NATIONAL RENEWABLE ENERGY ACTION PLAN

2010

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1. SUMMARY OF NATIONAL RENEWABLE ENERGY POLICY

The National Strategy for the Development of Renewable Energy Sources approved by Resolution No 789 of the Government of the Republic of Lithuania of 21 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No $\underline{73-3725}$) indicates that Lithuanian energy policy places an increasingly great emphasis on the development of renewable energy sources. It is considered to be one of the most important priorities of the National Energy Policy.

The development of renewable energy sources will ensure an attractive alternative to traditional energy because the combustion of fossil energy sources substantially increases environmental pollution and accelerates climate warming, which causes natural disasters more and more frequently. The use of renewable energy sources not only helps to resolve problems of climate change, but also creates conditions to combat poverty and problems of energy and economic exclusion. Moreover, global reserves of fossil energy sources are finite and are becoming depleted, and the prices of this type of fuel are unstable.

In Lithuania, the possibilities of wider use of local fossil resources (oil, peat) are limited; therefore, it is extremely important to use renewable energy sources as widely as possible.

The target is to increase the share of renewable energy sources to at least 23 % of the country's final gross energy consumption by 2020. **The development** of renewable energy sources **will ensure** the following:

• sustainable energy supplies to consumers;

• further development of heating and electricity production from renewable energy sources;

• implementation and development of production and use technologies in the transport sector;

• reduction of amounts of pollutants (including greenhouse gas) emitted into the environment;

- saving of fossil energy sources;
- reduction of the dependence on fossil energy sources and their imports;
- diversification of energy sources;
- higher national energy security.

With a view to creating more favourable conditions for the development of renewable energy sources in the country, the following **development directions** of renewable energy sources have been established for all three sectors, namely electricity, heating, and transport:

• to improve the legal basis – to create more favourable conditions of administrative regulation and access to infrastructure for the development of renewable energy sources; to regulate separate fields and thus to encourage consumers and energy producers to opt for renewable energy sources. To create conditions for producers of energy from renewable sources to participate in the market;

• to involve municipal institutions in the implementation of the policy for the development of renewable energy sources and thus to ensure cooperation between state and municipal institutions; to implement the established goals in a more efficient manner;

• to create effective financial (including indirect) support schemes for the development of renewable energy sources designated for consumers and producers taking into account added value generated in the course of using renewable energy sources in the country as well as external benefit with a focus on projects resulting in the effective use of renewable

sources, implementation of advanced technologies, and maximum economic efficiency as well to improve the attractiveness of renewable energy sources to investors;

• to support scientific research and promote cooperation between science and business in the field of renewable energy sources as well as to strengthen the scientific base and create conditions for the development of technologies of renewable energy sources in the country;

• to improve public information and education, to organise trainings for relevant specialists on issues of renewable energy sources as well as to enhance public understanding and acceptance of the development of renewable energy sources and to ensure the quality of services to be provided.

In order to utilise the available potential of renewable energy sources in the best possible manner, to establish the following **priorities of the development** of renewable energy sources:

• to use the existing district heating, electricity and natural gas transport infrastructure and to further develop the infrastructure necessary for the formation of conditions for the development of renewable energy sources;

• to promote the development of renewable energy sources, to place a priority on those resources which create maximum added value at minimum cost. For this purpose, to use biofuel to the maximum extent possible;

• the use of renewable energy sources should increase most of all due to more extensive use of biofuel in the sector of district heating. This will allow reducing the price of heating for consumers while reducing the dependence of this sector on imported fossil fuel. Taking into account technological possibilities and economic efficiency of the district heating sector, the production of heat from renewable energy sources should increase at least to 50 % in this sector by 2020;

• to promote electricity production from various types of biofuel including that from municipal waste. To create conditions for the use of municipal, industrial and other waste that forms in the country to the maximum extent possible thus reducing amounts of waste to be shipped to landfills and demand for traditional energy sources for energy production;

• in order to diversify energy resources taking into account the existing potential of using renewable energy sources for energy production, existing possibilities of electricity networks to accept alternating production electricity in order to ensure reliable and safe supply of electricity to consumers and reduce the impact on the price of electricity:

• to increase the total installed capacity of wind power plants to 500 MW while encouraging the use of the central and western areas of the country for the purpose;

• to increase the total installed capacity of solar power plants to 10 MW;

 \circ when the aforementioned capacities (including that of wind power plants – to 500 MW and solar power plants to 10 MW) are achieved, to analyse technical and economic possibilities for further increase in the amount of electricity production at wind and solar power plants;

• pursuant to the principles of sustainable development, to increase the total installed capacity of hydropower plants with capacities lower than 10 MW to 40 MW;

• to create a dynamic mechanism for supporting electricity production from renewable energy sources that would encourage the implementation of the most effective technologies and ensure market openness to new technologies;

• to promote electricity and heating production from geothermal energy utilising the potential of West Lithuania;

• taking into account the goals established by the European Union, to increase the share of renewable energy sources consumed in all kinds of transport to 10% of the final consumption of energy in the transport sector. In order to achieve this goal, scientific research and cooperation of scientific and business institutions in the field of biofuel production from wastes, residues, non-food cellulosic material and ligno-cellulosic material should be developed, thus forming preconditions for starting the production of such biofuels in the country and facilitating the implementation of the established goal;

• to form conditions for supplying biogas to natural gas networks; to regulate quality requirements to biogas and conditions for connecting biogas production installations to natural gas networks;

• to create support schemes encouraging natural persons to use renewable energy sources (biofuel granules, geothermal, hydrothermal and solar energy) for energy production for own needs; to ensure that support is provided to energetically effective technologies.

The country's **vision of the development** of renewable energy sources: to promote the use of renewable energy sources as a matter of exclusive priority; to achieve that renewable energy sources would become the most important part of the country's primary energy sources as soon as in 2020. The sector of renewable energy sources would fully satisfy the country's demand for heating, and electricity would be produced at power plants that are neutral in terms of carbon dioxide (electricity is produced from renewable energy sources and at the new nuclear power plant); there would appear vehicles using pure biofuel and electric cars. This would result in lower adverse impact of energy and the transport sector on the environment. Creation of new jobs, encouraged development of technologies and promotion of scientific research on the basis of the development of renewable energy sources would allow creating, patenting and manufacturing installations producing energy from renewable energy sources in Lithuania. The sector of renewable energy sources will become the driving force of the country's economy.

The strategic goal of the national development of renewable energy sources is to satisfy the demand for energy with local resources to the maximum extent possible, to abandon imported polluting fossil fuel, thus improving the reliability of energy supply and energy independence and to contribute to international efforts to reduce emissions of greenhouse gas by increasing the share of renewable energy sources in the country's energy balance, in the electricity and heating, and transport sectors.

The objective of the development of renewable energy sources is to ensure that the share of renewable energy sources in the country's total final consumption of energy, which amounted to 15.3 % in 2008, would reach at least 23 % in 2020, i.e. to seek the following:

• to increase the share of renewable energy sources consumed in all kinds of transport from 4.3 % of the final consumption of energy in the transport sector in 2008 to 10 % in 2020;

• to increase the share of electricity produced from renewable energy sources from 4.9 % in the country's total electricity consumption in 2008 to 21 % in 2020;

• to increase the share of renewable energy sources in heating and cooling from 28 % in the gross final consumption of this sector in 2008 to 36 % in 2020, and to increase the share of district heating produced from renewable energy sources from 14.9 % in 2008 to 50 % in 2020.

The tasks of the development of renewable energy sources:

1. To coordinate actions of market participants of separate sectors and to involve municipalities in the promotion of the use of renewable energy sources.

2. To improve and implement support schemes which would create favourable conditions for the use of renewable energy sources – to prioritise projects which would bring maximum effect at minimum cost and would enable every potential investor to participate in

activities related to renewable energy sources in accordance with transparent, simple, nondiscriminating and public selection procedures.

3. To ensure that all administrative procedures intended for projects for renewable energy sources would be proportionate, simple and transparent.

4. By effectively developing electricity, thermal energy and gas infrastructure, to create favourable and transparent conditions for the implementation of projects for renewable energy sources and to coordinate the development of renewable energy sources with the principles of distributed (decentralised) generation.

5. To increase the use of all types of biomass for thermal energy and electricity production.

6. To increase the use of renewable energy sources and electricity in the transport sector – to ensure that biofuels and other bioliquids meet the sustainability criteria.

7. To carry out scientific research, pilot projects, applied work, and informational and educational activities on issues of the use of renewable energy sources.

For the purposes of monitoring of the implementation of the development of renewable energy sources, the **results** (assessment criteria) were established, which are directly related to the goals and tasks of the development and allow regular assessment of the achieved progress:

• in 2011–2012, the average share of renewable energy sources should account for not less than 16.6 % of the gross final energy consumption;

• in 2013–2014, the average share of renewable energy sources should account for not less than 17.4 % of the gross final energy consumption;

• in 2015–2016, the average share of renewable energy sources should account for not less than 18.6 % of the gross final energy consumption;

• in 2017–2018, the average share of renewable energy sources should account for not less than 20.2 % of the gross final energy consumption;

• in 2020, the share of renewable energy sources should account for not less than 23 % of the gross final energy consumption.

2. Expected Final Energy Consumption 2010–2020

In this section, gross final energy consumption of all types of energy (from both renewable and conventional sources), overall and for each sector, in the period up to 2020 are set out.

These estimates also take into account the expected effects of energy efficiency and saving measures to be introduced during the period. Under the heading "reference scenario" a scenario is presented taking into account only the energy efficiency and savings measures adopted before 2009. Under the heading "additional energy efficiency scenario" a scenario is presented taking into account all measures to be adopted from 2009. The elaboration of the other parts of the National Renewable Energy Action Plan is based on this additional energy efficiency scenario.

The term "consumption for heating and cooling" has to be understood as the derived heat produced (heat sold), plus the final consumption of all other energy commodities except electricity in end-use sectors such as industry, households, services, agriculture, forestry and fisheries. The notion of heating and cooling covers therefore also final energy consumption for processing. Electricity may also be used for heating and cooling in final consumption, but this electricity is covered in the electricity target, which is why it is excluded here.

·		2005	2	additional	2	additional		additional		additional	2	additional
	base	year	reference scenario	energy efficiency								
1) heating and cooling ¹	2	2,583	2,417	2,417	2,448	2,428	2,497	2,454	2,545	2,481	2,621	2,514
2) electricity ²		985	913	911	940	937	973	970	1,005	1,002	1,029	1,025
3) transport as in Article 3(4)a ³	1	1,133	1,336	1,333	1,376	1,368	1,418	1,405	1,461	1,444	1,506	1,484
4) gross final energy consumption ⁴	2	4,907	5,034	5,031	5,134	5,111	5,273	5,229	5,412	5,347	5,555	5,479
			1		1		1					
		2015	2016		2017		2018		2019		2020	
	reference scenario	additional energy efficiency										
1) heating and cooling	2,697	2,601	2,724	2,618	2,750	2,634	2,795	2,650	2,841	2,667	2,886	2,684
2) electricity	1,053	1,048	1,075	1,069	1,097	1,090	1,133	1,124	1,168	1,158	1,204	1,193
3) transport as in Article 3(4)a	1,554	1,527	1,603	1,566	1,654	1,606	1,707	1,648	1,761	1,691	1,817	1,734

Table 1. Expected gross final energy consumption of the Republic of Lithuania in heating and cooling, electricity and transport up to 2020 taking into account the effects of energy efficiency and energy saving measures 2010–2020 (ktoe)

¹It is the final energy consumption of all energy commodities except electricity for purposes other than transport, plus the consumption of heat for own use at electricity and heat plants and heat losses in networks (items "2. Own use by plant" and "11. Transmission and distribution losses" of Regulation (EC) No 1099/2008 (p. 23-24) OJ L 304, 14.11.2008).

²The gross electricity consumption is national gross electricity production, including autoproduction, plus imports, minus exports.

³Transport consumption as defined in Article 3(4)(a) of Directive 2009/28/EC. Renewable electricity in road transport for this figure should be multiplied by a factor of 2.5, as indicated by Article 3(4)(c) of Directive 2009/28/EC.

⁴As defined in Article (2)(f) of Directive 2009/28/EC. This comprises final energy consumption plus network losses and own use of heat and electricity at electricity and heating plants (NB: this does not include consumption of electricity for pumped hydro storage or for transformation in electrical boilers or heat pumps at district heating plants).

4) gross final energy												
consumption	5,698	5,610	5,797	5,692	5,895	5,773	6,029	5,877	6,162	5,980	6,296	6,084

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3. RENEWABLE ENERGY TARGETS AND TRAJECTORIES

3.1. National overall target

Table 2. National overall target for the share of energy from renewable sources in grossfinal consumption of energy in 2005 and 2020 (figures to be transcribed from Annex I,Part A of Directive 2009/28/EC)

A. Share of energy from renewable sources in gross final consumption of energy in	
2005 (S ₂₀₀₅) (%)	15
B. Target of energy from renewable sources in gross final consumption of	•••
energy in 2020 (S ₂₀₂₀) (%)	23
C. Expected total adjusted energy consumption in 2020 (from Table 1, last cell)	
(ktoe)	6,084
D. Expected amount of energy from renewable sources corresponding to the 2020	
target (calculated as $B \times C$) (ktoe)	1,399

3.2. Sectoral targets and trajectories

According to Article 4 (1) of Directive 2009/28/EC, targets for the share of energy from renewable sources in 2020 were set out in the following sectors:

- heating and cooling;
- electricity;
- transport.

The total of the three sectoral targets, translated into expected volumes (ktoe) including the planned use of flexibility measures, is greater than the expected amount of energy from renewable sources that corresponds to the country's 2020 target (as reported in the last cell of Table 2).

The target for transport is compatible with the requirements specified in Article 3(4) of Directive 2009/28/EC for a 10 % share of renewable energy in transport. It should, however, be noted that the calculation of compliance with the target in Article 3(4) differs from the calculation of transport's contribution to the Member State's overall national target for renewable energy.

For the transport target, and not for the overall target:

• among petroleum products, only petrol and diesel count towards the **denominator**. This means that the kerosene/jet fuel used in aviation and the fuel oil used in shipping do not count (though the diesel used by some trains and some inland waterway vessels does);

• biofuels from wastes, residues, non-food cellulosic material and ligno-cellulosic material count double towards the **numerator**,

• electricity from renewable sources used in road vehicles counts 2.5 times towards the **numerator and the denominator**.

When setting out sectoral targets for 2020, the trajectory of the growth in renewable energy use between 2010 and 2020 was estimated. The sectoral renewable targets in electricity and heating and cooling and the sectoral trajectories are estimations.

The information referred to above is provided in Table 3.

	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
RES-H&C ⁵ (%)	27	28	29	30	32	34	34	36	38	39	39	39
$\text{RES-E}^6(\%)$	4	8	10	11	13	15	17	20	22	22	22	21
RES-T ⁷ (%)	0.3	4	4	5	6	6	7	8	9	10	10	10
Overall RES share ⁸ (%)	15	16	17	18	19	20	21	22	24	24	24	24
Of which from cooperation mechanism ⁹	0	0	0	0	0	0	0	0	0	0	0	0
Surplus for cooperation mechanism ¹⁰	0	0	0. 9	0.9	2.1	2.1	2.9	2.9	3.8	3.8	0.0	1.0
As to Part B of Annex I			20	11–2012	2013	-2014	2015	-2016	2017	-2018		2020
to the Directive			S ₂₀₀₅ +20	% (S ₂₀₂₀ -S ₂₀₀₅)	S2005 + 30 %	6 (S ₂₀₂₀ -S ₂₀₀₅)	S2005 +45%	6 (S ₂₀₂₀ -S ₂₀₀₅)	S2005 +65%	∕• (S ₂₀₂₀ -S ₂₀₀₅)		S ₂₀₂₀
RES minimum trajectory (%) ¹¹				16.6	17	7.4	18	3. 6	20). 2		23
RES minimum trajectory (ktoe)				858	9	42	1,0	051	1,	177		1,399

Table 3. National 2020 target and estimated trajectory of energy from renewable sources in heating and cooling, electricity and transport

⁵Share of renewable energy in heating and cooling: gross final consumption of energy from renewable sources for heating and cooling (as defined in Articles 5(1)b) and 5(4) of Directive 2009/28/EC) divided by gross final consumption of energy for heating and cooling. Line (A) from Table 4a divided by line (1) of Table 1.

⁶Share of renewable energy in electricity: gross final consumption of electricity from renewable sources for electricity (as defined in Articles 5(1)(a) and 5(3) of Directive 2009/28/EC) divided by total gross final consumption of electricity. Row (B) from Table 4a divided by row (2) of Table 1.

⁷Share of renewable energy in transport: final energy from renewable sources consumed in transport (cf. Article 5(1)(c) and 5(5) of Directive 2009/28/EC) divided by the consumption in transport of 1) petrol; 2) diesel; 3) biofuels used in road and rail transport and 4) electricity in land transport (as reflected in row 3 of Table 1). Line (J) from Table 4b divided by row (3) of Table 1.

⁸Share of renewable energy in gross final energy consumption. Row (G) from Table 4a divided by row (4) of Table 1.

⁹In percentage point of overall RES share.

¹⁰In percentage point of overall RES share. ¹¹As defined in Annex I.B to the Directive 2009/28/EC.

	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
(A) Estimated gross final consumption of RES ¹² for heating and cooling	688	666	714	748	800	860	849	945	1,011	1,033	1,042	1,051
(B) Estimated gross final consumption of electricity from renewable sources	38	74	92	106	131	158	182	210	235	245	249	254
(C) Expected final consumption of energy from renewable sources in transport	3.7	55	58	76	91	94	111	125	139	155	165	169
(D) Estimated total RES consumption ¹³	730	795	864	930	1,022	1,112	1,142	1,280	1,385	1,433	1,456	1,474
(E) Estimated transfer of RES to other Member States	0	0	0	0	0	0	0	0	0	0	0	0
(F) Expected transfer of RES from other Member States and third countries	0	0	0	0	0	0	0	0	0	0	0	0
(G) Expected RES consumption adjusted by the target (D)- (E)+(F)	730	795	864	930	1,022	1,112	1,142	1,280	1,385	1,433	1,456	1,474

Table 4a. Calculation table for the renewable energy contribution of each sector to final energy consumption (ktoe)

 ¹²Energy from renewable sources.
 ¹³According to Article 5(1) of Directive 2009/28/EC gas, electricity and hydrogen from renewable energy sources shall only be considered once. No double counting is allowed.

	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
(C) Expected RES ¹⁴ consumption in transport ¹⁵	3.7	55	58	76	91	94	111	125	139	155	165	169
(H) Expected RES electricity in road transport ¹⁶	0.12	0.3	0.8	0.8	0.9	0.9	1.6	1.6	2.4	2.4	2.4	2.5
(I) Expected consumption of biofuels from wastes, residues, non-food cellulosic and ligno- cellulosic material in transport ¹⁷	0	0	0	0	0	0	0	0	0	0	0	0
(J) Estimated RES contribution to transport for the RES-T target: $(C)+(2.5-1)\times(H)+(2-1)\times(I)$	4	55	59	77	92	95	113	127	143	159	169	173

Table 4b. Calculation table for the renewable energy in transport share (ktoe)

¹⁴Energy from renewable sources.

¹⁵Containing all RES used in transport including electricity, hydrogen and gas from renewable energy sources, and excluding biofuels that do no comply with the sustainability criteria (cf. Article 5(1) last subparagraph). Specify here actual values without using the multiplication factors. ¹⁶Specify here actual values without using the multiplication factors. ¹⁷Specify here actual values without using the multiplication factors.

4. MEASURES FOR ACHIEVING THE TARGETS

4.1. Overview of all policies and measures to promote the use of energy from renewable resources

Name and reference of the measure	Type of measure*	Expected result**	Target group and/or activity***	Existing or planned	Start and end dates of the measure
	Existi	ng measures			
1. Purchasing prices of electricity from RES Resolution No 7 of the National Control Commission for Prices and Energy of 11 February 2002 regarding prices of services meeting public interests in the electricity sector (Valstyb•s Žinios (Official Gazette), 2002, No <u>16-648</u> ; Informaciniai Pranešimai (Information Notices), 2002, No 69-329; No 81-400; 2008, No 16-217; No 77-1002; Valstyb•s Žinios (Official Gazette), 2009, No 108-4576)	Financial	Increase in the production of electricity from renewable energy sources	Producers of electricity from renewable energy sources	Existing	From 2002
 Network connection discounts for an RES electric power plant The Description of the Procedure for the Promotion of the Production and Purchase of Electricity Produced from Renewable Energy Sources approved by Resolution No 1474 of the Government of the Republic of Lithuania of 5 December 2001 regarding the approval of legal acts necessary for the implementation of the Law of the Republic of Lithuania on Electricity (Valstyb•s Žinios (Official Gazette), 2001, No 104-3713; 2003, No 48-2121; 2004, No 9-228; 2005, No 73-2651; 2006, No 88-3463, No 100-3862) 	Financial	Increase in the production of electricity from renewable energy sources	Producers of electricity from renewable energy sources	Existing	From 2004
3. Priority transmission of electricity produced with the use of RES by electricity transmission and distribution networks The Rules for the Assumption of Commitments to provide Services Meeting Public Interests approved by Order No 4 - 485 of the Minister of Economy of the Republic of Lithuania of 21 December 2006 regarding the amendment of Order No 380 of the Minister of Economy of the Republic of Lithuania of 18 December 2001 regarding the approval of legal acts necessary for the implementation of the Law of the Republic of Lithuania on Electricity (Valstyb•s Žinios (Official Gazette), 2001, No <u>110-4010</u> ; 2002, No <u>125-5686</u> ; 2006, No 140- 5374)	Regulatory	Increase in the production of electricity from renewable energy sources	Transmission system operator and distribution networks operator	Existing	From 2002

Table 5. Overview of all policies and measures

Name and reference of the measure	Type of measure*	Expected result**	Target group and/or activity***	Existing or planned	Start and end dates of the measure
4. Benefit on environmental pollution tax Law of the Republic of Lithuania on environmental pollution tax No VIII-1183 (Valstyb•s Žinios (Official Gazette), 1999, No 47 1460: 2002 No. 12 474 No. 123 5550.	Financial	Increase in the consumption of biofuels	Consumers of biofuels (from mobile sources of contamination)	Existing	From 2002
2003, No <u>48-2108</u> , No <u>61-2761</u> ; 2004, No <u>25-</u> <u>746</u> , No <u>61-2188</u> ; 2005, No <u>47-1560</u> ; 2008, No <u>18-631</u>)	Financial	Increase in the consumption of biofuels	Consumers of biofuels (from stationary sources of contamination)	Existing	From 2005
 5. Mandatory blending of biofuels into mineral fuels The Rules for the Trade in Oil Product, Bio-Oil, and other Combustible Liquid Products in the Republic of Lithuania approved by Order No 147 of the Minister of Economy of the Republic of Lithuania of 26 April 2001 (Valstyb•s Žinios (Official Gazette), 2001, No 37-1269; 2005, No 35-1158; 2008, No 70-2669) 	Regulatory	Increase in the consumption of renewable energy sources in transport	Suppliers of oil products	Existing	From 2005
 Benefit on excise duty Law of the Republic of Lithuania on Excise Duty No IX-569 (Valstyb•s Žinios (Official Gazette), 2001, No 98-3482; 2004, No 26-802) 	Financial	Increase in the production of energy products containing substances of biological origin	Producers of energy products	Existing	From 2002
7. Financing of the production of biofuels The Rules for the Development of the Production of Biofuels approved by Order No 3D-417 of the Minister of Agriculture of the Republic of Lithuania of 25 July 2008 (Valstyb•s Žinios (Official Gazette), 2008, No 88-3551; 2009, No 110-4686)	Financial	Increase in the production of agricultural produce used for the production of biofuels	Producers of biofuels	Existing	From 2004
8. Measures of the Programme for the Development of Industrial Biotechnology in Lithuania for 2007–2010 approved by Resolution No 1050 of the Government of the Republic of Lithuania of 24 October 2006 (Valstyb•s Žinios (Official Gazette), 2006, No 114-4359):	Regulatory	Development of industrial biotechnology	Technology developers	Existing	2007–2010
1. To search for new components of biofuels; to develop technological research of the production of second-generation biofuels;					
2. To develop the creation of the new technologies for the production of bio-diesel and bio-oils with the use of bio-catalysers;					
3. To create technologies for the rational use of co-products of biofuel production.					

Name and reference of the measure	Type of measure*	Expected result**	Target group and/or activity***	Existing or planned	Start and end dates of the measure
9. Adjusted Cogeneration Plan taking into account overall balanced, effective, and competitive need in heat and electricity in the country when increasing the use of bio-fuel The Cogeneration Development Plan approved by Order No 1-174 of the Minister of Energy of the Republic of Lithuania of 22 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 75-3829)	Regulatory	Assurance of the cogeneration of heat and electricity from biofuel	Producers of energy from renewable sources	Under planning	From 16 August 2010
 10. EU structural support Annex to the Cohesion Promotion Action Programme approved by Resolution No 787 of 23 July 2008 of the Government of the Republic of Lithuania (Valstyb•s Žinios (Official Gazette), 2008, No <u>95-3720</u>, No <u>142-5628</u>; 2009, No <u>36-1388</u>, No <u>68-2773</u>) The Description of the Conditions of Financing for the Projects of Measure VP3-3.4-• M-02-K "the Use of Renewable Energy Sources for the Production of Energy" approved by Order No 4-442 of the Minister of Economy of the Republic of Lithuania of 29 September 2008 (Valstyb•s Žinios (Official Gazette), 2008, No 117-4460) 	Financial	Construction and modernisation of facilities using renewable energy sources for the production of energy	Energy producers	Existing	2007–2013
 11. The Lithuanian Environmental Investment Fund (LEIF) The Law of the Republic of Lithuania on environmental pollution tax (Valstyb•s Žinios (Official Gazette), 1999, No <u>47-1469</u>; 2002, No <u>13-474</u>, No <u>123-5550</u>; 2003, No <u>48-2108</u>, No <u>61-2761</u>; 2004, No <u>25-746</u>, No <u>61-2188</u>; 2005, No <u>47-1560</u>; 2008, No <u>18-631</u>) The Procedure for the Financing and Supervision of Investment Projects of the Lithuanian Environmental Investment Fund (LEIF) approved by Order No 437 of the Minister of Environment of the Republic of Lithuania of 29 September 2003 (Valstyb•s Žinios (Official Gazette), 2003, No 85-3890; 2007, No 114-4650; 2008, No 109-4165) 	Financial	Construction of facilities using renewable energy sources for the production of electricity	Energy producers	Existing	From 2000
12. Rural Development Programme for Lithuania 2007–2013	Financial	Electricity production in wind power plants; production of biogas	Farmers	Existing	2007–2013
13. Measures for the implementation of the Programme of the Government of the Republic of Lithuania for the Forestation of Lands Less Favourable for Farming and Derelict Lands with Short-Rotation Coppice for 2008–2012 approved by Resolution No 189 of the Government of the Republic of Lithuania of 25	Financial	Production of biofuel	Producers of energy crops	Existing	2009–2012

Name and reference of the measure	Type of measure*	Expected result**	Target group and/or activity***	Existing or planned	Start and end dates of the measure
February 2009 (Valstyb•s Žinios (Official Gazette), 2009, No 33-1268)			uoniny		
 14. Informational and educational activities The National Energy Strategy approved by Resolution No X-1046 of the Seimas (Parliament) of the Republic of Lithuania of 18 January 2007 (Valstyb•s Žinios (Official Gazette), 2007, No 11-430) The National Programme for the Improvement of Energy Consumption Efficiency for 2006– 2010 approved by Resolution No 443 of the Government of the Republic of Lithuania of 11 May 2006 (Valstyb•s Žinios (Official Gazette), 	Informational	Improvement of public awareness on issues of the use of energy from renewable sources	Energy consumers	Existing	From 2001
2006, No 54-1956; 2008, No 33-1183)	1	1			
<u>Pla</u> 1. To prepare the draft Law of the Republic of Lithuania on the Development of Renewable Energy Sources The measures for the implementation of the Description of the Development of the Development	nned measures an Regulatory	d measures under p Broader use of renewable energy sources	Energy producers and consumers	Under planning	2010 Quarter I
Programme of the Government of the Republic of Lithuania for 2008–2012 approved by Resolution No 189 of the Government of the Republic of Lithuania of 25 February 2009 (Valstyb•s Žinios (Official Gazette), 2009, No 33-1268)					
2. To prepare a draft legal act regulating the promotion of the production and purchase of electricity from renewable energy sources for 2010–2020 in order to ensure the use of renewable and local energy sources as widely as possible	Regulatory	Broader use of renewable energy sources	Producers of electricity from renewable energy sources	Under planning	2010 Quarter II
The measures for the implementation of the Programme of the Government of the Republic of Lithuania for 2008–2012 approved by Resolution No 189 of the Government of the Republic of Lithuania of 25 February 2009 (Valstyb•s Žinios (Official Gazette), 2009, No 33-1268)					
3. To prepare and provide proposals regarding the establishment of a system for the promotion of the production and use of biofuel for the production of energy	Regulatory	Promotion of the production of biofuel and its use for energy	Energy producers	Under planning	2010 Quarter IV
The measures for the implementation of the Programme of the Government of the Republic of Lithuania for 2008–2012 approved by Resolution No 189 of the Government of the Republic of Lithuania of 25 February 2009 (Valstyb•s Žinios (Official Gazette), 2009, No 33-1268)		production			
4. To amend the obligatory requirements for oil products, biofuels, and liquid fuel used in the Republic of Lithuania approved by Order No	Regulatory	Development of the use of biofuel in	Suppliers of oil products, biofuels, and	Under planning	2010 Quarter IV

Name and reference of the measure	Type of measure*	Expected result**	Target group and/or activity***	Existing or planned	Start and end dates of the measure
D1-399/4-336/3-340 of the Minister of Environment, the Minister of Economy, and the Ministry of Transport and Communications while providing for greater use of fuels of biological origin in transport The measures for the implementation of the Programme of the Government of the Republic of Lithuania for 2008–2012 approved by Resolution No 189 of the Government of the		transport	liquid fuel		
(Valstyb•s Žinios (Official Gazette), 2009, No 33-1268)					
5. To develop the information system for the issuance of construction permits and state supervision of construction: To enable not only submission, but also issuance of compendia of designing terms and conditions of a structure and other documents related to the construction process and state supervision of construction	Regulatory	Improvement of the conditions for the issuance of construction permits	Investors	Under planning	2010 Quarter IV
The measures for the implementation of the Programme of the Government of the Republic of Lithuania for 2008–2012 approved by Resolution No 189 of the Government of the Republic of Lithuania of 25 February 2009 (Valstyb•s Žinios (Official Gazette), 2009, No 33-1268)					
6. To analyse technical and economic possibilities and to provide proposals for the promotion of increasing the installed capacity of wind power plants to more than 500 MW, that of solar power plants to more than 10 MW, and that of bio-cogeneration power plants to more than 162 MW.	Regulatory	Increase in the installed capacity of wind, solar, and bio- cogeneration power plants	Investors	Under planning	2014 Quarter I
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
7. To prepare and provide draft legal acts, whereby municipalities would be obligated to promote the use of renewable energy sources	Regulatory	Development of the use of renewable energy sources	Municipal institutions	Under planning	2010 Quarter III
of the National Strategy for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)		in municipalities			
8. To prepare and approve municipal action plans for renewable energy sources for 2011– 2020 establishing objectives of the use of renewable energy sources and measures for	Regulatory	Development of the use of renewable	Municipal institutions	Under planning	2011 Quarter I

Name and reference of the measure	Type of measure*	Expected result**	Target group and/or activity***	Existing or planned	Start and end dates of the measure
achieving these objectives The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)		energy sources in municipalities			
 9. To analyse possibilities of the application of technologies of damless hydropower plants in the country and to assess the potential of the application of such technologies The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030) 	Regulatory	More effective use of available water resources for the production of energy	Investors	Under planning	2011 Quarter IV
 10. To prepare and to submit to the Government of the Republic of Lithuania a draft description of the procedure regulating the following: - the statistical transfer of the amount of energy produced from renewable energy sources (between the Republic of Lithuania and other Member States of the European Union) The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030) 	Regulatory	Statistical transfer of renewable sources is carried out	State institutions	Under planning	2011 Quarter IV
 11. To prepare and to submit to the Government of the Republic of Lithuania a draft description of the procedure regulating the following: - the procedure for the conclusion and execution of agreements regarding joint projects (between the Republic of Lithuania and other Member States of the European Union and/or third countries) The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Zinios (Official Gazette), 2010, No 78-4030) 	Regulatory	Undergoing joint projects of all types related to the production of electricity, heating or cooling from renewable energy sources	State institutions, investors	Under planning	2011 Quarter IV
12. To analyse the possibilities of the implementation of joint projects of the Republic	Informational	Envisaged possibilities and	State institutions,	Under planning	2011 Quarter III

Name and reference of the measure	Type of measure*	Expected result**	Target group and/or activity***	Existing or planned	Start and end dates of the measure
of Lithuania and other Member States of the European Union in the country and to determine the potential of such projects The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)		potential for the execution of joint projects of all types related to the production of electricity, heating or cooling from renewable energy sources	investors		
 13. To analyse the possibilities of the implementation of joint projects of the Republic of Lithuania, other Member States of the European Union and third countries in the country and to determine the potential of such projects The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030) 	Informational	Possibilities and potential for the execution of joint projects of all types related to the production of electricity, heating or cooling from renewable energy sources are envisaged	State institutions, investors	Under planning	2011 Quarter III
 14. To analyse the possibilities of integrating the promotions schemes for renewable energy sources of the Republic of Lithuania and other Member States of the European Union The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Zinios (Official Gazette), 2010, No 78-4030) 	Informational	Integrated schemes for renewable energy sources of the Republic of Lithuania and other Member States of the European Union	State institutions, investors	Under planning	2011 Quarter III
 15. To perform analysis and to develop the collection of data on renewable energy sources, to specify their types and use for the production of energy The Plan of Measures for the Implementation of the National Strategy for the Development of Parenushla Energy Sources for 2010, 2015 	Informational	To collect data on renewable energy sources	State and municipal institutions, investors	Under planning	2011 Quarter III
approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
16. To prepare draft legal acts for the planning, designing, construction, connection to the electrical grid, and operation of offshore wind power plants	Regulatory	Development of offshore wind power plants	Investors	Under planning	2011 Quarter II
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015					

Name and reference of the measure	Type of measure*	Expected result**	Target group and/or activity***	Existing or planned	Start and end dates of the measure
approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
 17. To prepare a draft legal act regulating the procedure for the use, issuance, transfer, and cancellation of guarantees of origin of electricity and thermal energy produced from renewable energy sources The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 	Regulatory	Guarantees of origin for electricity and thermal energy produced from renewable energy sources are issued	Producers of electricity and thermal energy	Under planning	2010 Quarter IV
approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
18. To prepare draft legal acts necessary for the preparation of the Special National Programme for the Promotion of the Use of Renewable Energy Sources (intended for the financing of projects on renewable energy sources), to set objectives and financing sources of this Programme, and to prepare the procedure for the use of the funds of the Programme	Financial	Promotion of the use of renewable energy sources	State and municipal institutions	Under planning	2011 Quarter I
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
19. To prepare and provide proposals regarding financial measures encouraging consumers to equip in buildings energy production installations producing energy from renewable sources (biofuel, solar, geothermal, hydrothermal, and wind energy) The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of	Financial	Equipping in buildings energy production installations producing energy from renewable sources	Energy consumers	Under planning	2011 Quarter II
Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
20. To prepare and provide proposals regarding legal and economic measures encouraging the production of installations using renewable energy sources	Financial	Development of the production of installations using renewable	Investors	Under planning	2011 Quarter II
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of		energy sources			

Name and reference of the measure	Type of measure*	Expected result**	Target group and/or activity***	Existing or planned	Start and end dates of the measure
Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
21. To apply a dynamic promotion mechanism for electricity produced from renewable energy sources encouraging the implementation of the most effective technologies and ensuring possibilities of the implementation of new technologies	Financial	Increase in the production of electricity from renewable energy sources	Producers of electricity from renewable energy sources	Under planning	2010–2015
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
22. To promote the use of biofuel in transport by financial and legal measures	Financial	Increase in the use of biofuel in transport	Users of biofuel in transport	Under planning	2010–2015
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
23. To prepare draft amendments of legal acts which would ensure the exemption from taxes for groundwater if it is used for the production of geothermal energy	Financial	Increase in the use of geothermal energy	Investors	Under planning	2011 Quarter I
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
24. To establish technical requirements for installations and systems using renewable energy sources, to which assistance is provided, and to include them into the conditions for the receipt of assistance	Financial	Decreased consumption of energy in installations and systems using renewable	Energy producers and consumers	Under planning	2010 Quarter IV
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)		energy sources			
25. To revise legal acts regulating the procedures for the issuance of construction permits and to assess possibilities for providing in the procedures for the issuance of	Regulatory	Improvement of conditions for the issuance of construction	Investors	Under planning	2010 Quarter III

Name and reference of the measure	Type of measure*	Expected result**	Target group and/or activity***	Existing or planned	Start and end dates of the measure
permits for the specifics of technologies of various renewable energy sources as well as possibilities to establish simplified procedures for the issuance of permits for lower-scope projects and for smaller-sized, decentralised structures producing energy from renewable sources. To prepare draft amendments to effective legal acts and draft new legal acts. The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)		permits			
 26. To prepare and constantly update the guidance of good practices of the administrative procedures applicable to entities using renewable energy sources to be published (on the internet) The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030) 	Informational	Improvement of the accessibility of information about administrative procedures applicable to entities using renewable energy sources	Investors	Under planning	2011 Quarter IV
27. To prepare draft amendments of existing legal acts and draft new legal acts regulating energy, territorial planning, and construction field according to which persons planning, designing, constructing, and upgrading industrial or residential territories would ensure that installations and systems using renewable energy sources would be implemented for district heating and cooling, and according to which the use of heating and cooling from renewable energy sources would be included in urban infrastructure planning. The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Zinios (Official Gazette), 2010, No 78-4030)	Regulatory	Development of installations and systems using renewable energy sources in the planning, designing, constructing, and upgrading industrial or residential territories	Investors	Under planning	2010 Quarter IV
28. To prepare and publish recommendations for designers, architects, and other specialists regarding the implementation of technologies of renewable energy sources, high energy efficiency technologies, and district heating and cooling supply systems in the planning, designing, constructing, and upgrading territories of industrial or residential intended purpose	Regulatory	Implementation of technologies of renewable energy sources and high energy efficiency in the designing of territories of industrial or	Designers, architects	Under planning	2010 Quarter IV

Name and reference of the measure	Type of measure*	Expected result**	Target group and/or activity***	Existing or planned	Start and end dates of the measure
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)		residential intended purpose			
29. To prepare draft legal acts, which would require that a certain smaller amount of renewable energy sources, taking into account different types of energy used in buildings and possibilities of using separate types of renewable energy sources, should be used in new buildings and existing buildings under renovation (modernisation)	Regulatory	Increase in the use of renewable energy sources in new buildings and existing buildings under renovation	Designers	Under planning	2011 Quarter II
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
30. To prepare and approve a technical regulation (regulations) for construction establishing requirements for buildings of low energy consumption	Regulatory	Improvement of the effective consumption of energy resources	Designers, investors	Under planning	2011 Quarter III
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
31. To prepare draft legal acts, whereby operators of the transmission system and distribution networks would be obligated to ensure access to electricity networks for installations producing electricity from of renewable energy sources, to manage and modernise electricity networks in such a manner that it would be possible to increase installed capacities of electric installations using renewable energy sources while not infringing the interests of consumers	Regulatory	Improvement of access to electricity networks for installations producing electricity from of renewable energy sources	Operators of the transmission system and distribution networks	Under planning	2010 Quarter III
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
32. To improve and publish rules regulating reimbursement and distribution of costs as well	Regulatory	Transparent and non- discriminating	Operators of the transmission	Under planning	2011 Quarter IV

Name and reference of the measure	Type of measure*	Expected result**	Target group and/or activity***	Existing or planned	Start and end dates of the measure
as provision of information to producers to be applied when carrying out technical adaptations related to the connection of installations of renewable energy sources to electricity networks The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010,		criteria of costs related to the connection of installations of producers to the electricity network	system and distribution networks		
33. To establish requirements for the accounting of electricity produced from renewable energy sources, where part of such electricity is supplied to networks, and another part is consumed for own use by plant	Regulatory	Accounting of all electricity consumed in the country	Producers of energy from renewable sources	Under planning	2010 Quarter IV
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
34. To prepare and approve draft amendments to the Technical Rules for the Connection of Wind Power Plants to the Lithuanian Electricity System; to simplify the requirements for the connection of wind power plants with capacities of up to 250 kW	Regulatory	Simplification of the connection of wind power plants with capacities of up to 250 kW	Operators of the transmission system and distribution networks	Under planning	2010 Quarter II
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
35. To create financial support schemes for projects for the modernisation of operators of electricity networks, electricity transmission and distribution networks into an ably managed active network and integration of the production of renewable energy sources into the electricity network – to appropriate financial support from the structural funds of the European Union	Financial	Modernisation of electricity transmission and distribution networks	Operators of the transmission system and distribution networks	Under planning	2011–2015
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
36. To prepare and approve the technical rules	Regulatory	Establishment of	Operators of	Under planning	2011

Name and reference of the measure	Type of measure*	Expected result**	Target group and/or activity***	Existing or planned	Start and end dates of the measure
for the connection of solar power plants and hydropower plants to the Lithuanian electricity system The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Zinios (Official Gazette), 2010, No 78-4030)		the rules for the connection of solar power plants and hydropower plants to the Lithuanian electricity system	the transmission system and distribution networks		Quarter IV
37. To evaluate the demand for the development of the infrastructure of the gas network and to prepare draft amendments to legal acts, which would form favourable conditions for the supply of biogas of appropriate quality to natural gas networks, and to use biogas for the production of energy more extensively The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)	Regulatory	Development of the production of biogas	Investors	Under planning	2010 Quarter IV
 38. To prepare and publish technical conditions (rules) regulating the connection of biogas supply systems to the natural gas network and connection tariffs applicable to biogas The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030) 	Regulatory	Formation of the conditions for the supply of gas from renewable energy sources to natural gas networks	Operators of gas transmission and distribution systems	Under planning	2011 Quarter III
 39. To prepare legal and economic measures encouraging the cultivation of more energy plants in unused derelict lands of agricultural intended purpose The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Zinios (Official Gazette), 2010, No 78-4030) 	Regulatory	Development of the use of biomass for the production of energy	Farmers	Under planning	2010–2015
40. To prepare measures of financial support, which would promote the modernisation of heat production installations supplying heat to rural public buildings (schools, kindergartens, health care institutions, elderships etc), while adjusting these installations for the incineration	Financial	Development of the use of biofuel	Municipal institutions, heat producers	Under planning	2011–2015

Name and reference of the measure	Type of measure*	Expected result**	Target group and/or activity***	Existing or planned	Start and end dates of the measure
of biofuel (wood, straw) including herbaceous plant biomass (grass granules)			uoning		
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
41. To prepare and provide proposals regarding the formalisation of financial measures promoting the use of lumbering waste for the production of energy	Financial	Development of the use of biomass for the production of energy	Forest owners, operators, and users	Under planning	2010 Quarter IV
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
42. To prepare the draft Rules for the Equipping of Installations Producing and Using Biogas	Regulatory	Development of installations producing and using biogas	Investors	Under planning	2011 Quarter IV
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
43. To create conditions for the construction of cogeneration power plants using municipal and other waste unsuitable for processing, which has energy value, in the big Lithuanian cities (Vilnius, Kaunas, Klaip•da)	Regulatory	Development of the use of municipal waste for the production of energy	Investors	Under planning	2010–2015
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
44. To prepare and approve the methodology for the separation of the biodegradable fraction of municipal waste taking into account the renewable fraction of energy produced from municipal waste	Regulatory	Development of the use of municipal waste for the production of energy	Investors	Under planning	2011 Quarter IV
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of					

Name and reference of the measure	Type of measure*	Expected result**	Target group and/or activity***	Existing or planned	Start and end dates of the measure
Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
45. To prepare forecasts of the use of biomass resources in the country until 2020 taking into account the import, export of biomass and the assessment of the impact of the use of biomass for the production of energy on other sectors (industry, agriculture etc), and to provide proposals regarding the creation of a system for the monitoring of this impact	Informational	Preparation of forecasts of the use of biomass resources	State and municipal institutions, investors	Under planning	2012 Quarter IV
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
46. To conduct research intended for the improvement of forest fuel resources: to specify methods of the accounting of underwood and non-prospective underbrush biomass; to specify (by the structure of wood biomass) the structure of lumbering waste (wood of branches, stumps, roots etc); to create a system for the accounting of stump wood resources; to analyse possibilities of the accounting and use of the living soil cover and litterfall for fuel in Lithuania	Informational	Improvement of the accounting of forest fuel resources	State and municipal institutions, investors	Under planning	2011 Quarter IV
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
47. To prepare and provide proposals regarding the improvement of forest management methods in order to maximise the quantity of biomass produced from forest by the sustainable method	Regulatory	Development of the use of biomass for the production of energy	Forest owners, operators, and users	Under planning	2011 Quarter IV
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
48. To unify the regulatory systems for electricity produced from municipal waste and electricity produced from renewable energy sources	Regulatory	Unification of the electricity regulatory system	State institutions	Under planning	2011 Quarter IV
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015					

Name and reference of the measure	Type of measure*	Expected result**	Target group and/or activity***	Existing or planned	Start and end dates of the measure
approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
 49. To prepare and provide to the Government of the Republic of Lithuania the draft Description of the Procedure for the Control of the Compliance of Biofuels and Other Bioliquids with the Sustainability Criteria and Certification Thereof The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78 4030) 	Regulatory	Production of biofuels and bioliquids complying with the sustainability criteria	State institutions, producers of biofuels and bioliquids	Under planning	2010 Quarter IV
50. To prepare and approve the methodology for the calculation of the amount of greenhouse gas emitted in the course of production and use of transport fuels, biofuels, and other bioliquids The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)	Regulatory	Production of biofuels and bioliquids complying with the sustainability criteria	State institutions, producers of biofuels and bioliquids	Under planning	2010 Quarter IV
 51. To accumulate data on peatlands and wetlands in the State Geology Information System; to systemise them and provide them for use The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030) 	Informational	Accessibility of information on peatlands and wetlands	State and municipal institutions	Under planning	2011 Quarter IV
52. To evaluate the applicable procedures for the change of the main intended purpose, method, and character of use of the land and, if necessary, to prepare draft amendments ensuring the observance of the sustainability criteria of biofuels and other bioliquids The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Zinios (Official Gazette), 2010, No 78-4030)	Regulatory	Observance of the sustainability criteria of biofuels and other bioliquids when changing the intended purpose of land	State and municipal institutions	Under planning	2010 Quarter IV

Name and reference of the measure	Type of measure*	Expected result**	Target group and/or activity***	Existing or planned	Start and end dates of the measure
53. To prepare a quality standard for methane produced from biogas and used for motor fuels	Regulatory	Prepared standard	Biofuel producers	Under planning	2014 Quarter IV
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
54. To prepare standards for biofuels and fuel mixes containing a percentage portion of biofuel blended into mineral fuel exceeding 10 per cent	Regulatory	Prepared standard	Biofuel producers	Under planning	2014 Quarter I
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
55. To amend the obligatory requirements for oil products, biofuels, and liquid fuel used in the Republic of Lithuania approved by Order No D1-399/4-336/3-340 of the Minister of Environment, the Minister of Economy, and the Ministry of Transport and Communications while providing for more extensive use of fuels of biological origin in transport	Regulatory	Increase in the consumption of fuels of biological origin in transport	Biofuel and liquid fuel producers	Under planning	2011 Quarter IV
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
56. To prepare measures encouraging the use of electric cars and cars using pure biofuels	Regulatory	Increase in the use of electric cars	Manufacturer s and users of cars	Under planning	2012 Quarter IV
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
57. To prepare and implement measures creating conditions for and encouraging the use of excess electricity produced at night- time in transport; to create and develop city infrastructure of cars using electricity The Plan of Measures for the Implementation	Regulatory	Creation of conditions for the use of excess electricity produced at night time in	State and municipal institutions	Under planning	2011–2015

Name and reference of the measure	Type of measure*	Expected result**	Target group and/or activity***	Existing or planned	Start and end dates of the measure
of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)		transport			
 58. To prepare the Lithuanian State Geology Survey for 2011–2015 in order to determine the possibilities of using renewable and non- traditional resources of the earth interior The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030) 	Informational	Determination of the possibilities of using renewable and non- traditional resources of the earth interior	State institutions	Under planning	2010 Quarter IV
 59. To prepare and approve the procedure for the certification of installers of installations and systems using renewable energy sources as well as training programmes for installers, and to include in them issues on renewable energy sources, technologies of their use, and their economic opportunities and benefits The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030) 	Regulatory	Prepared procedure for the certification of installers	Installers of installations and systems using renewable energy sources	Under planning	2011 Quarter IV
 60. To prepare, provide, and publish information on the issuance of permits, licences, and certificates related to renewable energy installations and on assistance provided to applicants The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030) 	Informational	Accessibility of information on the issuance of permits, licences, and certificates	Investors	Under planning	2011–2015
61. To prepare, provide, and publish information on the support granted for the use and production of renewable energy sources The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June	Informational	Accessibility of information on the support granted for the use and production of renewable energy sources	Investors	Under planning	2011–2015

Name and reference of the measure	Type of measure*	Expected result**	Target group and/or activity***	Existing or planned	Start and end dates of the measure
2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
62. To prepare and implement public information and awareness raising measures, and to provide consultations encouraging the effective use of the energy of renewable sources	Informational	Improvement of public information	Energy consumers	Under planning	2011–2015
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
63. To organise trainings on practical possibilities and benefits of the development and use of renewable energy sources including those on the accessibility and environmental benefits of various renewable energy sources used in transport	Informational	Improvement of public information	Energy consumers	Under planning	2011–2015
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
64. To organise exchange of experience in the field of using renewable energy sources between state and municipal institutions, bodies, enterprises, organisations and private entities, and to publish examples of best practices	Informational	Improvement of public information	of State and municipal institutions, bodies, enterprises, organisations and private entities	Under planning	2011–2015
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
65. To prepare, provide, and publish information on installations and systems using renewable energy sources, benefits provided by them, their costs, and the efficiency of the consumption of these sources	Informational	Improvement of public information	Energy consumers	Under planning	2011–2015
The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)					
66. To include knowledge and capabilities of	Informational	Improvement of	Energy	Under planning	2011

Name and reference of the measure	Type of measure*	Expected result**	Target group and/or activity***	Existing or planned	Start and end dates of the measure
pupils in the field of the possibilities of the use of renewable energy sources, benefits provided by them, and their technological solutions into comprehensive formal education programmes The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Zinios (Official Gazette), 2010, No 78-4030)		public information	consumers		Quarter IV
67. To encourage and support scientific research in the field of renewable energy sources The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030)	Financial	Development of scientific research in the field of renewable energy sources	Scientific research institutions	Under planning	2011–2015
 68. To encourage and support pilot projects on the production and use of renewable energy resources, including those for biofuel of the second generation, related to the development of smart electricity networks The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030) 	Financial	Development of pilot projects in for the use of renewable energy sources	Scientific research institutions	Under planning	2011–2015

^{*}Indicate if the measure is (predominantly) regulatory, financial or soft (i.e. information campaign).

^{**}Is the expected result behavioural change, installed capacity (MW; t/year), energy generated (ktoe)?

^{***}Who are the targeted persons: investors, end users, public administration, planners, architects, installers, etc.? or what is the targeted activity/sector: biofuel production, energetic use of animal manure, etc.)?

4.2. Specific measures to fulfil the requirements under Articles 13, 14, 16 and Articles 17 to 21 of Directive 2009/28/EC

4.2.1. Administrative procedures and spatial planning (Article 13(1) of Directive 2009/28/EC)

(a) <u>List of existing national and, if applicable, regional legislation concerning</u> <u>authorisation, certification, licensing procedures and spatial planning applied to plants and</u> <u>associated transmission and distribution network infrastructure:</u>

1. In the electricity sector:

- The Law of the Republic of Lithuania on Energy (Valstyb•s Žinios (Official Gazette), 2002, No 56-2224; 2010, No 67-3337);

- the Law of the Republic of Lithuania on Electricity (Valstyb•s Žinios (Official Gazette), 2000, No 66-1984; 2004, No 107-3964);

- the Description of the Procedure for the Promotion of the Production and Purchase of Electricity the Production of which Involves the Use of Renewable Energy Sources approved by Resolution No 1474 of the Government of the Republic of Lithuania of 5 December 2001 (Valstyb•s Žinios (Official Gazette), 2001, No 104-3713; 2004, No 9-228);

- the Rules for the Issuance of Permits for Activities in the Electricity Sector approved by Order No 380 of the Minister of Economy of the Republic of Lithuania of 18 December 2001 (Valstyb•s Žinios (Official Gazette), 2001, No 110-4010; 2009, No 63-2522);

- the Rules for Licensing of Activities in the Electricity Sector approved by Resolution No 1474 of the Government of the Republic of Lithuania of 5 December 2001 (a revision of Resolution No 470 of the Government of the Republic of Lithuania of 28 April 2010) (Valstyb•s Žinios (Official Gazette), 2001, No 104-3713; 2010, No 51-2498).

2. In the heating sector:

- the Law of the Republic of Lithuania on Heating Sector (Valstyb•s Žinios (Official Gazette), 2003, No 51-2254; 2007, No 130-5259; 2010, No 65-3196);

- the Rules for the Licensing of Heat Supply approved by Resolution No 982 of the Government of the Republic of Lithuania of 25 July 2003 (Valstyb•s Žinios (Official Gazette), 2003, No 75-3481; 2008, No 121-4595);

- the Description of the Procedure for the Purchase of Heating from Independent Producers into Heating Supply Systems approved by Resolution No 982 of the Government of the Republic of Lithuania of 25 July 2003 (Valstyb•s Žinios (Official Gazette), 2003, No 75-3481).

3. In the natural gas sector:

- the Law of the Republic of Lithuania on Natural Gas (Valstyb•s Žinios (Official Gazette), 2000, No 89-2743);

- the Rules for the Licensing of the Transmission, Distribution, Storage, Liquefaction, and Supply of Gas approved by Resolution No 1304 of the Government of Lithuania dated 5 December 2007 (Valstyb•s Žinios (Official Gazette), 2007, No 132-5379).

4. In the oil sector:

- the Law of the Republic of Lithuania on State Stocks of Petroleum Products and Crude Oil (Valstyb•s Žinios (Official Gazette), 2002, No 72-3008);

- the Law of the Republic of Lithuania on Biofuel, Biofuels for Transport, and Bio-Oils (Valstyb•s Žinios (Official Gazette), 2000, No 64-1940; 2004, No 28-870);

- the Rules for the Licensing of Trade in Bulk Petroleum Products approved by Resolution No 113 of the Government of the Republic of Lithuania of 28 January 2003 (Valstyb•s Žinios (Official Gazette), 2003, No <u>11-410</u>; 2004, No <u>34-1106</u>; 2006, No <u>14-477</u>; 2008, No <u>101-3902</u>; 2009, No <u>112-4767</u>);

- the Rules for Trade in Petroleum Products, Biofuel, Bio-Oil, and Other Flammable Liquid Products in the Republic of Lithuania approved by Order No 147 of the Minister of Economy of the Republic of Lithuania of 26 April 2001 (Valstyb•s Žinios (Official Gazette), 2001, No 37-1269).

5. The designing and issuance of construction permits for the construction of power plants and engineering networks are regulated by the following:

- the Law of the Republic of Lithuania on Construction (Valstyb•s Žinios (Official Gazette), 1996, No 32-788; 2001, No 101-3597);

- the Law of the Republic of Lithuania on Territorial planning (Valstyb•s Žinios (Official Gazette), 1995, No 107-2391; 2004, No 21-617);

- the Law on Land (Valstyb•s Žinios (Official Gazette), 1994, No 34-620; 2004, No 28-868);

- the Law on Geodesy and Cartography (Valstyb•s Žinios (Official Gazette), 2001, No 62-2226; 2007, No 4-160);

- the Law on Protected Areas (Valstyb•s Žinios (Official Gazette), 1993, No 63-1188; 2001, No 108-3902);

- the Law on Environmental Impact Assessment of the Proposed Economic Activity (Valstyb•s Žinios (Official Gazette), 1996, No82-1965; 2005, No 84-3105);

- the Law on the Protection of the Cultural Heritage (Valstyb•s Žinios (Official Gazette), 1995, No 3-37; 2004, No 153-5571);

- Technical Regulation for Construction STR 1.07.01:2002 "Construction Permit" approved by Order No 218 of the Minister of Environment of the Republic of Lithuania of 30 April 2002 regarding the approval of Technical Regulation for Construction STR 1.07.01:2002 "Construction Permit" (Valstyb•s Žinios (Official Gazette), 2002, No 55-2203);

- Technical Regulation for Construction STR 1.05.07:2002 "The Code of the Conditions for the Designing of a Structure" approved by Order No 215 of the Minister of Environment of the Republic of Lithuania regarding the approval of Technical Regulation for Construction STR 1.05.07:2002 "The Code of the Conditions for the Designing of a Structure" (Valstyb•s Žinios (Official Gazette), 2002, No 54-2153);

- Technical Regulation for Construction STR 1.05.06:2005 "The Designing of a Structure" approved by Order No D1-708 of the Minister of Environment regarding the approval of Technical Regulation for Construction STR 1.05.06:2005 "The Designing of a Structure" (Valstyb•s Žinios (Official Gazette), 2005, No 4-80).

(b) <u>Responsible Ministry(/ies)/authority(/ies) and their competences in the field:</u>

The Ministry of Energy of the Republic of Lithuania:

- issues licences for the production of electricity, development of electricity production capacities as well as permits for the export and import of electricity and permits for the construction of a straight line;

- upon recommendation of the Commission for the Licensing of Trade in Bulk Petroleum Products, issues licences for engaging in wholesale trade in bulk petroleum
products, diesel fuel, and other gas oils, which are supplied as fuel stocks for ships, licences for engaging in trade in bulk aviation gasoline and jet fuels, which are supplied as fuel stocks for aircraft, and licences for engaging in wholesale trade in residues of bulk oil products.

The National Control Commission for Prices and Energy:

- issues electricity market operator licences and licences for electricity transmission, distribution, public supply, and independent supply activities;

- with regard to recommendations of municipal institutions, issues heat supply licences to enterprises supplying not less than 10 GWh of heat per year;

- issues licences for the transmission, distribution, storage, liquefaction, and supply of natural gas.

Municipal institutions:

- issue heat supply licences to enterprises supplying less than 10 GWh of heat per year;

- upon recommendation of the Licensing Commission of a municipality, the Director of the Administration of the Municipality issues licences for engaging in retail trade in bulk motor gasoline, diesel fuel, liquefied gas intended for motor vehicles, and biodiesel fuel as well as licences for engaging in retail trade in residues of bulk motor gasoline, diesel fuel, liquefied gas intended for motor vehicles, and biodiesel fuel, liquefied gas intended for motor vehicles, and biodiesel fuel;

- the Director of the Administration of the Municipality or another public servant of the Municipality authorised by the former issues a construction permit for any structure (with the exception of those cases when a structure is arranged at the area of two or more municipalities);

- when a structure is arranged at the area of two or more municipalities (irrespective of whether one or several projects of the whole structure are prepared), construction permits shall be issued by the administration of each municipality for a part of the structure within the area of the municipality.

(c) <u>Revision foreseen with the view to take appropriate steps as described by</u> <u>Article 13(1) of Directive 2009/28/EC by: 2012.</u>

In order to ensure that all administrative procedures intended for projects on the use of renewable energy sources for the production of energy would be proportionate, simple and transparent, the revision of the legal acts regulating these procedures is foreseen in the Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No <u>78-4030</u>) by the end of 2011.

(d) <u>Summary of the existing and planned measures at regional/local levels (where relevant):</u>

Currently, no such measures exist.

(e) <u>Are there unnecessary obstacles or non-proportionate requirements detected</u> related to authorisation, certification and licensing procedures applied to plants and associated transmission and distribution network infrastructure for the production of electricity, heating or cooling from renewable sources, and to the process of transformation of biomass into biofuels or other energy products? If so, what are they? Certain obstacles and shortcomings created by the requirements of administrative procedures regulating the construction of power plants using renewable energy sources for the production of energy are encountered in the Republic of Lithuania in the course of the implementation of projects on the use of renewable energy sources for the production of energy:

- Planning procedures are quite complicated. Spatial planning procedures take a long time (1 to 2 years). The process of the preparation of project documents is slowed down by the preparation of detailed plans, procedures of coordination with the public, and environmental impact assessment;

- There exists a number of intuitions regulating the development of renewable energy sources; there is a lack of coordination between different institutions and coordination on issues concerning the issuance of authorisations;

- Due to the existing requirements to the preparation and implementation of projects, costs almost do not depend on the capacity of an electric power plant. The issuance of authorisations for the production and development of electricity from renewable energy sources for small-sized power plants is complicated;

- Sanitary protection zones and requirements for the change of the intended purpose of land use for small-capacity power plants also impede their development. The equipping of offshore wind power plants is not legally regulated;

- The prohibition of the construction of new dams at rivers of environmental and cultural importance remarkably limits the use of hydropower. The typical rules for the use and maintenance of reservoirs no longer corresponds to the existing situation (it is required to measure water levels hourly by automated measuring and registration devices and to apply new procedure for the management of reservoir overflow water throughput).

(f) <u>What level of administration (local, regional and national) is responsible for</u> <u>authorising, certifying and licensing renewable energy installations and for spatial planning?</u> (*If it depends on the type of installation, please specify.*) If more than one level is involved, how is coordination between the different levels managed? How will coordination between different responsible authorities be improved in the future?

The Ministry of Energy of the Republic of Lithuania, which issues authorisations for the development of the production of electricity, is the national level administration responsible for the issuance of authorisations for renewable energy installations.

When a structure is arranged at the area of two or more municipalities of the Republic of Lithuania (irrespective of whether one or several projects of the whole structure are prepared), construction permits shall be issued by the administration of each municipality for a part of the structure within the area of the municipality.

The Director of the Administration of the Municipality or another public servant of the Municipality authorised by the former issues a construction permit for any structure other than those specified above (with the exception of those cases when a structure is arranged at the area of two or more municipalities);

The administrations responsible for spatial planning are as follows:

- the organisers of general spatial planning include the Ministry of the Environment, the institution authorised by the Government of the Republic of Lithuania, and the Director of the Administration of a municipality;

- the preparation of spatial planning documents at the county level is organised and coordinated, within its jurisdiction, by the institution authorised by the Government of the Republic of Lithuania; - the preparation of spatial planning documents at the municipality level is organised and coordinated by municipal institutions.

In order to improve the coordination of actions of various responsible administrations, the Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 provides for the measure of preparing and constantly updating the guidance of administrative procedures of best practices applicable to facilities using renewable energy sources to be announced publicly (on the internet).

(g) <u>How is it ensured that comprehensive information on the processing of authorisation, certification and licensing applications and on assistance to applicants made available? What information and assistance is available to potential applicants for new renewable energy installations on their applications?</u>

An enterprise wishing to receive an authorisation or licence for renewable energy installations and activities has the right to require that the institution issuing the authorisation or licence should explain the reasons for the delay in issuing of refusal to issue an authorisation or licence.

Upon issuing authorisations or licences to enterprises and upon supplementing or specifying them, the institution issuing authorisations or licences shall announce this fact in the annex Informaciniai Pranešimai (Information Notices) to Valstyb•s Žinios (Official Gazette). The information shall also be made available on the website of the institution issuing authorisations or licences. In the field of the issuance of construction permits, the information system Infostatyba has been established in Lithuania. This system enables receiving applications and other documents for a construction permit electronically as well as monitoring the progress of the consideration of documents. So far, this system functions only in several municipalities; however, it is to become accessible within the whole territory of Lithuania in near future.

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 and the draft Law on Energy from Renewable Sources¹⁸ envisages that state and municipal institutions, bodies, and enterprises, within their competence, shall prepare, provide, and publish information about the issuance of authorisations and licences, on the processing of applications for certification related to renewable energy installations and on the assistance to be provided to applicants, and shall prepare, provide, and publish information on support schemes applicable to the use and production of renewable energy sources.

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 envisages the measure of preparing and constantly updating the guidance of administrative procedures of best practices applicable to facilities using renewable energy sources to be announced publicly (on the internet).

(h) <u>How is horizontal coordination facilitated between different administrative</u> bodies, responsible for the different parts of the permit? How many procedural steps are needed to receive the final authorisation/licence/permit? Is there a one-stop shop for coordinating all steps? Are timetables for processing applications communicated in advance? What is the average time for obtaining a decision for the application?

¹⁸<u>http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_1?p_id=365570</u>

An enterprise wishing to obtain an authorisation for renewable energy installations and activities (development and production) shall submit an application in the established form and other necessary documents to the institution issuing authorisations. The institution issuing authorisations shall verify whether the submitted documents and information contained therein complies with the conditions for the issuance of authorisations and whether the enterprise complies with the established requirements. Within 30 days from receipt of the necessary documents, the institution issuing authorisations must issue or replace an authorisation, or to provide the enterprise with a reasoned written refusal to do so. If not all data or documents have been submitted, the period shall commence from the date of the submission of all data or documents.

Procedures for the implementation of an investment project on the construction of installations for the production of renewable energy sources take a long time and are complicated. Spatial planning procedures take a long time (1 to 2 years). The process of the preparation of project documents is slowed down by the preparation of detailed plans, procedures of coordination with the public, and environmental impact assessment. There is a lack of coordination between different institutions and coordination on issues concerning the issuance of authorisations. The main stages of the implementation of a project are as follows:

1. Possession of the land plot necessary for the implementation of the project while acquiring the status of the user of the land (purchase, lease etc). Land plots assigned to the land of intended purpose classified as "other" in accordance with the intended purpose stipulated in spatial planning documents with areas envisaged for industrial and storage facilities and engineering infrastructure facilities can be used for the construction of facilities of renewable energy sources.

In case when the intended purpose of the use of the land is inappropriate, it should be changed at the request of the owners of the land in accordance with detailed or special spatial planning documents.

In case when a decision has been made to change the intended purpose of the land or when changing only the manner or character of the use of the land, the value of the land plot shall be recalculated and the data of the Real Estate Cadastre and entries in the Real Estate Cadastre shall be specified.

It shall be evaluated whether the Special Conditions of the Use of the Land and the easements of the lands will allow the implementation of the envisaged project.

The preparation of projects on the formation and rearrangement of land plots shall be organised by owners of land plots and shall be prepared by persons holding licences, in accordance with the procedure and requirements stipulated by the Law on Land. Cadastral measurements shall be performed in accordance with the procedure stipulated by the Law on the Real Estate Cadastre after the approval of the project on the formation and rearrangement of the land plot.

2. Geodetic measurements of the land plot necessary for the project include special purpose geodetic, topographic and cartographic activities related to the drawing up and publishing of special maps and layouts of construction sites and engineering networks. The topographic plan of the land plot, i.e. a large-scale (1:500 \div 1 \div 5,000) topographic map drawn up without taking into account the sphericity of the Earth, shall be drawn up. The activities shall be performed by a person holding a licence for such activities in accordance with the procedure stipulated by the Law on Geodesy and Cartography.

3. Preparation of the detailed plan of the land plot intended for the project.

The detailed plan of a land plot is a spatial planning document establishing the boundaries of the land plot as well as the regime of the management and use of the territory (conditions for construction and other activities).

Detailed plans shall be prepared for territories (land plots), where the construction of energy facilities is envisaged in accordance with general and special plans of municipalities, when land plots are to be newly formed and when the intended purpose of the use of the land is to be changed.

The process of special territorial planning is regulated by the Law on Territorial Planning. This process shall comprise the preparatory stage, territorial planning shall comprise the preparatory stage where planning terms are to be obtained and certified contractors shall be chosen, the stage of preparation of the territorial planning documents, the stage of assessing the effects of the solutions, and the final stage.

Detailed plans shall be approved by the Municipality Council or by the Director of the Administration of the Municipality under the instruction of the Council.

A positive conclusion of the state spatial planning supervision institution regarding the approval of the detailed plan should be attached when submitting the detailed plan for approval.

4. Preparation of the construction project of an energy facility.

The right to construct a renewable energy facility shall belong to persons who are possessors of the land, have a prepared and approved construction project and hold a construction permit issued in accordance with the established procedure.

At the initial designing stage, the Code of Design Conditions shall be issued. It shall be issued by the Director of the Administration of the Municipality with the approval of the design conditions established for the construction of a particular energy production facility.

The document of the environmental impact assessment of the proposed economic activity to be prepared in the cases stipulated by the Law on Environmental Impact Assessment of the Proposed Economic Activity shall form an important part of the Code of Design Conditions. The conclusion whether such document should be prepared or not shall be provided by the Regional Environmental Protection Department of the Ministry of the Environment. The preparation process includes provision of information to the participants, preparation and approval of the programme, preparation of the report and familiarisation of the participants with the report, and adoption of a decision whether the activity is permissible or not.

Besides, individual regulations on the protection of protected areas approved by the institution authorised by the Government as stipulated by the Law on Protected Areas shall be obtained (if required).

The Code of Conditions shall also establish other requirements such as follows: to engineering networks and systems, transport communications, protection of rights of other persons, requirements to the protection of cultural heritage etc.

The following shall be submitted to the Municipality together with the Code of Design Conditions of the structure: documents certifying the right of the land user, spatial planning documents, design proposals, design assignment for the structure, and documents of construction investigations of the structure and construction site.

Upon the receipt of the Code of Design Conditions of the structure of the energy facility, the construction project shall be prepared in accordance with the procedure stipulated by the Law on Construction. The construction project of the energy facility shall be prepared by the project developer under the instruction of the designer. Obligatory project documents of the structure as well as the procedure and composition of preparation are stipulated by the relevant Technical Regulations for Construction (Lithuanian abbreviation: STR).

The project of the structure shall be approved by the construction management company. The approval procedure includes indication of the main technical and economic indicators of the structure as well as environmental and landscape requirements.

5. Upon the submission of all the aforementioned documents and performance of the established procedures, the construction permit shall be issued by the Administration of the Municipality.

The "one-stop shop" principle is applied in the field of the issuance of construction permits, the implementation of which is a responsibility of municipalities. With the view to implement this principle, permanent construction commissions are formed of representatives of responsible institutions in municipalities. The timetables for the consideration of applications for the issuance of construction permits are established in the Law of the Republic of Lithuania on Construction (10 days or, in case of structures of exceptional significance, 15 days).

(i) <u>Do authorisation procedures take into account the specificities of the different</u> renewable energy technologies? If so, please describe how. If they do not, do you envisage taking them into account in the future?

For areas (land plots), where the construction of energy facilities is envisaged in accordance with general and special plans of municipalities, as well as in case of newly forming land plots, when the intended purpose of the land is to be changed, detailed plans should be prepared. Pursuant to the provisions of the Law on Territorial Planning, detailed plans shall not be prepared for the following:

- when constructing single wind power plants with capacities not exceeding $250 \, \text{kW}$ 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 1 MW to be constructed within land plots of existing livestock farming buildings.

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 provides for the measure of revising legal acts regulating the procedures for the issuance of construction permits and evaluating the possibility of taking into account the specificity of various technologies for energy from renewable sources in the procedure as well as possibilities of establishing simpler procedures for the issuance of permits for smaller-scope projects and small-scale, decentralised structures producing energy from renewable sources. Amendments of effective legal acts and new draft legal acts will be prepared.

Procedures for the issuance of construction permits depend on the category of the structure (simple, not of essential significance, of essential significance). Structures shall be assigned to one or another category with regard to their designs, the danger level of technologies used in them etc. This is why not only the technology but also the parameters of the structure itself will be considered when evaluating possibilities of simplifying the procedures for the issuance of permits.

(j) Are there specific procedures, for example simple notification, for small-scale, decentralised installations (such as solar panels on buildings or biomass boilers in buildings)? If so, what are the procedural steps? Are the rules publicly available to citizens? Where are they published? Is the introduction of simplified notification procedures planned in the future? If so, for which types of installation/system? (Is net metering possible?) Currently, there are no specific procedures for small-scale, decentralised installations.

The possibility of assigning small-sized power plants to simple structures, which are subject to simplified procedures, is under consideration. Simple structures are divided into two groups. For structures of Group I, no procedures are required to be performed; for structures of Group II, a full-scope project of the structure is not required (a simplified project of the structure shall be prepared), a construction permit is not required either, and only the approval of an authorised public servant of the municipality is necessary.

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 provides for the measure of establishing simpler procedures for the issuance of permits for smaller-scope projects and small-scale, decentralised structures producing energy from renewable sources.

It is appropriate to establish a simplified procedure for the processing of documents for small-sized hydropower plants to be constructed at existing dams, at sites of former water watermills as well as for operating hydropower plants when it is intended to improve their efficiency, and to simplify the construction planning process for small-capacity hydropower plants.

In the prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources, it is planned that power plants with installed capacities not exceeding 30 kW and power plants with installed capacities exceeding 30 kW but not exceeding 250 kW and not exceeding the load capacity of the consumer, provided that the producer has fulfilled the simplified designing conditions issued by the grid operator, will be connected to electricity grids immediately. These power plants shall be connected to electricity distribution grids while equipping production and consumption metering. These power plants will not be subject to the provisions that a producer planning to develop capacities for the production of electricity from renewable energy sources, upon the receipt of the initial designing conditions for the connection of the power plant to the electricity grid, shall prepare a request for signing a protocol of intent and submit it to the grid operator.

(k) Where are the fees associated with applications for authorisation/licences/permits for new installations published? Are they related to the administrative costs of granting such permits? Is there any plan to revise these fees?

For the issuance, supplementation (amendment) of authorisations, specification of particulars and issuance of duplicates, a state fee shall be charged on an enterprise in accordance with the procedure stipulated by the Law of the Republic of Lithuania on Fees (Valstyb•s Žinios (Official Gazette), 2000, No <u>52-1484</u>) and Resolution No 1458 of 15 December 2000 regarding the approval of the specific amounts of the state fee and the Rules for the Payment and Repayment of the Fee (Valstyb•s Žinios (Official Gazette), 2000, No <u>108-3463</u>; 2008, No <u>36-1285</u>; 2010, No 28-1307). The amount of this fee shall depend on administrative costs and be revised on a regular basis. The amounts of fees are published on the internet site of the institution issuing the authorisations.

(l) <u>Is official guidance available to local and regional administrative bodies on</u> planning, designing, building and refurbishing industrial and residential areas to install equipments and systems using renewable energy sources in electricity and heating and cooling, including in district heating and cooling? If such official guidance is not available or insufficient, how and when will this need be addressed?

Currently, such guidance is not available.

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 provides for measures for amending legal acts and preparing new draft legal acts regulating energy, spatial planning, and construction field, according to which persons planning, designing, building and refurbishing industrial and residential areas would ensure that equipments and systems using renewable energy sources in district heating and cooling are installed, and according to which the use of heating and cooling from renewable energy sources would be included in city infrastructure planning.

It is envisaged to prepare and publish guidance for designers, architects, and other specialists on technologies of renewable energy sources, high energy efficiency technologies, and integration of district heating and cooling systems when planning, designing, building and refurbishing industrial and residential areas.

(m) <u>Are there specific trainings for case handlers of authorisation, certification and licensing procedures of renewable energy installations?</u>

There are no specific trainings for case handlers of authorisation, certification and licensing procedures of renewable energy installations.

4.2.2. Technical specifications (Article 13(2) of Directive 2009/28/EC)

(a) <u>To benefit from support schemes do renewable energy technologies need to</u> <u>meet certain quality standards? If so, which installations and what quality standards? Are</u> <u>there national, regional standards that go beyond European standards?</u>

Currently, it is not envisaged that renewable energy technologies need to meet certain quality standards to benefit from support schemes.

In the prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources, the following is envisaged:

- installations and systems using energy from renewable sources, which are subject to support schemes, should meet the technical requirements established for these installations and systems;

- when support schemes are applied to installations and systems using energy from renewable sources, the conditions for obtaining support shall include technical specifications, where the technical requirements to installations and systems using energy from renewable sources are specified;

- if there are European standards, including eco-labels, energy labels, and other systems of technical standards established by European standardisation bodies, technical specifications shall be prepared in accordance with such standards. Technical specifications do not indicate where installations and systems should be certified. Technical specifications shall be prepared in such a manner that they would not impede the functioning of the market of the European Union.

4.2.3. Buildings (Article 13(3) of Directive 2009/28/EC)

<u>Please note that when referring to increasing the use of renewable energy sources in</u> <u>buildings, the supply of renewable electricity from the national grid should not be considered.</u> <u>The focus here is on increasing local supply of heat and/or electricity to individual buildings.</u> <u>The direct supply of heat or cooling through district heating and cooling in buildings could</u> <u>also be taken into account.</u> (a) <u>Reference to existing national and regional legislation (if any) and summary of</u> <u>local legislation concerning the increase of the share of energy from renewable sources in the</u> <u>building sector:</u>

The share of energy from renewable sources in the building sector is not regulated. Currently, it is not required to implement renewable energy sources in the construction sector, and this is the option of the builder (customer).

(b) <u>Responsible Ministry(/ies)/authority(/ies):</u>

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources envisages that the Government or the institution authorised by the Government shall prepare and implement measures related to cogeneration as well as to passive houses, low energy and zero energy buildings, which increase the use of energy from renewable sources of all types and remarkably improve the efficiency of energy use.

(c) <u>Revision of rules, if any, planned by: 31 December 2014</u>

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources envisages that the Government or the institution authorised by the Government shall establish the requirements stated below and the procedure for the implementation control thereof:

- effective from 31 December 2014, all new buildings and existing buildings requiring major renovation should comply with the requirements to the use of energy from renewable sources. The compliance with these requirements can also be ensured by using district heating and cooling, the production of which involves a significant share of renewable sources;

- effective from 1 January 2012, new buildings of governmental and municipal institutions, bodies, and enterprises and existing buildings of governmental and municipal institutions, bodies, and enterprises requiring major renovation should comply with the requirements to the use of energy from renewable sources.

(d) <u>Summary of the existing and planned measures at regional/local levels:</u>

Currently, no such measures exist.

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources envisages that municipalities shall include measures for increasing the use of renewable energy sources in their action plans for renewable energy sources.

(e) Are there minimum levels for the use of renewable energy in building regulations and codes? In which geographical areas and what are these requirements? (Please summarise.) In particular, what measures have been built into these codes to ensure the share of renewable energy used in the building sector will increase? What are the future plans related to these requirements/measures?

Legal acts of the Republic of Lithuania regulating buildings do not provide for minimum levels for the use of renewable energy resources.

With the view to ensure the effective use, maintenance, renovation and modernisation of housing and rational use of energy resources, the Government of the Republic of Lithuania approved the Programme for the Renovation (Modernisation) of Multi-Apartment Buildings by Resolution No 1213 of 23 September 2004 (Valstyb•s Žinios (Official Gazette), 2004, No 143-5232; 2009, No 112-4776). The objective of this Programme is to encourage apartment owners of multi-apartment buildings to renovate (modernise) multi-apartment buildings in order to achieve a better quality of living, rational use of energy resources, and reduction of budget costs for the compensation of expenses for heating of housing. The installation of alternative energy (solar, wind etc) equipment is financed in the course of the implementation of the Programme and modernisation of multi-apartment buildings.

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 provides for a measure of preparing draft legal acts stipulating the requirement of minimum levels of using renewable energy sources in new buildings and existing newly renovated (modernised) buildings with regard to various types of energy used in buildings and possibilities of using separate types of renewable energy sources.

(f) What is the projected increase of renewable energy use in buildings until 2020?

It is foreseen that renewable energy use in buildings will account for 69 % compared to 44 % in 2005.

(g) <u>Have obligations for minimum levels of renewable energy in new and newly</u> refurbished buildings been considered in national policy? If so, what are these levels? If not, how will the appropriateness of this policy option be explored by 2015?

The national policy does not provide for obligations for minimum levels of renewable energy in new and newly refurbished buildings.

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources envisages the following:

- effective from 31 December 2014, all new buildings and existing buildings requiring major renovation should comply with the requirements to the use of energy from renewable sources. The compliance with these requirements can also be ensured by using district heating and cooling, the production of which involves a significant share of renewable sources;

- effective from 1 January 2012, new buildings of governmental and municipal institutions, bodies, and enterprises and existing buildings of governmental and municipal institutions, bodies, and enterprises requiring major renovation should comply with the requirements to the use of energy from renewable sources.

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 provides for a measure of preparing draft legal acts stipulating the requirement of minimum levels of using renewable energy sources in new buildings and existing newly renovated (modernised) buildings with regard to various types of energy used in buildings and possibilities of using separate types of renewable energy sources. The following needs to be prepared:

- a draft amendment of the Law on Construction;

- a technical regulation for construction regulating minimum requirements to using renewable energy sources in buildings with regard to various types of energy used in buildings and possibilities of using separate types of renewable energy sources;

- a technical regulation for construction regulating requirements to low energy buildings, zero energy buildings, and passive houses;

- to prepare and approve measures necessary for the supervision and control of the compliance with the established minimum requirements;

- to prepare financial measures (tax benefits, funds) ensuring the implementation of minimum requirements.

(h) <u>Please describe plans for ensuring the exemplary role of public buildings at</u> national, regional and local level by using renewable energy installations or becoming zero energy buildings from 2012 onwards? (Please take into account the requirements under the <u>EPBD).</u>

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources envisages that effective from 1 January 2012, new buildings of governmental and municipal institutions, bodies, and enterprises and existing buildings of governmental and municipal institutions, bodies, and enterprises requiring major renovation should comply with the requirements to the use of energy from renewable sources.

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 provides for a measure of preparing draft legal acts stipulating the requirement of minimum levels of using renewable energy sources in new buildings and existing newly renovated (modernised) buildings with regard to various types of energy used in buildings and possibilities of using separate types of renewable energy sources.

In addition, it is envisaged to prepare draft amendments of legal acts regulating the construction field, which establish requirements to low energy buildings or ultra-low energy buildings. A technical regulation (regulations) for construction establishing requirements to low energy buildings will be prepared and approved.

(i) <u>How are energy efficient renewable energy technologies in buildings</u> promoted? (Such measures may concern biomass boilers, heat pumps and solar thermal equipment fulfilling eco-label requirements or other standards developed at national or Community level (cf. text of Article 13(6))).

The installation of alternative energy (solar, wind etc) equipment is financed in the course of the implementation of the Programme for the Modernisation of Multi-Apartment Buildings and modernisation of multi-apartment buildings.

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 provides for a measure of preparing and providing proposals on financial measures encouraging consumers to equip energy production installations producing energy from renewable sources (biofuel, solar, geothermal, hydrothermal, and wind energy) in buildings.

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources envisages supporting the acquisition of equipment increasing the use of renewable energy sources for own needs in the residential and public sectors.

It is also envisaged that the Government or an institution authorised by the Government shall prepare and approve the Programme for the Use of Roofs for the Production of Energy from Solar Energy.

4.2.4. Information provisions (Articles 14(1), 14(2) and 14(4) of Directive 2009/28/EC)

(a) <u>Reference to existing national and or regional legislation (if any) concerning</u> information requirements according to Article 14 of Directive 2009/28/EC: (1) The Law of the Republic of Lithuania on Energy (Valstyb•s Žinios (Official Gazette), 2002, No <u>56-2224</u>; 2010, No 67-3337).

(2) The National Programme for the Improvement of Energy Consumption Efficiency for 2006–2010 approved by Resolution No 443 of the Government of the Republic of Lithuania of 11 May 2006 (Valstyb•s Žinios (Official Gazette), 2006, No <u>54-1956</u>), where measures for public education and information with the view to improve the efficiency of the consumption of renewable energy sources and energy are envisaged.

(3) The Plan for the Provision of Information on structural support of the European Union approved by Order No 1K-255 of the Minister of Finance of the Republic of Lithuania of 25 August 2008 (Valstyb•s Žinios (Official Gazette), 2008, No <u>99-3830</u>). This legal acts establishes the main goals of the provision of information on structural support of the European Union in Lithuania in 2007–2013 and publicity of provided support and its target groups as well as the on the implementation, evaluation, financing, and obligatory information and publicity measures of the Plan for the Provision of Information

(4) The Articles of Association of the Public Institution Lietuvos Verslo Paramos Agent•ra (Lithuanian Business Support Agency) approved by Order No <u>4-103</u> of the Minister of Economy of the Republic of Lithuania of 20 March 2009. This institution administers national and European Union support funds allocated for the development of the Lithuanian energy and other sectors and, within its jurisdiction, provides high-quality services and information related to the use of national and European Union support funds allocated for the development funds for the implementation of projects to natural and legal persons. Also, it accumulates, prepares, provides and disseminates information related to support being provided as well as organises information and other training seminars and other events.

(5) The Articles of Association of the Public Institution Lietuvos Aplinkos Apsaugos Investicij• Fondas (Lithuanian Environmental Investment Fund) approved by Order No <u>D1-724</u> of the Minister of Environment of the Republic of Lithuania of 29 December 2007. These Articles of Association establish the procedure for the provision of information to the public on the activities of the aforementioned Fund, which provides subsidies and loans to projects on the use of renewable energy sources.

(6) The Regulations of the National Paying Agency under the Ministry of Agriculture approved by Order No 3D-17 of the Minister of Agriculture of 22 January 2003. These Regulations specify the following: provision of comprehensive information to beneficiaries about measures of state support and EU support for the development of agriculture and rural development, possibilities and procedure for their implementation and use, consultancy of enterprises, institutions, organisations, farmers and other natural persons on issues within the competence of the Agency.

(b) <u>Responsible body/(ies)</u> for dissemination of information at <u>national/regional/local levels:</u>

1. The following bodies are responsible for dissemination of information at the national level:

- the Ministry of Energy of the Republic of Lithuania;

- the Ministry of the Environment of the Republic of Lithuania;

- the Ministry of Agriculture of the Republic of Lithuania;

- the Ministry of Transport and Communications of the Republic of Lithuania;

- the Ministry of Education and Science of the Republic of Lithuania;

- the Ministry of Finance of the Republic of Lithuania. This Ministry owns the internet site on European Union structural support (*http://www.esparama.lt*), where information to be known by an applicant preparing a project on the use of renewable energy sources for the

production of energy and submitting an application for the financing of such project is published;

- the Ministry of Economy of the Republic of Lithuania which, within its competence, is responsible for [the provision] of information about measures in the energy sector jointly financed from the European Union funds including measures related to the use of renewable energy sources for the production of energy. Information on support for the production of energy from renewable sources is provided on the internet site (<u>http://www.ukmin.lt</u>¹⁹) of the Ministry;

- State Enterprise Energy Agency;

- Public Institution Lietuvos Verslo Paramos Agent•ra (Lithuanian Business Support Agency);

- Public Institution Lietuvos Aplinkos Apsaugos Investicij• Fondas (Lithuanian Environmental Investment Fund);

- National Paying Agency under the Ministry of Agriculture;

2. Municipalities are responsible for dissemination of information at the local level.

(c) <u>Summary of the existing and planned measures at regional/local levels (where</u> relevant):

Currently, municipalities, taking into account local conditions and circumstances as well as financial possibilities, carry out public education (information stands, booklets etc).

(d) <u>Please indicate how information is made available on supporting measures for</u> using renewable energy sources in electricity, heating and cooling and in transport to all relevant actors (consumers, builders, installers, architects, suppliers of relevant equipment and vehicles). Who is responsible for the adequacy and the publishing of this information? Are there specific information resources for the different target groups, such as end consumers, builders, property managers, property agents, installers, architects, farmers, suppliers of equipment using renewable energy sources, public administration? Are there information campaigns or permanent information centres in the present, or planned in the future?</u>

So far, there are no special information sources for different target groups. Information on supporting measures for using renewable energy sources in electricity, heating and cooling and in transport is made available to all relevant actors (consumers, builders, installers, architects, suppliers of relevant equipment and vehicles) by state and municipal institutions within their competence.

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 and the prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources envisage the following:

- state and municipal institutions, bodies and enterprises, within their competence, shall prepare, provide and publish information on handling the issuance of authorisations and licences related to renewable energy installations sources as well as on the assistance available to applicants; shall prepare, provide and publish information on support available for the use and production of renewable energy sources;

- the Ministry of Energy, the Ministry of the Environment, the Ministry of Transport and Communications, the Ministry of Education and Science, the Ministry of Agriculture, municipal institutions, while coordinating their actions, within their competence, shall prepare and implement public information and awareness measures, provide consultations

¹⁹<u>http://www.ukmin.lt/lt/veiklos_kryptys/es_strukturiniai_fondai/2007-2013/2007_2013_dokumentai_energetika.php</u>

encouraging the effective use of energy from renewable sources, organise trainings on the practical possibilities and the benefits of the development and use of renewable energy sources including those on the accessibility and environmental benefits of various renewable energy sources used in transport;

- the Ministry of Energy shall organise exchange of experience in the field of using renewable energy sources between state and municipal institutions, bodies, enterprises, organisations and private entities, and publishes examples of best practices;

- State Enterprise Energy Agency shall prepare, provide, and publish information on installations and systems using renewable energy sources, benefits provided by them, their costs, and the efficiency of the consumption of these sources.

(e) Who is responsible for publishing information on the net benefits, costs and energy efficiency of equipment and systems using renewable energy sources for heating, cooling and electricity? (Supplier of the equipment or system, public body or someone else?)

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources envisages that information on the net benefits, costs and energy efficiency of equipment and systems using renewable energy sources shall be prepared, provided and published by State Enterprise Energy Agency.

(f) <u>How is guidance for planners and architects provided to help them to properly</u> consider the optimal combination of renewable energy sources, high efficiency technologies and district heating and cooling when planning, designing, building and renovating industrial or residential areas? Who is responsible for that?

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 and the prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources envisage that the Ministry of Energy jointly with the Ministry of the Environment shall prepare and publish guidance for designers, architects, and other specialists on technologies of renewable energy sources, high energy efficiency technologies, and integration of district heating and cooling systems when planning, designing, building and renovating industrial or residential areas.

(g) <u>Please describe the existing and planned information, awareness raising and training programmes for citizens on the benefits and practicalities of developing and using energy from renewable sources. What is the role of regional and local actors in the designing and managing these programmes?</u>

In the course of the implementation of the National Programme for the Improvement of Energy Consumption Efficiency for 2006–2010 approved by Resolution No 443 of the Government of the Republic of Lithuania of 11 May 2006 (Valstyb•s Žinios (Official Gazette), 2006, No 54-1956), information, education and consultancy activities are carried out, during which publications intended for the public on issues on broader use of renewable energy sources including benefits provided by them are prepared and issued; seminars, conferences, contents are arranged; television and radio programmes are arranged or participated in; information for the press is prepared.

State institutions, within their competence, shall carry out information and educational activities on issues of broader use of renewable energy sources.

State Enterprise Energy Agency performs promotional and informational activities related to the effective consumption of energy sources, energy, and renewable energy sources.

Municipalities of the Republic of Lithuania participate in the preparation or prepare educational public information measures facilitating the effective consumption of energy and energy resources.

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 envisages the following measures:

- to prepare and implement public information and awareness raising measures and to provide consultations encouraging more effective use of energy from renewable sources;

- to organise trainings on the practical possibilities and benefits of the development and use of renewable energy sources including those on the accessibility and environmental benefits of various renewable energy sources used in transport;

- to organise exchange of experience in the field of using renewable energy sources between state and municipal institutions, bodies, enterprises, organisations and private entities, and to publish examples of best practices;

- to prepare, provide, and publish information on installations and systems using renewable energy sources, benefits provided by them, their costs, and the efficiency of the consumption of these sources;

- to include knowledge and capabilities of pupils in the field of the possibilities of the use of renewable energy sources, benefits provided by them, and their technological solutions into comprehensive formal education programmes.

4.2.5. Certification of installers (Article 14(3) of Directive 2009/28/EC)

(a) <u>Reference to existing national and/or regional legislation (if any) concerning</u> certification or equivalent qualification schemes for installers according to Article 14(3) of the <u>Directive 2009/28/EC:</u>

Currently, there are no such legal acts in place.

It is envisaged that qualification and certification of specialists installing installations and systems using renewable energy sources will be regulated by the Law of the Republic of Lithuania on Energy from Renewable Sources, a draft of which has been prepared (please see more information on this matter in Clause 4.2.5 (c)).

(b) <u>Responsible body/(ies) for setting up and authorising certification/qualification</u> schemes by 2012 for installers of small-scale biomass boilers and stoves, solar photovoltaic and solar thermal systems, shallow geothermal systems and heat pumps:

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 envisages the measure that the Ministry of Energy shall be the responsible body for the preparation of the procedure for the certification of installers of installations and systems using renewable energy sources as well as training programmes for installers, which include issues on renewable energy sources, technologies of their use, and their economic opportunities and benefits.

(c) <u>Are such certification schemes/qualifications already in place? If so, please,</u> <u>describe.</u>

Currently, it is only planned to prepare such certification/qualification schemes. In the prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources, it is planned to prepare and approve the procedure for the certification of installers of installations and systems using renewable energy sources as well as training programmes for installers, which should include issues on renewable energy sources, technologies of their use, and their economic opportunities and benefits.

It is envisaged that installers of the following installations and systems using renewable energy sources should be certified in accordance with the established procedure:

1) water heating biomass boilers and non-stone stoves, when the temperature of water prepared by them is lower than 95 $^{\circ}$ C;

2) solar photovoltaic and solar thermal systems;

3) geothermal systems and heat pumps.

(d) <u>Is information on these schemes publicly available? Are lists of certified or</u> <u>qualified installers published? If so, where? Are other schemes accepted as equivalent to the national/regional scheme?</u>

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources envisages that the procedure for the certification of installers of installations and systems using renewable energy sources should be established pursuant to the principle of transparency. Information on the procedure for certification and lists of certified installers are published.

The aforementioned draft Law also envisages that certificates of the said installers issued by another Member State of the European Union, provided that they comply with the criteria stipulated in the procedure for the certification of installers of installations and systems using renewable energy sources, shall be acknowledged in the Republic of Lithuania.

(e) <u>Summary of existing and planned measures at regional/local levels (where relevant).</u>

Currently, there are no such measures in place.

4.2.6. Electricity infrastructure development (Article 16(1) and Article 16(3) to (6) of Directive 2009/28/EC)

(a) <u>Reference to existing national legislation concerning requirements related to the energy grids (Article 16):</u>

the National Energy Strategy approved by Resolution No X-1046 of the Seimas of the Republic of Lithuania of 18 January 2007 (Valstyb•s Žinios (Official Gazette), 2007, No 11-430);

the National Strategy for the Development of Renewable Energy Sources approved by Resolution No 789 of the Government of the Republic of Lithuania of 21 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 73-3725);

the Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 78-4030);

the Law of the Republic of Lithuania on Energy (Valstyb•s Žinios (Official Gazette), 2002, No 56-2224; 2010, No 67-3337);

the Law of the Republic of Lithuania on Electricity (Valstyb•s Žinios (Official Gazette), 2000, No 66-1984; 2004, No 107-3964);

the Description of the Procedure for the Promotion of the Production and Purchase of Electricity the Production of which Involves the Use of Renewable Energy Sources approved by Resolution No 1474 of the Government of the Republic of Lithuania of 5 December 2001 (Valstyb•s Žinios (Official Gazette), 2001, No 104-3713; 2004, No 9-228);

the Rules for the Issuance of Permits for Activities in the Electricity Sector approved by Order No 380 of the Minister of Economy of the Republic of Lithuania of 18 December 2001 (Valstyb•s Žinios (Official Gazette), 2001, No 110-4010; 2009, No 63-2522);

the Rules for the Supply and Use of Electricity approved by Order No 1-38 of the Minister of Energy of the Republic of Lithuania of 11 February 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 20-957);

the Description of the Procedure and Conditions for the Connection of Energy Facilities (Networks, Installations, Systems) of Electricity Consumers and Producers to Operating Facilities of Energy Companies (Networks, Installations, Systems) approved by Order No 1-246 of the Minister of Energy of the Republic of Lithuania of 9 December 2009 (Valstyb•s Žinios (Official Gazette), 2009, No 149-6678);

the Technical Rules for the Connection of Wind Power Plants to the Lithuanian Electricity System approved by Order No 4-102 of the Minister of Economy of the Republic of Lithuania (Valstyb•s Žinios (Official Gazette), 2004, No 57-2007);

the Rules for Licensing of Activities in the Electricity Sector approved by Resolution No 1474 of the Government of the Republic of Lithuania of 5 December 2001 (a revision of Resolution No 470 of the Government of the Republic of Lithuania of 28 April 2010) (Valstyb•s Žinios (Official Gazette), 2001, No 104-3713; 2010, No 51-2498);

the Description of the Procedure for the Provision of Services Meeting Public Interests approved by Order No 1-215 of the Minister of Energy of the Republic of Lithuania of 24 November 2009 (Valstyb•s Žinios (Official Gazette), 2009, No 140-6159).

(b) <u>How is it ensured that transmission and distribution grids will be developed with</u> <u>a view to integrating the targeted amount of renewable electricity while maintaining the</u> <u>secure operation of the electricity system? How is this requirement included in the</u> <u>transmission and distribution operators' periodical network planning?</u>

It is indicated in the Law on Electricity that the transmission system operator, taking into account the requirements for security of supply, quality, efficiency, consumption, management and environmental protection specified in the National Energy Strategy, improving the terms and conditions of access to the system shall plan the long-term development of the electricity system in coordination thereof with a body authorised by the Government and distribution system operators. The transmission system operator must develop the country's energy system infrastructure and system connections in order to satisfy growing demands of the country for electricity, while declaring associated expenses in a clear and transparent manner as well as the procedure for compensating such expenses.

The distribution system operator must operate, maintain, manage and develop distribution networks and interconnections with other networks, securing reliable operation of the distribution network, guaranteeing reliable, effective and safe supply with due regard to the environment.

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 envisages preparation of draft legal acts, whereby transmission system and distribution networks operators would be obligated to ensure access to electricity networks for installations for the production of electricity from renewable energy sources, and to manage and modernise electricity networks

in such a manner that it would be possible to increase installed capacities of installations using renewable energy sources without infringing consumer rights.

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources envisages that the obligation stipulated for a transmission system operator and distribution networks operator to connect a power plant of a producer of energy from renewable sources to electricity networks shall also be valid in case when such connection is possible only after technical upgrading of the electricity networks, their optimisation, expansion of the electricity network and increasing the capacity of the electricity network or reconstructing them otherwise. In this case, the power plant of the producer should be connected to the electricity network within a reasonable period of time with consideration of the need for the upgrading and expansion of the network as it is reasonably required for the connection of a power plant.

Upon conclusion of an agreement regarding the service of connecting a power plant to the electricity network between a producer of energy from renewable sources and transmission system operator and distribution networks operator, the network operator shall immediately, taking into account the existing technical condition, take all reasonably necessary measures for the optimisation, expansion and/or reconstruction and electricity network capacity increase in respect of the network operated by the network operator, including electricity installations and facilities required for the operation of the network, in order to enable ensuring safe and reliable acceptance, transmission and distribution of energy produced from renewable energy sources.

(c) <u>What will be the role of intelligent networks, information technology tools and</u> storage facilities? How will their development be ensured?

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources envisages that with a view to increasing the total installed capacity of wind power plants above 500 MW, the Government of the Republic of Lithuania shall prepare and approve further procedure for the development of wind power plants, transmission and distribution networks, intelligent networks, and electricity accumulation infrastructure.

(d) <u>Is the reinforcement of the interconnection capacity with neighbouring countries</u> planned? If so, which interconnectors, for which capacity and by when?

The new investment projects provided for in the National Energy Strategy are as follows: the inter-system 400 kV link Lithuania – Poland is planned to be put into operation in 2015; the inter-system link Lithuania – Sweden with a throughput capacity of 7,000 MW is planned to be commissioned in 2016.

(e) <u>How is the acceleration of grid infrastructure authorisation procedures</u> addressed? What is the current state and average time for getting approval? How will it be improved? (*Please refer to current status and legislation, bottlenecks detected and plans to streamline procedure with timeframe of implementation and expected results.*)

The procedures for the issue of network infrastructure permits are regulated by the Rules for the Issuance of Permits for Activities in the Electricity Sector.

Existing electricity production capacities can be expanded, or new production capacities in a new place can be equipped only upon the receipt of a permit for the expansion of electricity production capacities. A permit for the expansion of existing or equipping new production capacities in a new place shall be issued by the Ministry of Energy within 30 days

from the receipt of necessary documents, or a reasoned written request to do so shall be provided. If not all data or documents have been submitted, the period shall commence from the date of the submission of all data or documents.

Permits shall be issued to all persons who have submitted an application and ensure that the activities to be carried out by them will meet the following conditions: the electricity installations and related equipment will be safe and reliable, harmless to health, will comply with environmental requirements, will comply with requirements to the use of land and selection of a construction site, will comply with requirements to the energy consumption efficiency, will meet technical, economic and financial possibilities, and the services will meet public interests and will comply with requirements to the selection of fuel to be used.

(f) <u>How is coordination between grid infrastructure approval and other</u> <u>administrative planning procedures ensured?</u>

The Description of the Procedure and Conditions for the Connection of Energy Facilities (Networks, Installations, Systems) of Electricity Consumers and Producers to Operating Facilities of Energy Companies (Networks, Installations, Systems) envisages that installations of an energy producer from renewable energy sources shall be connected to the electricity networks of the transmission system operator and distribution networks operator after the producer has received a permit for the expansion of the electricity production capacity and has fulfilled the conditions and requirements indicated in the designing conditions issued by the operator in the procedure stipulated by the Law on Construction.

A producer wishing to connect his installations to the electricity networks of an operator shall be entitled to submit to the operator an application for initial designing conditions where preliminary requirements to the connection of the electricity installations of the producer to the electricity networks of the operator are indicated. Initial designing conditions shall be valid for 6 months and are intended for the preliminary evaluation of the amount of future investments and create no rights or obligations either to the producer or operator.

A producer who has decided on the appropriateness of the investment shall submit to the Ministry of Energy, in accordance with the procedure established by legal acts, an application for a permit for the expansion of the electricity production capacity.

A producer who has received a permit for the expansion of the electricity production capacity shall submit to the Director of the Administration of the Municipality (another public servant of the Municipality authorised by the former), in accordance with the procedure established by legal acts, an application for the code of designing conditions.

Requirements to the designing and construction of new electricity production capacities are established by the Law on Construction and other legal acts.

(g) <u>Are priority connection rights or reserved connection capacities provided for</u> <u>new installations producing electricity from renewable energy sources?</u>

Currently, no priority connection rights or reserved connection capacities are provided for new installations producing electricity from renewable energy sources.

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 envisages preparation of draft legal acts, whereby transmission system and distribution networks operators would be obligated to ensure access to electricity networks for installations for the production of electricity from renewable energy sources, and to manage and modernise electricity networks

in such a manner that it would be possible to increase installed capacities of installations using renewable energy sources without infringing consumer rights.

(h) <u>Are any renewable installations ready to come online but not connected due to capacity limitations of the grid? If so, what steps are taken to resolve this and by when is it expected to be solved?</u>

There are no renewable energy installations ready to come online.

(i) Are the rules on cost sharing and bearing of network technical adaptations set up and published by transmission and distribution system operators? If so, where? How is it ensured that these rules are based on objective, transparent and non-discriminatory criteria? Are there special rules for producers located in peripheral regions and regions with low population density? (*Cost bearing rules define which part of the costs is covered by the* generator wishing to be connected and which part by the transmission or distribution system operator. Cost sharing rules define how the necessary cost should be distributed between subsequently connected producers that all benefit from the same reinforcements or new lines.)

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 envisages preparation of rules on cost sharing and bearing as well as on the provision of information to producers to be applied when performing technical adaptations related to the connection of renewable energy installations to electricity networks.

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources envisages that a network operator, upon coordinating with the National Control Commission for Prices and Energy, shall publish the Procedure for the Use of Electricity Networks. This Procedure shall regulate cost sharing and bearing when performing technical adaptations necessary to enable new producers to be connected to the electricity network. This Procedure is based on objective, transparent and non-discriminatory criteria, which take into account all benefits and costs related to the connection of producers to electricity networks and to specific circumstances of producers located in peripheral regions and regions with low population density. Costs related to the connection of a mechanism based on objective, transparent and non-discriminatory criteria, which take into account the benefits gained by producers connected to the system initially and subsequently as well as by the network operator.

(j) Please describe how the costs of connection and technical adaptation are attributed to producers and/or transmission and/or distribution system operators? How are transmission and distribution system operators able to recover these investment costs? Is any modification of these cost bearing rules planned in the future? What changes do you envisage and what results are expected? (*There are several options for distributing grid connection costs. Member States are likely to choose one or a combination of these. According to the "deep" connection cost charging the developer of the installation generating electricity from renewable energy sources bears several grid infrastructure related costs (grid connection, grid reinforcement, and extension). Another approach is the "shallow" connection cost charging, meaning that the developer bears only the grid connection cost, but not the costs of reinforcement and extension (this is built into the grid tariffs and paid by the customers). A further variant is when all connection costs are socialised and covered by the grid tariffs.)*

Producers bear 60 % of "deep" costs. 40 % of these costs are paid by operators. These costs are taken into account when establishing the prices of services provided by operators.

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources envisages that a network operator, upon coordinating with the National Control Commission for Prices and Energy, shall publish the Procedure for the Use of Electricity Networks. This Procedure shall regulate cost sharing and bearing when performing technical adaptations necessary to enable new producers to be connected to the electricity network. This Procedure is based on objective, transparent and non-discriminatory criteria, which take into account all benefits and costs related to the connection of producers to electricity networks and to specific circumstances of producers located in peripheral regions and regions with low population density. Costs related to the connection of power plants of producers to the electricity network shall be shared with the application of a mechanism based on objective, transparent and non-discriminatory criteria, which take into account the benefits gained by producers connected to the system initially and subsequently as well as by the network operator.

(k) <u>Are there rules for sharing the costs between initially and subsequently</u> <u>connected producers? If not, how are the benefits for subsequently connected producers taken</u> <u>into account?</u>

There no rules for sharing the costs between initially and subsequently connected producers.

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources envisages that a network operator, upon coordinating with the National Control Commission for Prices and Energy, shall publish the Procedure for the Use of Electricity Networks. This Procedure shall regulate cost sharing and bearing when performing technical adaptations necessary to enable new producers to be connected to the electricity network. This Procedure is based on objective, transparent and non-discriminatory criteria, which take into account all benefits and costs related to the connection of producers to electricity networks and to specific circumstances of producers located in peripheral regions and regions with low population density. Costs related to the connection of a mechanism based on objective, transparent and non-discriminatory criteria, which take into account the benefits gained by producers connected to the system initially and subsequently as well as by the network operator.

(1) <u>How will it be ensured that transmission and distribution system operators</u> provide new producers wishing to be connected with the necessary information on costs, a precise timetable for processing their requests and an indicative timetable for their grid connection?

The Description of the Procedure and Conditions for the Connection of Energy Facilities (Networks, Installations, Systems) of Electricity Consumers and Producers to Operating Facilities of Energy Companies (Networks, Installations, Systems) envisages that a producer of energy from renewable sources wishing to connect his installations to the electricity networks of an operator shall be entitled to submit to the operator an application for initial designing conditions where preliminary requirements to the connection of the electricity installations of the producer to the electricity networks of the operator are indicated. Initial designing conditions shall be valid for 6 months and are intended for the preliminary evaluation of the amount of future investments and create no rights or obligations either to the producer or operator.

The prepared [draft] Law of the Republic of Lithuania on Energy from Renewable Sources envisages that the network operator must provide all information on the actions to be taken by the producer in relation to connecting his power plant to the electricity network and on the planned timetable for network expansion operations not later than 30 calendar days from the date of the submission of the application of the producer for the issuance of initial designing conditions. If a producer requests so, the network operator must provide a detailed estimate of costs related to the connection to the electricity network, a substantiated and accurate timetable for the submission and consideration of applications for the connection to the electricity network, and a substantiated preliminary timetable of proposed connections to the electricity network. In all cases, the network operator and producer shall exchange all technical and other information necessary for the connection of the producer to the electricity network. Initial designing conditions may not contain any requirements other than those necessary for ensuring reliable, safe, and high-quality operation of the electricity capacities and electricity system. Initial designing conditions shall be published on the internet site of the network operator.

4.2.7. Electricity network operation (Article 16(2) and Article 16(7) and (8) of Directive 2009/28/EC)

(a) <u>How is the transmission and distribution of electricity from renewable energy</u> <u>sources guaranteed by transmission and distribution system operators?</u> Is priority or <u>guaranteed access ensured?</u>

The Description of the Procedure for the Provision of Services Meeting Public Interests envisages that a transmission network operator should ensure priority transportation of electricity produced with the use of renewable energy sources by electricity transmission networks (when throughput capacity is limited).

(b) <u>How is it ensured that transmission system operators, when dispatching electricity generating installations give priority to those using renewable energy sources?</u>

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 envisages preparation of draft legal acts, whereby transmission system and distribution networks operators would be obligated to ensure access to electricity networks for installations for the production of electricity from renewable energy sources, and to manage and modernise electricity networks in such a manner that it would be possible to increase installed capacities of installations using renewable energy sources without infringing consumer rights.

The draft Description of the Procedure for the Promotion of the Use of Renewable Energy Sources for the Production of Energy, which is currently under preparation, envisages that investments into the development, reconstruction, renovation and/or repair of electricity networks, which should be made by network operators in accordance with the procedure and conditions stipulated in legal acts with a view to promoting the use of renewable energy sources for the use of electricity, shall be classified as investments to be made for the implementation of the energy priorities established in the National Energy Strategy.

(c) <u>How are grid- and market-related operational measures taken in order to</u> <u>minimise the curtailment of electricity from renewable energy sources? What kinds of</u> measures are planned and when is implementation expected? (*Market and grid design that* enable the integration of variable resources could cover measures such as trading closer to real time (changing from day-ahead to intra-day forecasting and rescheduling of generators), aggregation of market areas, ensuring sufficient cross border interconnection capacity and trade, improved cooperation of adjacent system operators, the use of improved communication and control tools, demand-side management and active demand-side participation in markets (through two-way communication systems — smart metering), increased distributed production and domestic storage (e.g. electric cars) with active management of distribution networks (smart grids).)

Currently, such problems do not exist. The throughput capacities of networks are sufficient for receiving energy produced from renewable sources.

The draft Description of the Procedure for the Promotion of the Use of Renewable Energy Sources for the Production of Energy, which is currently under preparation, envisages that all electricity produced with the use of renewable energy sources and supplied to electricity networks shall enjoy the right of priority transmission (in case of throughput capacity limitations of networks) irrespective of the scope and period of promotion. The transmission of electricity produced with the use of renewable energy sources by electricity networks may be limited or temporarily suspended in accordance with the procedure stipulated by legal acts in case of an emergency situation in the energy system or due to other technical reasons, when the non-discrimination principle is limited by throughput capacities of electricity networks.

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 envisages preparation of measures promoting the use of electricity-driven vehicles and vehicles using pure biofuels. It is envisaged to prepare and implement measures creating conditions for and encouraging the use of excess electricity produced at night time in transport while creating and developing city infrastructure of vehicles using electricity.

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources envisages that municipalities shall promote the use of renewable energy sources powered and hydrogen powered, electric and hybrid vehicles in public sector and in protected areas, and shall create infrastructure needed for the development of the use of renewable energy sources powered and hydrogen powered, electric and hybrid vehicles pursuant to their own action plans for the development of the use of energy from renewable sources.

The aforementioned draft also envisages that with a view to increasing the total installed capacity of wind power plants above 500 MW, the Government of the Republic of Lithuania shall prepare and approve further procedure for the development of wind power plants, transmission and distribution networks, intelligent networks, and electricity accumulation infrastructure.

(d) <u>Is the energy regulatory authority informed about these measures? Does it have</u> the competence to monitor and enforce implementation of these measures?

The energy regulatory authorities are informed about these measures and have the competence to enforce implementation of these measures.

(e) <u>Are plants generating electricity from renewable energy sources integrated in</u> <u>the electricity market? Could you please describe how? What are their obligations regarding</u> <u>participation in the electricity market?</u> Electricity is purchased at prices established for separate technologies by the National Control Commission for Prices and Energy. The whole actually amount of electricity produced with the use of renewable energy sources and supplied to networks shall be acknowledged as the eligible amount of electricity production.

The procedure of purchase of electricity produced by power plants using renewable energy sources is not adjusted to the electricity market because electricity produced by these power plants is purchased by public suppliers at fixed tariffs.

The prepared draft Description of the Procedure for the Promotion of the Use of Renewable Energy Sources for the Production of Electricity envisages measures for the promotion of the use of renewable energy sources for the production of electricity comprising the following: adjustable electricity selling price or premium to the market price for electricity produced in a power plant and supplied to networks.

It is envisaged that when constructing solar power plants and wind power plants with capacities exceeding 250 kW, auctions for the distribution of quotas of the promotion scope shall be announced. Participants of the auction compete by providing proposals for the desired premium to the market price of electricity (ct/kWh), which is calculated by national regulatory authorities in accordance with the established procedure as the average weighted electricity exchange price of each month. The participant who has quoted the lowest desirable premium to the market price of electricity shall be acknowledged as the winner of the auction. Electricity produced at wind power plants of the winners of auctions shall be traded in accordance with the procedure and conditions established in the Rules for Trade in Electricity. The networks operator managing the electricity networks to which the power plants are to be connected shall pay to the producers, in accordance with the procedure established by the Ministry of Energy, the difference between the price of the agreement on the purchase and sale of electricity or exchange transaction price and the regulated selling price of electricity established by the National Regulatory Authority if electricity is sold by the producer at a price lower than the regulated selling price of electricity established by the National Regulatory Authority, or the premium to the market price of electricity to the amount established in the permits of the winners of auctions for the whole amount of electricity produced and supplied to networks. When calculating the indicated price difference of electricity, the price of the agreement on the purchase and sale of electricity or exchange transaction price indicated by the producer may not be lower than the market price calculated in accordance with the procedure established by the National Regulatory Authority as the average weighted electricity exchange price of each month by more than 20%.

(f) <u>What are the rules for charging transmission and distribution tariffs to</u> generators of electricity from renewable energy sources?

Generators of electricity from renewable energy sources shall pay neither for the transmission nor for the distribution service.

4.2.8. Biogas integration into the natural gas network (Article 16(7) and Article 16(9) and (10) of Directive 2009/28/EC)

(a) <u>How is it ensured that the charging of transmission and distribution tariffs does</u> not discriminate against gas from renewable energy sources?

The prepared draft Description of the Procedure for the Promotion of the Use of Renewable Energy Sources for the Production of Electricity regulates that when establishing gas transmission and distribution tariffs, it should be ensured that the application of these tariffs would not discriminate against gas produced from renewable energy sources.

(b) <u>Has any assessment been carried out on the need to extend the gas network</u> <u>infrastructure to facilitate the integration of gas from renewable sources? What is the result? If</u> <u>not, will there be such an assessment?</u>

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 envisages an assessment of the need to extend the gas network infrastructure and preparation of amendments of legal acts, which would facilitate supplying of biogas of appropriate quality to natural gas networks and broader use of biogas for the production of energy.

(c) <u>Are technical rules on network connection and connection tariffs for biogas</u> <u>published? Where are these rules published?</u>

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 envisages preparation and publication of technical conditions (rules) on network connection and connection tariffs for biogas.

4.2.9. District heating and cooling infrastructure development (Article 16(11) of Directive 2009/28/EC)

(a) <u>Please provide an assessment of the need for new district heating and cooling</u> infrastructure using renewable energy sources and contributing to the 2020 target. Based on this assessment, are there plans to promote such infrastructures in the future? What are the expected contributions of large biomass, solar and geothermal facilities in the district heating and cooling systems?

The National Strategy for the Development of Renewable Energy Sources, among other priorities of the development of energy from renewable sources, envisages utilisation of the existing district heating infrastructure and further development of necessary infrastructure while creating conditions for the development of renewable energy sources. It is envisaged that biofuel to be consumed in the district heating sector should become the biggest contributor to the increase in the consumption of renewable energy sources. Taking into account technological possibilities of the district heating sector and economic advantage, heat production from renewable energy sources in this sector should be increased by not less than to 50 % by 2020.

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 envisages creating conditions for the construction of cogeneration power plants using municipal and other waste unsuitable for processing, which has energy value, in the big Lithuanian cities (Vilnius, Kaunas, and Klaip•da).

It is envisaged to prepare measures of financial support, which would promote the modernisation of heat production installations supplying heat to rural public buildings (schools, kindergartens, health care institutions, elderships etc), while adjusting these installations for the incineration of biofuel (wood, straw) including herbaceous plant biomass (grass granules)

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources regulates that when planning the development of city and/or district infrastructure, renovation of buildings, heating and/or cooling of public and private facilities, municipalities would give priority to the production of heating and cooling from renewable energy sources.

4.2.10. Biofuels and other bioliquids — sustainability criteria and verification of compliance (Articles 17 to 21 of Directive 2009/28/EC)

(a) <u>How will the sustainability criteria for biofuels and bioliquids be implemented at</u> <u>national level? (*Is there legislation planned for implementation? What will be the institutional* <u>setup?)</u></u>

On the basis of the assessment of the provisions of the Law on Land, the Law on Forest, the Law on Protected Areas, the Law on Protected Fauna, Flora and Fungi Species and Communities, the Law on Environmental Impact Assessment of the Proposed Economic Activity as well as other legal acts providing for certain procedures of spatial planning and environmental impact assessment or limitations of economic activities related to the change of the intended purpose, manner and character of the use of land, it can be stated that produce grown in Lithuania complies with the sustainability criteria related to the transformation of land areas and change of the manner or character of use specified in Article 17(3-5) of Directive 2009/28/EC.

However, it is not in all cases known how to ensure the application of the sustainability criteria when preparation of spatial planning documents or getting certain authorisations is not obligatory for changing technologies of raw materials intended for the production and cultivation of biofuels and other bioliquids and changing the composition of plants, e.g. when starting intensive fertilisation, sowing with new plants, early mowing or other unfavourable use of highly biodiverse grasslands.

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources regulates that when calculating national targets, evaluating the compliance of energy producers with obligations of using energy from renewable sources, and providing financial support for the use of biofuels and other bioliquids, biofuels and other bioliquids must comply with the sustainability criteria set out in the Law.

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 envisages preparation of the Procedure for the Control of the Compliance of Biofuels and Other Bioliquids with the Sustainability Criteria and Certification Thereof, the preparation and control of which shall be the responsibility of the Ministry of Agriculture of the Republic of Lithuania. In addition, the Methodology for the Calculation of Greenhouse Gas Emitted in the Course of Production and Use of Transport Fuels, Biofuels, and Other Bioliquids.

The Ministry of the Environment, the Ministry of Energy, the Ministry of Finance, the Ministry of Transport and Communications, the Ministry of Economy, the Ministry of Agriculture and other institutions will be obligated to harmonise necessary legal acts while incorporating in them provisions regulating the requirements to the implementation of sustainability criteria of biofuels and bioliquids.

(b) <u>How will it be ensured that biofuels and bioliquids that are counted towards the</u> national renewable target, towards national renewable energy obligations and/or are eligible for financial support comply with the sustainability criteria set down in Article 17(2) to (5) of Directive 2009/28/EC? (*Will there be a national institution/body responsible for monitoring/verifying compliance with the criteria*?)

There is no national institution appointed as responsible for monitoring/verifying compliance with the indicated sustainability criteria.

(c) If a national authority/body will monitor the fulfilment of the criteria, does such a national authority/body already exist? If so, please specify. If not, when is it envisaged to be established?

There is no national institution/body which would monitor the fulfilment of the criteria.

It is envisaged to prepare the Procedure for the Certification of Biofuels and Other Bioliquids, the preparation and control of which shall be the responsibility of the Ministry of Agriculture of the Republic of Lithuania.

(d) <u>Please provide information on the existence of national law on land zoning and</u> national land register for verifying compliance with Article 17(3) to (5) of Directive 2009/28/EC. How economic operators can access to this information? (*Please provide information on the existence of rules and distinction between different land statuses, like biodiversity area, protected area etc; and on the competent national authority who will monitor this land register and changes in land status.*)

The classification of land in accordance with the main intended purpose, manner and character of use of land is provided for in the Law on Land. In accordance with this Law, the following intended purpose can be established for land: "agriculture", "forestry", "aquaculture", "conservation" and "other". The Law provides for a procedure as to how the content of the manner and character of the use of land shall be defined as well as how the established main intended purpose should be changed if change in the use of the land is envisaged. Information on the main intended purpose, manner and character of the use of land established for land plots is accumulated in the Real Estate Cadastre and in the Real Property Register, and is provided from them to entities concerned when required. The Real Estate Cadastre also accumulates information on limitations imposed on the use of land (special conditions of the use of land, e.g. regarding access of a land plot to the protection zone of a water body) and composition of lands, e.g. agricultural lands, forest, bogs, waters etc; however, such data are recorded only in respect of land where land plots have been formed and registered, i.e. there are no such data on land belonging to the vacant state land fund.

Information on the classification of forests by certain groups according to their environmental, social and economic significance is accumulated in the State Forest Cadastre of the Republic of Lithuania (managing authority: the State Forest Survey Service). Information on areas declared as protected areas in accordance with the Law on Protected Areas is accumulated in the State Cadastre of Protected Areas (managing authority: the State Service for Protected Areas). Economic entities are entitled to unlimited access to information on the status of particular territories according to the data of the aforementioned Cadastres.

Accumulation of information on the location sites of protected fauna, flora and fungi species and communities in the Information System of Protected Species and Communities started in 2009 (managing authority: the Ministry of the Environment). Economic entities are entitled to use data accumulated by this System with certain limitations, which may be applied if there are grounded suspicions that the disclosure of the precise location site of the protected species may endanger the survival of the species.

The Lithuanian Geological Survey has compiled an electronic map of Lithuanian moors. This map, which is distributed without limitation, provides mapping information on

moors of the country. However, according to the definition of wetland provided in the Directive, it covers not only moors; therefore, application of the corresponding criterion may be complicated in case of wetlands where moors are absent.

There is no official register of highly biodiverse grasslands. Inventorying of natural grasslands has been performed at approximately 70 % of the area of the country; however, the data of the inventorying are stored in scientific institutions. The use of these data for making decisions on the change of the manner of using the land is not legally binding.

(e) <u>As far as protected areas are concerned, please provide information under which</u> <u>national, European or international protection regime they are classified.</u>

Protected areas are classified by categories and types established by the Law on Protected Areas of the Republic of Lithuania. Protection requirements are established by the aforementioned Law as well as by the Law on Environmental Protection, the Law on Protection of Immovable Cultural Properties, the Law on Forests and other laws, regulations of protected areas, environmental regulations, other legal acts, and planning documents of protected areas. Environmental requirements can also be established by protection agreements concluded with land owners and managers.

The Law on Protected Areas of the Republic of Lithuania envisages that national protected areas of the Republic of Lithuania or parts thereof complying with the requirements of international documents can be entered in lists of international protected areas, including the network *Natura 2000*, protected areas under the Ramsar Convention etc by a decision of the Government of Lithuania.

(f) <u>What is the procedure for changing the status of land? Who monitors and reports</u> <u>at national level on land status changes? How often are the land zoning register updated</u> (monthly, annually, bi-annually, etc.)?

The procedure for changing the main intended purpose of land established for a land plot is stipulated by the Law on Land and the Procedure for the Submission, Consideration of and Decisions on Applications for Changing the Main Intended Purpose of Land approved by the Government. It shall be changed in accordance with detailed or special spatial planning documents.

Changing of the manner and character of the use of land should also be performed by preparing relevant spatial planning documents; however, in certain cases, they shall not be prepared, e.g. when cultivating energy plantations in grasslands.

Data of the Land Cadastre on the changed intended purpose, manner and character of land shall be amended each time when such decisions are made.

The National Land Service under the Ministry of Agriculture publishes data on the Land Fund of the Republic of Lithuania and its changes on its internet site (<u>http://www.nzt.lt</u>²⁰) annually.

The following manners of the use of land plots can be established for land of the intended purpose "agriculture":

1) amateur gardening land plots and common-use land plots of gardeners' communities;

2) recreational use land plots;

²⁰<u>http://www.nzt.lt/index.php?id=221</u>

3) land plots of specialised gardening, floriculture, greenhouse, nursery-gardening farms and other specialised farms;

4) other land plots of the intended purpose "agriculture".

The manners of the use of land for land plots of the intended purpose "agriculture" including land plots of specialised gardening, floriculture, greenhouse, nursery-gardening farms and other specialised farms are established for those land plots which are used by farms engaged in specialised agricultural activities.

The manner of the use of land "other land plots of the intended purpose "agriculture" for land plots of the intended purpose "agriculture" is established for those land plots where the following agricultural activities are possible: production and treatment of agricultural produce and foodstuffs, processing of agricultural products and foodstuffs produced and treated by own forces and sales of these products and foodstuffs as well as provision of services for agriculture and maintenance of good condition of agricultural and environmental land.

In those cases when it is intended to cultivate energy plantations in grasslands and cultivation of these energy plantations is classified as production and treatment of agricultural produce and foodstuffs, processing of agricultural products and foodstuffs produced and treated by own forces and sales of these products and foodstuffs as well as provision of services for agriculture and maintenance of good condition of agricultural and environmental land, it is not required to change the manner of use of land of the intended purpose "agriculture".

(g) <u>How is compliance with good agro-environmental practices and other cross-</u> <u>compliance requirements (required by Article 17(6) of Directive 2009/28/EC) ensured and</u> <u>verified at national level?</u>

Compliance of farming with agro-environmental practices and other cross-compliance requirements has been controlled in Lithuania since 2009.

The observance of these requirements is controlled by the National Paying Agency under the Ministry of Agriculture, the State Food and Veterinary Service, the Ministry of the Environment and other authorised institutions and municipalities. Applicants are evaluated in accordance with risk assessment criteria and are verified on the spot. Depending on the number of infringements and character of infringement, up to 5 % of applicants will be verified.

(h) <u>Do you intend to help develop voluntary "certification" scheme(s) for biofuel</u> and bioliquid sustainability as described in the second subparagraph of Article 18(4) of <u>Directive 2009/28/EC? If so, how?</u>

It is envisaged to prepare the Procedure for the Certification of Biofuels and Other Bioliquids, the preparation and control of which is the responsibility of the Ministry of Agriculture of the Republic of Lithuania.

4.3. Support schemes to promote the use of energy from renewable resources in electricity applied by the Member State or a group of Member States

4.3.1. REGULATION

Regulation here is understood as setting targets and obligations.

I. To seek that 7 % of all electricity consumed in the country in 2010 would be produced from renewable energy sources (target).

(a) <u>What is the legal basis for this obligation/target?</u>

• the National Energy Strategy approved by Resolution No X-1046 of the Seimas of the Republic of Lithuania of 18 January 2007 (Valstyb•s Žinios (Official Gazette), 2007, No 11-430);

• the National Programme for the Improvement of Energy Consumption Efficiency for 2006–2010 approved by Resolution No 443 of the Government of the Republic of Lithuania (Valstyb•s Žinios (Official Gazette), 2006, No 54-1956; 2008, No 33-1183; 2010, No 7-297);

• the Description of the Procedure for the Promotion of the Production and Purchase of Electricity the Production of which Involves the Use of Renewable Energy Sources approved by Resolution No 1474 of the Government of the Republic of Lithuania of 5 December 2001 (Valstyb•s Žinios (Official Gazette), 2001, No 104-3713; 2004, No 9-228; 2005, No 73-2651; 2006, No 100-3862; 2009, No 49-1958).

(b) <u>Are there any technology-specific targets?</u>

Planned target volumes (installed capacity and production) are envisaged for separate technologies of renewable energy sources: wind power plants, hydropower plants, biofuel power plants, solar power plants, and geothermal power plants.

(c) <u>What are the concrete obligations/targets per year (per technology)?</u>

The Description of the Procedure for the Promotion of the Production and Purchase of Electricity the Production of which Involves the Use of Renewable Energy Sources establishes the following for 2009:

1) maximum planned volumes of electricity production which are subject to the purchase promotion procedure:

• wind power plants (total capacity at the beginning of the year–173 MW, annual production volume – 320.4 GWh);

• hydropower plants (total capacity at the beginning of the year – 30 MW, annual production volume – 122 GWh);

• biomass power plants (total capacity at the beginning of the year -30.8 MW, annual production volume -127.1 GWh);

• solar and geothermal power plants (total capacity at the beginning of the year - 0.6 MW, annual production volume - 3.2 GWh).

2) planned volumes of electricity production which are not subject to the purchase promotion (Kaunas hydropower plant, volumes of own use by plant in biomass power plants):

• hydropower plants (total capacity at the beginning of the year – 100.8 MW, annual production volume – 330 GWh);

• biomass power plants (total capacity at the beginning of the year – 22.6 MW, annual production volume – 92.4 GWh);

The prepared draft Description of the Procedure for the Promotion of the Use of Renewable Sources for Electricity Production (hereinafter referred to as the draft Description) has been prepared. The objective of the draft Description is to establish general criteria, conditions and requirements for the use of renewable energy sources for electricity production in the Republic of Lithuania. In accordance with the procedure and conditions stipulated in the draft Description, it is envisaged to promote electricity production in wind power plants, solar power plants, biomass power plants, geothermal power plants as well as in hydropower plants with installed capacities not exceeding 10 MW.

It is envisaged to promote the use of renewable energy sources for electricity production by applying an adjustable electricity selling price or a premium to the market price for electricity produced at a power plant and supplied to networks, discount on the fee for the connection of a power plant to electricity networks, release from the responsibility for balancing and power reservation of produced electricity, and other measures.

It is envisaged to promote the use of wind power and solar power for electricity production provided that the total installed capacity quota of 500 MW and 10 MW, correspondingly, is not exceeded. It is proposed to distribute the envisaged quota for wind and solar power plants through an auction, thus ensuring effective competition of electricity producers due to limited throughput capacities of the electricity system and technical possibilities for connecting new electricity production installations to electricity networks as well as in order to ensure transparent distribution of state support to the renewable energy sector. According to the draft Description, the amount of quotas shall be established taking into account possibilities of the electricity system to accept production volumes of varying electricity production volumes and in order to minimise the impact on the electricity price for consumers.

Power plants using renewable energy sources which are not subject to promotion measures in accordance with the procedure and conditions established in the draft Description can be constructed in accordance with the procedure established by legal acts upon coordinating the conditions of connecting the power plant to electricity network and other conditions of the development of electricity production capacities with the networks operator, i.e. the development of such power plants which are not subject to promotion measures established in the draft Description is not regulated by the indicated quotas, nor they are subject to the auction procedure.

The National Strategy for the Development of Renewable Energy Sources approved by Resolution No 789 of the Government of the Republic of Lithuania of 21 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No <u>73-3725</u>) envisages the following forecasted electricity production volumes from renewable energy sources for 2010:

• hydropower plants (total capacity – 127 MW, annual production volume – 432 GWh) including:

 $_{\odot}\,$ those with installed capacity not exceeding 10 MW (total capacity – 26 MW, annual production volume – 79 GWh),

 \circ those with installed capacity exceeding 10 MW (total capacity – 100.8 MW, annual production volume – 353 GWh);

• solar photovoltaic power plants (total capacity -1 MW, annual production volume -0 GWh);

• wind power plants (total capacity – 179 MW, annual production volume – 297 GWh);

• biomass power plants (total capacity – 34 MW, annual production volume – 147 GWh) including:

 $_{\odot}\,$ solid biomass power plants (total capacity – 22 MW, annual production volume – 98 GWh),

 $_{\odot}$ gaseous biomass power plants (total capacity – 12 MW, annual production volume – 50 GWh).

The aforementioned Strategy provides for the following forecasted total electricity production volumes from renewable energy sources for 2010: total capacity -341 MW, annual production volume -876 GWh.

(d) <u>Who has to fulfil the obligation?</u>

No specific parties in charge of fulfilment are established; however, the state is responsible for the formation of appropriate conditions for the production and purchase of energy [the production of] which involves the use of renewable energy sources so that the established targets would be properly achieved.

(e) <u>What is the consequence of non-fulfilment?</u>

No consequences of non-fulfilment are envisaged.

(f) <u>Is there any mechanism to supervise fulfilment?</u>

The mechanism of supervision is provided for in the National Strategy for the Development of Renewable Energy Sources: monitoring of implementing the development of renewable energy sources including electricity production from renewable energy sources, which will be performed by the Ministry of Energy of the Republic of Lithuania in accordance with the established results (assessment criteria), is envisaged.

(g) <u>Is there any mechanism to modify obligations/targets?</u>

A target can be modified by correspondingly modifying the aforementioned legal acts, whereby it is formalised:

• the National Energy Strategy;

• the National Programme for the Improvement of Energy Consumption Efficiency for 2006–2010;

• the Description of the Procedure for the Promotion of the Production and Purchase of Electricity the Production of which Involves the Use of Renewable Energy Sources.

II. To seek that 21 % of all electricity consumed in the country in 2020 would be produced from renewable energy sources.

(a) <u>What is the legal basis for this obligation/target?</u>

The target is established in the National Strategy for the Development of Renewable Energy Sources and is also indicated in the prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources²¹.

Are there any technology-specific targets?

The National Strategy for the Development of Renewable Energy Sources establishes 2010–2020 volumes (installed capacity and amount of electricity produced) for the following renewable energy technologies: hydropower plants, solar power plants, wind power plants, and biomass power plants.

(b) <u>What are the concrete obligations/targets per year (per technology)?</u>

The National Strategy for the Development of Renewable Energy Sources envisages the following forecasted electricity production volumes from renewable energy sources for 2020:

• hydropower plants (total capacity – 141 MW, annual production volume – 470 GWh) including:

 \circ those with installed capacity not exceeding 10 MW (total capacity – 40 MW, annual production volume – 117 GWh),

 \circ those with installed capacity exceeding 10 MW (total capacity – 100.8 MW, annual production volume – 353 GWh);

• solar power plants (total capacity – 10 MW, annual production volume – 15 GWh);

• wind power plants (total capacity – 500 MW, annual production volume – 1250 GWh);

• biomass power plants (total capacity – 224 MW, annual production volume – 1,223 GWh) including:

 $_{\odot}\,$ solid biomass power plants (total capacity – 162 MW, annual production volume – 810 GWh),

 $_{\odot}$ gaseous biomass power plants (total capacity – 62 MW, annual production volume – 413 GWh).

The aforementioned Strategy provides for the following forecasted total electricity production volumes from renewable energy sources for 2020: total capacity - 875 MW, annual production volume - 2,958 GWh.

(c) <u>Who has to fulfil the obligation?</u>

No specific parties in charge of fulfilment are established; however, the state is responsible for the formation of appropriate conditions for the production and purchase of energy [the production of] which involves the use of renewable energy sources so that the established targets would be properly achieved.

(d) <u>What is the consequence of non-fulfilment?</u>

The period for the fulfilment of the provisions of the National Strategy for the Development of Renewable Energy Sources will cover 2010–2020, and they will be fulfilled

²¹http://www3.lrs.lt/pls/inter3/dokpaieska.showdoc_l?p_id=365570

by executing the Plan for the Implementation of the Strategy, which will be approved by an order of the Minister of Energy of the Republic of Lithuania for the following two fulfilment periods: the first period -2010-2015; the second period -2016-2020.

The established results (assessment criteria) directly related to the objectives and tasks established in the aforementioned Strategy allowing regular assessment of the achieved progress:

1) In 2011–2012, the average share of renewable energy sources should account for not less than 16.6 % of gross final energy consumption.

2) In 2013–2014, the average share of renewable energy sources should account for not less than 17.4 % of gross final energy consumption.

3) In 2015–2016, the average share of renewable energy sources should account for not less than 18.6 % of gross final energy consumption.

4) In 2017–2018, the average share of renewable energy sources should account for not less than 20.2 % of gross final energy consumption.

5) In 2020, the share of renewable energy sources should account for not less than 23 % of gross final energy consumption.

In case of failure to achieve the aforementioned results, not later than after 14 months from the end of the calculated period, it is envisaged to submit for approval an updated draft Plan of Measures of the National Strategy for the Development of Renewable Energy Sources providing for adequate and proportional measures ensuring that the share of renewable energy sources would meet the established assessment criteria within a reasonable period of time.

(e) <u>Is there any mechanism to supervise fulfilment?</u>

The mechanism of supervision is provided for in the National Strategy for the Development of Renewable Energy Sources: monitoring of implementing the development of renewable energy sources including electricity production from renewable energy sources, which will be performed by the Ministry of Energy of the Republic of Lithuania in accordance with the established results (assessment criteria), is envisaged.

(f) <u>Is there any mechanism to modify obligations/targets?</u>

A target can be modified by correspondingly modifying the aforementioned National Strategy for the Development of Renewable Energy Sources and, after the draft Law of the Republic of Lithuania on Renewable Energy Sources is adopted, also by modifying the Law.

4.3.2. FINANCIAL SUPPORT

I. Purchasing prices of electricity produced from renewable energy sources.

(a) <u>What is the name and a short description of the scheme?</u>

The Procedure for the Promotion of the Production and Purchase of Electricity the Production of which Involves the Use of Renewable Energy Sources regulating general criteria, conditions and requirements for the use of electricity produced with the use of renewable energy sources in the Republic of Lithuania. This electricity is purchased at average prices established by the National Control Commission for Prices and Energy and conditions for the application thereof.

The aforementioned Procedure for the Promotion of Production and Purchase applies to producers (natural and legal persons) producing/intending to produce electricity at power plants using renewable energy sources as well as to persons who connect electricity installations of producers to electricity networks and/or purchase up electricity produced by producers to distribution and transmission networks.

(b) <u>Is it a voluntary or obligatory scheme?</u>

It is obligatory to purchase up electricity produced from renewable energy sources at established average prices and in accordance with the conditions of application thereof.

(c) <u>Who manages the scheme? (Implementing body, monitoring authority).</u>

Purchasing prices and the conditions of application thereof is established by the National Control Commission for Prices and Energy.

Electricity production with the use of renewable energy sources is a service meeting public interests. Public and independent suppliers, market, transmission and distribution networks operators, upon the receipt of activity licences, as well as free consumers importing electricity are obliged to provide established services meeting public interests.

Producers of electricity from renewable energy sources collect payment for electricity supplied to the grid from the transmission system operator.

(d) <u>What are the measures taken to ensure availability of necessary budget/funding to achieve the national target?</u>

As it was mentioned above, public and independent suppliers, market, transmission and distribution networks operators as well as free consumers importing electricity are obliged to provide established services meeting public interests. The price of services meeting public interests includes the amount of funds necessary for payment for electricity produced from renewable energy sources.

All market participants whose electricity installations are connected to transmission and/or distribution networks and who in their internal networks use and/or operate electricity producing installations for own use by plant, when the total installed capacity of their electricity producing installations is equal to or greater than 35 MW, must declare amounts of produced energy to transmission system or distribution networks operators and to pay for services meeting public interests.

(e) <u>How is long-term security and reliability addressed by the scheme?</u>

The transmission system operator must develop the infrastructure and system connections of the energy system of the country with a view to satisfy growing demands of the country for electricity, while declaring related expenses and procedure for their compensation in a clear and transparent manner.

(f) <u>Is the scheme periodically revised? What kind of feed-back or adjustment</u> mechanism exists? How has the scheme been optimised so far?

The scheme is periodically revised. Purchase prices are adjusted (increased) with regard to the varying economic conditions (see Point (g)).

(g) <u>Does support differ according to technology?</u>

Different purchasing prices are applied to renewable energy technologies:

Technology	2002-2007	2008	2009	2010
	Purchasing prices, LTL cnt/kWh			
Hydropower plants (• 10 MW)	20	20	26	26
Wind power plants	22	22	30	30
Biomass power plants	20	22*/24**	30	30
Solar power plants (photovoltaic power plants) by				
peak electric power:				
up to 100 kW	_	-	-	163
100 kW to 1 MW	_	_	-	156
over 1 MW	_	_	_	151

*for power plants put into operation before 1 January 2008 **for power plants put into operation after 1 January 2008

(h) <u>What are the expected impacts in terms of energy production?</u>

It is expected to achieve the established goals for electricity production from renewable sources.

(i) <u>Is support conditional on meeting energy efficiency criteria?</u>

Energy efficiency criteria are not currently established as a condition for support.

(j) <u>Is it an existing measure? Could you please indicate national legislation</u> regulating it?

It is an existing measure, the legal base of which is formed by the following:

• the Description of the Procedure for the Promotion of the Production and Purchase of Electricity the Production of which Involves the Use of Renewable Energy Sources approved by Resolution No 1474 of the Government of the Republic of Lithuania of 5 December 2001 (Valstyb•s Žinios (Official Gazette), 2001, No 104-3713; 2004, No 9-228; 2005, No 73-2651; 2006, No 100-3862; 2009, No 49-1958);

• Resolution No 7 of the National Control Commission for Prices and Energy of 11 February 2002 regarding prices of services meeting public interests in the electricity sector (Valstyb•s Žinios (Official Gazette), 2002, No 16-648; 2007, No 73-1041; 2008, No 16-217; No 77-1002; 2009, No 108-4576);

• the Description of the Procedure for the Provision of Services Meeting Public Interests approved by Order No 1-215 of the Minister of Energy of the Republic of Lithuania of 24 November 2009 (Valstyb•s Žinios (Official Gazette), 2009, No 140-6159);

• Order No 1-214 of the Minister of Energy of the Republic of Lithuania of 24 November 2009 regarding the establishment of the List of Services Meeting Public Interests in the Electricity Sector (Valstyb•s Žinios (Official Gazette), 2009, No 140-6158).

- (k) <u>Is this a planned scheme? When would it be operational?</u>
- LT
(l) What start and end dates (duration) are set for the whole scheme?

Purchasing prices were started to be applied in Lithuania from 1 April 2002, and purchasing prices under this scheme are guaranteed to producers until 31 December 2020.

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources envisages periods, during which producers are guaranteed fixed purchasing tariffs and premiums to be established by the Government of the Republic of Lithuania upon recommendation of the National Control Commission for Prices and Energy.

The same draft envisages that the Government of the Republic of Lithuania will establish the total maximum annual amount of electricity produced from renewable energy sources to be purchased while differentiating by separate types of renewable energy sources, for which a fixed purchasing tariff shall be paid:

• In 2015, the total amount of electricity produced from renewable energy sources will amount to 2.0 TWh;

• In 2020, the total amount of electricity produced from renewable energy sources will amount to 3.0 TWh.

It is envisaged to apply premiums to electricity produced in excess of the volumes specified in the subparagraph above.

(m) Are there maximum or minimum sizes of system which are eligible?

Maximum volumes of electricity produced from renewable energy sources subject to purchasing prices are established until 2010.

It is envisaged that annual volumes will not be limited later on.

(n) <u>Is it possible for the same project to be supported by more than one support</u> <u>measure? Which measures can be cumulated?</u>

Biofuel, wind (when the installed capacity of the power plant is up to 250 kW) and solar power plants can still receive structural support of the European Union for investments. Besides, the Lithuanian Environmental Investment Fund (LEIF) finances projects related to electricity production with the use of renewable energy sources such as wind (when the installed capacity of the power plant is up to 250 kW), solar, water and biomass energy sources. Benefit on environmental pollution tax can be applied when natural and legal persons who have submitted documents confirming consumption of biofuel shall be released from environmental pollution tax in respect of pollutants emitted into the atmosphere from stationary pollution sources as a result of the use of biofuel.

(o) <u>Are there regional/local schemes? If so, please detail using the same criteria.</u>

There are no regional/local schemes under implementation.

Specific questions for feed-in fixed tariffs:

(a) <u>What are the conditions to get the fixed tariff?</u>

The tariff is applied to purchasing electricity produced at wind, biomass and solar power plants as well as hydropower plants with capacities not exceeding 10 MW (small-sized hydropower plants) with the exception of cases when:

• electricity produced or planned to be produced is consumed or will be consumed for economic needs of the producer;

electricity is produced or planned to be produced:

 $_{\odot}\,$ at a biomass power plant, where biomass and biogas account for not less than 70 % of the fuel balance;

 $_{\odot}\,$ at a power plant of another type, where renewable energy sources account for less than 90 % of the fuel balance.

Until the beginning of hourly electricity trade with suppliers to be established by the Minister of Energy of the Republic of Lithuania, electricity shall be purchased from producers at the tariffs approved by Resolution No 7 of the National Control Commission for Prices and Energy of 11 February 2002 regarding prices of services in the electricity sector meeting public interests, and without exceeding the established annual volume of energy sources of each type. After transferring to hourly electricity trade with suppliers, until 31 December 2020, electricity purchased at contractual prices while compensating producers for the difference between the income level calculated in accordance with the tariff established by the National Control Commission for Prices and Energy for the sources of that type and income actually received from selling electricity at contractual prices without exceeding the established annual volume of energy and income actually received from selling electricity at contractual prices without exceeding the established annual volume of energy sources of each type.

The procedure and conditions for the promotion of purchase of electricity produced by geothermal power plants and hydropower plants with capacities not exceeding 10 MW and for the connection of these power plants to networks can be established by the Government of the Republic of Lithuania.

(b) <u>Is there a cap on the total volume of electricity produced per year or of installed capacity that is entitled to the tariff?</u>

Maximum annual electricity production volumes from renewable sources subject to purchasing tariffs were established for each year until 2009.

(c) <u>Is it a technology specific scheme? What are the tariff levels for each?</u>

Tariffs are applied to hydropower plants with installed capacities not exceeding 10 MW, wind power plants, biomass power plants, where biofuel accounts for not less than 70 % in the fuel balance, and solar power plants (for the latter, from 2010).

Technology	2009	2010
	Purchasing prices, LTL cnt/kWh	
Hydropower plants (• 10 MW)	26	26
Wind power plants	30	30
Biomass power plants	30	30
Solar power plants (photovoltaic power plants) by peak electric		
power:		
up to 100 kW	—	163
100 kW to 1 MW	_	156
over 1 MW	_	151

(d) <u>Are there other criteria differentiating tariffs?</u>

The National Control Commission for Prices and Energy establishes the purchasing tariff taking into account the factors determining the cost such as the following:

- price of investments (LTL/kW_{el}),
- price of financing (LTL/year),
- pay-back period (years),

• utilisation level of the capacity of the power plant, which depends on the climatic conditions in Lithuania (% and kWh/year),

- price of operation (LTL/year),
- expenses on fuel (biofuel) (LTL/year),
- income (LTL/year).

(e) For how long is the fixed tariff guaranteed?

The support scheme with establishment of average purchasing prices of electricity produced with the use of renewable energy sources started to be applied from 1 April 2002. The National Control Commission for Prices and Energy is entitled to change these prices. It is envisaged to apply the aforementioned support scheme until 31 December 2020.

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources envisages periods during which producers are guaranteed fixed purchasing tariffs and premiums to be established by the Government of the Republic of Lithuania upon recommendation of the National Control Commission for Prices and Energy.

The same draft envisages that the Government of the Republic of Lithuania will establish the total maximum annual amount of electricity produced from renewable energy sources to be purchased while differentiating by separate types of renewable energy sources, for which a fixed purchasing tariff shall be paid:

• In 2015, the total annual amount of electricity produced from renewable energy sources to be purchased will be 2.0 TWh;

• In 2020, the total annual amount of electricity produced from renewable energy sources to be purchased will be 3.0 TWh.

It is envisaged to apply premiums to electricity produced in excess of the volumes specified in the subparagraph above.

(f) <u>Is there any tariff adjustment foreseen in the scheme?</u>

The National Control Commission for Prices and Energy is entitled to change the purchasing tariff taking into account the factors determining the cost such as the following:

- price of investments (LTL/kW_{el}),
- price of financing (LTL/year),
- pay-back period (years),

• utilisation level of the capacity of the power plant, which depends on the climatic conditions in Lithuania (% and kWh/year),

- price of operation (LTL/year),
- expenses on fuel (biofuel) (LTL/year),
- income (LTL/year).

II. Discount for the connection of power plants producing electricity from renewable energy sources

(a) <u>What is the name and a short description of the scheme?</u>

Wind power plants, biomass power plants, solar power plants as well as hydropower plants with capacities not exceeding 10 MW are connected to operating networks of energy companies in accordance with the procedure established by legal acts while applying a 40 % discount on the connection fee, which is credited as purchase of services meeting public interests and is compensated next year to operators who connected the power plants.

(b) <u>Is it a voluntary or obligatory scheme?</u>

It is an obligatory scheme.

(c) <u>Who manages the scheme? (Implementing body, monitoring authority).</u>

Connecting of power plants to networks of energy companies is the responsibility of networks operators.

Compensation of connection expenses is performed by the transmission system operator.

Connection of electricity production installation using wind power, biomass power, solar power or hydropower to transmission or distribution electricity networks is a service meeting public interests. Public and independent suppliers, market, transmission and distribution networks operators, upon the receipt of activity licences, as well as free consumers importing electricity are obliged to provide established services meeting public interests.

(d) <u>What are the measures taken to ensure availability of necessary budget/funding</u> to achieve the national target?

As it was mentioned above, public and independent suppliers, market, transmission and distribution networks operators, upon the receipt of activity licences, as well as free consumers importing electricity are obliged to provide established services meeting public interests. The price of services meeting public interests includes the amount of funds necessary for covering a portion (40 %) of the connection fee.

All market participants whose electricity installations are connected to transmission and/or distribution networks and who in their internal networks use and/or operate electricity producing installations for own use by plant, when the total installed capacity of their electricity producing installations is equal to or greater than 35 MW, must declare amounts of produced energy to transmission system or distribution networks operators and to pay for services meeting public interests.

(e) <u>How is long-term security and reliability addressed by the scheme?</u>

The transmission system operator must develop the infrastructure and system connections of the energy system of the country with a view to satisfy growing demands of the country for electricity, while declaring related expenses and procedure for their compensation in a clear and transparent manner.

(f) <u>Is the scheme periodically revised? What kind of feed-back or adjustment</u> mechanism exists? How has the scheme been optimised so far?

This scheme is not periodically revised.

(g) <u>Does support differ according to technology?</u>

The scheme is applied to wind power plants, biomass power plants, solar power plants and hydropower plants with capacities not exceeding 10 MW.

(h) <u>What are the expected impacts in terms of energy production?</u>

It is expected to achieve the established goals for electricity production from renewable sources.

(i) <u>Is support conditional on meeting energy efficiency criteria?</u>

Currently, no energy efficiency criteria are established.

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources establishes energy efficiency criteria for technologies which are applied for the production of electricity eligible for support.

(j) <u>Is it an existing measure? Could you please indicate national legislation</u> regulating it?

It is an existing measure, the legal base of which is formed by the following:

• the Description of the Procedure for the Promotion of the Production and Purchase of Electricity the Production of which Involves the Use of Renewable Energy Sources approved by Resolution No 1474 of the Government of the Republic of Lithuania of 5 December 2001 (Valstyb•s Žinios (Official Gazette), 2001, No 104-3713; 2004, No 9-228; 2005, No 73-2651; 2006, No 100-3862; 2009, No 49-1958);

• the Description of the Procedure for the Provision of Services Meeting Public Interests approved by Order No 1-215 of the Minister of Energy of the Republic of Lithuania of 24 November 2009 (Valstyb•s Žinios (Official Gazette), 2009, No 140-6159);

• Order No 1-214 of the Minister of Energy of the Republic of Lithuania of 24 November 2009 regarding the establishment of the List of Services Meeting Public Interests in the Electricity Sector (Valstyb•s Žinios (Official Gazette), 2009, No 140-6158).

(k) <u>Is this a planned scheme? When would it be operational?</u>

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(l) What start and end dates (duration) are set for the whole scheme?

The discount has been applied since 2002. No specific effective period is established.

(m) Are there maximum or minimum sizes of system which are eligible?

No sizes of system are established.

(n) <u>Is it possible for the same project to be supported by more than one support</u> <u>measure? Which measures can be cumulated?</u>

Biofuel power plants can also receive structural support of the European Union for investments, support from the Lithuanian Environmental Investment Fund (LEIF), and purchasing tariff can be applied on produced electricity for those power plants where biofuel accounts for not less than 70 % of the fuel balance. Also, benefit on environmental pollution tax can be applied when natural and legal persons who have submitted documents confirming consumption of biofuel shall be released from environmental pollution tax in respect of pollutants emitted into the atmosphere from stationary pollution sources as a result of the use of biofuel.

(o) <u>Are there regional/local schemes? If so, please detail using the same criteria.</u>

There are no regional/local schemes under implementation.

III. Structural support of the European Union for 2007–2013

(a) What is the name and a short description of the scheme?

State Support No N 197/2008 – Lithuania. Regional Support to the Energy Sector.

The following is financed in accordance with the measure of the use of renewable energy sources for energy production:

• modernisation of cogeneration power plants supplying heating to heating supply systems – replacement of the usable fuel with biomass;

• construction of new effective cogeneration power plants using renewable energy sources and their connection to heating supply systems.

(b) <u>Is it a voluntary or obligatory scheme?</u>

It is a voluntary scheme.

(c) <u>Who manages the scheme? (Implementing body, monitoring authority).</u>

Responsible – the Ministry of Economy of the Republic of Lithuania.

Institution implementing the measure – the Public Institution Lietuvos Verslo Paramos Agent•ra (Lithuanian Business Support Agency)

(d) <u>What are the measures taken to ensure availability of necessary budget/funding to achieve the national target?</u>

Funds are appropriated from the structural funds of the European Union in the course of the implementation of the Cohesion Promotion Action programme.

(e) <u>How is long-term security and reliability addressed by the scheme?</u>

Construction of biofuel power plants is associated with the increase of electricity generation capacities and use of local renewable energy sources. The increase of electricity generation capacities and diversification of usable fuel of the country improves its energy security and reliability of fuel self-sufficiency and reduces its dependence on fossil fuels and their import.

(f) <u>Is the scheme periodically revised? What kind of feed-back or adjustment</u> mechanism exists? How has the scheme been optimised so far?

By Resolution No 60 of the Government of the Republic of Lithuania of 22 January 2007 (Valstyb•s Žinios (Official Gazette), 2007, No 10-396; 2008, No 4-133; 2009, No 102-4252), the Monitoring Committee for supervising the implementation of the action programmes implementing the Lithuanian Strategy for the Use of structural support of the European Union for 2007–2013 was established. The Monitoring Committee performs the following functions:

• ascertains the efficiency and quality of the implementation of the programme,

• considers and approves selection criteria for actions to be financed and modifications of the aforementioned criteria;

• regularly checks the progress made in achieving specific goals of the action programme,

• analyses results of the implementation of the action programme,

• considers and approves annual and final implementation reports (on the progress made in the implementation of the action programme and priority directions, on the financial implementation of the action programme etc),

• can propose amendment or revision of the action programme to the managing authority,

• considers and approves all proposals for amending the contents of the decision of the European Commission on the support from funds.

Assessments, studies, and research (hereinafter referred to as assessments) of the use of structural support of the European Union in Lithuania, which were performed by independent experts at the request of various institutions, are published on the internet site "ES strukt•rin• parama 2007–2013 metams (EU Structural Support for 2007–2013)" (*http://www.esparama.lt*²²). Reports on these assessments provide analysis performed according to various assessment criteria (appropriateness, efficiency, effectiveness, impact) as well as recommendations for the improvement of the use of structural support of the European Union.

(g) <u>Does support differ according to technology?</u>

Support is provided to cogeneration biofuel power plants.

(h) What are the expected impacts in terms of energy production?

It is planned that the share of energy production from renewable energy sources will increase by 100 MW (construction and modernisation of boiler plants is also supported under the measure; no distinction is made for capacities of power plants and heating capacities).

(i) <u>Is support conditional on meeting energy efficiency criteria?</u>

In case of construction of cogeneration power plants, construction of energy efficient power plants is supported as it is specified in the above Subparagraph (a) of this Chapter.

(j) <u>Is it an existing measure? Could you please indicate national legislation</u> regulating it?

It is an existing measure.

²²<u>http://www.esparama.lt/2007-2013/lt/administravimas/ataskaitos/vertinimas#3</u>

Annex to the Cohesion Promotion Action programme approved by Resolution No 787 of the Government of the Republic of Lithuania of 23 July 2008 (Valstyb•s Žinios (Official Gazette), 2008, No 95-3720, No 142-5628; 2009, No 36-1388, No 68-2773).

(k) Is this a planned scheme? When would it be operational?

The scheme has been implemented since 2007.

(l) What start and end dates (duration) are set for the whole scheme?

The start date of the implementation of the scheme: 2007; the end date of the implementation of the scheme: 2015.

(m) Are there maximum or minimum sizes of system which are eligible?

No size of system is envisaged; however, in case of modernisation of power plants, the power plant must supply heating to the heating supply system.

(n) <u>Is it possible for the same project to be supported by more than one support</u> <u>measure? Which measures can be cumulated?</u>

Besides, the Lithuanian Environmental Investment Fund (LEIF) finances projects related to electricity production with the use of renewable energy sources such as wind (when the installed capacity of the power plant is up to 250 kW), solar, water and biomass energy sources. Benefit on environmental pollution tax can be applied when natural and legal persons who have submitted documents confirming consumption of biofuel shall be released from environmental pollution tax in respect of pollutants emitted into the atmosphere from stationary pollution sources as a result of the use of biofuel. Purchasing tariff for produced electricity can be applied to power plants using renewable energy sources.

(o) <u>Are there regional/local schemes? If so, please detail using the same criteria.</u>

There are no regional/local schemes under implementation.

Specific questions for financial support for investment:

(a) <u>What is granted by the scheme? (subsidies, capital grants, low interest loans, tax exemption or reduction, tax refunds)</u>

Under this scheme, subsidies amounting up to 50 % of the eligible costs of a project are granted. The value of the project may not exceed LTL 172.64 million.

(b) Who can benefit from this scheme? Is it specified for certain technology(/ies)?

Legal persons complying with the established criteria can benefit from this scheme. The scheme is specified for technologies using biofuel for energy production.

(c) <u>Are applications continuously received and granted or are there periodical</u> calls? If periodical, could you please describe the frequency and conditions?

There are periodical calls for submission of applications.

IV. Lithuanian Rural Development Programme for 2007–2013

(a) <u>What is the name and a short description of the scheme?</u>

• Measure 6 "Modernisation of Agricultural Holdings" of Direction I of the Lithuanian Rural Development Programme for 2007–2013 (hereinafter referred to as the Programme". The following is financed under this measure:

• production of biogas from waste forming in the farm. Biogas produced can be used only for the needs of the holding;

• cultivation of short-rotation plantations;

• construction of small-capacity (with capacities of 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 Creation and Development "of Direction III of the Programme. The following is financed under this measure:

o peration 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 4 MW) 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 % of gas (or electricity) is produced for sale);

o disposal of non-hazardous waste by incinerating or otherwise when electricity, alternate fuel, and biogas are produced for further use as well as disposal of straw and hay waste when alternate fuel (granules) is produced from a mix one of the components thereof is straw, hay or grass.

• Measure 3 "Promotion of Countryside Tourism Activities" of Direction III of the Programme. Under this measure, equipping of small-capacity wind power plants and hydropower plants is financed. Electricity produced should be used only for satisfying the needs of the holding.

(b) <u>Is it a voluntary or obligatory scheme?</u>

It is a voluntary scheme.

(c) <u>Who manages the scheme? (Implementing body, monitoring authority).</u>

Responsible – the Ministry of Agriculture of the Republic of Lithuania.

Institution implementing the measure – the National Paying Agency under the Ministry of Agriculture.

(d) <u>What are the measures taken to ensure availability of necessary budget/funding to achieve the national target?</u>

Funds appropriated from the structural funds of the European Union in the course of the implementation of the support programmes of the European Agricultural Fund for Rural Development as well as from the national budget.

(e) <u>How is long-term security and reliability addressed by the scheme?</u>

Increase in the use of local renewable energy sources guarantees higher energy security of the country and reliability of fuel self-sufficiency and reduces its dependence on fossil fuels and their import.

(f) <u>Is the scheme periodically revised? What kind of feed-back or adjustment</u> mechanism exists? How has the scheme been optimised so far?

The Lithuanian Rural Development Programme for 2007–2013 is periodically revised taking into account the economic and market situation of the country as well as proposals of social partners. When necessary, amendments to the aforementioned Programme are introduced subject to coordination with the European Commission.

(g) <u>Does support differ according to technology?</u>

Support is appropriated to the development of renewable energy sources using various technologies, mostly for the construction of biogas and wind power plants.

(h) <u>What are the expected impacts in terms of energy production?</u>

Producers of agricultural produce will first of all be able to satisfy their own needs, and to sell excess electricity as well as resulting energy products (e.g. straw granules) to energy producers.

(i) <u>Is support conditional on meeting energy efficiency criteria?</u>

Energy efficiency is not envisaged as a condition for the receipt of support.

(j) <u>Is it an existing measure? Could you please indicate national legislation</u> regulating it?

It is an existing measure.

The Lithuanian Rural Development Programme for 2007–2013 prepared pursuant to the provisions of Council Regulation (EC) No 1698/2005 of 20 September 2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) as well as of Commission Regulation No 1974/2006 laying down detailed rules for the application of this Council Regulation. Also, this document in all aspects meets the provisions of Council Regulation No 2006/144/EC on Community strategic guidelines for rural development, which were transposed to the National Strategy of Lithuania for the corresponding period.

(k) Is this a planned scheme? When would it be operational?

The scheme has been implemented since 2007.

(l) What start and end dates (duration) are set for the whole scheme?

The scheme is to be implemented in 2007–2015.

(m) Are there maximum or minimum sizes of system which are eligible?

The size of system is established for wind power plants, when electricity produced by them should be used only for satisfying the needs of the holding: the capacity may not exceed 250 kW. In other cases, capacity of power plants is limited by the amount of support provided.

(n) <u>Is it possible for the same project to be supported by more than one support</u> <u>measure? Which measures can be cumulated?</u>

Benefit on environmental pollution tax and support from the Lithuanian Environmental Investment Fund (LEIF) can be applied.

(o) <u>Are there regional/local schemes? If so, please detail using the same criteria.</u>

There are no regional/local schemes under implementation.

Specific questions for financial support for investment:

(a) <u>What is granted by the scheme? (subsidies, capital grants, low interest loans, tax exemption or reduction, tax refunds)</u>

Subsidies are provided from the Lithuanian Rural Development Programme for 2007–2013. The intensity of support varies from 40 to 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.

(b) <u>Who can benefit from this scheme? Is it specified for certain technology(/ies)?</u>

Natural and legal persons complying with the established requirements.

The scheme is specified for technologies producing electricity from renewable energy sources and for fuel (granules) production technologies.

(c) <u>Are applications continuously received and granted or are there periodical</u> calls? If periodical, could you please describe the frequency and conditions?

Applications can be submitted continuously, while there can be periodical calls for submission of application.

V. Benefit on environmental pollution tax

(a) <u>What is the name and a short description of the scheme?</u>

Benefit on environmental pollution tax.

Natural and legal persons who have submitted documents confirming consumption of biofuel shall be released from environmental pollution tax in respect of pollutants emitted into the atmosphere from stationary pollution sources as a result of the use of biofuel.

(b) <u>Is it a voluntary or obligatory scheme?</u>

It is a voluntary scheme.

(c) <u>Who manages the scheme? (Implementing body, monitoring authority).</u>

Regional environmental protection departments under the Ministry of the Environment of the Republic of Lithuania.

(d) <u>What are the measures taken to ensure availability of necessary budget/funding</u> to achieve the national target?

The application of the benefit on environmental pollution tax (release from the tax) does not require and additional funding.

(e) <u>How is long-term security and reliability addressed by the scheme?</u>

The use of biofuel and production thereof from local renewable energy sources are promoted, which improves the energy security and reliability of fuel self-sufficiency of the country and reduces its dependence on fossil fuels and their import.

(f) <u>Is the scheme periodically revised? What kind of feed-back or adjustment</u> mechanism exists? How has the scheme been optimised so far?

This scheme is periodically revised and, with regard to the results, the regulating mechanism is amended.

(g) <u>Does support differ according to technology?</u>

The scheme is applied to biofuel power plants and boiler plants.

(h) What are the expected impacts in terms of energy production?

It is expected to achieve the established goals for electricity production from renewable sources.

(i) <u>Is support conditional on meeting energy efficiency criteria?</u>

Energy efficiency criteria are not established as a condition for support.

(j) <u>Is it an existing measure? Could you please indicate national legislation</u> regulating it?

It is an existing measure. This benefit on environmental pollution tax in respect of pollution from stationary pollution sources is established since 31 March 2005.

The Law on Environmental Pollution Tax (Valstyb•s Žinios (Official Gazette), 1999, No 47-1469; 2002, No 13-474; 2005, No 47-1560).

(k) Is this a planned scheme? When would it be operational?

- _
- (l) What start and end dates (duration) are set for the whole scheme?

Since 31 March 2005. No specific effective period is established.

(m) Are there maximum or minimum sizes of system which are eligible?

Environmental pollution tax from stationary pollution sources shall be paid by operators operating such fuel-burning installations in the energy industry whose nominal thermal capacity is 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 capacity amounts to or is greater than 1.0 MW.

(n) <u>Is it possible for the same project to be supported by more than one support</u> <u>measure? Which measures can be cumulated?</u>

Biofuel power plants can also receive structural support of the European Union for investments, support from the Lithuanian Environmental Investment Fund (LEIF), and purchasing tariff can be applied on produced electricity for those power plants where biofuel accounts for not less than 70 % of the fuel balance.

(o) <u>Are there regional/local schemes? If so, please detail using the same criteria.</u>

There are no regional/local schemes under implementation.

VI. Lithuanian Environmental Investment Fund

(a) What is the name and a short description of the scheme?

The Lithuanian Environmental Investment Fund (LEIF) finances projects related to electricity production with the use of renewable energy sources such as wind (when the installed capacity of the power plant is up to 250 kW), solar, water and biomass energy sources.

(b) <u>Is it a voluntary or obligatory scheme?</u>

It is a voluntary scheme.

(c) <u>Who manages the scheme? (Implementing body, monitoring authority).</u>

This scheme is implemented by the Public Institution Lietuvos Aplinkos Apsaugos Investicij• Fondas (Lithuanian Environmental Investment Fund) (d) <u>What are the measures taken to ensure availability of necessary budget/funding</u> to achieve the national target?

30 % of environmental pollution tax is paid to the state budget. These funds are used in accordance with the intended purpose for the financing of environmental investment projects envisaged in the programme of the LEIF.

(e) <u>How is long-term security and reliability addressed by the scheme?</u>

Electricity production from local renewable sources is promoted, which improves the energy security and reliability of fuel self-sufficiency of the country and reduces its dependence on fossil fuels and their import.

(f) <u>Is the scheme periodically revised? What kind of feed-back or adjustment</u> mechanism exists? How has the scheme been optimised so far?

Each year, the Supervisory Council of the Lithuanian Environmental Investment Fund (LEIF) approves priorities (financing directions) of the field of environmental investments, with regard to which financing of investment projects is carried out.

(g) <u>Does support differ according to technology?</u>

Support does not differ according to technology.

(h) What are the expected impacts in terms of energy production?

By submitting an application, an applicant undertakes to achieve certain environmental indicators, i.e. to produce a certain amount of energy from renewable sources. The Public Institution Lietuvos Aplinkos Apsaugos Investicij• Fondas (Lithuanian Environmental Investment Fund) verifies the execution of the planned obligations.

(i) <u>Is support conditional on meeting energy efficiency criteria?</u>

Energy efficiency is not directly specified as a condition for support; however, one of the objectives of the activities of the Lithuanian Environmental Investment Fund (LEIF) is to contribute to the reduction of environmental pollution and prevention of pollution by financing projects reducing negative impact on the environment and ensuring continuity of the environmental effect.

(j) <u>Is it an existing measure? Could you please indicate national legislation</u> regulating it?

It is an existing measure regulated by the following:

• the Law on Environmental Pollution Tax (Valstyb•s Žinios (Official Gazette), 1999, No 47-1469; 2002, No 13-474; 2005, No 47-1560);

• the Description of the Procedure for the Financing and Supervision of Projects of the Public Institution Lietuvos Aplinkos Apsaugos Investicij• Fondas (Lithuanian Environmental Investment Fund) (Valstyb•s Žinios (Official Gazette), 2003, No 85-3890, 2004, No 143-5237, 2007, No 114-4650).

(k) Is this a planned scheme? When would it be operational?

_

(l) What start and end dates (duration) are set for the whole scheme?

Since 2000. No specific effective period is established.

(m) Are there maximum or minimum sizes of system which are eligible?

The size of system is established only for wind power plants, the maximum installed capacity of which must be not greater than 250 kW.

(n) <u>Is it possible for the same project to be supported by more than one support</u> <u>measure? Which measures can be cumulated?</u>

Purchasing tariff and benefit on environmental pollution tax can be applied. Besides, structural support of the European Union is provided (replacement of fuel used by cogeneration power plants with biomass and construction of new effective cogeneration power plants using renewable energy sources).

(o) <u>Are there regional/local schemes? If so, please detail using the same criteria.</u>

There are no regional/local schemes under implementation.

Specific questions for financial support for investment:

(a) <u>What is granted by the scheme? (subsidies, capital grants, low interest loans, tax exemption or reduction, tax refunds)</u>

According to this system, subsidies are granted. The amount of subsidy to be granted to one beneficiary may not exceed LTL 690,000 (six hundred and ninety thousand) over a period of three years and 70 % of the whole amount of an environmental investment project.

(b) Who can benefit from this scheme? Is it specified for certain technology(/ies)?

A public or private legal person carrying out economic activities in the Republic of Lithuania.

The scheme is specified for certain envisaged technologies.

(c) <u>Are applications continuously received and granted or are there periodical</u> calls? If periodical, could you please describe the frequency and conditions?

After approval of priorities for the utilisation of funds for the subsequent year by the Supervisory Council of the Lithuanian Environmental Investment Fund (LEIF), the Public Institution Lietuvos Aplinkos Apsaugos Investicij• Fondas (Lithuanian Environmental Investment Fund) shall publish information on the possibility of project financing in mass media and/or on the internet site of the Fund (*http://www.LEIF.lt*) at least twice a year.

VII. Benefit on excise duty

(d) <u>What is the name and a short description of the scheme?</u>

Excise duty shall not be levied on electricity produced with the use of renewable energy sources.

(e) <u>Is it a voluntary or obligatory scheme?</u>

It is an obligatory scheme.

(f) <u>Who manages the scheme? (Implementing body, monitoring authority).</u>

Responsible – the Ministry of Finance of the Republic of Lithuania.

Institution implementing the measure – the State Tax Inspectorate under the Ministry of Finance of the Republic of Lithuania.

(g) <u>What are the measures taken to ensure availability of necessary budget/funding</u> to achieve the national target?

No additional funding is required for the application of the benefit on the excise duty (exemption from the duty).

(h) <u>How is long-term security and reliability addressed by the scheme?</u>

Electricity production from local renewable sources is promoted, which improves the energy security and reliability of fuel self-sufficiency of the country and reduces its dependence on fossil fuels and their import.

(i) <u>Is the scheme periodically revised? What kind of feed-back or adjustment</u> mechanism exists? How has the scheme been optimised so far?

The scheme came into effect from 1 January 2010.

(j) <u>Does support differ according to technology?</u>

Support does not differ according to technology: the benefit is applied to electricity produced with the use of renewable energy sources.

(k) <u>What are the expected impacts in terms of energy production?</u>

It is expected to achieve the established goals for electricity production from renewable sources.

(l) <u>Is support conditional on meeting energy efficiency criteria?</u>

Energy efficiency criteria are not established as a condition for support.

(m) <u>Is it an existing measure? Could you please indicate national legislation</u> regulating it?

The measure came into effect from 1 January 2010.

The Law of the Republic of Lithuania on Excise Duty (Valstyb•s Žinios (Official Gazette), 2001, No 98-3482; 2004, No 26-802).

- (n) <u>Is this a planned scheme? When would it be operational?</u>
- _
- (o) What start and end dates (duration) are set for the whole scheme?

Since 1 January 2010. No specific effective period is established.

(p) Are there maximum or minimum sizes of system which are eligible?

Not established.

(q) <u>Is it possible for the same project to be supported by more than one support</u> <u>measure? Which measures can be cumulated?</u>

The Lithuanian Environmental Investment Fund (LEIF) provides financial support, and purchasing tariff is applied to electricity produced. Biofuel power plants can also receive structural support of the European Union for investments, and benefit on environmental pollution tax can be applied.

(r) <u>Are there regional/local schemes? If so, please detail using the same criteria.</u>

There are no regional/local schemes under implementation in the country.

VIII. Envisaged new measure – special programmes for the development of renewable energy sources

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources envisages drawing up the following in order to promote the use of renewable energy sources including that for electricity production:

• the Special National Programme for the Development of Renewable Energy Sources;

• special municipal programmes for the development of renewable sources.

The following sources of financing of the Special National Programme for the Development of Renewable Energy Sources are envisaged:

• 30 % of excise duty proceeds received for the sale of liquid fuel (heavy fuel oil), orimulsion, natural gas, coal, coke and lignite, gas oil intended for heating (domestic heating fuel) used for the production of heating and electricity as well as for the sale of electricity;

 $_{\odot}\,$ 30 % of corporate income tax received from biofuel producers and suppliers as well as from producers of renewable energy sources;

- income received for statistical transfers;
- $\circ~40$ % of funds from the Special Climate Change Programme;

 $_{\odot}\,$ voluntary funds of natural and legal persons and foreign countries intended for the development of the use of renewable energy sources;

• other lawfully received funds.

In addition, the use of the funds of the Special National Programme for the Development of Renewable Energy Sources in the electricity sector is envisaged:

• for the implementation of projects on biogas production, extraction, refining, treating, and preparation for further use when supplying biogas to natural gas networks and/or for transportation to the final consumption point;

 $_{\odot}\,$ for the implementation of projects on the use of geothermal energy for energy production;

o for the creation and production of technologies using renewable energy sources;

• for the promotion of biofuel production;

o for scientific research work related to scientific research in the field of renewable energy sources and implementation of pilot projects on the use of such sources.

The following sources of financing of special municipal programmes for the development of renewable sources are envisaged:

• 10 % of excise duty proceeds received for the sale of liquid fuel (heavy fuel oil), orimulsion, natural gas, coal, coke and lignite, gas oil intended for heating (domestic heating fuel) used for the production of heating and electricity as well as for the sale of electricity;

 15 % of corporate income tax received from biofuel producers and suppliers as well as from producers of renewable energy sources;

• tax and penalty for environmental pollution with methane from swine farming enterprises where the design number of swine held amounts to 12,000 units or more;

• voluntary funds of natural and legal persons and foreign countries intended for the development of the use of renewable energy sources;

 \circ other lawfully received funds.

Funds of special municipal programmes for the development of renewable sources in the electricity sector should be used as follows:

• support of the acquisition of equipment increasing the use of renewable energy sources for own needs in the residential and public sectors by compensating a fixed amount of funds attributable to one equipped capacity unit in accordance with the procedure approved by the municipality;

o public information and education, consultancy and learning on issues of the implementation of technologies of renewable energy sources.

The following measures are envisaged in the Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015:

• to prepare and approve municipal action plans for the use of renewable energy sources for 2011–2020, where the goals for the use of renewable energy sources and measures for achieving these goals would be established;

• to prepare draft legal acts necessary for the drawing up of the Special National Programme for the Promotion of the Development of Renewable Energy Sources (intended for the financing of projects on renewable energy sources), to envisage the objectives and sources of financing of this Programme and to prepare a procedure for the use of the funds of this Programme.

4.4. Support schemes to promote the use of energy from renewable resources in heating and cooling applied by the Member State or a group of Member States

I. Structural support of the European Union for 2007–2013

(a) <u>What is the name and a short description of the scheme?</u>

State Support No N 197/2008 – Lithuania. Regional Support to the Energy Sector.

The following is financed in accordance with the measure of the use of renewable energy sources for energy production:

• modernisation of cogeneration power plants supplying heating to heating supply systems – replacement of the usable fuel with biomass;

• construction of new effective cogeneration power plants using renewable energy sources and their connection to heating supply systems.

(b) <u>Is it a voluntary or obligatory scheme?</u>

It is a voluntary scheme.

(c) <u>Who manages the scheme? (Implementing body, monitoring authority).</u>

Responsible – the Ministry of Economy of the Republic of Lithuania.

Institution implementing the measure – the Public Institution Lietuvos Verslo Paramos Agent•ra (Lithuanian Business Support Agency)

(d) <u>What are the measures taken to ensure availability of necessary budget/funding to achieve the national target?</u>

Funds are appropriated from the structural funds of the European Union in the course of the implementation of the Cohesion Promotion Action programme.

(e) <u>How is long-term security and reliability addressed by the scheme?</u>

Construction of biofuel boiler plants is associated with the increase of heating generation capacities and use of local renewable energy sources. The increase of heating generation capacities and diversification of usable fuel of the country improves its energy security and reliability of fuel self-sufficiency and reduces its dependence on fossil fuels and their import.

(f) <u>Is the scheme periodically revised? What kind of feed-back or adjustment</u> mechanism exists? How has the scheme been optimised so far?

By Resolution No 60 of the Government of the Republic of Lithuania of 22 January 2007 (Valstyb•s Žinios (Official Gazette), 2007, No 10-396; 2008, No 4-133; 2009, No 102-4252), the Monitoring Committee for supervising the implementation of the action programmes implementing the Lithuanian Strategy for the Use of structural support of the European Union for 2007–2013 was established. The Monitoring Committee performs the following functions:

• ascertains the efficiency and quality of the implementation of the programme,

• considers and approves selection criteria for actions to be financed and modifications of the aforementioned criteria;

• regularly checks the progress made in achieving specific goals of the action programme,

• analyses results of the implementation of the action programme,

• considers and approves annual and final implementation reports (on the progress made in the implementation of the action programme and priority directions, on the financial implementation of the action programme etc),

• can propose amendment or revision of the action programme to the managing authority,

• considers and approves all proposals for amending the contents of the decision of the European Commission on the support from funds.

Assessments, studies, and research (hereinafter referred to as assessments) of the use of structural support of the European Union in Lithuania, which were performed by independent experts at the request of various institutions, are published on the internet site "ES strukt•rin• parama 2007–2013 metams (EU Structural Support for 2007–2013)" (*http://www.esparama.lt*²³). Reports on these assessments provide analysis performed according to various assessment criteria (appropriateness, efficiency, effectiveness, impact) as well as recommendations for the improvement of the use of structural support of the European Union.

(g) <u>Does support differ according to technology?</u>

Support is provided to biofuel boiler plants.

(h) <u>What are the expected impacts in terms of energy production?</u>

It is planned that the share of energy production from renewable energy sources will increase by 100 MW (construction and modernisation of power plants is also supported under the measure; no distinction is made for capacities of power plants and heating capacities).

(i) <u>Is support conditional on meeting energy efficiency criteria?</u>

Energy efficiency criteria are not established as a condition for support.

(j) <u>Is it an existing measure? Could you please indicate national legislation</u> regulating it?

It is an existing measure.

Annex to the Cohesion Promotion Action programme approved by Resolution No 787 of the Government of the Republic of Lithuania of 23 July 2008 (Valstyb•s Žinios (Official Gazette), 2008, No 95-3720, No 142-5628; 2009, No 36-1388, No 68-2773).

(k) <u>Is this a planned scheme? When would it be operational?</u>

²³<u>http://www.esparama.lt/2007-2013/lt/administravimas/ataskaitos/vertinimas#3</u>

The scheme has been implemented since 2007.

(l) What start and end dates (duration) are set for the whole scheme?

The start date of the implementation of the scheme: 2007; the end date of the implementation of the scheme: 2015.

(m) Are there maximum or minimum sizes of system which are eligible?

No size of system is established; however, the boiler plant must supply heating to the heating supply system.

(n) <u>Is it possible for the same project to be supported by more than one support</u> <u>measure? Which measures can be cumulated?</u>

Benefit on environmental pollution tax can be applied; support from the Lithuanian Environmental Investment Fund (LEIF) can be received.

(o) <u>Are there regional/local schemes? If so, please detail using the same criteria.</u>

There are no regional/local schemes under implementation.

Specific questions for financial support for investment:

(a) <u>What is granted by the scheme? (subsidies, capital grants, low interest loans, tax exemption or reduction, tax refunds)</u>

Under this scheme, subsidies amounting up to 50 % of the eligible costs of a project are granted. The value of the project may not exceed LTL 172.64 million.

(b) Who can benefit from this scheme? Is it specified for certain technology(/ies)?

Legal persons complying with the established criteria can benefit from this scheme. The scheme is specified for technologies using biofuel for energy production.

(c) <u>Are applications continuously received and granted or are there periodical</u> <u>calls? If periodical, could you please describe the frequency and conditions?</u>

There are periodical calls.

II. Lithuanian Rural Development Programme for 2007–2013

(a) <u>What is the name and a short description of the scheme?</u>

• Measure 6 "Modernisation of Agricultural Holdings" of Direction I of the Lithuanian Rural Development Programme for 2007–2013 (hereinafter referred to as the Programme". The following is financed under this measure:

 production of biogas from waste forming in the farm. However, biogas produced can be used only for satisfying the needs of the holding; • cultivation of short-rotation plantations;

• Measure 1 "Transition to Non-Agricultural Activities" and Measure 2 "Support to Business Creation and Development" of Direction III of the Programme. The following is financed under this measure: disposal of non-hazardous waste by incinerating or otherwise when steam, alternate fuel (granules), and biogas are produced for further use as well as disposal of straw and hay waste when alternate fuel (granules) is produced from a mix one of the components thereof is straw, hay or grass.

• Measure 3 "Promotion of Countryside Tourism Activities" of Direction III of the Programme. Under this measure, equipping of geothermal power plants and solar collectors is financed. Thermal power received from these power plants should be used only for satisfying the needs of the holding.

(b) <u>Is it a voluntary or obligatory scheme?</u>

It is a voluntary scheme.

(c) <u>Who manages the scheme? (Implementing body, monitoring authority).</u>

Responsible – the Ministry of Agriculture of the Republic of Lithuania.

Institution implementing the measure – the National Paying Agency under the Ministry of Agriculture.

(d) <u>What are the measures taken to ensure availability of necessary budget/funding to achieve the national target?</u>

Funds appropriated from the structural funds of the European Union in the course of the implementation of the support programmes of the European Agricultural Fund for Rural Development as well as from the national budget.

(e) <u>How is long-term security and reliability addressed by the scheme?</u>

Increase in the use of local renewable energy sources guarantees higher energy security of the country and reliability of fuel self-sufficiency and reduces its dependence on fossil fuels and their import.

(f) <u>Is the scheme periodically revised? What kind of feed-back or adjustment</u> mechanism exists? How has the scheme been optimised so far?

The Lithuanian Rural Development Programme for 2007–2013 is periodically revised taking into account the economic and market situation of the country as well as proposals of social partners. When necessary, amendments to the aforementioned Programme are introduced subject to coordination with the European Commission.

(g) <u>Does support differ according to technology?</u>

Support is appropriated to the development of renewable energy sources using various technologies, mostly for the construction of biogas and wind power plants.

(h) <u>What are the expected impacts in terms of energy production?</u>

Producers of agricultural produce will first of all be able to satisfy their own energy needs, and to sell excessive thermal power as well as resulting energy products used for the production of thermal power (e.g. straw granules) to energy producers.

(i) <u>Is support conditional on meeting energy efficiency criteria?</u>

Energy efficiency is not envisaged as a condition for the receipt of support.

(j) <u>Is it an existing measure? Could you please indicate national legislation</u> regulating it?

It is an existing measure.

The Lithuanian Rural Development Programme for 2007–2013 prepared pursuant to the provisions of Council Regulation (EC) No 1698/2005 of 20 September 2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) as well as of Commission Regulation No 1974/2006 laying down detailed rules for the application of this Council Regulation. Also, this document in all aspects meets the provisions of Council Regulation No 2006/144/EC on Community strategic guidelines for rural development, which were transposed to the National Strategy of Lithuania for the corresponding period.

(k) Is this a planned scheme? When would it be operational?

The scheme has been implemented since 2007.

(l) What start and end dates (duration) are set for the whole scheme?

The start of the implementation of the scheme: 2007; the end date of the implementation of the scheme: 2015.

(m) Are there maximum or minimum sizes of system which are eligible?

No size of system is established; however, the capacity of power plants is limited by the amount of support provided.

(n) <u>Is it possible for the same project to be supported by more than one support</u> <u>measure? Which measures can be cumulated?</u>

Benefit on environmental pollution tax and support from the Lithuanian Environmental Investment Fund (LEIF) can be applied.

(o) <u>Are there regional/local schemes? If so, please detail using the same criteria.</u>

There are no regional/local schemes under implementation.

Specific questions for financial support for investment:

(p) <u>What is granted by the scheme? (subsidies, capital grants, low interest loans, tax exemption or reduction, tax refunds)</u>

Subsidies are provided from the Lithuanian Rural Development Programme for 2007–2013. The intensity of support varies from 40 to 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.

(q) Who can benefit from this scheme? Is it specified for certain technology(/ies)?

Natural and legal persons complying with the established requirements.

The scheme is specified for technologies producing electricity from renewable energy sources and for fuel (granules) production technologies.

(r) <u>Are applications continuously received and granted or are there periodical</u> calls? If periodical, could you please describe the frequency and conditions?

Applications can be submitted continuously, while there can be periodical calls.

III. Benefit on environmental pollution tax

(a) <u>What is the name and a short description of the scheme?</u>

Benefit on environmental pollution tax.

Natural and legal persons who have submitted documents confirming consumption of biofuel shall be released from environmental pollution tax in respect of pollutants emitted into the atmosphere from stationary pollution sources as a result of the use of biofuel.

(b) <u>Is it a voluntary or obligatory scheme?</u>

It is a voluntary scheme.

(c) <u>Who manages the scheme? (Implementing body, monitoring authority).</u>

Regional environmental protection departments under the Ministry of the Environment of the Republic of Lithuania.

(d) <u>What are the measures taken to ensure availability of necessary budget/funding to achieve the national target?</u>

The application of the benefit on environmental pollution tax (release from the tax) does not require and additional funding.

(e) <u>How is long-term security and reliability addressed by the scheme?</u>

The use of biofuel and production thereof from local renewable energy sources are promoted, which improves the energy security and reliability of fuel self-sufficiency of the country and reduces its dependence on fossil fuels and their import.

(f) <u>Is the scheme periodically revised? What kind of feed-back or adjustment</u> mechanism exists? How has the scheme been optimised so far? This scheme is periodically revised, and the regulating mechanism is amended with regard to the results.

(g) <u>Does support differ according to technology?</u>

The scheme is applied to biofuel power plants and boiler plants.

(h) <u>What are the expected impacts in terms of energy production?</u>

It is expected to achieve the established goals for energy production from renewable sources.

(i) <u>Is support conditional on meeting energy efficiency criteria?</u>

Energy efficiency criteria are not envisaged as a condition for support.

(j) <u>Is it an existing measure? Could you please indicate national legislation</u> regulating it?

It is an existing measure. This benefit on environmental pollution tax in respect of pollution from stationary pollution sources is established since 31 March 2005.

The Law on Environmental Pollution Tax (Valstyb•s Žinios (Official Gazette), 1999, No 47-1469; 2002, No 13-474; 2005, No 47-1560).

- (k) <u>Is this a planned scheme? When would it be operational?</u>
- _
- (l) What start and end dates (duration) are set for the whole scheme?

Since 31 March 2005. No specific effective period is established.

(m) Are there maximum or minimum sizes of system which are eligible?

Environmental pollution tax from stationary pollution sources shall be paid by operators operating such fuel-burning installations in the energy industry whose nominal thermal capacity is 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 capacity amounts to or is greater than 1.0 MW.

(n) <u>Is it possible for the same project to be supported by more than one support</u> <u>measure? Which measures can be cumulated?</u>

Biofuel boiler plants can also receive structural support of the European Union for replacement of fuel used by boiler plants with biomass and construction of new boiler plants using renewable energy sources. Support from the Lithuanian Environmental Investment Fund (LEIF) can also be received.

(o) <u>Are there regional/local schemes? If so, please detail using the same criteria.</u>

There are no regional/local schemes under implementation.

IV. Lithuanian Environmental Investment Fund

(a) <u>What is the name and a short description of the scheme?</u>

The Lithuanian Environmental Investment Fund (LEIF) finances projects related to energy production with the use of renewable energy sources such as geothermal energy and biomass for heating production.

(b) <u>Is it a voluntary or obligatory scheme?</u>

It is a voluntary scheme.

(c) <u>Who manages the scheme? (Implementing body, monitoring authority).</u>

This scheme is implemented by the Public Institution Lietuvos Aplinkos Apsaugos Investicij• Fondas (Lithuanian Environmental Investment Fund)

(d) <u>What are the measures taken to ensure availability of necessary budget/funding to achieve the national target?</u>

30 % of environmental pollution tax is paid to the state budget. These funds are used in accordance with the intended purpose for the financing of environmental investment projects envisaged in the programme of the Lithuanian Environmental Investment Fund (LEIF).

(e) <u>How is long-term security and reliability addressed by the scheme?</u>

Electricity production from local renewable sources is promoted, which improves the energy security and reliability of fuel self-sufficiency of the country and reduces its dependence on fossil fuels and their import.

(f) <u>Is the scheme periodically revised? What kind of feed-back or adjustment</u> mechanism exists? How has the scheme been optimised so far?

Each year, pursuant to the Description of the Procedure for Description the Financing and Supervision of Projects of the Public Institution Lietuvos Aplinkos Apsaugos Investicij• Fondas (Lithuanian Environmental Investment Fund), the Supervisory Council of the Lithuanian Environmental Investment Fund (LEIF) approves priorities (financing directions) of the field of environmental investments, with regard to which financing of investment projects is carried out.

(g) <u>Does support differ according to technology?</u>

Support does not differ according to technology.

(h) <u>What are the expected impacts in terms of energy production?</u>

By submitting an application, an applicant undertakes to achieve certain environmental indicators, i.e. to produce a certain amount of energy from renewable sources. The Public Institution Lietuvos Aplinkos Apsaugos Investicij• Fondas (Lithuanian Environmental Investment Fund) verifies the execution of the planned obligations.

(i) <u>Is support conditional on meeting energy efficiency criteria?</u>

Energy efficiency is not directly specified as a condition for support; however, one of the objectives of the activities of the Lithuanian Environmental Investment Fund (LEIF) is to contribute to the reduction of environmental pollution and prevention of pollution by financing projects reducing negative impact on the environment and ensuring continuity of the environmental effect.

(j) <u>Is it an existing measure? Could you please indicate national legislation</u> regulating it?

It is an existing measure regulated by the following:

- the Law on Environmental Pollution Tax (Valstyb•s Žinios (Official Gazette), 1999, No 47-1469; 2002, No 13-474; 2005, No 47-1560);

- the Description of the Procedure for the Financing and Supervision of Projects of the Public Institution Lietuvos Aplinkos Apsaugos Investicij• Fondas (Lithuanian Environmental Investment Fund) (Valstyb•s Žinios (Official Gazette), 2003, No 85-3890, 2004, No 143-5237, 2007, No 114-4650).

- (k) <u>Is this a planned scheme? When would it be operational?</u>
- _
- (l) What start and end dates (duration) are set for the whole scheme?

Since 2000. No specific effective period is established.

(m) Are there maximum or minimum sizes of system which are eligible?

No maximum or minimum size of system is established for heating production installations.

(n) <u>Is it possible for the same project to be supported by more than one support</u> <u>measure? Which measures can be cumulated?</u>

Benefit on environmental pollution tax can be applied. Biofuel boiler plants can receive structural support of the European Union for the replacement of usable fuel of boiler plants with biomass and for the construction of new boiler plants using renewable energy sources.

(o) <u>Are there regional/local schemes? If so, please detail using the same criteria.</u>

There are no regional/local schemes under implementation.

Specific questions for financial support for investment:

(a) <u>What is granted by the scheme? (subsidies, capital grants, low interest loans, tax exemption or reduction, tax refunds)</u>

According to this system, subsidies are granted. The amount of subsidy to be granted to one beneficiary may not exceed LTL 690,000 (six hundred and ninety thousand) over a period of three years and 70 % of the whole amount of an environmental investment project.

(b) <u>Who can benefit from this scheme? Is it specified for certain technology(/ies)?</u>

A public or private legal person carrying out economic activities in the Republic of Lithuania.

The scheme is specified for certain technologies including the use of geothermal energy and biofuel for heating production.

(c) <u>Are applications continuously received and granted or are there periodical</u> <u>calls? If periodical, could you please describe the frequency and conditions?</u>

After approval of priorities for the utilisation of funds for the subsequent year by the Supervisory Council of the Lithuanian Environmental Investment Fund (LEIF), the Public Institution Lietuvos Aplinkos Apsaugos Investicij• Fondas (Lithuanian Environmental Investment Fund) shall publish information on the possibility of project financing in mass media and/or on the internet site of the Fund (<u>http://www.LEIF.lt</u>) at least twice a year. (Currently, acceptance of projects is suspended. Acceptance of applications will be resumed when the Lithuanian Environmental Investment Fund (LEIF) is in the position to undertake new financial obligations).

V. Additional questions:

(a) <u>How are the support schemes for electricity from renewable energy sources</u> adapted to encourage the use of CHP from renewable energy sources?

It is possible to receive structural support of the European Union for investments in the course of the implementation of the Cohesion Promotion Action programme for the use of renewable energy sources for energy production. The following is financed in accordance with this measure:

• modernisation of cogeneration power plants supplying heating to heating supply systems – replacement of the usable fuel with biomass;

• construction of new effective cogeneration power plants using renewable energy sources and their connection to heating supply systems.

(b) <u>What support schemes are in place to encourage the use of district heating and cooling using renewable energy sources?</u>

EU structural support.

If independent heating producers offer the same price of heating, the heating supplier shall purchase heating from them in accordance with the following order of priority:

1) from electricity and heating cogeneration installations using renewable energy sources;

2) heating produced from renewable and geothermal energy sources;

3) waste heat from industrial enterprises;

4) heating from effective cogeneration installations;

5) from organic fossil fuel boiler plants.

(c) <u>What support schemes are in place to encourage the use of small-scale heating</u> and cooling from renewable energy sources?

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 approved by Order No 1-180 of the Minister of Energy of the Republic of Lithuania of 23 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No <u>78-4030</u>) envisages such measures as follows:

• to prepare draft legal acts stipulating the requirement of using renewable energy sources in new buildings and existing newly renovated (modernised) buildings with regard to various types of energy used in buildings and possibilities of using separate types of renewable energy sources;

• to prepare proposals on financial measures encouraging consumers to equip energy production installations producing energy from renewable sources (biofuel, solar, geothermal, hydrothermal, and wind energy) in buildings;

• to prepare and provide draft legal acts, whereby municipalities would be obligated to promote the use of renewable energy sources;

• to prepare and approve municipal action plans for the use of renewable energy sources for 2011–2020, where the goals for the use of renewable energy sources and measures for achieving these goals would be established;

• to establish technical requirements for installations and systems using renewable energy sources, to which assistance is provided, and to include them into the conditions for the receipt of assistance;

• to prepare measures of financial support, which would promote the modernisation of heat production installations supplying heating to rural public buildings (schools, kindergartens, health care institutions, elderships etc), and to adjust these installations for the incineration of biofuel (wood, straw) including herbaceous plant biomass (grass granules).

(d) <u>What support schemes are in place to encourage the use of heating and cooling</u> from renewable energy sources in industrial applications?

Currently, the aforementioned structural support of the European Union for replacement of fuel used by boiler plants with biomass and construction of new boiler plants using renewable energy sources is applied.

VI. Envisaged new measure – special programmes for the development of renewable energy sources

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources envisages drawing up the following in order to promote the use of renewable energy sources including that for heating and cooling production:

• the Special National Programme for the Development of Renewable Energy Sources;

• special municipal programmes for the development of renewable sources

The following sources of financing of the Special National Programme for the Development of Renewable Energy Sources are envisaged:

• 30 % of excise duty proceeds received for the sale of liquid fuel (heavy fuel oil), orimulsion, natural gas, coal, coke and lignite, gas oil intended for heating (domestic heating fuel) used for the production of heating and electricity as well as for the sale of electricity;

 $_{\odot}$ 30 % of corporate income tax received from biofuel producers and suppliers as well as from producers of renewable energy sources;

• income received for statistical transfers;

• 40 % of funds from the Special Climate Change Programme;

• voluntary funds of natural and legal persons and foreign countries intended for the development of the use of renewable energy sources;

• other lawfully received funds.

In addition, the use of the funds of the Special National Programme for the Development of Renewable Energy Sources in the heating and cooling sector is envisaged:

• for the implementation of projects on the use of solid biofuel for the production of heating and/or cooling energy supplied to heating/cooling supply systems as well as consumed at industrial enterprises, agricultural and commercial facilities;

o for the implementation of projects on the use of biogas for the production of heating and/or cooling energy supplied to heating/cooling supply systems as well as consumed at industrial enterprises, agricultural and commercial facilities;

o for the implementation of projects on the use of other renewable energy sources for the production of heating and/or cooling energy supplied to heating/cooling supply systems as well as consumed at industrial enterprises, agricultural and commercial facilities;

• for the implementation of projects on biogas production, extraction, refining, treating, and preparation for further use when supplying biogas to natural gas networks and/or for transportation to the final consumption point;

• for the implementation of projects on the use of geothermal energy for energy production;

o for the creation and production of technologies using renewable energy sources;

• for the promotion of biofuel production;

o for scientific research work related to scientific research in the field of renewable energy sources and implementation of pilot projects on the use of such sources.

The following sources of financing of special municipal programmes for the development of renewable sources are envisaged:

• 10 % of excise duty proceeds received for the sale of liquid fuel (heavy fuel oil), orimulsion, natural gas, coal, coke and lignite, gas oil intended for heating (domestic heating fuel) used for the production of heating and electricity as well as for the sale of electricity;

 15 % of corporate income tax received from biofuel producers and suppliers as well as from producers of renewable energy sources;

• tax and penalty for environmental pollution with methane from swine farming enterprises where the design number of swine held amounts to 12,000 units or more;

 voluntary funds of natural and legal persons and foreign countries intended for the development of the use of renewable energy sources;

• other lawfully received funds.

Funds of special municipal programmes for the development of renewable sources in the electricity sector should be used as follows:

• support of the acquisition of equipment increasing the use of renewable energy sources for own needs in the residential and public sectors by compensating a fixed amount of funds attributable to one equipped capacity unit in accordance with the procedure approved by the municipality;

o public information and education, consultancy and learning on issues of the implementation of technologies of renewable energy sources.

The following measures are envisaged in the Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015:

• to prepare and approve municipal action plans for the use of renewable energy sources for 2011–2020, where the goals for the use of renewable energy sources and measures for achieving these goals would be established;

• to prepare draft legal acts necessary for the drawing up of the Special National Programme for the Promotion of the Development of Renewable Energy Sources (intended for the financing of projects on renewable energy sources), to envisage the objectives and sources of financing of this Programme and to prepare a procedure for the use of the funds of this Programme.

4.5. Support schemes to promote the use of energy from renewable resources in transport applied by the Member State or a group of Member States

(a) What are the concrete obligations/targets per year (per fuel or technology)?

The Government of the Republic of Lithuania or institutions authorised by the Government shall prepare measures ensuring that the share of biofuels would account for not less than 2 % and 5.75 % of the total energy quantity of petrol and diesel fuel intended for transport available in the market of the country by 31 December 2005 and 31 December 2010, correspondingly.

To increase the share of biofuels in the country's market of fuels intended for transport to 10 % by 2020.

(b) <u>Is there differentiation of the support according to fuel types or technologies?</u> <u>Is there any specific support to biofuels which meet the criteria of Article 21(2) of the Directive?</u>

There is differentiation of the support according to fuel types.

No specific support is envisaged according to the criteria of Article 21(2) of the Directive.

4.5.1. REGULATION

Regulation means setting targets and obligations.

I. To ensure that the share of biofuels would account for not less than 2 % and 5.75 % of the total energy quantity of petrol and diesel fuel intended for transport available in the market of the country by 31 December 2005 and 31 December 2010, correspondingly.

(a) <u>What is the legal basis for this obligation/target?</u>

The Law of the Republic of Lithuania on Biofuel, Biofuels for Transport, and Bio-Oils (Valstyb•s Žinios (Official Gazette), 2000, No 64-1940; 2004, No 28-870).

(b) <u>Are there any technology-specific targets?</u>

No technology-specific targets are established.

(c) <u>What are the concrete obligations/targets per year (per technology)?</u>

No concrete obligations per year are established.

(d) <u>Who has to fulfil the obligation?</u>

The Government of the Republic of Lithuania or institutions authorised by the Government.

(e) <u>What is the consequence of non-fulfilment?</u>

No consequences of non-fulfilment are envisaged.

(f) <u>Is there any mechanism to supervise fulfilment?</u>

From 2006, the Republic of Lithuania presents to the European Commission annual reports indicating information on the following:

• measures promoting the use of biofuel and other renewable fuel replacing diesel fuel and petrol in transport;

- national programmes for biofuel and biofuels for transport under implementation;
- support to growers of raw materials for biofuel;
- support to biofuel producers;

• scientific research programmes in the field of the production and use of biofuel under implementation;

• demonstrative measures of the production and use of biofuel;

• national biomass resources intended for the production of energy (with the exception of that for transport needs);

• total sales of transport fuels and relative share of biofuels (pure or in a mix with mineral fuels);

• national commitment for the use of biofuels and other renewable fuels for the first stage – until 2005, and for the second stage – until 2010.

(g) <u>Is there any mechanism to modify obligations/targets?</u>

Obligations/targets can be modified by correspondingly modifying the aforementioned Law of the Republic of Lithuania on Biofuel, Biofuels for Transport, and Bio-Oils wherein they are established.

II. To seek that the share of renewable energy sources consumed in transport of all types would account for not less than 10 % of the final energy consumption in transport in 2020.

(a) <u>What is the legal basis for this obligation/target?</u>

The National Strategy for the Development of Renewable Energy Sources approved by Resolution No 789 of the Government of the Republic of Lithuania of 21 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No <u>73-3725</u>).

Besides, it is planned to formalise this obligation in the Law of the Republic of Lithuania on Renewable Energy Sources. A draft of this Law has been prepared.

(b) <u>Are there any technology-specific targets?</u>

There are no technology-specific targets.

(c) <u>What are the concrete obligations/targets per year (per technology)?</u>

(d) <u>Who has to fulfil the obligation?</u>

No specific parties in charge of fulfilment are established; however, the state is responsible for the formation of appropriate conditions so that the established targets would be properly achieved.

(e) <u>What is the consequence of non-fulfilment?</u>

To update the Plan of Measures of the National Strategy for the Development of Renewable Energy Sources providing for adequate and proportional measures ensuring that obligation would be fulfilled within a reasonable period of time.

(f) <u>Is there any mechanism to supervise fulfilment?</u>

The mechanism of supervision is provided for in the National Strategy for the Development of Renewable Energy Sources: monitoring of implementing the development of renewable energy sources including transport, which will be performed by the Ministry of Energy of the Republic of Lithuania, is envisaged.

(g) <u>Is there any mechanism to modify obligations/targets?</u>

Targets can be modified by correspondingly modifying the aforementioned National Strategy for the Development of Renewable Energy Sources and, after the draft Law of the Republic of Lithuania on Renewable Energy Sources is adopted, also by modifying the Law.

4.5.2. FINANCIAL SUPPORT

I. Financing of the development of the production of biofuels for transport

(a) <u>What is the name and a short description of the scheme?</u>

A portion of the price of rape oil intended for the production of rapeseed methyl (ethyl) ester (RME) and a portion of the price of rape seed and cereal grain purchased for the production of dehydrated ethanol shall be compensated.

(b) <u>Is it a voluntary or obligatory scheme?</u>

It is a voluntary scheme.

(c) <u>Who manages the scheme? (Implementing body, monitoring authority).</u>

Responsible – the Ministry of Agriculture of the Republic of Lithuania.

Institution implementing the measure – the National Paying Agency under the Ministry of Agriculture.

(d) <u>What are the measures taken to ensure availability of necessary budget/funding to achieve the national target?</u>

Funds are provided for in the state budget on an annual basis.

(e) <u>How is long-term security and reliability addressed by the scheme?</u>

Greater production of fuels from local renewable raw materials improves the energy security and reliability of fuel self-sufficiency of the country and reduces its dependence on fossil fuels and their import.

(f) <u>Is the scheme periodically revised? What kind of feed-back or adjustment</u> mechanism exists? How has the scheme been optimised so far?

The scheme is revised and updated on an annual basis. Yearly economic and financial indicators of biofuel producers are analysed in order to avoid overruns of the support.

(g) <u>Does support differ according to technology?</u>

Support differs according to raw materials used.

(h) What are the expected impacts in terms of energy production?

The envisaged targets for the consumption of biofuels in transport will be executed.

(i) <u>Is support conditional on meeting energy efficiency criteria?</u>

Satisfaction of energy efficiency criteria is not envisaged as a condition for the receipt of support.

(j) <u>Is it an existing measure? Could you please indicate national legislation</u> regulating it?

It is an existing measure.

Order No 3D-658 of the Minister of Agriculture of the Republic of Lithuania of 9 September 2009 regarding the amendment of Order No 3D-417 of the Minister of Agriculture regarding the approval of the Rules for Financing the Development of the Production of Biofuels for Transport (Valstyb•s Žinios (Official Gazette), 2009, No 110-4686). Amendment of this legal act is planned for August 2010 with a view to establishing the compensable quantity of raw materials for 2010.

- (k) <u>Is this a planned scheme? When would it be operational?</u>
- _
- (l) What start and end dates (duration) are set for the whole scheme?

The start date of the implementation of the system: 2004; the end date of the implementation of the scheme: 31 December 2012.

(m) Are there maximum or minimum sizes of system which are eligible?

The greatest quantity of compensable rape seed for all beneficiaries in the country in 2009 was 66,816 tons; that of cereal grains was 46,569 tons. The compensable quantity of raw materials for 2010 is planned to be established in August 2010.

(n) <u>Is it possible for the same project to be supported by more than one support</u> <u>measure? Which measures can be cumulated?</u>

Benefit on excise duty is applied to energy products containing a portion of additives of biological origin (in terms of per cent) amounting to or greater than 30 %. Besides, benefit on environmental pollution tax can be applied.

(o) <u>Are there regional/local schemes? If so, please detail using the same criteria.</u>

There are no regional/local schemes under implementation in Lithuania.

II. Benefit on environmental pollution tax

(a) <u>What is the name and a short description of the scheme?</u>

Benefit on environmental pollution tax.

According to the Law of the Republic of Lithuania on Environmental Pollution Tax, natural and legal persons using biofuels meeting established standards shall be released from environmental pollution tax in respect of pollutants emitted from mobile pollution sources.

(b) <u>Is it a voluntary or obligatory scheme?</u>

It is a voluntary scheme.

(c) <u>Who manages the scheme? (Implementing body, monitoring authority).</u>

Regional environmental protection departments under the Ministry of the Environment of the Republic of Lithuania.

(d) <u>What are the measures taken to ensure availability of necessary budget/funding to achieve the national target?</u>

The application of the benefit on environmental pollution tax (release from the tax) does not require and additional funding.

(e) <u>How is long-term security and reliability addressed by the scheme?</u>

The use of biofuel and production thereof from local renewable energy sources are promoted, which improves the energy security and reliability of fuel self-sufficiency of the country and reduces its dependence on fossil fuels and their import.

(f) <u>Is the scheme periodically revised? What kind of feed-back or adjustment</u> mechanism exists? How has the scheme been optimised so far?
This scheme is periodically revised and, with regard to the results, the regulating mechanism is amended.

(g) <u>Does support differ according to technology?</u>

Support does not differ according to technology.

(h) <u>What are the expected impacts in terms of energy production?</u>

It is expected to achieve the established goals for the use of biofuels.

(i) <u>Is support conditional on meeting energy efficiency criteria?</u>

Energy efficiency is not established as a condition for the application of support.

(j) <u>Is it an existing measure? Could you please indicate national legislation</u> regulating it?

It is an existing measure.

The Law on Environmental Pollution Tax (Valstyb•s Žinios (Official Gazette), 1999, No 47-1469; 2002, No 13-474; 2005, No 47-1560).

(k) <u>Is this a planned scheme? When would it be operational?</u>

_

(l) What start and end dates (duration) are set for the whole scheme?

Benefit on the environmental pollution tax for pollutants emitted from mobile pollution sources has been established since 22 January 2002. No effective period is established.

(m) Are there maximum or minimum sizes of system which are eligible?

No size of system is established.

(n) <u>Is it possible for the same project to be supported by more than one support</u> <u>measure? Which measures can be cumulated?</u>

A portion of the price of rape oil intended for the production of rapeseed methyl (ethyl) ester (RME) and a portion of the price of rape seed and cereal grain purchased for the production of dehydrated ethanol can be compensated. Benefit on excise duty is applied to energy products containing a portion of additives of biological origin (in terms of per cent) amounting to or greater than 30 %.

(o) Are there regional/local schemes? If so, please detail using the same criteria.

There are no regional/local schemes under implementation in the country.

III. Benefit on excise duty

(a) <u>What is the name and a short description of the scheme?</u>

Benefit on excise duty applicable to energy products containing a portion of additives of biological origin (in terms of per cent) amounting to or greater than 30 %. In this case, the established excise duty rate reduced by the portion proportional to the portion of additives of biological origin in the product (in terms of per cent) shall be applied, or products shall be released from excise duty when the products are produced only from the products specified in the Law of the Republic of Lithuania on Excise Tax.

(b) <u>Is it a voluntary or obligatory scheme?</u>

It is an obligatory scheme.

(c) <u>Who manages the scheme? (Implementing body, monitoring authority).</u>

Responsible – the Ministry of Finance of the Republic of Lithuania.

Institution implementing the measure – the State Tax Inspectorate under the Ministry of Finance of the Republic of Lithuania.

(d) <u>What are the measures taken to ensure availability of necessary budget/funding to achieve the national target?</u>

No additional funding is required for the application of the benefit on the excise duty (exemption from the duty).

(e) <u>How is long-term security and reliability addressed by the scheme?</u>

The use of biofuel and production thereof from local renewable energy sources are promoted, which improves the energy security and reliability of fuel self-sufficiency of the country and reduces its dependence on fossil fuels and their import.

(f) <u>Is the scheme periodically revised? What kind of feed-back or adjustment</u> mechanism exists? How has the scheme been optimised so far?

This scheme is periodically revised and, with regard to the results, the regulating mechanism is amended.

(g) <u>Does support differ according to technology?</u>

Support does not differ according to technology.

(h) <u>What are the expected impacts in terms of energy production?</u>

It is expected to achieve the established goals for the use of biofuels.

(i) <u>Is support conditional on meeting energy efficiency criteria?</u>

Energy efficiency criteria are not established as a condition for support.

(j) <u>Is it an existing measure? Could you please indicate national legislation</u> regulating it?

It is an existing measure.

The Law of the Republic of Lithuania on Excise Duty (Valstyb•s Žinios (Official Gazette), 2001, No 98-3482; 2004, No 26-802).

- (k) <u>Is this a planned scheme? When would it be operational?</u>
- _
- (l) What start and end dates (duration) are set for the whole scheme?

Since 2004. No specific effective period is established.

(m) Are there maximum or minimum sizes of system which are eligible?

No size of system is established.

(n) <u>Is it possible for the same project to be supported by more than one support</u> <u>measure? Which measures can be cumulated?</u>

Benefit on environmental pollution tax can be applied. A portion of the price of rape oil intended for the production of rapeseed methyl (ethyl) ester (RME) and a portion of the price of rape seed and cereal grain purchased for the production of dehydrated ethanol shall be compensated.

(o) <u>Are there regional/local schemes? If so, please detail using the same criteria.</u>

There are no regional/local schemes under implementation in the country.

IV. Envisaged new measure – special programmes for the development of renewable energy sources

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources envisages drawing up the following in order to promote the use of renewable energy sources including that for heating and cooling production:

• the Special National Programme for the Development of Renewable Energy Sources;

• special municipal programmes for the development of renewable sources

The following sources of financing of the Special National Programme for the Development of Renewable Energy Sources are envisaged:

• 30 % of excise duty proceeds received for the sale of liquid fuel (heavy fuel oil), orimulsion, natural gas, coal, coke and lignite, gas oil intended for heating (domestic heating fuel) used for the production of heating and electricity as well as for the sale of electricity;

 $_{\odot}\,$ 30 % of corporate income tax received from biofuel producers and suppliers as well as from producers of renewable energy sources;

- o income received for statistical transfers;
- $\circ~40$ % of funds from the Special Climate Change Programme;

• voluntary funds of natural and legal persons and foreign countries intended for the development of the use of renewable energy sources;

• other lawfully received funds.

In addition, the use of the funds of the Special National Programme for the Development of Renewable Energy Sources for the needs of the transport sector is envisaged:

• for the implementation of projects on biogas production, extraction, refining, treating, and preparation for further use when supplying biogas to natural gas networks and/or for transportation to the final consumption point;

• for the promotion of the acquisition of electric, hydrogen powered and hybrid vehicles and adjustment of vehicles to the use of renewable energy sources;

• for the creation and production of technologies using renewable energy sources;

• for the promotion of biofuel production;

o for scientific research work related to scientific research in the field of renewable energy sources and implementation of pilot projects on the use of such sources.

The following sources of financing of special municipal programmes for the development of renewable sources are envisaged:

• 10 % of excise duty proceeds received for the sale of liquid fuel (heavy fuel oil), orimulsion, natural gas, coal, coke and lignite, gas oil intended for heating (domestic heating fuel) used for the production of heating and electricity as well as for the sale of electricity;

 15 % of corporate income tax received from biofuel producers and suppliers as well as from producers of renewable energy sources;

• tax and penalty for environmental pollution with methane from swine farming enterprises where the design number of swine held amounts to 12,000 units or more;

 voluntary funds of natural and legal persons and foreign countries intended for the development of the use of renewable energy sources;

• other lawfully received funds.

Funds of special municipal programmes for the development of renewable sources should be used for the following needs of the transport sector:

• development of the infrastructure for the use of energy from renewable sources in transport;

• development of the infrastructure for the production of energy from renewable sources used in transport;

• implementation of projects on the creation and development of a network of battery charging points for electric vehicles and filling points for hydrogen powered vehicles as well as other necessary infrastructure;

• implementation of demonstrative projects related to the use of hybrid vehicles, hydrogen powered vehicles or electric vehicles and/or formation of infrastructure necessary for the operation of these vehicles;

• public information and education, consultancy and learning on issues of the implementation of technologies of renewable energy sources.

The following measures are envisaged in the Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015:

• to prepare and approve municipal action plans for the use of renewable energy sources for 2011–2020, where the goals for the use of renewable energy sources and measures for achieving these goals would be established;

• to prepare draft legal acts necessary for the drawing up of the Special National Programme for the Promotion of the Development of Renewable Energy Sources (intended for the financing of projects on renewable energy sources), to envisage the objectives and sources of financing of this Programme and to prepare a procedure for the use of the funds of this Programme.

4.6. Specific measures for the promotion of the use of energy from biomass

Biomass has an important role as primary energy in all the three sectors: heating and cooling, electricity and transport. National biomass strategy is crucial to plan the role and the interaction of uses between the energy end uses and interaction with other non-energy sectors. Therefore, the domestic biomass potential of the country is evaluated and it is required to provide for increased mobilisation of domestic and imported biomass resources in this Chapter.

4.6.1. Biomass supply: both domestic and trade

Under this point, the supply of domestically available biomass and the need for imports is assessed.

There should be a distinction between biomass (A) from forestry — (1) direct and (2) indirect supply; (B) from agriculture and fisheries — (1) directly provided and (2) by-products/processed crops; and (C) from waste — (1) biodegradable fraction of municipal solid waste, (2) biodegradable fraction of industrial solid waste and (3) sewage sludge. Data is required for the above-mentioned first subcategories, while more detailed information is optional. However the aggregated figures shall reflect the following categorisation and give information in the units of Table 7. The role of imports (EU and non-EU) and exports (if possible, EU and non-EU) must be reflected.

<u>Please note that wood chips, briquettes and pellets can be either from direct supply or</u> from indirect supply from forestry. If information on pellets is included in the table, it should specify whether the raw material comes from direct or indirect supply.

In the case of biogas and biofuels the amount of raw feedstock should be detailed in Table 7, not the amount of processed feedstock. It is understood that for imports and exports the amount of biomass feedstocks for biofuels is more difficult to ascertain, and estimations may be necessary. Alternatively, if the information on imports is given on the basis of biofuel imports, it must be specified in the table.

		Amount	Impo	orted	Exported		
Sector of origin		of domesti c resourc e ²⁴	EU	Non- EU	EU/non-EU	Net amount	Primary energy production (ktoe)
A) Biomass from	Of which:	3,824	228	96	430/4	3,714	728
forestry ²³ :	1. Direct supply of wood biomass from forests and other wooded land for energy generation	1,509	9	4	80/3	1,439	282
	Optional — if information is available you can further detail the amount of feedstock belonging to this category:						
	a) fellings	1,382	9	4	80/3	1,312	257
	b) residues from fellings (tops, branches, bark, stumps)	76	0	0	0/0	76	15
	 c) landscape management residues (woody biomass from parks, gardens, tree rows, bushes) 	51	0	0	0/0	51	10

 Table 7. Biomass supply 2006

²⁴ Amount of the resource in m³ (if possible, otherwise in appropriate alternative units) for category A and its subcategories and in tonnes for categories B and C and their subcategories.

²⁵ Biomass from forestry should also include biomass from forest-based industries. Under the category of biomass from forestry processed solid fuels, such as chips, pellets and briquettes should be included in the corresponding subcategories of origin.

		Amount	Impo	orted	Exported			
Sector of origin		of domesti c resourc e ²⁴	EU	Non- EU	EU/non-EU	Net amount	Primary energy production (ktoe)	
	d) other (please define)	-	-	-	-	-	-	
	2. Indirect supply of wood biomass for	2.315	219	92	350/1	2.275	446	
	energy generation	-,010	>		00011	_,		
	optional — if information is available you can further detail the amount of feedstock belonging to this category: a) residues from sawmilling, wood-working, furniture industry (bark, sawdust)	2,300	219	92	350/1	2,260	443	
	 b) by products of the pulp and paper industry (black liquor, tall oil) 	_	_	-	_	-	_	
	c) processed wood-fuel	-	-	_	-	_	-	
	d) post consumer recycled wood (recycled wood for energy generation, household waste wood)	_	_	-		_		
	e) other (please define)	15	0	0	0/0	15	3	
B) Biomass from	Of which:	0	0	0	0	0	0	
agriculture and fisheries	1. Agricultural crops and fishery products directly provided for energy generation	_	_	_	_	_	_	
	Optional — if information is available you can further detail: a) arable crops (cereals, oilseeds, sugar beet, silage maize) b) plantations c) short rotation trees c) other energy crops (grasses) d) algae d) other (please define)	_	_	-	-	_	-	
	2. Agricultural by-products/processed residues and fishery by-products for energy generation	-	-	-	-	-	-	
	Optional — if information is available you can further detail: a) straw b) manure c) animal fat d) meat and bone meal e) cake by-products (including oil seed and olive oil cake for energy) f) fruit biomass (including shell, kernel) g) fishery by-products g) clippings from vines, olives, fruit trees h) other (please define)	_	_	_	_	-	_	
C) Biomass from	Of which:	0	0	0	0	0	0	
waste	1. Biodegradable fraction of municipal solid waste including biowaste (biodegradable garden and park waste, food and kitchen waste from households, restaurants, caterers and retail premises, and comparable waste from food processing plants) and landfill gas	-	-	-	-	-	_	
	2. Biodegradable fraction of industrial waste (including paper, cardboard, pallets)	-	-	-	-	-	-	
	3. Sewage sludge	_	_	_	_	_	_	

<u>Please explain the conversion factor/calculation methodology used above for the</u> <u>conversion of the amount of available resources to primary energy.</u> The total amount of wood used for energy in 2006 has been cited from the publication "Fuel and Energy Balance, 2007" issued by the Department of Statistics. Enterprises shall present data on wood produced, exported, imported and used for energy purposes in the annual report EN-01. The amount of wood consumed for the production of energy for individuals is established on the basis of surveys of individuals. The factor 1,000 m³–0.196 ktoe is used for converting m³ into toe.

<u>Please specify on what basis the biodegradable fraction of municipal solid waste and</u> <u>of industrial waste was calculated.</u>

Currently, biomass is not produced from municipal solid waste and industrial waste. The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 envisages preparation and approval of the methodology for separating the biodegradable fraction of municipal solid waste taking into account the renewable share of energy produced from municipal solid waste.

<u>Please use Table 7a to give an estimated contribution of biomass energy use in 2015</u> and 2020. (Following the categorisation used in Table 7.)

		20)15	2	020
	Sector of origin	Expected amount of domestic resource	Primary energy production (ktoe)	Expected amount of domestic resource	Primary energy production (ktoe)
A) Biomass	1. Direct supply of wood biomass from forests and other wooded land for energy generation		456		408
from forestry:	2. Indirect supply of wood biomass for energy generation		228		204
B) Biomass	1. Agricultural crops and fishery products directly provided for energy generation		106		130
from agriculture and fisheries	2. Agricultural by-products/processed residues and fishery by-products for energy generation		161		379
C) Biomass from waste:	1. Biodegradable fraction of municipal solid waste including biowaste (biodegradable garden and park waste, food and kitchen waste from households, restaurants, caterers and retail premises, and comparable waste from food processing plants) and landfill gas		79		121
	2. Biodegradable fraction of industrial waste (including paper, cardboard, pallets)		_		_
	3. Sewage sludge		-		_

Table 7a. Estimated biomass domestic supply in 2015 and 2020

What is the estimated role of imported biomass up to 2020? Please specify the guantities expected (ktoe) and indicate possible import countries.

Taking into account the fact that consumption of biomass in electricity, heating and cooling, and transport will be growing in the country, the relation between imported and exported biomass is to tend to unity.

Table 8. Current agricultural land use for production of crops dedicated to energy in2006

Agricultural land use for production of dedicated energy crops	Surface (ha)
1. Land used for short rotation trees (willows, poplars)	300
2. Land used for other energy crops such as grasses (reed canary grass, switch grass, Miscanthus), sorghum	0
3. Rape	15,000
4. Cereals (triticale, wheat)	15,000

4.6.2. Measures to increase biomass availability, taking into account other biomass users (agriculture and forest-based sectors)

Mobilisation of new biomass sources

(a) <u>Please specify how much land is degraded.</u>

Lithuanian soils are not degraded and, under conditions of usual farming, they yield quite bounteous crops. In 2006, the total land area affected by erosion (water, wind, anthropogenic) amounted to 731,900 ha (of which: agricultural land – 609,000 ha; forests and other forested areas – 46,900 ha; scarcely vegetated and non-vegetated open areas – 75,000 ha). Approximately 19 % of the total area of soils of the country are sensitive to deflation (1.8-2.5 t/ha of soil).

In Lithuania, the land of used quarries and peatlands forms as a result of extracting fossil minerals used as mineral construction materials: sand, gravel, clay, dolomite, limestone, gaize, chalk marl and peat. Otherwise damaged land includes land which has been damaged by laying roads, various engineering communications (gas pipelines, oil pipelines, water supply and wastewater routes, communication lines etc) and construction of various facilities. Its portion is relatively small compared to areas of used quarries and peatlands, and it is managed (reclaimed) after finishing work.

The National Land Service under the Ministry of Agriculture accumulates information on the land fund of the Republic of Lithuania. Data on all private, state and municipal land of the Republic of Lithuania are provided in the information notice "The Land Fund of the Republic of Lithuania as of 1 January 2010"²⁶ issued by the Service and the State Enterprise Centre of Registers. It is indicated that as on 1 January 2010, the total area of the land fund of the country amounted to 6,530,023 ha. Agricultural lands covered 3,463,571 ha, of which arable land amounted to 2,927,849 ha, gardens – 59,839 ha, grasslands and natural pasture – 475,883 ha. The area of forest land was 2,125,769 ha. Besides, there were 145,579 ha of unused land (land unsuitable for cultivating agricultural crops or areas of soil which cannot be continuously used for pasturage and mowing due to their low economic value (steep hill slopes, cliffs, stones, sands etc)) and 22,729 ha of damaged land.

(b) <u>Please specify how much unused arable land there is.</u>

²⁶<u>http://www.nzt.lt/assets/files/statistika%202010/ZemesFondas_100101.pdf</u>

According to the aforementioned data of the National Land Service under the Ministry of Agriculture and the State Enterprise Centre of Registers, as on 1 January 2010, there were 99,912 ha of unused agricultural land and 8,752 ha of damaged agricultural land. There are no official data as to how much unused arable agricultural land there currently is.

(c) <u>Are any measures planned to encourage unused arable land, degraded land, etc. to be used for energy purposes?</u>

Currently, there are no targeted measures under implementation which would encourage unused arable land, degraded land etc to be used for energy purposes.

The measures for the implementation of the Programme of the Government of the Republic of Lithuania for 2008–2012 envisage that the Ministry of Agriculture jointly with the Ministry of the Environment should prepare the draft Programme for the Use of Degraded Land.

In addition, the Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 envisages preparing legal and economic measures encouraging cultivation of greater amounts of energy crops in unused degraded agricultural lands.

(d) <u>Is energy use of certain already available primary material (such as animal manure) planned?</u>

The Plan for the Implementation of the National Energy Strategy for 2008–2012 approved by Resolution No 1442 of the Government of the Republic of Lithuania of 27 December 2007 (Valstyb•s Žinios (Official Gazette), 2008, No <u>4-131</u>) envisages the following:

• to construct a cogeneration power plant using municipal and other waste unsuitable for processing, which has energy value, as well as biofuel and other organic fuel with electric capacity of 25 MW and thermal capacity of 50 MW in Klaip•da;

• to construct a cogeneration power plant using municipal and other waste unsuitable for processing, which has energy value, with electric capacity of 20 MW and thermal capacity of 50 MW in Vilnius;

• to construct a cogeneration power plant using municipal and other waste unsuitable for processing, which has energy value, with electric capacity of 15 MW and thermal capacity of 50 MW in Kaunas;

• after evaluating needs and possibilities, to construct cogeneration power plants using municipal and other waste unsuitable for processing, which has energy value, in Šiauliai, Panev•žys and other cities.

Scientific research of the possibility to use stumps for the biofuel production are being carried out. During this research, it will be determined how much biomass can be generated from forest without damaging the forest ecosystem.

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources sets out provisions for the promotion of the use of industrial and municipal waste suitable for energy production. It is envisaged that the use and scope of waste suitable for energy production will be established in the National Special Plan for the Use of Waste Suitable for Energy Production to be approved by the Government of the Republic of Lithuania or an institution authorised by the Government, which will provide for the following:

• planned quantities, energy properties, types of existing and prospective waste suitable for energy production and its distribution over the territory of the country;

• locations of energy facilities using waste suitable for energy production and their technical, environmental and economic indicators;

• tasks for municipalities (or groups thereof) concerning minimum levels of use and scope of waste suitable for energy production at energy facilities situated at their territories, in the special plan for the use of waste suitable for energy production to be approved by the council of the municipality.

It is envisaged that pursuant to the special plan for the use of waste suitable for energy production approved by the council of the municipality coordinated with the Special National Plan for the Use of Waste Suitable for Energy Production, municipalities (or groups thereof) will organise, in accordance with the procedure established by legal acts, planning, designing and construction of energy facilities using waste suitable for energy production.

It is envisaged that legal acts regulating technological and environmental requirements to and quality standards of waste suitable for energy production will be prepared by the Government of the Republic of Lithuania or an institution authorised by the Government.

Also, the procedures for the planning, issuance of authorisations, construction and operation of energy facilities using waste suitable for energy production, will be approved, in accordance with the aforementioned draft law under preparation, by the Government of the Republic of Lithuania or an institution authorised by the Government.

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 envisages a measure, the implementation of which will establish requirements ensuring that bigger animal husbandry enterprises, where manure, slurry etc are formed, would be equipped with installations for their treatment and/or processing intended for energy production.

(e) <u>Is there any specific policy promoting the production and use of biogas? What</u> type of uses are promoted (*local, district heating, biogas grid, natural gas grid integration*)?

The Law of the Republic of Lithuania on Biofuel, Biofuels for Transport, and Bio-Oils (Valstyb•s Žinios (Official Gazette), 2000, No <u>64-1940</u>; 2004, No <u>28-870</u>) specifies that the production of biofuel, including biogas, from raw materials originating from the Republic of Lithuania shall be promoted through programmes to be approved by the Government of the Republic of Lithuania and financed from the state budget. Producers and users of this fuel shall be subject to benefits stipulated by the laws. The production and processing of agricultural produce as raw materials for biofuel production is promoted. Biofuel production is made equal to development of new, environmentally-friendly technologies with the use of renewable energy sources. The status of a pilot project can be granted to such activities by a resolution of the Government of the Republic of Lithuania.

Pursuant to the Law of the Republic of Lithuania on Electricity (Valstyb•s Žinios (Official Gazette), 2000, No <u>66-1984</u>; 2004, No <u>107-3964</u>), the state shall promote the production of electricity with the use of renewable energy sources by establishing obligations for the provision of services meeting public interests, to which electricity production with the use of renewable energy sources as well as connection of electricity production installations using biomass, wind, solar energy or hydropower to transmission or distribution electricity networks are attributed.

The general criteria, conditions of and requirements to the promotion of the production and purchase of electricity produced in the Republic of Lithuania with the use of renewable energy sources are established in the Description of the Procedure for the Promotion of the Production and Purchase of Electricity the Production of which Involves the Use of Renewable Energy Sources approved by Resolution No 1474 of the Government of the Republic of Lithuania of 5 December 2001 (Valstyb•s Žinios (Official Gazette), 2001, No

<u>104-3713</u>; 2004, No <u>9-228</u>; 2005, No <u>73-2651</u>; 2006, No <u>100-3862</u>). This Description promotes the production of electricity at biomass, wind, and solar power plants as well as at hydropower plants with capacities not exceeding 10 MW (smaller hydropower plants) as well as purchase of electricity produced at these power plants. The aforementioned power plants shall be connected to operating networks of energy companies in accordance with the procedure established by legal acts while applying a 20 % discount from the connection fee for producers. With a view of promoting the use of biofuel for electricity production at cogeneration power plants, electricity produced from electricity and thermal power production combined cycle power plants in cogeneration mode, where biomass and/or biogas (biomass and/or biogas must account for at least 70 % of the fuel balance) shall be purchased.

Average purchasing prices of electricity produced with the use of renewable and waste energy sources and the conditions for the application thereof shall be established by Resolution No 7 of the National Control Commission for Prices and Energy of 11 February 2002 regarding prices of services meeting public interests in the electricity sector (Valstyb•s Žinios (Official Gazette), 2002, No <u>16-648</u>; Informaciniai Pranešimai (Information Notices), 2007, No <u>73-1041</u>; 2008, No <u>16-217</u>; No <u>77-1002</u>). Electricity produced with the use of biofuel shall be purchased at a price of 30 ct/kWh.

The Law of the Republic of Lithuania on Heating Sector (Valstyb•s Žinios (Official Gazette), 2003, No <u>51-2254</u>; 2007, No <u>130-5259</u>) stipulates that cogeneration of heating and electricity and purchase of heating produced from biofuel, other renewable energy sources and by waste incineration as well as that produced from geothermal energy are services meeting public interests.

When purchasing heating from independent heating suppliers offering the same price of heating, pursuant to the Description of the Procedure for the Purchase of Heating from Independent Producers into Heating Supply Systems approved by Resolution No 982 of the Government of the Republic of Lithuania of 25 July 2003 (Valstyb•s Žinios (Official Gazette), 2003, No <u>75-3481</u>; 2008, No <u>121-4595</u>), heating supply enterprises must first of all purchase heating from installations using renewable energy sources.

The Ministry of Agriculture supports biogas production projects in accordance with the measures of the Rural Development Programme for 2007–2013 also with the use of funds of the European Union. The maximum amount of support for one project amounts to EUR 200,000.

Besides, natural and legal persons, emitting pollution from stationary pollution sources, who have submitted documents confirming consumption of biofuel as stipulated in the Law on Environmental Pollution Tax (Valstyb•s Žinios (Official Gazette), 1999, No <u>47-1469</u>; 2002, No <u>13-474</u>; 2005, No <u>47-1560</u>) shall be released from environmental pollution tax in respect of pollutants emitted into the atmosphere as a result of the use of biofuel.

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources establishes the obligation for large swine farming enterprises to equip biofuel power plants intended for the treatment (processing) of organic waste and envisages the procedure for the supply of gas from renewable energy sources to natural gas networks, connection fees, tariffs etc. In transport, it is envisaged to promote the use of biogas and other alternative fuel.

In order to promote the use of renewable energy sources, it is envisaged to draw up the Special National Programme for the Development of Renewable Energy Sources, the funds of which, in accordance with the aforementioned draft Law currently under preparation, inter alia, will be used for the following:

• for the implementation of projects on the use of biogas for the production of heating and/or cooling energy supplied to heating/cooling supply systems as well as consumed at industrial enterprises, agricultural and commercial facilities;

• for the implementation of projects on biogas production, extraction, refining, treating, and preparation for further use when supplying biogas to natural gas networks and/or for transportation to the final consumption point.

It is envisaged to promote the production of electricity from renewable energy sources by applying fixed purchasing tariff and premium support schemes. As it is planned, fixed purchasing tariffs and premiums will be established by the Government of the Republic of Lithuania upon recommendation of the National Control Commission for Prices and Energy. These tariffs and premiums will be differentiated by various technologies for the production of electricity from renewable energy sources and electric capacities of these technologies. It is planned to be established for the following biogas power plants:

• biogas power plants, the installed electric capacity of which is not greater than 150 kW (with the exception of landfill biogas and sewage treatment plant biogas);

• biogas power plants, the installed electric capacity of which is greater than 150 kW and not greater than 500 kW (with the exception of landfill biogas and sewage treatment plant biogas);

• biogas power plants, the installed electric capacity of which is greater than 500 kW and not greater than 2,000 kW (with the exception of landfill biogas and sewage treatment plant biogas);

• landfill biogas;

• sewage treatment plant biogas.

Such measures from the Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 shall be mentioned as follows:

• to evaluate the need for expanding the gas network infrastructure and to prepare draft amendments of legal acts, which would form favourable conditions for supplying biogas of appropriate quality to natural gas networks and for broader use of biogas for energy production;

• to prepare and publish technical conditions (rules) regulating the connection of biogas supply systems to the natural gas network and connection tariffs applicable to biogas;

• to prepare draft rules for the equipping of installations producing and using biogas;

• to prepare a quality standard for methane produced from biogas and used for motor fuels.

(f) <u>What measures are planned to improve forest management techniques in order to</u> <u>maximise the extraction of biomass from the forest in a sustainable way? How will forest</u> <u>management be improved in order to increase future growth? What measures are planned to</u> <u>maximise the extraction of existing biomass that can already be put into practice?</u>

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 envisages the following:

• to prepare and provide proposals regarding the formalisation financial measures promoting the use of lumbering waste for the production of energy;

• to conduct research intended for the improvement of forest fuel resources: to specify methods of the accounting of underwood and non-prospective underbrush biomass; to specify (by the structure of wood biomass) the structure of lumbering waste (wood of branches, stumps, roots etc) and to create a system for the accounting of stump wood resources; to analyse possibilities of the accounting and use of the living soil cover and litterfall for fuel in Lithuania;

• to prepare and provide proposals regarding the improvement of forest management methods in order to maximise the quantity of biomass produced from forest by the sustainable method.

Impact on other sectors

(a) <u>How will the impact of energy use of biomass on other sectors based on agriculture and forestry be monitored? What are these impacts? (If possible, please provide information also on quantitative effects.) Is the monitoring of these impacts planned in the future?</u>

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 envisages the following measure: to prepare forecasts of the use of biomass resources in the country until 2020 taking into account the import, export of biomass and the assessment of the impact of the use of biomass for the production of energy on other sectors (industry, agriculture etc), and to provide proposals regarding the creation of a system for the monitoring of this impact.

(b) What kind of development is expected in other sectors based on agriculture and forest that could have an impact on the energy use? (E.g. could improved efficiency/productivity increase or decrease the amount of by-products available for energy use?)

In the future, owing to the implementation of more modern and advanced technologies, the amount of waste (biomass) to be generated in the wood industry suitable for the production of energy should decrease (from 2.3 million m^3 in 2006 to 1.8 million m^3 in 2020). However, it is necessary to increase amounts of wood and waste thereof received from forest (the forecasted increase from 2006 to 2020 could be over 1 million m^3).

4.7. Planned use of statistical transfers between Member States and planned participation in joint projects with other Member States and third countries

4.7.1. Procedural aspects

(a) <u>Describe the national procedures (step by step) established or to be established,</u> for arranging a statistical transfer or joint project (including responsible bodies and contact points).

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources envisages that the Government of the Republic of Lithuania or an institution authorised by the Government will be entitled to conclude agreements on statistical transfers of the amount of energy produced with the use of renewable energy sources between the Republic of Lithuania and other Member States of the European Union. These agreements on statistical transfers will be concluded in accordance with the procedure to be established by the Government of the Republic of Lithuania.

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 envisages for the following measures (responsible implementing body – the Ministry of Energy of the Republic of Lithuania):

• to prepare and to submit to the Government of the Republic of Lithuania a draft description of the procedure regulating the following:

o the statistical transfer of the amount of energy produced from renewable energy sources (between the Republic of Lithuania and other Member States of the European Union),

o the procedure for the conclusion and execution of agreements regarding joint projects (between the Republic of Lithuania and other Member States of the European Union and/or third countries);

• to analyse the possibilities of the implementation of joint projects of the Republic of Lithuania and other Member States of the European Union in the country and to determine the potential of such projects;

• to analyse the possibilities of the implementation of joint projects of the Republic of Lithuania, other Member States of the European Union and third countries in the country and to determine the potential of such projects.

(b) Describe the means by which private entities can propose and take part in joint projects either with Member States or third countries.

Private entities will be able to propose joint projects either with Member States or third countries pursuant to the aforementioned procedure for the conclusion and execution of agreements regarding joint projects (between the Republic of Lithuania and other Member States of the European Union and/or third countries) when such has been prepared and approved by the Government of the Republic of Lithuania.

(c) <u>Give the criteria for determining when statistical transfers or joint projects shall</u> be used.

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources envisages the following criteria:

• statistical transfers performed by the Republic of Lithuania should not have an adverse impact on the implementation of the national targets established for the country;

• the Republic of Lithuania is entitled to transfer a statistical amount of energy from renewable energy sources to another Member State of the European Union of the amount of energy from renewable energy sources of the country exceeds the national targets established for the country;

• if the forecasted consumption of energy from renewable sources of the country is lower than the national targets established for the Republic of Lithuania and there are no other means to achieve these targets, the Seimas of the Republic of Lithuania is entitled to adopt a decision to allow the Government of the Republic of Lithuania to perform statistical acceptance of an amount of energy from renewable sources from another Member State of the European Union.

(d) <u>What is going to be the mechanism to involve other interested Member States</u> <u>in a joint project?</u>

The mechanism to involve other interested Member States in joint projects is envisaged to be developed and incorporated in the aforementioned planned description of the procedure for the conclusion and execution of agreements regarding joint projects (between the Republic of Lithuania and other Member States of the European Union and/or third countries).

(e) <u>Are you willing to participate in joint projects in other Member States? How</u> <u>much installed capacity/electricity or heat produced per year are you planning to support?</u> <u>How do you plan to provide support schemes for such projects?</u>

As it is envisaged in the prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources, in order to ensure the fulfilment of the national targets established for the country, the Government of the Republic of Lithuania or an institution authorised by the Government will be entitled to initiate and/or execute the following:

• joint projects on the production of electricity, heating or cooling with the use of renewable energy sources between the Republic of Lithuania and another (other) Member State(s) of the European Union;

• joint projects on the production of electricity with the use of renewable energy sources between the Republic of Lithuania and third countries which can also be participated by other Member States of the European Union.

Decisions on the participation in joint projects and support schemes will be made taking into account the specific situation.

4.7.2. Estimated excess production of renewable energy compared to the indicative trajectory which could be transferred to other Member States

Information on the excess production of renewable energy is provided in Table 9.

Table 9. Estimated excess and/or deficit production of renewable energy compared to the indicative trajectory which could be transferred to/from other Member States (ktoe)

Year

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Estimated excess in forecast document	0	92	94	91	93	79	80	52	53	0	0
Estimated excess in NREAP	0	36	37	123	126	178	182	231	235	0	61
Estimated deficit in forecast document	0	0	0	0	0	0	0	0	0	0	0
Estimated deficit in NREAP	0	0	0	0	0	0	0	0	0	0	0

4.7.3. Estimated potential for joint projects

(a) <u>In which sectors can you offer renewable energy use development in your territory for the purpose of joint projects?</u>

Possibilities to offer renewable energy use development in the country will become clear after implementing the following measures envisaged in the Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015:

• to analyse the possibilities of the implementation of joint projects of the Republic of Lithuania and other Member States of the European Union in the country and to determine the potential of such projects;

• to analyse the possibilities of the implementation of joint projects of the Republic of Lithuania, other Member States of the European Union and third countries in the country and to determine the potential of such projects.

The envisaged date for the implementation of these measures: 2011.

(b) <u>Has the technology to be developed been specified? How much installed</u> capacity/electricity or heat produced per year?

This will become clear after the implementation of the measures specified in Subparagraph (a) of this Part 4.7.3.

(c) <u>How will sites for joint projects be identified?</u> (For example, can local and regional authorities or promoters recommend sites? Or can any project participate regardless its location?)

Requirements to the implementation of joint projects including the identification of sites will become clear after the following measures of the Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 (responsible implementing authority – the Ministry of Energy of the Republic of Lithuania) are implemented:

• to prepare and to submit to the Government of the Republic of Lithuania a draft description of the procedure regulating the procedure for the conclusion and execution of agreements regarding joint projects (between the Republic of Lithuania and other Member States of the European Union and/or third countries);

• to analyse the possibilities of the implementation of joint projects of the Republic of Lithuania and other Member States of the European Union in the country and to determine the potential of such projects;

• to analyse the possibilities of the implementation of joint projects of the Republic of Lithuania, other Member States of the European Union and third countries in the country and to determine the potential of such projects.

(d) <u>Are you aware of the potential for joint projects in other Member States or in</u> <u>third countries? (In which sector? How much capacity? What is the planned support? For</u> <u>which technologies?)</u>

Currently, we do not have official data on the potential for joint projects in other Member States or in third countries.

(e) <u>Do you have any preference to support certain technologies? If so, which?</u>

This will become clear after the implementation of the measures specified in Subparagraph (a) of this Part 4.7.3.

5. ASSESSMENTS

5.1 Total contribution expected of each renewable energy technology to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity, heating and cooling and transport

The contribution of each renewable energy technology to the trajectory and 2020 targets in the electricity, heating and cooling and transport sectors should be estimated giving a possible future scenario without necessarily establishing any technology target or obligation.

For the electricity sector, both the expected (accumulated) installed capacity (in MW) and yearly production (GWh) should be indicated by technology. For hydro, a distinction should be made between plants of less than 1 MW, between 1 and 10 MW, and over 10 MW installed capacity. For solar power, details should be given separately for contributions from photovoltaic solar and concentrated solar power. Wind energy data should be indicated for onshore and offshore separately. For biomass, a distinction should be made between solid, gaseous and liquid biomass for electricity.

When assessing the heating and cooling sector, estimates of both installed capacity and production should be given for geothermal, solar, heat pumps and biomass technologies, with a breakdown for the latter category for solid, gaseous and liquid biomass. The contribution from district heating plants using renewable energy sources should be estimated.

The contribution from different technologies to the renewable energy target in the transport sector should be indicated for ordinary biofuels (both bioethanol and biodiesel), biofuels from wastes and residues, biofuels from non-food cellulosic material or from ligno-cellulosic material, biogas, electricity from renewable energy sources and hydrogen from renewable energy origin.

In case you have estimations on developing the use of certain technologies by regions, could you please indicate that after the table?

Table 10a. Estimation of total contribution (installed capacity, gross electricity generation) expected from each renewable energytechnology in the Republic of Lithuania to meet the binding 2020 targets and the indicative interim trajectory for the shares of energyfrom renewable resources in electricity 2010-2014

	2005		2010		20	2011		2012		013	20	14
	MW	GWh	MW	GWh	MW	GWh	MW	GWh	MW	GWh	MW	GWh
Hydro:	127.8	451	127	432	127	432	128	433	130	437	131	441
<10 MW	27	66	26	79	26	79	27	80	29	84	30	89
>10 MW	100.8	385	100.8	353	100.8	353	100.8	353	100.8	353	100.8	353
Of which pumping	0	0	0	0	0	0	0	0	0	0	0	0
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0
Solar:	0	0	1	0	2	2	3	3	5	6	8	9
photovoltaic	0	0	1	0	2	2	3	3	5	6	8	9
concentrated solar power	0	0	0	0	0	0	0	0	0	0	0	0
Tide, wave, ocean	0	0	0	0	0	0	0	0	0	0	0	0
Wind:	1	2	179	297	200	473	250	563	300	688	350	813
onshore	1	2	179	297	200	473	250	563	300	688	350	813
offshore	0	0	0	0	0	0	0	0	0	0	0	0
Biomass:	5	7	34	147	41	202	59	268	94	429	128	612
solid	2	3	22	98	24	115	40	161	68	271	98	416
biogas	3	4	12	50	17	87	19	108	26	159	30	196
bioliquids ²⁷	0	0	0	0	0	0	0	0	0	0	0	0
Total	134	460	341	876	369	1,109	440	1267	529	1,560	616	1,875
of which in CHP	5	7	34	147	41	202	59	268	94	429	128	612

²⁷Take into account only those complying with the sustainability criteria (cf. Article 5(1) of Directive 2009/28/EC last subparagraph).

Table 10b. Estimation of total contribution (installed capacity, gross electricity generation) expected from each renewable energytechnology in the Republic of Lithuania to meet the binding 2020 targets and the indicative interim trajectory for the shares of energyfrom renewable resources in electricity2015-2020

	2015		2016		20	2017		2018)19	2020	
	MW	GWh										
Hydro:	133	446	134	450	134	452	137	456	139	464	141	470
<10 MW	32	93	33	98	33	99	36	104	38	111	40	117
>10 MW	100.8	353	100.8	353	100.8	353	100.8	353	100.8	353	100.8	353
Of which pumping	0	0	0	0	0	0	0	0	0	0	0	0
Geothermal	0	0	0	0	0	0	0	0	0	0	0	0
Solar:	10	13	10	15	10	15	10	15	10	15	10	15
photovoltaic	10	13	10	15	10	15	10	15	10	15	10	15
concentrated solar power	0	0	0	0	0	0	0	0	0	0	0	0
Tide, wave, ocean	0	0	0	0	0	0	0	0	0	0	0	0
Wind:	389	924	500	1,111	5,000	1,250	500	1,250	500	1,250	500	1,250
onshore	389	924	500	1,111	5,000	1,250	500	1,250	500	1,250	500	1,250
offshore	0	0	0	0	0	0	0	0	0	0	0	0
Biomass:	150	761	175	888	207	1,040	212	1,143	218	1181	224	1,223
solid	115	533	135	626	162	743	162	810	162	810	162	810
biogas	35	228	40	263	45	298	50	333	56	371	62	413
bioliquids ²⁸	0	0	0	0	0	0	0	0	0	0	0	0
Total	682	2,143	819	2,465	851	2,757	859	2,864	867	2,910	875	2,958
of which in CHP	150	761	175	888	207	1,040	212	1,143	218	1,181	224	1,223

²⁸ Take into account only those complying with the sustainability criteria (cf. Article 5(1) of Directive 2009/28/EC last subparagraph).

	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Geothermal (excluding low temperature geothermal heat in heat pump applications)	1.5	3	3	3	4	4	4	4	5	5	5	5
Solar	0	0	1	2	3	4	5	6	6	7	8	9
Biomass:	686	663	707	739	788	847	879	927	991	1,011	1,017	1,023
solid	685	657	696	726	769	823	851	895	954	970	971	973
biogas	1	6	11	13	19	24	28	32	37	41	46	50
bioliquids ³⁰	0	0	0	0	0	0	0	0	0	0	0	0
Renewable energy from heat pumps	0	0	3	4	5	5	6	7	9	10	12	14
Total	688	666	714	748	800	860	894	945	1,011	1,033	1,042	1,051
of which DH ³¹	17	27	28	33	39	44	47	49	52	51	51	51
of which biomass in households ³²	58	60	57	54	51	47	46	43	40	40	39	39

Table 11. Estimation of total contribution (final energy consumption²⁹) expected the Republic of Lithuania to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources <u>in heating and cooling</u> 2010-2020 (ktoe)

²⁹Direct use and district heat as defined in Article 5(4) of Directive 2009/28/EC.

³⁰Take into account only those complying with the sustainability criteria (cf. Article 5(1) last subparagraph of Directive 2009/28/EC).

³¹District heating and/or cooling from total renewable heating and cooling consumption (in terms of per cent) (RES-DH).

³²From the total renewable heating and cooling consumption (in terms of per cent).

Table 12. Estimation of total contribution expected from each renewable energy
technology in the Republic of Lithuania to meet the binding 2020 targets and the
indicative interim trajectory for the shares of energy from renewable resources in the
transport sector 2010-2020 (ktoe)³³

	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Bioethanol/bio-ETBE	0.8	13	14	22	25	26	30	32	33	34	35	36
<i>Of which biofuels</i> ³⁴ <i>Article 21(2)</i>	0	0	0	0	0			0	0	0	0	0
<i>Of which imported</i> ³⁵	0	0	0	0	0	0	0	0	0	0	0	0
Biodiesel	2.8	42	43	53	65	67	79	91	104	119	128	131
Of which biofuels ³⁶ Article 21(2)	0	0	0	0	0	0	0	0	0	0	0	0
<i>Of which imported</i> ³⁷	0	0	0	0	0	0	0	0	0	0	0	0
Hydrogen from renewables	0	0	0	0	0	0	0	0	0	0	0	0
Renewable electricity	0	0.3	0.8	0.8	0.9	0.9	1.6	1.6	2.4	2.4	2.4	2.5
Of which road transport	0	0	0	0	0	0	0	0	0	0	0	0
Of which non-road transport	0	0	0	0	0	0	0	0	0	0	0	0
Others (as biogas, vegetable oils, etc) – please specify	0	0	0	0	0	0	0	0	0	0	0	0
Of which Biofuels ³⁸ Article 21(2)	0	0	0	0	0	0	0	0	0	0	0	0
Total	3.6	56	59	77	92	95	113	127	143	159	196	173

³³For biofuels take into account only those compliant with the sustainability criteria (cf. Article 5(1) last subparagraph).

³⁴Biofuels that are included in Article 21(2) of Directive 2009/28/EC.

³⁵From the whole amount of bioethanol/bio-ETBE.

³⁶Biofuels that are included in Article 21(2) of Directive 2009/28/EC.

³⁷From the whole amount of biodiesel.

³⁸Biofuels that are included in Article 21(2) of Directive 2009/28/EC.

5.2. Total contribution expected from energy efficiency and energy saving measures to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity, heating and cooling and transport

The contribution expected from energy efficiency to meet the binding 2020 targets and the indicative interim trajectory in the sector was determined on the basis of the data set out in Table 1 of this Action plan (see the figure below).



šildymo ir v•sinimo sektorius, ktne = heating and cooling sector, ktoe elektros energijos sektorius, ktne = electricity sector, ktoe

transporto sektorius, ktne = transport sector, ktoe

Figure. The contribution expected from energy efficiency to meet the binding 2020 targets and the indicative interim trajectory (ktoe)

As it is seen on the figure, the biggest contribution from energy efficiency will be achieved in the heating and cooling sector, while its contribution in the electricity sector will be the lowest.

5.3. Preparation of the National Renewable Energy Action Plan and the follow-up of its implementation

(a) <u>How were regional and/or local authorities and/or cities involved in the</u> preparation of this Action Plan? Were other stakeholders involved?

The Association of Local Authorities in Lithuania was involved in the preparation of this Action Plan.

The National Strategy for the Development of Renewable Energy Sources approved by Resolution No 789 of the Government of the Republic of Lithuania of 21 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No <u>73-3725</u>) indicates that one of the directions for the development of the sector of renewable energy sources is to involve municipal institutions in the implementation of the policy for the development of renewable energy sources and thus to ensure cooperation between state and municipal institutions in fulfilling the established goals in a more efficient manner.

The prepared draft Law of the Republic of Lithuania on Energy from Renewable Sources envisages the following competence of municipalities in the field of renewable energy sources:

• prepare and implement action plans for the development of the use of renewable energy sources;

• ensure the use of renewable energy sources for the production of thermal power by organising supplies of thermal power within the territory of the municipality;

• include the use of heating from renewable energy sources in plans for the renovation of city and/or district infrastructure;

• approve the procedure for subsidising the acquisition of equipment increasing the use of renewable energy sources in the residential and public sectors;

• ensure that public transport would involve the use of transport vehicles using energy from renewable sources, electric vehicles and hybrid vehicles;

• create infrastructure necessary for the development of the use of transport vehicles using renewable sources and electricity;

• prepare and implement public information and awareness raising measures, provide consultations and arrange training programmes on practical possibilities and benefits of the development and use of renewable energy sources;

• Perform other functions established in the aforementioned draft Law.

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 provides for the following measures related to municipalities:

• to prepare and provide draft legal acts, whereby municipalities would be obligated to promote the use of renewable energy sources;

• to prepare and approve municipal action plans for renewable energy sources for 2011–2020 establishing objectives of the use of renewable energy sources and measures for achieving these objectives;

• financial measures (tax benefits, subsidies) for promoting the use of biofuel in transport (one of the implementing bodies of the measure – municipal institutions);

• to prepare measures of financial support, which would promote the modernisation of heat production installations supplying heat to rural public buildings (schools, kindergartens, health care institutions, elderships etc), while adjusting these installations for the incineration of biofuel (wood, straw) including herbaceous plant biomass (grass granules) (one of the implementing bodies of the measure – municipal institutions);

• to create conditions for the construction of cogeneration power plants using municipal and other waste unsuitable for processing, which has energy value, in the big Lithuanian cities (Vilnius, Kaunas, Klaip•da) (one of the implementing bodies of the measure – municipal institutions);

• to prepare and implement measures creating conditions for and encouraging the use of excess electricity produced at night time in transport while creating and developing city infrastructure of vehicles using electricity (one of the implementing bodies of the measure – municipal institutions);

• to prepare, provide, and publish information on the issuance of permits, licences, and certificates related to renewable energy installations and on assistance provided to applicants (one of the implementing bodies of the measure – municipal institutions);

• to prepare, provide, and publish information on the support granted for the use and production of renewable energy sources (one of the implementing bodies of the measure – municipal institutions);

• to prepare and implement public information and awareness raising measures, and to provide consultations encouraging the effective use of the energy of renewable sources (one of the implementing bodies of the measure – municipal institutions);

• to organise trainings on practical possibilities and benefits of the development and use of renewable energy sources including those on the accessibility and environmental benefits of various renewable energy sources used in transport (one of the implementing bodies of the measure – municipal institutions);

• to organise exchange of experience in the field of using renewable energy sources between state and municipal institutions, bodies, enterprises, organisations and private entities, and to publish examples of best practices.

The Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015 envisages that the implementation of the National Renewable Energy Action Plan will also be participated by the following:

- the Ministry of Energy of the Republic of Lithuania;
- the Ministry of the Environment of the Republic of Lithuania;
- the Ministry of Agriculture of the Republic of Lithuania;
- the Ministry of Transport and Communications of the Republic of Lithuania;
- the Ministry of Economy of the Republic of Lithuania;
- the Ministry of Education and Science of the Republic of Lithuania;
- the Ministry of Foreign Affairs of the Republic of Lithuania;
- the Ministry of Finance of the Republic of Lithuania;
- the Ministry of the Interior of the Republic of Lithuania;
- the Ministry of Health of the Republic of Lithuania;
- other state institutions:
 - o the Department of Statistics under the Government of the Republic of Lithuania,
 - o the National Control Commission for Prices and Energy,
 - o the State Territorial Planning and Construction Inspectorate Under the Ministry of the Environment;
 - o the Lithuanian Geological Survey under the Ministry of the Environment;
 - o the Lithuanian Standards Board under the Ministry of the Environment;
- the Research Council of Lithuania; scientific and educational institutions.

(b) <u>Are there plans to develop regional/local renewable energy strategies? If so, could you please explain? In case relevant competences are delegated to regional/local levels, what mechanism will ensure national target compliance?</u>

Municipalities are expected to contribute to the implementation of this Action Plan by preparing renewable energy action plans of municipalities where concrete goals and measures for the fulfilment of the action plans will be established. Reports on the fulfilment of action plans should be prepared on an annual basis, and action plans should be updated, if and when necessary, taking into account the results of the reports, in such a manner that the established goals would be achieved.

(c) <u>Please explain the public consultation carried out for the preparation of this</u> <u>Action Plan.</u>

For the initial draft Action Plan, an inter-institutional group, which included representatives of the following institutions, was formed:

- the Ministry of Energy of the Republic of Lithuania;
- the Ministry of the Environment of the Republic of Lithuania;
- the Ministry of Agriculture of the Republic of Lithuania;
- the Ministry of Education and Science of the Republic of Lithuania;
- the Department of Statistics under the Government of the Republic of Lithuania;
- the National Control Commission for Prices and Energy,
- State Enterprise Energy Agency;
- the Association of Local Authorities in Lithuania.

This Action Plan has been updated pursuant to the National Strategy for the Development of Renewable Energy Sources approved by Resolution No 789 of the Government of the Republic of Lithuania of 21 June 2010 (Valstyb•s Žinios (Official Gazette), 2010, No 73-3725) and the Plan of Measures for the Implementation of the National Strategy for the Development of Renewable Energy Sources for 2010–2015. The latter legal acts, during their preparation process, were coordinated by the Ministry of Energy of the Republic of Lithuania in accordance with the established procedure with all parties concerned including the following by publishing these legal acts on the internet:

- the Ministry of the Environment of the Republic of Lithuania;
- the Ministry of Agriculture of the Republic of Lithuania;
- the Ministry of Economy of the Republic of Lithuania;
- the Ministry of Education and Science of the Republic of Lithuania;
- the Ministry of Transport and Communications of the Republic of Lithuania;
- the Ministry of Finance of the Republic of Lithuania;
- the Ministry of the Interior of the Republic of Lithuania;
- the Ministry of Justice of the Republic of Lithuania;
- the Ministry of Foreign Affairs of the Republic of Lithuania;
- the Department of Statistics under the Government of the Republic of Lithuania,
- the European Law Department under the Ministry of Justice of the Republic of Lithuania;

• the State Territorial Planning and Construction Inspectorate Under the Ministry of the Environment;

- the Lithuanian Standards Board under the Ministry of the Environment;
- the Lithuanian Geological Survey under the Ministry of the Environment;
- the State Non-Food Products Inspectorate under the Ministry of Economy;
- the National Control Commission for Prices and Energy;
- the Lithuanian Association of Heat Suppliers;
- the Lithuanian Association of Wind Power Plants;
- the Lithuanian Wind Power Association;
- the Lithuanian Electricity Association;
- the Lithuanian Gas Association;
- the Lithuanian Association of Energy Consultants;
- the Association of Local Authorities in Lithuania;
- the Lithuanian Hydropower Association;
- the Lithuanian Geothermal Association;

- the Lithuanian Biomass Energy Association;
- the Lithuanian Bioenergy and Energy Saving Association;
- the Lithuanian Renewable Energy Association;
- the Biogas Association;
- the Biofuel Association;
- the Lithuanian Solar Power Association;
- the Lithuanian Confederation of Industrialists;
- the Research Council of Lithuania;
- the Lithuanian Energy Institute.

(d) <u>Please indicate your national contact point/the national authority or body</u> responsible for the follow-up of the Renewable Energy Action Plan?

The Ministry of Energy of the Republic of Lithuania.

(e) <u>Do you have a monitoring system, including indicators for individual measures</u> and instruments, to follow-up the implementation of the Renewable Energy Action Plan? If so, could you please give more details on it?

Each year, institutions responsible for the implementation of the measures for the development of renewable energy sources will present detailed reports on the implementation of measures for which they are responsible for the previous year. The Ministry of Energy of the Republic of Lithuania will monitor the implementation of the measures and will prepare annual reports and present them to the Government of the Republic of Lithuania.