

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

2011

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Introduction

The Republic of Lithuania Progress Report 2011 on the promotion and use of energy from renewable sources (hereinafter referred to as 'Report') was prepared in pursuance of the provisions of 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) (hereinafter referred to as Directive 2009/28/EC).

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 energy from renewable sources, approved by Resolution No 1314 of the Government of the Republic of Lithuania of 15 September 2010 (*Valstybės žinios* (Official Gazette) 2010, No 113-5757).

The Report relies on the 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 organizations subordinate to them.

1. Sectoral and overall shares and actual consumption of energy from renewable sources in the preceding 2 years (Article 22(1)a) of Directive 2009/28/EC).

Table 1: The sectoral (electricity, heating and cooling, and transport) and overall shares of energy from renewable sources*, 2009-2010

	2009	2010
Energy from renewable sources – heating and cooling (%)	34.46	33.00
Energy from renewable sources – electricity (%)	5.9	7.4
Energy from renewable sources – transport (%)	4.22	3.59
Overall share of energy from renewable sources (%)	19.96	19.72
<i>Of which from cooperation mechanism (%)</i>	0	0

* To achieve a more accurate assessment of the share of final energy consumed by households in the national fuel and energy balance, the Lithuanian Department of Statistics in 2010 carried out an analysis of energy consumption by households in 2009. Link: <http://www.stat.gov.lt/en/catalog/download/release/?id=3703&download=1&doc=1886>.

With regard to the findings of the analysis and methodological assumptions, the Lithuanian Department of Statistics recalculated the consumption by households of firewood and fuel from waste and, respectively, final energy consumption in 2005-2009. The percentage shares of renewable energy shown in Table 1 were calculated using the recalculated final energy consumption data for 2005.

Table 1a: Calculation table for the renewable energy contribution of each sector to final energy consumption (ktoe), 2009-2010

	2009	2010
(A) Gross final consumption of RES for heating and cooling	876	881
(B) Gross final consumption of electricity from RES	59	70
(C) Gross final consumption of energy from RES in transport	52	45
(D) Gross total renewable energy consumption	987	996
(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 $(D)-(E)+(F)$	987	996

Table 1.b: Total actual contribution (installed capacity, gross electricity generation) from each renewable energy technology in the Republic of Lithuania in 2009-2010 to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity

	Year n-2		Year n-1	
	MW	GWh	MW	GWh
Hydro*:	116	419	116	419
non pumped	116	419	116	419
<1MW	17	61	17	61
1MW-10 MW	9	33	9	33
>10MW	90	325	90	325
pumped	760	715	760	755
mixed	0	0	0	0
Geothermal	0	0	0	0
Solar:	0	0	0	0

<i>photovoltaic</i>	0	0	0	0
<i>concentrated solar power</i>	0	0	0	0
Tide, wave, ocean	0	0	0	0
Wind*:	98	174	133	244
<i>onshore</i>	98	174	133	244
<i>offshore</i>	0	0	0	0
Biomass:	24	102	29	147
<i>solid biomass</i>	16	87	16	116
<i>biogas</i>	8	15	13	31
<i>bioliquids</i>	0	0	0	0
TOTAL	238	695	278	810
<i>of which in CHP</i>	24	102	29	147

* Normalized generation of hydro-energy and wind energy is shown

Table 1c: Total actual contribution (final energy consumption) from each renewable energy technology in the Republic of Lithuania in 2009-2010 to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)

	2009	2010
Geothermal (excluding low temperature geothermal heat in heat pump applications)	3	2
Solar	0	0
Biomass:	873	879
<i>solid biomass</i>	870	874
<i>biogas</i>	3	5
<i>bioliquids</i>	0	0
Renewable energy from heat pumps:	0	0
- of which aerothermal		
- of which geothermal		
- of which hydrothermal		
TOTAL	876	881
<i>Of which district heating</i>	21%	21%
<i>Of which biomass in households</i>	67%	65%

Table 1d: Total actual contribution from each renewable energy technology in the Republic of Lithuania in 2009-2010 to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)

	2009	2010
Bioethanol/ bio-ETBE	14	10
<i>Of which Biofuels Article 21.2</i>	0	0
<i>Of which imported</i>	2	2
Biodiesel	38	35
<i>Of which Biofuels Article 21.2</i>	0	0
<i>Of which imported</i>	29	13
Hydrogen from renewables	0	0
Renewable electricity	1	1
<i>Of which road transport</i>	1	1
<i>Of which non-road transport</i>	0	0
Others (as biogas, vegetable oils, etc.)	0	0
<i>Of which Biofuels Article 21.2</i>	0	0
TOTAL	53	46

2. Measures taken in the preceding 2 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
2009-2011					
<p>1. (A) National Strategy for the development of energy from renewable sources, approved by Resolution No 789 of the Government of the Republic of Lithuania of 21 June 2010 (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 the Republic of Lithuania of 23 June 2010 (Official Gazette 2010, No 78-4030).</p> <p>The main objective: by way of increasing the share of energy from renewable sources in the national energy balance, to maximize 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 the international efforts to reduce greenhouse gas emissions.</p>	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
<p>2. Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources (Official Gazette 2011, No 62-2936)</p> <p>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.</p>	Regulatory	Wider use of energy from renewable sources	Energy producers and consumers, governmental and local authorities	Existing	Since 2011
<p>3. The prices of buying-in of electricity from renewable energy sources</p> <p>Resolution No 7 of the National Control Commission for Prices and Energy of 11 February 2002 on the prices of public service obligations in the electricity sector (Official Gazette 2002, No 16-648; Information Notices, 2008, No 16-217; No 77-1002; Official Gazette 2009, No 108-4576) established the average prices for the buying-in of electricity generated using energy from renewable</p>	Financial	Increase in the use of electricity generation from renewable sources of energy	Producers of electricity from renewable sources of energy	Existing	Since 2002

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
<p>sources and energy from waste as well as the terms of application of those prices:</p> <p>1) hydroelectric power plants – LTL 0.26/kWh (applicable as of 1 January 2009);</p> <p>2) wind power plants – LTL 0.30/kWh (applicable as of 1 January 2009);</p> <p>3) power plants using biofuels to generate energy – LTL 0.30/kWh (applicable as of 1 January 2009);</p> <p>4) solar (photovoltaic) power plants according to peak power: up to 100 kW – LTL 1.63/kWh, from 100kW to 1 MW – LTL 1.56/kWh; above 1 MW – 1.51 kWh (applicable as of 1 January 2010).</p>					
<p>4. Reduced rates for connecting a power plant using energy from renewable sources to the grid</p> <p>The Procedure for the promotion of the generation and purchasing of electricity generated using sources of renewable energy, adopted by Resolution No 1474 of the Government of the Republic of Lithuania of 5 December 2001 approving the legislation necessary for the implementation of the Law on Electricity of the Republic of Lithuania (Official Gazette 2004, No 9-228; 2006, No 100-3862), stipulates that producers whose power plants use renewable energy sources to generate energy shall benefit from a 40 per cent reduction in the fee for the connection to an electricity distribution network, which shall be covered by the operator of the distribution network.</p> <p>Article 21 of the Law No XI-1375 of the Republic of Lithuania on Energy From Renewable Sources, adopted on 12 May 2011 (Official Gazette 2011, No 62-2936), states that the connection of power plants to the power grid is a public service obligation and the costs association with the connection of power plants to the power grid shall be distributed between the producer and power grid operator, with regard to the power grid property boundaries. The costs shall be distributed in the following proportions:</p> <ul style="list-style-type: none"> • where the installed capacity of a power plant of the producer being connected exceeds 350 kW, the producer shall pay 40 per cent for the costs of connection to the grid, and the connecting operator shall cover 60 per cent of the connection costs; • where the installed capacity of the power plant of the producer being connected exceeds 30 kW but is not above 350 kW, the producer shall pay 20 per cent of the costs of connection to the grid, and the connecting operator shall cover 80 per cent of the connection costs; • where the installed capacity of the power plant of the producer being connected does not exceed 30 kW, the producer's plant shall be connected free of charge and the connecting operator shall cover 100 per cent of the connection costs. <p>Resolution No O3-235 of the National Control Commission for Prices and Energy of 29 July 2011 (Official Gazette 2011, No 101-4777) approved the</p>	Financial	Increase in the use of electricity generation from renewable sources of energy	Producers of electricity from renewable sources of energy	Existing	Since 2004

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
Methodology for setting the tariffs for connecting electricity installations to the power grid, which governs the procedure for setting the tariffs for connecting electricity installations to the power grid.					
<p>5. Compulsory mixing of biofuels into mineral fuels</p> <p>(A) Order No 147 of the Minister for the Economy of the Republic of Lithuania 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 (Official Gazette 2001, No 37-1269; 2005, No 35-1158; 2008, No 70-2669)</p> <p>The Rules for trade in petroleum products, biofuels, bio-oils and other combustible liquid products in the Republic of Lithuania stipulate that petroleum products supplied to the national market must meet the following requirements:</p> <ul style="list-style-type: none"> • from 1 January 2007, 95 RON engine petrol must be produced using bio-ethyltertiarybutylether (hereinafter referred to as 'bio-ETBE'), which, in mixture with petrol, must account for at least 7 per cent of the volume but not more than 15 per cent of the volume; from 1 October 2008, the additive bio-ETBE, mixed with 95 RON petrol, must account for at least 10 per cent but not more than 15 per cent of the volume; • from 1 January 2007, 95 RON engine petrol produced without bio-ETBE must contain 5 per cent (permissible error: minus 0.5 per cent of the volume) of bioethanol; the bioethanol content error in bioethanol E85 may be plus or minus 0.5 per cent; • from 1 January 2007, diesel (except for class 2 arctic diesel) must contain 5 per cent (permissible error: minus 0.5 per cent of the volume) of fatty acid methyl ester (hereinafter referred to as FAME), which belongs to the group of fatty acid monoalkyl esters and is made of vegetable oils or animal fat. The FAME amount in diesel may exceed 5 per cent of the volume if the diesel and FAME mixture meets the mandatory quality requirements and is marked in accordance with the procedure prescribed by the Rules for trade in petroleum products, biofuels, bio-oils and other combustible liquid products in the 	Regulatory	Growth of the use of energy from renewable sources in transport sector	Suppliers of petroleum products	Implemented	2005-2010

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
<p>Republic of Lithuania. (B) Order No 1-346 of the Minister for Energy of the Republic of Lithuania 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 (Official Gazette 2010, No 148-7625).</p> <p>The Rules for trade in petroleum products, biofuels, bio-oils and other combustible liquid products in the Republic of Lithuania state that petroleum products supplied to the national market must meet the following requirements:</p> <ul style="list-style-type: none"> • 95 RON engine petrol must be produced using bio-ethyltertiarybutylether (hereinafter referred to as 'bio-ETBE'), which, in mixture with petrol, must account for at least 10 per cent of the volume but not more than 22 per cent of the volume; • 95 RON engine petrol produced without bio-ETBE must contain a 5 per cent (permissible error: ± 0.5 per cent) content of bioethanol; the error of bioethanol content in E85 bioethanol may be ± 0.5 per cent; <p>diesel (except for class 2 arctic diesel) must contain 5 per cent (permissible error may be ± 0.5 per cent) of fatty acid methyl ester (hereinafter referred to as FAME), which belongs to the group of fatty acid monoalkyl esters and is made of vegetable oils or animal fat. The FAME amount in diesel may exceed 5 per cent of the volume if the diesel and FAME mixture meets the mandatory quality requirements and is marked in accordance with the procedure prescribed by the Rules for trade in petroleum products, biofuels, bio-oils and other combustible liquid products in the Republic of Lithuania.</p>	Regulatory	Growth of the use of energy from renewable sources in transport sector	Suppliers of petroleum products	Existing	2011
<p>6. Excise reduction for biofuels</p> <p>In 2010, the legal basis for excise reduction for biofuels consisted of the Law No IX-1987 of 29 January 2004 amending the Law of the Republic of Lithuania on Excise Duties (Official Gazette 2004, No 26-802) which provides that in respect of energy products produced from materials of biological origin or with their extenders the excise duty rate shall be reduced in proportion to the percentage share of biological extenders per 1 tonne of product.</p> <p>The Law amending Article 38 of the Law of the Republic of Lithuania on Excise Duties of 9 December 2009 (Official Gazette 2009, No 151-6784) establishes the following excise rate reductions for products made of materials of biological origin or with their extenders:</p> <ul style="list-style-type: none"> • for energy products exceeding the percentage share of extenders of biological origin required by legislation in the petroleum products supplied to the national market, the excise rate shall be reduced in proportion to the percentage share of extenders of biological origin which is above the percentage share of extenders of biological origin required by legislation; • for energy products in which the percentage share of extenders of 	Financial	Growth in the production of energy products containing materials of biological origin	Producers of energy products	Existing	Since 2004

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
biological origin is 30 per cent or more, the excise rate shall be reduced in proportion to the percentage share of extenders of biological origin in the product, or the product shall be exempted from the excise duty if it is made only from materials of biological origin.					
<p>7. Funding of biofuel production</p> <p>Pursuant to the Rules on the funding of biofuel production development, approved by Order No 3D-417 of the Minister for Agriculture of the Republic of Lithuania of 25 July 2008 (Official Gazette 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 rape seed and cereal grain (hereinafter referred to as 'raw material') purchased for the production of dehydrated ethanol shall be compensated from State Budget funds as State aid. Aid beneficiaries receive compensations for the costs of acquisition (cultivation) of raw material incurred from January 1 of the current year to November 15 of the current year: LTL 160/t for rapeseed and LTL 114 for cereal grain.</p>	Financial	Growth in agricultural production used in the production of biofuel	Biofuel producers	Existing	Since 2008
<p>8. Pollution tax exemption</p> <p>Pursuant to paragraphs 3 and 4 of Article 5 of the Law of the Republic of Lithuania on Pollution Tax (Official Gazette 1999, No 47-1469; 2002, No 13-474; 2005, No 47-1560), taxpayers polluting the environment from mobile and/or stationary sources of pollution shall be exempted from the pollution tax, provided that they use biofuels for energy and transport in their operations and produce supporting documentary evidence:</p> <p>1) the exemption from the tax for pollution from mobile pollution sources shall apply to natural and legal persons polluting the environment from vehicles running on biofuel meeting the set standards, if they provide the documents attesting the use of biofuel;</p> <p>2) natural and legal persons having produced the documents attesting the use of biofuel shall be exempted from the tax for pollution from stationary pollution sources in respect of the atmospheric emissions resulting from the use of biofuel. The tax for pollution from stationary pollution sources shall be paid by operators using, in the energy industry, fuel burning installations with a nominal thermal power greater than 50 MW as well as by operators using at least one solid fuel boiler whose thermal power amounts to or is greater than 0.5 MW or use a stationary incineration source whose thermal power amounts to or is greater than 1.0 MW.</p>	Financial	Growth in consumption of biofuel for transport	Biofuel consumers (from mobile pollution sources)	Existing	Since 2003
	Financial	Growth in consumption of biofuel for energy	Biofuel consumers (from stationary pollution sources)	Existing	From 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
<p>9. European Union structural assistance</p> <p>Annex to the Operational Programme for cohesion promotion approved by Resolution No 787 of the Government of the Republic of Lithuania of 23 July 2008 (Official Gazette 2008, No 95-3720, No 142-5628; 2009, No 36-1388, No 68-2773).</p> <p>Description of the Conditions of Financing for the projects of the 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 the Republic of Lithuania of 29 September 2008 (Official Gazette 2008, No 117-4460). Order No 712 of the Government of the Republic of Lithuania of 2 June 2010 (Official Gazette 2010, No 68-3408) transferred, from the funds allocated by the Ministry of the Environment of the Republic of Lithuania to the measure 'Installation of air pollution reduction and monitoring systems in major energy objects', the amount of LTL 75 million for the implementation of the projects under the measure 'Use of renewable energy sources in energy production', administered by the Ministry of Energy of the Republic of Lithuania.</p>	Financial	Construction and upgrading of facilities using energy from renewable sources in energy production	Energy producers	Existing	Since 2010
<p>10. Lithuanian Environmental Investment Fund</p> <p>Law of the Republic of Lithuania on Pollution Tax (Official Gazette 1999, No 47-1469; 2002, No 13-474, No 123-5550; 2003, No 48-2108, No 61-2761; 2004, No 25-746, No 61-2188; 2005, No 47-1560; 2008, No 18-631).</p> <p>Procedure for the implementation and supervision of the investment projects financed from the funds of the Programme of the Lithuanian Environmental Investment Fund, approved by Order No 437 of the Minister for Environment of the Republic of Lithuania of 29 August 2003 (Official Gazette 2003, No 85-3890; 2011, No 46-2206).</p>	Financial	Construction of facilities using energy from renewable sources in energy production	Energy producers	Existing	Since 2000
<p>11. Lithuanian Rural Development Programme 2007-2013</p> <p>Subsidies are provided from the Lithuanian Rural Development Programme for 2007–2013. The intensity of support varies from 40-65 % of eligible project expenses. The maximum project support amount depends on the measure of the programme and may range from EUR 40 000 to EUR 2.8 million.</p>	Financial	Electricity generation in wind power plants, biogas production	Farmers	Existing	2007-2013
<p>12. Website 'Renewable energy sources in Lithuania'</p> <p>This website, available in both Lithuanian and English, is a joint project by the State enterprise Energy Agency, the Ministry of Energy of the Republic of Lithuania and the Danish consulting firm Danish Energy Management A/S. The website presents current information on the legal regulation of 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 the Lithuanian territory, which allows user-</p>	Informational	Public awareness raising	Energy producers and consumers, institutions of science and higher education, public and local authorities	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
friendly search by location or specific RES type. It also gives statistics on RES use in Lithuania and the European Union. http://www.avei.lt					
13. Lithuanian State geological survey programme for 2011-2015 Order No D1-743 of the Minister for the Environment of the Republic of Lithuania of 8 September 2010 (Official Gazette 2010, No 109-5612) approved the Lithuanian State geological survey programme for 2011-2015 'Survey of the spatial, renewable and non-traditional resources of the subsoil (geological resources)'. One of the targets is to evaluate the opportunities to use the spatial, renewable and non-traditional resources of the subsoil.	Informational	Evaluation of the opportunities to use the renewable and non-traditional resources of the subsoil	State authorities	Existing	Since 2010
14. Support mechanisms for electricity generated from renewable energy sources to promote the introduction of the most effective technologies In 2011, the National Control Commission for Prices and Energy drafted and approved 18 legislative acts implementing the provisions of the Law of the Republic of Lithuania on Energy from Renewable Sources, the most important of which are the following: 1) Resolution No O3-160 of 30 June 2011 (Official Gazette 2011, No 83-4084) amended the Procedure and Terms for the buying in of heat from independent heat producers; 2) Resolution No O3-166 (Official Gazette 2011, No 89-4301) approved the Methodology for setting the price of public service obligations in the energy sector; 3) Resolution No O3-230 of 29 July 2011 (Official Gazette 2011, No 101-4775) approved the Methodology for setting the rates for the buying-in of biogas into natural gas systems; 4) Resolution No O3-229 of 29 July 2011 (Official Gazette 2011, No 101-4774) approved the Regulations for the auctions held to distribute promotional quotas; 5) Resolution No O3-233 of 29 July 2011 (Official Gazette 2011, No 101-4776) approved the Methodology for setting the rates of electricity generated using energy from renewable sources; 6) Resolution No O3-235 of 29 July 2011 (Official Gazette 2011, No 101-4777) approved the Methodology for setting the tariffs for connecting electricity installations to the power grid; 7) Resolution No O3-249 of 26 September 2011 (Official Gazette 2011, No 78-714) setting the maximum amount of the fixed rate.	Financial	Growth of energy generation from renewable energy sources	Producers of energy from renewable sources	Existing	Since 2011
15. Ensuring power grid access and grid optimization Order No 1-282 of the Minister for Energy of the Republic of Lithuania of 8	Regulatory	Improvement of power grid access for installations	Operators of the transmission system and	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
<p>October 2010 amending Order No 1-214 of the Minister for Energy of the Republic of Lithuania of 24 November 2009 drawing up the List of public service obligations in the electricity sector (Official Gazette 2010, No 122-6226) stipulates that public service obligations in the electricity sector include distribution network preparation for the integration of production from renewable energy sources.</p> <p>Resolution No O3-193 of the National Control Commission for Prices and Energy of 25 July 2011 approved the Requirements for the Procedure for the use of the power grid (Official Gazette 2011, No 100-4737), which govern the general principles and procedure for the development of the Procedure for grid use.</p>		generating energy from renewable sources	distribution networks		
<p>16. Financial instruments promoting the use of felling waste in energy generation</p> <p>In order to create more favourable conditions for the preparation and storage of felling waste, Order No D1-195 of the Minister for the Environment of the Republic of Lithuania of 4 March 2011 amending the Felling Rules (Official Gazette 2011, No 30-1412) amended the Felling Rules, approved by Order No D1-79 of the Minister for the Environment of 27 January 2010 approving the Felling Rules, by adding new paragraphs 48 and 49 providing for the storage of felling waste in special places as well as stumping in certain forest groups and sites.</p> <p>In order to promote felling waste use, the Ministry of the Environment of the Republic of Lithuania issued Order No D1-317 of the Minister for the Environment of the Republic of Lithuania of 18 April 2011 amending the Rules for the preparation of forest management schemes and for the preparation of internal forest management projects (Official Gazette 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 for the preparation of forest management schemes and for the preparation of internal forest management projects, stipulating that the design part of an internal forest management project shall include the estimate of the amount of potentially usable felling waste</p>	Financial	Development of biomass use in energy generation	Forest owners, managers and users	Existing	Since 2011
<p>17. Methodology for calculating the amount of greenhouse gas emissions resulting from the production and use of transport fuels, biofuels and other liquid bio-products</p> <p>Order No D1-2 of the Minister for the Environment of 3 January 2011 (Official Gazette 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</p>	Regulatory	Production of biofuel and liquid bio-products meeting the sustainability criteria	State authorities, producers of biofuel and liquid bio-products	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
<p>atmospheric emissions of CO₂) of the burning of fossil fuel or of biofuels or liquid bio-products emitting the same amount of energy.</p> <p>Order No 3-100 of the Minister for Transport and Communications of 21 February 2011 (Official Gazette 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.</p>					
<p>18. Support measures promoting the use of vehicles running on electricity and biofuels in their pure form</p> <p>The Ministry of Transport and Communications put forward proposals on the allocation of the funds of European Union structural assistance for the 2007-2013 period for the implementation of a new complex measure for the development of ecological public transportation. Resolution No 712 of the Government of the Republic of Lithuania of 2 June 2010 amending Resolution 787 approving the Annex to the Operational Programme for cohesion promotion (Official Gazette 2010, No 68-3408) approved measure VP3-3.3-SM-01-V 'Complex development of ecological public transportation. This measure supports the acquisition of ecological public transport vehicles (trolleybuses and buses running on gas, electricity and hybrid engines)</p>	Financial	Growth in the use of vehicles running on electricity	Manufacturers and users of vehicles	Existing	Since 2010
<p>19. Simplification of the construction permit issuance procedures for smaller and decentralized installations generating energy from renewable sources of energy, with respect to the specificity of different technologies of renewable energy sources.</p> <p>The following legislation governs the simplification of permit issuance procedures:</p> <p>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 of the Republic of Lithuania (Official Gazette 2009, No 159-7205), adopted in 2009;</p> <p>2) Construction technical regulation STR1.01.07:2010 'Simple structures', approved by Order No D1-812 of the Minister for the Environment of the Republic of Lithuania 29 September 2010 (Official Gazette 2010, No 115-5903);</p> <p>3) Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources, adopted on 12 May 2011 (Official Gazette 2011, No 62-2936);</p> <p>4) Construction technical regulation STR1.01.07:2010 'Simple structures', approved by Order No D1-578 of the Minister for the Environment of the Republic of Lithuania of 19 July 2011 (Official Gazette 2011, No 96-4531)</p>	Regulatory	Improvement of the conditions of construction permit issuance	Investors	Existing	Since 2010
<p>20. The opportunities for statistical transfers and implementation of joint projects of the Republic of Lithuania and other Member States of the European Union in the country were analysed and the potential for such projects was</p>	Informational	Evaluation of the opportunities and potential for joint	State authorities, investors	Existing	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
<p>determined</p> <p>In 2011, the survey ‘Evaluation of international cooperation in promoting the use of energy from renewable sources’, ordered by the Ministry of Energy of the Republic of Lithuania, was carried out to analyze the potential and costs of 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 in the systems of district heating, where the annual heat demand does not exceed 50 GWh.</p>		<p>projects of all types relating to the production of electricity, heat or cooling from renewable energy sources</p>			
<p>21. An analysis of household consumption of final energy was carried out</p> <p>With the aim to obtain a more accurate estimate of the share of household consumption of final energy in the national fuel and energy balance, in 2010 the Department of Statistics of the Republic of Lithuania conducted an analysis of energy consumption by households in 2009.</p> <p>http://goo.gl/tKiul</p>	<p>Informational</p>	<p>Collection of data on the consumption of renewable energy sources</p>	<p>State and local authorities, investors</p>	<p>Existing</p>	<p>2009-2012</p>
<p>22. Analysis of the promotion of the demand for energy from renewable sources</p> <p>Project ‘Economic substantiation of the promotion of the demand for renewable energy sources’ of the Lithuanian Energy Institute won a competition in the fields of 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</p>	<p>Informational</p>	<p>Collection of data on the consumption of renewable energy sources and incentives</p>	<p>Public and local authorities, investors</p>	<p>Planned</p>	<p>2011-2012</p>
2012					
<p>1. Law of the Republic of Lithuania on the Market for Energy Resources (<i>draft</i>)</p> <p>Key objectives of the Law:</p> <ol style="list-style-type: none"> 1) to establish the legal bases for the organization, administration and regulation of the energy resource exchange; 2) to define the legal status of the energy resource exchange operator and to regulate its relations with other persons engaged in energy activities; 3) to enable the operators of the energy resource market to compete effectively on the energy resource market and use a transparent, clearly regulated and non-discriminatory system of trade in energy resources; 4) to harmonize the legal regulation of trade in energy resources in different energy sectors; 5) to establish legal conditions for trade in the derivative instruments of the energy market and its further development; 6) to ensure the differentiation of natural gas supply and trade, i.e. to create the legal conditions for effective trade in natural gas; 	<p>Regulatory</p>	<p>Improvement of transparency in biofuel trade, improvement of competitiveness, legal regulation of trade in renewable energy resources</p>	<p>Energy producers, sellers of biofuel</p>	<p>Planned</p>	<p>Since 2012</p>

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
<p>7) to enable the operators of the energy resource market to effectively trade in biofuel and petroleum product reserves by establishing a centralized electronic trade system;</p> <p>8) to ensure a sustainable, transparent and integral development of the energy resource market based on effective competition and non-discrimination.</p> <p>http://www.lrs.lt/pls/proj/dokpaieska.showdoc_l?p_id=116980&p_org=&p_fix=n&p_gov=n</p>					
<p>2. Procedure for the promotion of the use of renewable energy sources in energy generation (<i>draft</i>)</p> <p>The Procedure aims to establish the procedures and conditions for the application of the incentives that make up the scheme for the assistance to the use of renewable energy sources in energy generation.</p> <p>http://www.lrs.lt/pls/proj/doknaieska.showdoc_l?p_id=114307&p_query=&p_r2=&p_org=15&p_fix=n&p_gov=n</p>	Regulatory	Wider use of renewable energy sources	Producers of electricity from renewable energy sources	Planned	Since 2012
<p>3. Rules on permit issuance for activities in the electricity sector (<i>draft</i>)</p> <p>The Rules on permit issuance for activities in the electricity sector (<i>draft</i>) establish a simplified procedure for permit issuance for the development of the capacities of electricity generation from renewable energy sources.</p> <p>http://www.lrs.lt/pls/proj/doknaieska.showdoc_l?p_id=114592&p_query=&p_r2=&p_org=&p_fix=n&p_gov=n</p>	Regulatory	Improvement of the conditions of permit issuance for development	Producers of electricity from renewable energy sources	Planned	Since 2012
<p>4. Preferential forwarding of electricity generated from renewable energy sources through the electricity transmission or distribution networks</p> <p>Article 17 of Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources (Official Gazette 2011, No 62-2936) provides that the power grid operator must preferentially accept, transmit and/or distribute at transparent and non-discriminatory rates the electricity amount generated from renewable energy sources offered by the producer. The producer is granted this right of preference for electricity reception, transmission and/or distribution in respect of the electricity produced by other electricity producers who use non-renewable energy sources.</p> <p>Resolution No O3-193 of the National Control Commission for Prices and Energy of 25 July 2011 adopted the Requirements for the Procedure for the use of the power grid (Official Gazette 2011, No 100-4737), which govern the general principles and procedure for development of the procedure for the use of the power grid. The Requirements are aimed to establish clear requirements for grid operators ensuring that the grid use procedure developed by them enables the producers using renewable energy sources for electricity generation</p>	Regulatory	Increase in electricity generation from renewable energy sources	Transmission system operator and distribution network operator, producers of electricity from renewable energy sources	Planned	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
to use operator networks in line with the principles of transparency, objectiveness and non-discrimination.					
<p>5. Compulsory mixing of biofuel into mineral fuel</p> <p>No 1-311 of the Minister for Energy of the Republic of Lithuania of 22 December 2011 amending Order No 1-346 of the Minister for Energy of the Republic of Lithuania 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 (submitted for publication in <i>Valstybės žinios</i> (Official Gazette)).</p> <p>The amended Rules for trade in petroleum products, biofuels, bio-oils and other combustible liquid products in the Republic of Lithuania prescribe that as of 1 January 2012 diesel (except arctic fuel of classes 1 and 2) must contain 5-7 per cent of biofuel (permissible error is ± 0.5), while making sure that the mandatory share of biofuel in diesel accounts for 6.25 per cent from 1 January 2012, 6.5 per cent from 1 January 2013 and 7 per cent from 1 January 2014. The content of biofuel in diesel must be above 7 per cent where the diesel-biofuel mixture is in compliance with the mandatory quality standards of diesel and is marked in accordance with the procedure prescribed by the Rules for trade in petroleum products, biofuels, bio-oils and other combustible liquid products in the Republic of Lithuania.</p>	Regulatory	Growth of the use of renewable energy sources in the transport sector	Petroleum product suppliers	Planned	Since 2012
<p>6. Measures under the Programme for industrial biotechnology development in Lithuania for 2007-2010, approved by Resolution No 1050 of the Government of the Republic of Lithuania of 24 October 2006 (Official Gazette 2006, No 114-4359):</p> <p>1) to search for new biofuel components and to develop technological research into second-generation biofuel production;</p> <p>2) to expand the development of new technologies for the production of biodiesel and bio-oils using bio-catalysts;</p> <p>3) to develop technologies for a rational use of the by-products of biofuel production.</p> <p>The Programme for industrial biotechnology development in Lithuania for 2011-2013, approved by Order No 4-118 of 3 March 2011 (Official Gazette 2011, No 28-1361) envisages a measure aimed at the development of technologies for second-generation biofuel production and improvement of the existing production technologies.</p>	Regulatory	Industrial biotechnology development	Technology developers	Planned	2011-2013
7. To draft and approve a construction technical regulation setting the	Regulatory	Increase in efficient	Designers,	Planned	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
<p>requirements for low-energy buildings</p> <p>Order No D1-462 of the Minister for the Environment of the Republic of Lithuania of 7 June 2011 amending Order No D1-624 of the Minister for the Environment of the Republic of Lithuania of 20 December 2005 approving the Construction Technical Regulation STR 2.01.09:2005 'Energy performance of buildings. Certification of energy performance' (Official Gazette 2011, No 73-3521) adds to the regulation the terms 'low-energy buildings' and 'almost zero-energy buildings'. Buildings are classified into nine energy performance classes: A++, A+, A, B, C, D, E, F and G, A++ being the highest class.</p>		use of energy resources	investors		
<p>8. To draft and publish technical provisions (rules) governing the connection of biogas supply systems to the natural gas network as well as the connection rates for biogas</p> <p>Resolution No O3-230 of 29 July 2011 (Official Gazette 2011, No 101-4775) approved the Methodology for setting the rates for the buying in of biogas into natural gas systems, which governs the setting of fixed rates for the buying in of biogas into the natural gas transmission and/or distribution systems. The methodology is intended to establish transparent, objective and non-discriminatory principles for the setting of the said buying-in rates. .</p>	Regulatory	Creation of conditions for the supply of gas from renewable energy sources to natural gas networks	Operators of gas transmission and distribution networks	Planned	Since 2012
<p>9. To develop and approve a methodology for the separation of the biodegradable part of municipal waste with regard to the renewable part of energy generated from municipal waste.</p> <p>Order D1-661 of the Minister for the Environment of the Republic of Lithuania of 31 August 2011 (Official Gazette 2011, No 109-5148) approved the Procedure for determining the composition of mixed municipal waste going to regional non-hazardous waste landfills and for the estimation of the content of biodegradable waste therein. This procedure is followed to determine the composition of mixed municipal waste going to regional non-hazardous waste landfills and the content of biodegradable waste therein for the assessment of the achievement of the tasks of reduction of the disposal of municipal biodegradable waste in landfills, also to present reports on the determination of the composition of mixed municipal waste going to regional non-hazardous waste landfills and the estimation of the content of biodegradable waste therein</p>	Regulatory	Development of the use of municipal waste for energy generation	Investors	Planned	Since 2012
<p>10. To develop and approve a procedure for the certification of installers of equipment and systems using renewable energy sources and installer training programmes, and to supplement these programmes with the topics of renewable energy sources, their use as well as economic feasibility and benefits.</p> <p>Order No 1-228 of the Minister for Energy of the Republic of Lithuania of 16 September 2011 (Official Gazette 2011, No 115-5432) approved the</p>	Regulatory	Drafted Procedure for the training and certification of installers of renewable energy generation equipment	Installers of renewable energy generation equipment and systems	Planned	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
Guidelines for the Procedure for the training and certification of installers of renewable energy generation equipment, which establish vocational training requirements for installers of renewable energy generation equipment and their professional qualification requirements. In accordance with the provisions of the mentioned guidelines, the Procedure for the training and certification of installers of renewable energy generation equipment will be drafted in 2012.					
<p>11. To promote and support research into energy from renewable sources</p> <p>The Plan of implementing measures for 2010-2013 of the Lithuanian Innovation Strategy 2010-2020, approved by Order No 4-750/V-1692 of the Minister for the Economy of the Republic of Lithuania and Minister for Education and Science of 7 October 2010 (Official Gazette 2010, No 121-6192), states that the Ministry of Economy of the Republic of Lithuania, the Ministry of Energy of the Republic of Lithuania and the Ministry of Transport and Communications of the Republic of Lithuania must, by the end of 2012, carry out a comprehensive feasibility study on the development of electric vehicle transport (measure 3.1.11). To achieve this objective, Order No 3-265 of the Minister for Transport and Communications of the Republic of Lithuania of 5 May 2011 on the formation of a workgroup formed a workgroup to coordinate the implementation of the comprehensive feasibility study on the development of electric vehicle transport and to address other issues related to the activities in the area of electric vehicles.</p>	Informational	Performance of a comprehensive feasibility study on the development of electric vehicle transport	Research institutions	Planned	2012

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 related to the simplification of administrative procedures aimed at the promotion of 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 of the Republic of Lithuania (Official Gazette 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 power plants with capacities not exceeding 250kW in rural areas and towns provided that the distance from the installation point of the power plant to the boundary of the land plot is not less than 1.5 of the maximum height of the wind power plant;
- when constructing groups of wind power plants (2 and more power plants) 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 1MW 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 in case the municipality council or the director of the municipality administration authorized by the municipality council refuses to approve a detailed plan, a reasoned response must be delivered to the planning organizer within 20 working days of the submission of the detailed plan. Where the municipality council or municipality administration director authorised by the municipality 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 following the detailed planning approval procedure set out in the Procedure for detailed plan approval in the cases where the municipality council or municipality administration director authorised by the municipality council does not approve a detailed plan within the prescribed period, approved by Resolution No 825 of the Government of the Republic of Lithuania of 13 July 2011 (Official Gazette 2011, No 89-4251).

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

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' (Official Gazette 2010, No 115-5903), which lays down simplified requirements for the design and construction of low-capacity wind power plants (up to 30 kW), classifying them as simple structures that do not require a construction permit.

3. Article 16 of Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources, adopted on 12 May 2011 (Official Gazette 2011, No 62-2936), stipulates that permits for the development of the capacities for electricity generation from renewable energy sources shall be issued to producers intending to develop power plants (except for hydroelectric dams) with an installed capacity of not more than 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 shall be issued 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 the Republic of Lithuania of 18 December 2001 (Official Gazette 2001, No 110-4010; 2009, No 63-2522), and based on objective and non-discriminatory principles. It also provides that the

Ministry of Energy, within 30 calendar days from the receipt of the necessary documentation, shall issue a permit to the energy producer to develop the potential for generating electricity from renewable energy sources or shall 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 designation of land use 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 wind power plants 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 use for which the land is intended, to prepare detailed plans or to change the solutions of the general plan, provided that this does not contradict the local management and use regulations;
- wind power plants, 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, environmental impact assessment procedure, the requirement to obtain a construction permit or to carry out an assessment of public health effects;
- solar power plants, solar heat collectors, wind power plants of up to 30 kW in installed capacity that do not exceed the noise level permitted by legislation as well as heat pumps fitted on buildings or integrated into buildings shall be installed without a construction permit.

Article 14 of the Law of the Republic of Lithuania on Energy from Renewable Sources provides that power plants with an installed capacity up to 350 kW and not greater than the permissible 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, shall be connected to the power grids immediately if the energy producer conforms to the simplified design 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 the capacities for electricity generation from renewable energy sources.

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 processing of authorisation, certification and licensing applications for renewable energy installations and on the assistance available to applicants.

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

Electricity transmission and distribution

The issues of the transmission and distribution of energy produced from renewable energy sources are governed by the Law of the Republic of Lithuania on Energy from Renewable Sources.

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 electricity amount generated from renewable energy sources offered by the producer. The producer is granted this right of preference for electricity reception, transmission and/or distribution in respect of the electricity produced by other electricity producers who use non-renewable energy sources.

Transmission of electricity produced from renewable energy sources through the power grid in accordance with a procedure established by laws may be restricted or suspended in 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 the energy producer as a result of such restriction shall not be compensated, unless the appropriate circumstances determining 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 responsible 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 the Law of the Republic of Lithuania on Energy from Renewable Sources stipulates that the power grid operator shall have the right to regulate the electricity amount produced and supplied to the power networks by wind power plants with an installed capacity above 350 kW and hydro-power 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 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.

Sharing the costs of grid connection

The issues of sharing the costs of grid connection are governed by the following legislation:

1. Order No 1-214 of the Minister for Energy of the Republic of Lithuania of 24 November 2009 drawing up the List of public service obligations in the electricity sector (Official Gazette 2009, No 140-6158), which stipulates that the connection of power generating installations using wind, biomass, solar or hydro energy for energy production to the transmission or distribution networks is a public service obligation in the electricity sector;
2. The Procedure for the promotion of the generation and purchasing of electricity generated using sources of renewable energy, adopted by Resolution No 1474 of the Government of the Republic of Lithuania of 5 December 2001 approving the legislation necessary for the implementation of the Law on Electricity of the Republic of Lithuania (Official Gazette 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 energy shall benefit from a 40 per cent reduction in the fee for the connection to an electricity distribution network, which shall be covered by the operator of the distribution network.
3. Article 21 of the Law of the Republic of Lithuania on Energy from Renewable Sources, which states that the connection of power plants to the power grid is a public service obligation and the costs associated with the connection of power plants to the power grid shall be distributed between the producer and power grid

operator, with regard to the power grid property boundaries. The costs shall be distributed in the following proportions:

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

4. The Methodology for setting the tariffs for connecting electricity installations to the power grid, approved by Resolution No O3-235 of the National Control Commission for Prices and Energy of 29 July 2011 (Official Gazette 2011, No 101-4777), which governs the procedure for setting the tariffs for connecting electricity installations to the power grid.

5. The Requirements for the Procedure for the use of the power grid, approved by Resolution No O3-193 of the National Control Commission for Prices and Energy of 25 July 2011 (Official Gazette 2011, No 100-4737), which govern the general principles and procedure for the development of the procedure for grid use.

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 the Republic of Lithuania of 24 November 2009 drawing up the List of public service obligations in the electricity sector (Official Gazette 2009, No 140-6158; 2010, No 122-6226), which stipulates that the preparation (renovation, optimization) of distribution networks for the integration of the production of energy from renewable sources is a public service obligation in the electricity sector.

2. The Law of the Republic of Lithuania on Energy from Renewable Sources, in particular Article 14, 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, optimized, expanded, increased in capacity or otherwise reconstructed.

Article 18 of the 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 optimize, 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 optimize and expand its power grid system and increase the capacity of the power grid.

Article 21 of the Law of the Republic of Lithuania on Energy from Renewable Sources stipulates that the producer shall compensate the power grid operator up to 10 per cent of its costs of power grid optimization, 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 optimization 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 2009-2010.

Public service obligations

Resolution No 1462 of the Government of the Republic of Lithuania of 22 November 2004 granting the authorizations to implement the Law of the Republic of Lithuania on Energy (Official Gazette 2004, No 170-6250) authorised the Ministry of the Economy of the Republic of Lithuania to establish the list of public service obligations as well as the suppliers and the procedure and conditions for supplying such services.

Order No 4-495 of the Minister for the Economy of the Republic of Lithuania of 27 December 2006 drawing up the List of public service obligations in the electricity sector (Official Gazette 2007, No 1-27) set out the public service obligations in the electricity sector, of which the following services are related to the use of renewable energy sources for energy generation:

- 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 the Republic of Lithuania of 8 October 2010 drawing up the List of public service obligations in the energy sector (Official Gazette 2010, No 122-6226) supplemented the List of public service obligations in the energy sector with the services related 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 service obligations and implemented in 2009-2010 and the relevant results.

Buying-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 pursuant to the conditions of their application. Electricity produced from renewable energy sources and supplied to networks is bought in by the transmission system operator.

The application of buying-in prices in Lithuania began from 1 April 2002 and this scheme guarantees buying-in prices for producers until 31 December 2020.

Resolution No 7 of the National Control Commission for Prices and Energy of 11 February 2002 on the prices of public service obligations in the electricity sector (Official Gazette 2002, No 16-648; Information Notices 2008, No 16-217; No 77-1002; Official Gazette 2009, No 108-4576) established the average prices for buying-in of electricity generated using energy from renewable sources and energy from waste as well as the terms of application of those prices. Table 3 shows the prices valid in 2009 and 2010.

Table 3. Prices of buying-in of electricity generated from renewable energy sources in 2009-2010

	2009		2010	
	LTL cents/kWh	EUR cents*/kWh	LTL cents/kWh	EUR cents*/kWh
Hydro-power plants (≤ 10 MW)	26	7.53	26	7.53
Wind power plants	30	8.69	30	8.69
Biomass power plants	30	8.69	30	8.69
Solar (photovoltaic) power plants according to peak power:				
up to 100 kW			163	47.2
from 100 kW to 1 MW			156	45.2
from 1 MW			151	43.7

*LTL 1: EUR 3.4528

The average prices for the buying-in of electricity generated using renewable energy sources by other plants 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 production of electricity from renewable energy sources requiring support (MWh) in 2009-2010 and the support granted (LTL thou).

Table 4. Production of electricity from renewable energy sources requiring support (mWh) in 2009-2010 and the support granted

	2009		2010	
	produced, MWh	support, LTL thou	produced, MWh	support, LTL thou
Transmission network (wind power plants)	141.421	34.648	192.248	27.876
Distribution network	185.521	42.481	263.691	34.522
Small hydro-power plants	74.284	15.228	94.007	9.915
Small wind power plants	15.418	3.777	32.273	4.680
Small solar power plants	0	0	2	3
Big biofuel power plants	74.588	18.274	102.898	14.920
Small biofuel power plants	21.232	5.202	24.512	5.004
TOTAL	326.942	77.129	455.939	62.398

Reduced rates for grid connection

The Procedure for the promotion of the generation and purchasing of electricity generated using sources of renewable energy, adopted by Resolution No 1474 of the Government of the Republic of Lithuania of 5 December 2001 (Official Gazette 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 per cent reduction in the fee for the connection to a electricity distribution network, which shall be covered by the operator of the distribution network.

Under Decision No O3-254 of the National Control Commission for Prices and Energy of 29 October 2010 setting the funds and prices for public service obligations (Official Gazette 2010, No 128-6576), LTL 0.844 million (EUR 244 000) were allocated to cover (compensate for) the reduced fees for grid connection granted by the grid operator to wind, biomass, and solar power plants as well as hydro-power plants with a capacity of up to 10 MW.

European Union structural assistance in 2007-2013

Resolution No 787 of the Government of the Republic of Lithuania of 23 July 2008 approving the Annex to the Operational Programme for cohesion promotion approved the measure 'Use of renewable energy sources in energy production'. Support of LTL 239.93 million (EUR 69.5 million) was allocated for the measure. The following activities have received support:

- modernization of boilers that supply heat to the heat supply systems, i.e. replacing the fuel used with biomass;
- modernization 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 2009-2010, 15 projects were financed under the measure for the total of LTL 143.77 million (EUR 41.6 million):

- LTL 76.54 million (EUR 22.16 million) for eight projects of heat supply enterprises;
- LTL 29.79 million (EUR 8.6 million) for four projects of independent heat producers;
- LTL 37.44 million (EUR 10.8 million) for three projects of industrial enterprises.

The following projects have been completed: one project of a heat supply enterprise (two wood burning boilers, 5 MW each, were installed in a current boiler-house for LTL 4.75 million (EUR 1.37 million)); one project of an industrial enterprise (a co-generation power plant burning biogas of a 4.23 MW electrical power and 5.28 MW thermal power was set up for LTL 18 million (EUR 5.2 million)).

The following facilities will be set up with the completion of the remaining projects:

- seven co-generation plants (total electrical power – 22.6 MW, thermal power – 51.8 MW);
- five water heating boilers (41 MW total power) and one 38 MW boiler would be adapted to burn biofuel;
- one steam boiler (15 MW power);
- two economizers (21.3 MW in total power).

Nine energy generation capacities will use wood waste, two – biogas, and two – landfill gas.

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 per cent 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 'Modernization of agricultural holdings' of Axis I. 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 associated with the production and processing of agricultural produce or services to agriculture and preparation for realisation.
- Measure 1 'Transition to non-agricultural activities' and Measure II 'Support to business start-up and development' of Axis III of the Programme. These measures fund the following activities:
 - operation of installations producing electricity (from renewable energy sources and bioenergy) including gas turbines, diesel plants, biogas and biomass boilers, wind power plants (with the exception of wind parks), hydropower plants (with capacities of up to 4MW) and other installations using renewable energy sources (when not less than 50% of energy is produced for sale);
 - gas production (when not less than 50 per cent of gas (or electricity) is produced for sale);
 - disposal of non-hazardous waste by incineration or other methods when electricity, alternate fuel and biogas are produced for further use as well as disposal of straw and hay waste when an alternate fuel (granules) is produced from a mix one of the components of which is straw, hay or grass.
- Measure 3 'Promotion of rural tourism activities' of Axis III of the Programme. Under this measure, setting up of small-capacity wind power plants and hydropower plants is financed. Electricity produced should be used only for satisfying the needs of the holding.

In 2009-2010, 64 projects received LTL 44.5 million (EUR 12.88 million) in support under the Programme's measures 'Modernization of agricultural holdings', 'Transition to non-agricultural activities' and 'Support to business start-up and development'

Lithuanian Environmental Investment Fund (LAAIF)

The Lithuanian Environmental Investment Fund (hereinafter referred to as LAAIF) provides subsidies in accordance with the Procedure for the implementation and supervision of the 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 the Republic of Lithuania of 29 August 2003 (Official Gazette 2003, No 85-3890; 2011, No 46-2206) as well as the funding areas approved by the Minister for the Environment of the Republic of Lithuania on an annual basis, i.e. a document setting out the types of LAAIF-funded projects and the subsidy amount granted to projects under each type, as well as the methods for application submission and selection.

The maximum amount of a subsidy per applicant is LTL 690 000, however the subsidy of a project may not exceed 80 per cent of all eligible costs. A lower amount of the subsidy available may be set in the financing areas.

60 per cent of the subsidy granted 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 LAAIF. Subsequently, 40 per cent of the subsidy granted is paid out after the applicant has submitted to LAAIF the performance results of the installations that were acquired with support funds for the first year, indicating the actual environmental effect.

In 2009, the following projects related to the production of energy from renewable sources were financed: three boiler-houses burning biofuel (total installed capacity – 7 410 MW, granted support – LTL 754 369.87 (EUR 218 480)); two geothermal heating systems (total installed capacity – 0.585 MW, granted support – LTL 1 102 288.04 (EUR 319 244)); one wind power plant (total installed capacity – 0.250 MW, granted support – 630 000.00 (EUR 182 460)); one solar power plant (total installed capacity – 0.051 MW, granted support LTL 150 000.00 (EUR 43 443)).

In 2010, the following projects related to the production of energy from renewable sources were financed: four boiler-houses burning biofuel (total installed capacity – 13 325 MW, granted support – LTL 1 519 953.76 (EUR 440 208)); six wind power plants (total installed capacity – 1.500 MW, granted support – LTL 2 623 225.36 (EUR 759 738)).

Reduction of the pollution tax

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

- 1) the exemption from the tax for pollution from mobile pollution sources shall apply to natural and legal persons polluting the environment from vehicles running on biofuel meeting the set standards, if they provide the documents attesting the use of biofuel;
- 2) natural and legal persons having produced the documents attesting the use of biofuel shall be exempted from the tax for pollution from stationary pollution sources in respect of the atmospheric emissions resulting from the use of biofuel. The tax for pollution from stationary pollution sources shall be paid by operators using, in the energy industry, fuel burning installations with a nominal thermal capacity greater than 50 MW as well as by operators using at least one solid fuel boiler whose thermal capacity amounts to or is greater than 0.5 MW or use a stationary incineration source whose thermal power amounts to or is greater than 1.0 MW.

Excise reduction for biofuels

In 2010, the legal basis for excise reduction for biofuels consisted of the Law No IX-1987 of 29 January 2004 amending the Law of the Republic of Lithuania on Excise Duties (Official Gazette 2004, No 26-802) which provides that in respect of energy products produced from materials of biological origin or with their extenders the excise duty rate shall be reduced in proportion to the percentage share of biological extenders per 1 tonne of product.

The Law amending Article 38 of the Law of the Republic of Lithuania on Excise Duties of 9 December 2009 (Official Gazette 2009, No 151-6784) establishes the following excise rate reductions for products made of materials of biological origin or with their extenders:

- for energy products exceeding the percentage share of extenders of biological origin required by legislation in the petroleum products supplied to the national market, the excise rate shall be reduced in

proportion to the percentage share of extenders of biological origin which is above the percentage share of extenders of biological origin required by legislation;

- for energy products where the percentage share of extenders of biological origin is 30 per cent or more, the excise rate shall be reduced in proportion to the percentage share of extenders of biological origin in the product, or the product shall be exempted from the excise duty if it is made only from materials of biological origin.

According to the data presented by the State Tax Inspectorate under the Ministry of Finance of the Republic of Lithuania, an excise reduction for a total amount of LTL 77.07 million (EUR 22.32 million) was granted with respect to biofuel sold on the domestic market in 2009. The distribution of the excise duty reduction by product was as follows: LTL 36 755.879 (EUR 10 645) for bioethanol added to engine petrol and LTL 40 311.545 (EUR 11 675) for fatty acid methyl ester (FAME) added to diesel.

An excise reduction for a total amount of LTL 4.82 million (EUR 1.40 million) was granted with respect to biofuel sold on the domestic market in 2010. The distribution of the excise duty reduction by product was as follows: LTL 1.39 million (EUR 402 845) for bioethanol added to engine petrol, LTL 2.18 million (EUR 631 424) for bioethanol (engine petrol E-15) and LTL 1.25 million (EUR 362 499) for fatty acid methyl ester (FAME) added to diesel.

Funding of biofuel production development

The Rules on the funding of biofuel production development, approved by Order No 3D-417 of the Minister for Agriculture of the Republic of Lithuania of 25 July 2008 (Official Gazette 2008, No 88-3551), provide for compensation of biofuel producers for the raw material acquired to produce rapeseed oil, rapeseed methyl(ethyl)ester and dehydrated ethanol. The amount of assistance totals LTL 160/t (EUR 46/t) for rapeseeds and LTL 114/t (EUR 33/t) for cereal grain.

LTL 16 million (EUR 5.66) was allocated for compensations from the State Budget in 2009. 66 816 t of rapeseeds and 46 569 t of cereal grain were bought in for biofuel production.

LTL 20.44 million (EUR 5.92) was allocated for compensations from the State Budget in 2010. 88 252 t of rapeseeds and 55 569 t of cereal grain were bought in for biofuel production.

3.1. Information on how supported electricity is allocated to final customers for purposes of Article 3 (6) of Directive 2003/54/EC. (Article 22(1)b) of Directive 2009/28/EC).

326.943 MWh of supported electricity produced from renewable energy sources were supplied to the power grid (to final consumers) in 2009 and 455.939 MWh in 2010.

Suppliers inform final customers about the energy 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 (Official Gazette 2010, No 59-2923). The control of information provision is performed by the State Energy Inspectorate under the Ministry of Energy.

4. Information on how, where applicable, the support schemes have been structured to take into account RES applications that give additional benefits, 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).

In 2009-2010, no support schemes for biofuel production from wastes, residues, non-food cellulosic material, and ligno-cellulosic material were applied.

5. Information on the functioning of the system of guarantees of origin for electricity and heating and cooling from RES, and the measures taken to ensure reliability and protection against fraud of the system. (Article 22(1)d of Directive 2009/28/EC)).

The issues of guarantees of origin are dealt with in the following legislation:

1. Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources:

Articles 28-29 of the Law provide:

- 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 recognizes the guarantees of origin issued by other Member States. A guarantee of origin may not be recognized 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 Minister for the Economy of the Republic of Lithuania of 7 October 2005 (Official Gazette 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:

1. The transmission system operator *AB Litgrid* has been appointed as a body administering guarantees of origin. The transmission system operator oversees the compliance with public service obligations. This ensures that the origin guarantees of a producer whose electricity was bought in under the support scheme is marked as used.

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

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 dates of electricity generation start and end; the date of issue of the guarantee of origin; the amount of energy produced from renewable energy sources; the amount of sold/bought electricity generated from renewable energy sources; the amount of electricity generated using renewable energy sources promoted under the procedure established by the Government of the Republic of Lithuania or Government-authorized institution; the code of the guarantee of origin assigned to the guarantee of origin).

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.

6. Information on the developments in the preceding 2 years in the availability and use of biomass resources for energy purposes. (Article 22(1)g) of Directive 2009/28/EC).

Table 5: Biomass supply for energy production in 2009 and 2010

	Amount of domestic raw material (*)		Primary energy in domestic raw material (ktoe)		Amount of imported raw material from EU (*)		Primary energy in amount of imported raw material from EU (ktoe)		Amount of imported raw material from non EU(*)		Primary energy in amount of imported raw material from non EU (ktoe)	
	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010
<i>Biomass supply for heating and electricity:</i>												
Direct supply of wood biomass from forests and other wooded land energy generation Fellings	4742	4804	941	951	148	130	29	26	87	88	17	17
Indirect supply of wood biomass for energy generation Residues and co-products from wood industry etc. – sawdust briquettes, granules	290	260	56.8	51	5	22	1	4.3	0.06	0.04	0.012	0.008
Energy crops Short rotation trees	12	18	4.2	6.3								
Agricultural by-products / processed residues and fishery by-products Straw	12	16.3	4.2	5.7								
Biogas from manure, waste of vegetable and animal origin and treatment facility sludge	8.8	20	4.2	9.5								
Biologically decomposable part of household solid waste, including biological waste Landfill gas	0.9	1	0.4	0.5								
<i>Biomass supply for transport:</i>												
Common arable crops for biofuels Rape	318	291	90.6	82.8	102	44	29.2	12.6				

Cereals	74	112	14.3	23.4	11	13	2.2	2.5				
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** Amount of raw material is given in m³ for biomass from forestry and in thousands of tonnes for biomass from agriculture and fishery*

Table 5a. Current domestic agricultural land use for production of crops dedicated to energy production (ha) in 2009-2010

Land use	Area (ha)	
	2009	2010
1. Land use for common arable crops:	190 100	190 000
Rape	162 500	145 000
Cereals	27 600	45 000
2. Land use for short rotation trees	600	900
Willow	600	900
TOTAL	190 700	190 900

Over the 2009-2010 period, a 100 ha decrease was recorded in the use of agricultural land for growing raw materials for biofuels (rape, cereals), from 190 100 ha to 190 000 ha. The areas of willows cultivated for energy needs grew by 300 ha, from 600 ha to 900 ha.

The total area of agricultural land used to cultivate plants for energy production in the period concerned expanded by 200 ha, from 190 700 ha to 190 900 ha.

7. Information on any changes in commodity prices and land use in the preceding 2 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 2009-2010 did not have an impact on commodity prices due to the following reasons:

- 1) the designation of arable agricultural land used for energy crops in 2009 and 2010 was not changed. The available unused arable agricultural land was used for cultivation;
- 2) in 2009 and 2010, the area of available arable agricultural land in Lithuania totalled 350 000, which could also be used for food and feed crops or energy crops.

Information on the national land reserves is published by the National Land Service under the Ministry of the Economy. The links below lead to the reports of the national land reserves for 2009 and 2010:

<http://www.nzt.lt/stotisFiles/uploadedAttachments/Statistika/Zemes%20apskaita/zemes%20fondas%2020100101.pdf>

www.zis.lt/download.php/fileid/71

Information on the reserves of available State land: <http://www.geoportal.lt/lvzfondas/>

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

In 2009-2010, biofuel from wastes, residues, non-food cellulosic material, and lingo cellulosic material was not produced or used.

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 2 years. (Article 22 (1) j) of Directive 2009/28/EC)

According to the data of the regional environmental departments of the Ministry of the Environment, in 2009-2010 environmental impact assessment (hereinafter referred to as EIA) procedures concerning the production of biofuels and bioliquids were carried out in the following cases:

1. Production of biodiesel (FAME) in Kalnėnai village, Užusaliai subdistrict, Jonava District. Customer: *UAB Metoil*. On 5 August 2009, the Kaunas Regional Environmental Department of the Ministry of the Environment of the Republic of Lithuania adopted a positive EIA decision (No KR12-1953/1).

Link: http://krd.am.lt/VI/rubric.php3?rubric_id=144

2. Introduction of the biodiesel production technology, Didžioji g. 2, Kaišiadorys. Customer: *UAB Armeta*. On 24 November 2009, an EIA selection conclusion (No KR12-2867/139) was adopted stating that an EIA was mandatory. Further EIA procedures have not been performed yet.

3. Liquid biofuel from animal fat will be produced at an enterprise producing biodiesel or fatty acid methyl ester (FAME). Customer: *UAB Arvi cukrus*. On 27 August 2009, an EIV selection conclusion (No MRS-813) was adopted that an EIA is not mandatory.

4. A feasibility study on the production of diesel from by-products, secondary raw materials and non-hazardous waste in Mokolai village, Šunskai subdistrict, Marijampolė municipality. Customer: *UAB Ugira*. On 9 August 2010, the Marijampolė Regional Environmental Department of the Ministry of the Environment of the Republic of Lithuania adopted a positive EIA decision.

Link: <http://mrd.am.kt/VI/files/0.232044001285920563.doc>

10. Estimate of the 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: Estimated greenhouse gas (hereinafter referred to as GHG) emission savings from the use of renewable energy (thou t CO₂eq), 2009-2010

Environmental aspects	2009	2010
	thou t CO ₂ eq	
Total estimated net GHG emission saving from using renewable energy	4283.148	4273.842
- Estimated net GHG saving from the use of renewable electricity*	1092.008	1101.308
- Estimated net GHG saving from the use of renewable energy in heating and cooling*	3153.290	3138.924
- Estimated net GHG saving from the use of renewable energy in transport**	37.850	33.610

* The net GHG savings in the electricity and heating sectors for 2009-2010 is indicated on the basis of the data from the National GHG emission inventory report on GHG emissions when biomass is used. Link: <http://www.am.lt/VI/index/php#r/1326>.

The National GHG emission inventory report was prepared pursuant to the methodology recommended in the publications of the United Nations Intergovernmental Panel on Climate Change (IPCC):

- Revised IPCC 1996 Guidelines for National Greenhouse Gas Inventories; IPCC 1997.
- Good Practice Guidance and Uncertainty Management in National Greenhouse Gas Inventories; IPCC 2000.
- Good Practice Guidance for Land Use, Land-Use Change and Forestry; IPCC 2003.

As the GHS emissions from biomass are equated to 0 (zero), this quantity can be assumed to represent the GHG saving in the electricity and heating sectors.

** Net GHH saving from the use of renewable electricity in transport was calculated in line with 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, approved by Order No D1-2 of the Minister for the Environment of 3 January 2011 (Official Gazette 2011, No 2-83), which implement the requirements of Annex V of Directive 2009/28/EC.

11. Report on (for the preceding 2 years) and estimate (for the following years up to 2020) of the excess/deficit production of energy from renewable sources compared to the indicative trajectory which could be transferred to/imported from other Member States and/or third countries, as well as estimated potential for joint projects until 2020. (Article 22 (1) l, m) of Directive 2009/28/EC).

In 2009-2011, the Republic of Lithuania did not perform the statistical transfer to or import from the Member States and/or third countries of energy from renewable sources (see Table 1).

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’, ordered by the Ministry of Energy of the Republic of Lithuania, was carried out to analyze 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 in the systems of district heating, 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 of the Republic of Lithuania on Energy from Renewable Sources stipulates that the rules on statistical transfers of renewable energy sources and on the implementation of joint projects shall be drafted by 31 December 2012.

12. Information on how the share for 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)

Since energy from municipal and industrial waste was not produced in 2009-2011, the biodegradable share of such waste was not calculated.

The calculation of the biodegradable share of waste for energy generation is governed by the legislation listed below:

1. Article 7 of Law No XI-1375 of the Republic of Lithuania on Energy from Renewable Sources states that the Ministry of the Environment of the Republic of Lithuania shall draft and approve the methodology for the separation of the biodegradable part of industrial and communal waste with regard to the renewable share of energy produced from industrial and municipal waste.
2. The Procedure for determining the composition of mixed municipal waste going to regional non-hazardous waste landfills and for the estimation of the content of biodegradable waste therein, approved by Order D1-661 of the Minister for the Environment of the Republic of Lithuania of 31 August 2011 (Official Gazette 2011, No 109-5148).

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

The work of determining the composition of mixed municipal waste going to landfills must be planned taking weather conditions into consideration. The work of composition determination is not carried out during rain, snowfall, under strong winds or otherwise foul weather, also in the cases when mixed municipal

waste is soaked or frozen or there are other factors that would significantly impact the findings of municipal waste composition determination.

One sanitation truck is selected for the work of mixed municipal waste composition determination from each municipal waste landfill operator with the intention to represent the waste management system of every municipality. In the municipalities of a municipal waste management region having a population above 100 000, a minimum sample of 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 sanitation truck (≈ 0.1 t or ≈ 0.06 t from each place).

The following municipal wastes are separated from a minimum sample of 0.5 t or 0.3 t of mixed municipal waste into clean containers or other storages: 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 storages are weighed and, after subtracting the weight of the empty containers or other storages, the weight of every type of municipal waste (in kilograms) 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 annually submitted to the Ministry of the Environment of the Republic of Lithuania and the municipalities of the relevant municipal waste management region.

13. Additional information. (Article 22(3)(a-c) of Directive 2009/28/EC)

Information on Article 22(3)(a) of Directive 2009/28/EC

In the Republic of Lithuania, no single administrative body has been appointed to be responsible for processing authorisation, certification and licensing applications for renewable energy installations and providing assistance to applicants. There are no plans to appoint such a body in the near future.

Information on Article 22(3)(b) of Directive 2009/28/EC

The Republic of Lithuania has not established the procedure for automatic approval of planning and permit applications for renewable energy installations where the authorising body has not responded within the set time limits.

Information on Article 22(3)(c) of Directive 2009/28/EC

The issues of district heating planning are governed by Law No IX-1565 of the Republic of Lithuania on Heat Sector, adopted on 20 May 2003 (Official Gazette 2003, 51-2254). Article 7 of this Law stipulates that municipalities shall plan the heat sector based on the special heat sector plans approved by municipality councils. The main objective of the heat sector special plan is to meet the consumer heating needs at the lowest cost to the consumer and without exceeding the permissible negative environmental impact. The heat sector special plan defines the existing and planned new heat consumer territories and presents the essential technical solutions regarding the alternative energy and fuel type use envisaged for each territory with the aim to satisfy the heat requirements of the consumers in the relevant territory.

Heat sector special plans are devised pursuant to the requirements laid down in Law No I-1120 of the Republic of Lithuania on Territorial Planning, adopted on 20 May 2003, (Official Gazette 1995, No 107-2391) and the Rules on the preparation of heat sector special plans, approved by Order No 4-13/D1-28 of the Minister for the Environment of the Republic of Lithuania and the Minister for Energy of the Republic of Lithuania of 16 January 2004 (Official Gazette 2004, No 12-360). The said Rules stipulate that the preparation of the heat sector special plan shall include an analysis of the current heat sector condition, dividing the municipal territories into zones. The zone boundaries shall be set by the planner with regard to the technical feasibility of changing the heat supply method for the consumers in one zone, the heat requirement parameters and other characteristics. The solutions worked out for the special planning zone of the heat sector of the territory being designed shall specify the existing and/or potential heat generation sources, fuel and energy types, district heating systems, gas and electricity networks, and other energy consuming installations intended for the production of heat and hot water.