradable municipal waste disposed in a regional non-hazardous waste landfill. Having determined the amount of the biodegradable municipal waste disposed in a regional non-hazardous waste landfill, the landfill operator fills in the reports on the assessment of the amount of biodegradable municipal waste disposed in a regional non-hazardous waste landfill, which shall specify:

- the total amount of biodegradable municipal waste disposed in the municipal waste management region (in tonnes, t., to three decimal places);
- the amount of biodegradable municipal waste disposed by each municipality of the municipal waste management region whose waste is disposed in the non-hazardous waste landfill of that region (in tonnes, t., to three decimal places).

The net amount of biodegradable municipal waste discharged in a regional non-hazardous waste landfill (in tonnes, t., to three decimal places) is calculated by multiplying the total amount of biodegradable municipal waste (in tonnes, t) by the biodegradability of waste (percentage, %) and dividing the result by 100 %.

The reports on the assessment of the amount of biodegradable municipal waste disposed in a regional non-hazardous waste landfill, prepared by the landfill operator, are submitted annually to the Ministry of the Environment and to the municipalities of the relevant municipal waste management region.

13. Number of operators producing energy from renewable energy sources and change since Lithuania's first progress report on the promotion and use of renewable energy sources

The number of permits issued by the Lithuanian Ministry of Energy for the production of electricity from renewable energy sources, the change in that number and the total capacity of electricity generating installations and the change in capacity over the preceding two years is shown in Table 7.

Table 7. Summary data on power plants producing energy from renewable energy sources

	Number of permits issued by the Lithuanian Ministry of Energy for the production of electricity from renewable energy sources	Year-on-year change in number of permits for the production of electricity from renewable energy sources	Total capacity of electricity generating installations according to permits issued (MW)	Overall change in electricity generating installation capacity according to permits issued (MW)
to 31/12/2010	143		313.104	
to 31/12/2011	205	62	357.148	44.044
to 31/12/2012	459	254	433.895	76.747

316 new power plants producing energy from renewable energy sources have been added since Lithuania's first progress report on the promotion and use of renewable energy sources.

The Kruonis Pumped Storage Plant (KHAE) in Lithuania is the only power plant of its kind in the Baltic States. When demand is low and there is cheap surplus energy, the plant is operated in pump mode and raises water from the Kauno marios reservoir to an upper reservoir, which is 100 m higher. When the upper reservoir is full, it can operate as a normal HEP plant supplying up to 900 MW to the 330kV grid for more than 12 hours. In order to prevent or rectify power system emergencies, it has to be able to provide reserve capacity rapidly: its full capacity can be connected to the grid in less than two minutes.

The number of district heating companies using renewable energy sources to produce energy and the change over the preceding two years is indicated in Table 8.

Table 8. Summary data for district heating companies producing energy from renewable energy sources

	Number of companies using renewable energy sources to produce energy	**Year-on–year change in number of permits for the production of electricity from renewable energy sources**	**Biofuel boiler input (MW)**	**Change in biofuel boiler input (MW)**
to 31/12/2010	27		395.2	
to 31/12/2011	30	3	423.7	28.5
to 31/12/2012	32	2	464.3	40.6

* Lithuanian District Heating Association (LŠTA) dara

Five new DH companies producing energy from renewable energy sources have been added since Lithuania's first progress report on the promotion and use of renewable energy sources.