

Information Report
Republic of Latvia National Renewable Energy Action
Plan for implementing Directive 2009/28/EC of the European
Parliament and of the Council of 23 April 2009 on the
promotion of the use of energy from renewable sources and
amending and subsequently repealing Directives 2001/77/EC
and 2003/30/EC by 2020

TABLE OF CONTENTS

1. Summary of National Renewable Energy Policy	4
1. Expected Final Energy Consumption 2010–2020	7
3. Renewable energy targets and trajectories	12
3.1. National overall targets	12
3.2. Sectoral targets and trajectories	12
4. Measures for the attainment of targets	17
4.1. Overview of all policies and measures to promote the use of energy generated from renewable energy sources.....	17
4.2. Specific measures to fulfil the requirements of Articles 13, 14, 16 and 17 to 21 of Directive 2009/28/EC	22
4.2.1. Administrative procedures and spatial planning (Article 13(1) of Directive 2009/28/EC)	23
4.2.2. Technical specifications (Article 13(2) of Directive 2009/28/EC) ...	30
4.2.3. Buildings (Article 13(3) of Directive 2009/28/EC)	30
4.2.4. Information provisions (Articles 14(1), 14(2) and 14(4) of Directive 2009/28/EC)	33
4.2.5. Certification of installers (Article 14(3) of Directive 2009/28/EC) ..	37
4.2.6. Development of electricity infrastructure (Article 16(1) and Article 16(3) to (6) of Directive 2009/28/EC)	38
4.2.7. Electricity network operation (Article 16(2) and Article 16(7) and (8) of Directive 2009/28/EC)	48
4.2.8. Biogas integration into the natural gas network (Article 16(7) and Article 16(9) and (10) of Directive 2009/28/EC)	52
4.2.9. District heating and cooling infrastructure development (Article 16(11) of Directive 2009/28/EC)	54
4.2.10. Biofuels and bioliquids – sustainability criteria and verification of compliance (Articles 17 to 21 of Directive 2009/28/EC)	56
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.....	62
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 .	80
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	81
4.6. Specific measures for the promotion of the use of energy from biomass	83
4.6.1. Biomass supply: both domestic and trade.....	84

4.6.2. Measures to increase biomass availability, taking into account other biomass users (agriculture and forest-based sectors).....	86
4.7. Planned use of statistical transfers between Member States and planned participation in joint projects with other Member States and third countries	88
4.7.1. Procedures aspects	88
4.7.2. Estimated excess production of renewable energy compared to the indicative trajectory which could be transferred to other Member States	89
4.7.3. Estimated potential for joint projects.....	89
4.7.4. Estimated demand for renewable energy to be satisfied by means other than domestic production	89
5. Assessments	90
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	90
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	96
5.3. Assessment of the impacts (Optional).....	96
5.4. Preparation of the National Renewable Energy Action Plan and the follow-up of its implementation.....	99
Annex	

1. Summary of National Renewable Energy Policy

Latvia's medium-term energy policy planning documents and legislation consolidate the objective of increasing the share of renewable energy sources in the consumption of electricity and transport fuel, however, Latvia needs to establish a unified strategy so that it is possible to fulfil the requirements provided for by Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC (hereinafter – Directive 2009/28/EC) which prescribes mandatory targets for European Union Member States.

Pursuant to Annex I(A) to Directive 2009/28/EC, Latvia's overall objective, provided for by the draft action plan, is to increase the share of energy produced from renewable energy sources (hereinafter – RES) in gross final energy consumption from 32.6% in 2005 to 40% in 2020.

To fulfil the requirements of Directive 2009/28/EC, the 'Republic of Latvia National Renewable Energy Plan for implementing Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC by 2020' (hereinafter – action plan) has been drawn up in accordance with the European Commission's (hereinafter – Commission) 30 June 2009 Decision No L 182/33 *Commission Decision of 30 June 2009 establishing a template for National Renewable Energy Action Plans under Directive 2009/28/EC of the European Parliament and of the Council*.

Pursuant to Article 22(1) of Directive 2009/28/EC, Latvia will submit to the Commission by 31 December 2011 and thence biannually a report on the progress in the promotion and utilisation of energy obtained from RES. The sixth report, to be submitted by 31 December 2021, will be the final mandatory report.

Latvia's total final energy consumption is secured from local energy resources and the flow of primary resources from Russia, the CIS countries, the Baltic countries, EU and other countries. Currently, three types of energy resource making up approximately equal proportions dominate in the delivery of Latvia's primary resources – oil products (mainly petrol and diesel), natural gas and wood-fuel. Like many other European Union (hereinafter – EU) countries, Latvia is dependent on imports of primary resources. Having regard to the reduction of economic activity in Latvia, although consumption fell during 2008

and 2009 RES maintain a significant position in Latvia's primary energy resource balance.

The share of RES has traditionally been significant in Latvia's energy supply and in 2008 it comprised **29.9%** of the total final energy consumption. Rapid growth in final energy consumption and the slow development of RES projects has reduced the RES proportion by 2.6% compared with 2005.

In the consumption structure for electricity, the RES segment is made up of hydropower plants, wind power plants, biogas power plants and biomass power plants, as well as cogeneration stations utilising RES. In 2008, RES made up 39.6% of the total final consumption of electricity, with the majority of this, a little over 97%, supplied by large hydropower plants, with the remainder coming from wind power plants, biomass cogeneration power plants and small hydropower plants. RES makes up the largest proportion in the final consumption of heat energy, including district heating, at 42.7%.

The action plan 'Latvia's national renewable energy action plan' (hereinafter – the action plan) stipulates indicative targets for the share of RES in each type of final energy consumption (the consumption of energy in heating and cooling, electricity and fuel consumption for transport), to foster the fulfilment of the common objective pursuant to Directive 2009/28/EC, taking into account the potential RES available and usable in Latvia.

Having regard to the potential of economically usable RES available in Latvia, the main types of usable RES will continue to be solid biomass, mainly wood, as well as biogas, wind power and hydro power.

The import of fossil energy resources is characterised by large price fluctuations, which does not facilitate the sustainable development of the economy. Given that Latvia's natural gas is supplied by only one country – Russia – Latvia, having regard to the potential of RES available in its territory and the significant position RES already takes in Latvia's current primary energy resource balance compared with other European Union Member States, must attain national energy independence both through promoting measures to increase energy efficiency and increasing the share of local RES in energy, diversifying energy resources and energy supply sources and reducing energy imports.

Given that changing the structure of the energy resource balance through the more extensive use of RES is one of the instruments for securing sustainable development, in addition to promoting economic growth, social welfare (which includes improving the quality of life, the development of good infrastructure and balanced employment) is also facilitated.

In order for Latvia to maintain its leadership in RES utilisation in the European Union in the future, availing itself of the advantages of the European Union energy market and local RES, a successful policy must be drawn up in the long term for increased use of RES, including the energy, environmental, transport and agricultural sectors, as well as regional or spatial planning. Support mechanisms for generating energy from RES that operate more successfully than previous ones must be established, not only for electricity but also for heating and transport fuel.

Given that the total consumption of energy and its density within Latvia is comparatively small, as well as the fact that fossil energy prices have not yet reached their maximum level, this is the most appropriate time to commence the more extensive use of RES in Latvia's primary energy balance.

The action plan provides for guidance towards the more extensive use of local RES in Latvia, noting the measures to be taken to attain the target prescribed in Directive 2009/28/EC, implementing sustainable development, conserving environmental quality and contributing to the reduction of greenhouse gas emissions, increasing Latvia's energy self-sufficiency, ensuring the sustainable utilisation of Latvia's natural resources and the socio-economic benefits of their utilisation.

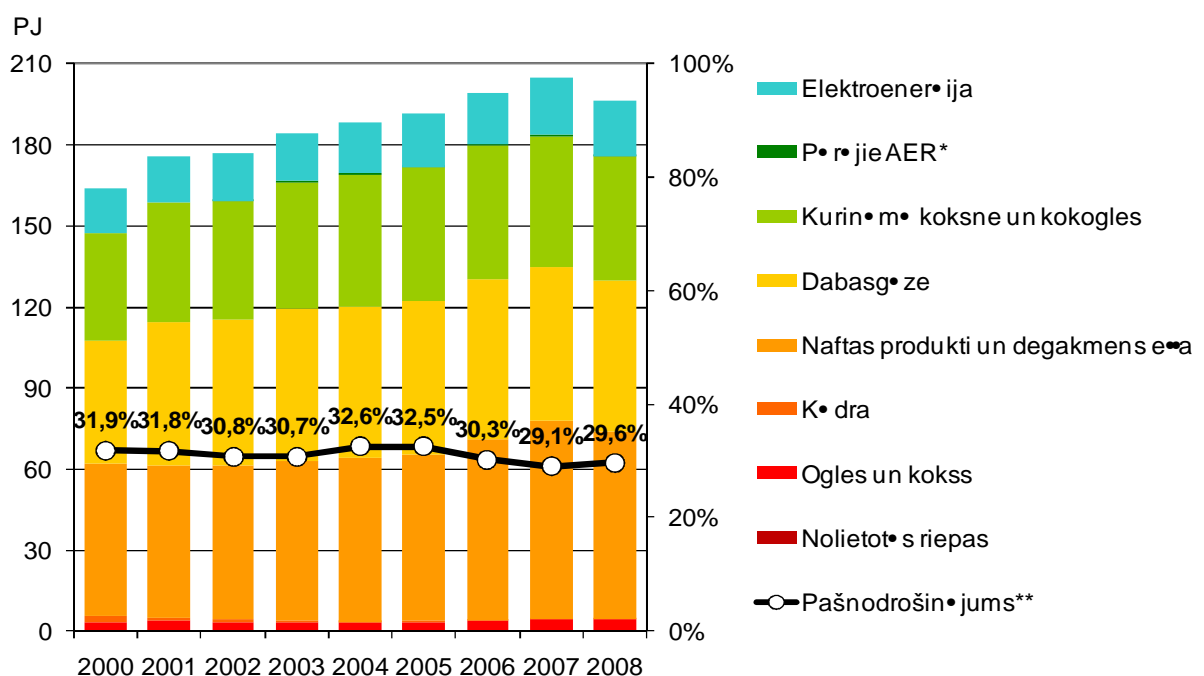


Figure 1 Consumption of primary energy resources in Latvia 2000-2008, PJ

Key Figure 1: Electricity
Other RES
Wood-fuel and charcoal

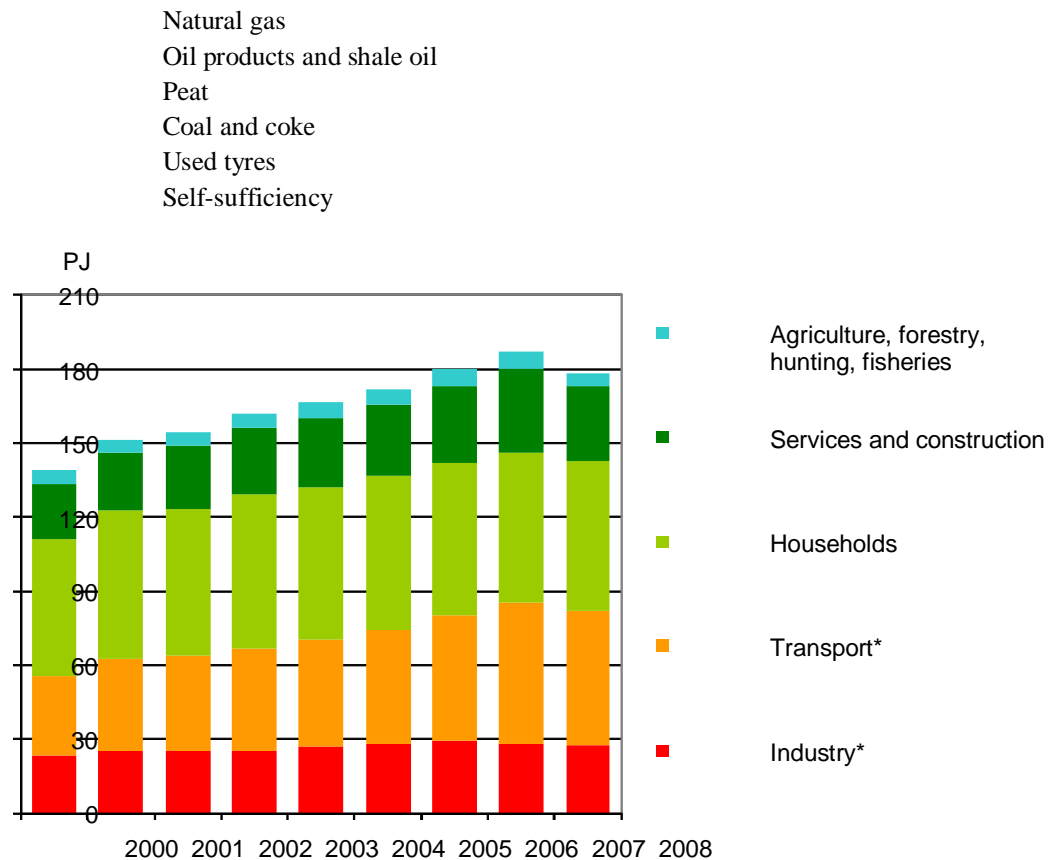


Figure 2 Total final energy consumption in Latvia 2000-2008, PJ

Key Figure 2:

- Agriculture, forestry, hunting, fishing
- Services and building*
- Households
- Transport
- Industry

2. Expected Final Energy Consumption 2010–2020

The rapid economic growth of 2005-2007 saw an increase in energy demand. The economic downturn that commenced in the second half of 2008 and continued in 2009 necessitates the correction of earlier forecasts and makes energy demand forecasting up to 2020 difficult.

The forecast for gross final energy consumption (hereinafter – GFEC) up to 2020 is constructed both by energy type (electricity (E), district heating (DH), heating and cooling consumption (H) and transport fuels (F), and by final energy consumption by sector (industry, households, services, agriculture, forestry and fisheries).

GFEC has been forecast for two scenarios: a ‘reference’ scenario and an ‘additional energy efficiency’ scenario. The basic assumptions (rates of GDP

growth, energy intensity, energy prices, elasticity of energy consumption and others), and also the taking into account other energy and environmental policy planning documents (Energy Development Guidelines 2007-2016, Renewable energy source Utilisation Guidelines 2006-2013), are the same for both scenarios. The ‘reference’ scenario only takes into account the energy-efficiency and energy-saving measures adopted up to 2009 and the measures provided for by planning documents currently in force.

The ‘additional energy efficiency’ scenario takes into account the energy-efficiency and energy-saving measures to be adopted and implemented pursuant to the ‘First energy efficiency action plan for the Republic of Latvia 2008-2016’ (hereinafter – EEAP) and other anticipated energy efficiency measures, including the reduction of energy losses in transmission and distribution grids. Hereinafter in the action plan, RES target calculations utilise the ‘additional energy efficiency’ scenario.

Given that the amount of energy to be consumed by aviation in Latvia in 2020 is not expected to exceed 6.18% of GFEC, GFEC will not be corrected in accordance with Article 5(6) of Directive 2009/28/EC

An econometric model has been developed to forecast energy consumption using certain macroeconomic indicators and calculated coefficients as entry data (exogenous parameters). Consequently, a theoretically determined ratio between the gross final energy consumption and the exogenous parameters has been applied, the most important being the observable changes in Latvia’s GDP and elasticity coefficients that characterise the interaction of changes in GDP and energy consumption, energy and fuel price changes, and changes in energy intensity. In addition, trends affected by Latvia’s economic downturn, such as changes in consumption to date and factors that can affect energy consumption in the future, must be taken into account.

The Figure below shows GFEC forecasts for both the ‘reference’ and ‘additional energy efficiency’ scenarios where energy savings are calculated according to the energy efficiency measures provided for in the EEAP and other planning documents. The consumption of electricity (E) in 2020 is forecast to be 746 ktoe, heating and cooling consumption (H) in 2020 is forecast to be 2 612 ktoe and transport fuel consumption (F) is forecast to be 1 299 ktoe.

The numerical quantities of the forecasts and changes for the period from 2008 to 2020 as well as the rates of annual changes are shown in Table 2 of the Annex. Also presented are the GDP forecast up to 2020, in which the figures up to 2015 are based on annual GDP changes indicated in the Ministry of Economics’ June 2009 ‘Report on Latvia’s economic development’, while from

2016, the annual rate of GDP increase is assumed to be 5%. According to the forecast, by 2020 GDP and GFEC will increase by 22.4% and 11.0% respectively. The largest increases are expected in the transport sector (transport fuel (F)) and electricity demand (electricity (E)), forecast in accordance with the ‘Transmission system operator’s annual assessment report for 2009 ‘Forecast of final gross energy consumption’.

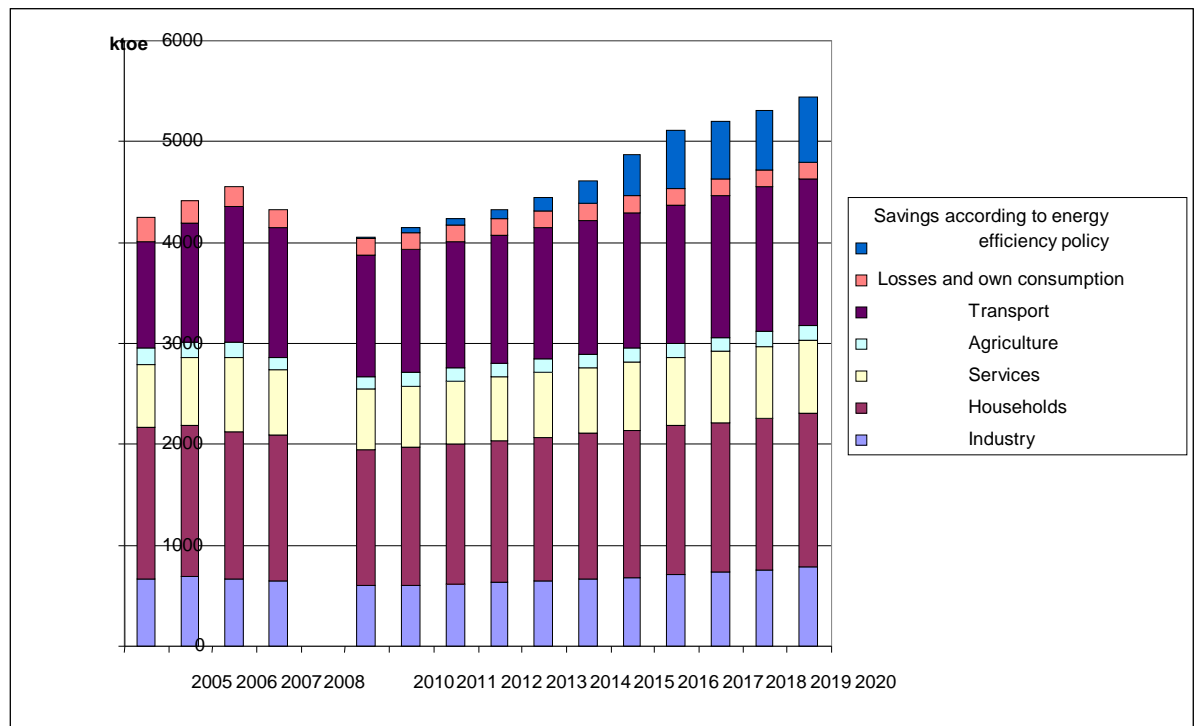


Figure 3 Forecast of total final energy consumption up to 2020 by sector, ktoe.

Key Figure 3:

- Savings related to EE policy
- Losses and own consumption
- Transport
- Agriculture
- Services
- Households
- Industry

A two-stage modelling approach is taken to determine the distribution of renewable resources by energy type for the attainment of national targets specified for resource types. In the first stage, the optimisation model MARKAL is used to find the distribution of RES among RES energy types and determines the structure of primary resources by selecting the lowest total delivery cost for energy as the criterion. An additional task at this stage was to integrate the execution of the renewable energy source target with the new package of EU environmental policy guidelines which stipulate the GHG emission reduction target for 2020.

In the second stage, an imitation model was used iteratively to find the possible technology choices for attaining the RES target specified for each separate sector,

In accordance with the requirements of the Directive, in their national renewable energy source action plans under Directive 2009/28/EC, Member States must not only specify 2020 targets in each sector, they must also describe an indicative trajectory for the RES-generated energy target, reflecting the increase in the use of RES-generated energy in each sector from 2011 to 2020.

The main scenarios drawn up anticipate attaining Latvia's RES target of 40% by 2020, mainly on the basis of utilising the renewable energy sources available in Latvia without the supplementary mechanisms provided for in Directive 2009/28/EC. At the same time, the developed scenario does not anticipate a surplus in comparison with the indicative trajectory that could be distributed to other Member States pursuant to Articles 6 to 11 of the Directive.

Irrespective of the planned measures to increase energy efficiency, GFEC is forecast to increase by 11% by 2020 compared with 2008 and could reach 4 796 ktoe. The increase is anticipated mainly in the consumption of electricity and the consumption of fuel in transport. According to the assumptions used in the calculation, the 'additional energy efficiency' scenario anticipates 12% less energy being consumed in 2020 than under the 'reference' scenario.

Table 1

Forecast gross final energy consumption in Latvia for heating and cooling, electricity and transport up to 2020, taking into account the effects of energy efficiency and energy saving measures [1] in 2010-2020 ('000 tonnes oil equivalent)

Table

ktoe

	2005	2010		2011		2012		2013		2014	
	base year	reference scenario	additional energy efficiency	reference scenario	additional energy efficiency	reference scenario	additional energy efficiency	reference scenario	additional energy efficiency	reference scenario	additional energy efficiency
1. Heating and cooling a	2607	2271	2251	2316	2285	2361	2319	2416	2354	2493	2389
2. Electricity	581	588	584	603	596	618	608	636	620	657	633
3. Transport	982	1099	1096	1119	1116	1145	1136	1165	1157	1190	1178
4. Gross final energy consumption	4241	4060	4033	4141	4101	4231	4170	4325	4240	4451	4311

	2015		2016		2017		2018		2019		2020	
	reference scenario	additional energy efficiency	reference scenario	additional energy efficiency	reference scenario	additional energy efficiency	reference scenario	additional energy efficiency	reference scenario	additional energy efficiency	reference scenario	additional energy efficiency
1. Heating and cooling a	2604	2425	2779	2461	2962	2497	2994	2535	3042	2573	3114	2612
2. Electricity	686	646	733	665	764	684	795	704	827	725	860	746
3. Transport	1212	1199	1231	1218	1253	1237	1274	1257	1297	1278	1320	1299
4. Gross final energy consumption	4615	4383	4862	4462	5101	4542	5191	4624	5300	4709	5434	4796

Source: Ministry of Economics

¹ These estimates on energy performance and energy saving measures must be consistent with the respective estimates that Member States notify to the Commission, notably in Action Plans under the Energy Services Directive and the Energy Performance of Buildings Directive. If different units are used in the Action Plans, the conversion factors applied should be indicated.

3. Renewable energy targets and trajectories

3.1. National overall targets

Pursuant to Annex I(A) to Directive 2009/28/EC, Latvia's target is to increase the use of RES from 32.6% of GFEC in 2005 to 40% in 2020. The total amount of RES to be utilised in 2020 is (1 918 ktoe).

Latvia's RES targets up to 2020 and the subsequent period:

1) by 2020, the share of renewable energy in total gross final energy consumption to be increased to **at least 40%** and to increase it gradually thereafter;

2) by 2020, the share of renewable energy in the transport sector must reach **at least 10%** of gross final energy consumption for transport and to increase it gradually thereafter.

In Table 2 below, the national overall target for the share of energy generated from RES in gross final energy consumption in 2020 is shown in comparison with 2005, and the shares of the gross final energy consumption generated from RES (%) are compared. Both the expected total corrected energy consumption for 2020 (ktoe) and the amount of energy generated from RES in line with the 2020 target (ktoe) are shown.

Table 2

National overall target for the share of energy generated from renewable energy sources in the gross final energy consumption for 2005 and 2020 (numerical values prescribed in Annex I(A) to Directive 2009/28/EC)

AA	Share of gross final energy consumption generated from renewable energy sources, 2005 (S ₂₀₀₅) (%)	32.6
BB	Share of gross final energy consumption generated from renewable energy sources, 2020 (S₂₀₂₀) (%)	40
CC	Expected total corrected energy consumption for 2020 (from last column of Table 1) ('000 tonnes oil equivalent)	4 796
DD	Expected amount of energy generated from renewable energy sources in line with 2020 target (calculated as B × C) ('000 tonnes oil equivalent)	1 918

Source: Ministry of Economics

3.2. Sectoral targets and trajectories

To ensure the attainment of the overall mandatory targets prescribed for Latvia in Directive 2009/28/EC, the country must work towards an indicative trajectory tracing a path towards the achievement of its final mandatory 2020

targets. Latvia must implement appropriate measures to ensure that the share of energy generated from RES is equal to or greater than that shown in the indicative trajectory in Annex I(B) to Directive 2009/28/EC (40%).

By implementing energy efficiency measures and measures promoting the use of RES, the fulfilment of the development scenarios shown in Table 3 and the achievement of the targets prescribed in Directive 2009/28/EC can be expected in Latvia.

Table 3 shows an indicative trajectory tracing a path towards the attainment of targets for each different energy type. This development scenario anticipates that in the electricity sector the share of GFEC increases from 44.9% in 2005 to **59.8%** in 2020, in the corresponding period in the heating and cooling sector the share increases from 42.7% to **53.4%**, and in the transport sector the share increases from 0.9% to **10%**.

It should be noted that the development of RES and the nominated interim targets for each sub-sector are subject to various uncertainty factors, for example changes in the relationship between fossil fuel and RES prices, the auction procedure for CO₂ quotas and the expected CO₂ quota price, as well as the impact of planned support measures on increasing RES utilisation. Implementing the scenario in Table 3 affects many sectors of the economy and their mutual interaction in RES utilisation leads to certain development trends.

Furthermore, given that since 2005 a 2.5% fall in the share of energy generated from RES has been observed, to return to the traced indicative trajectory the RES share of GFEC must be increased by 3.8% in 2011 and by 10.1% by 2010 compared with 2008.

Latvia's main RES sources are concentrated in agriculture and forestry, which could make up 60-80% of all the economically utilisable RES potential in Latvia. The remaining energy is made up of solar radiation, wind and geothermal heat.²

² Gaidis Klīvs, Antra Kundziņa, Juris Ozolišs, Jānis Reis, Utilisation of renewable energy sources to ensure Latvia's sustainable development, (Soros Foundation Latvia, 2010), 24.
EMZino_111010_RES; Information Report: Republic of Latvia National Renewable Energy Action Plan for implementing Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC by 2020

Table 3

**National 2020 target and estimated trajectory for energy from renewable energy sources in heating and cooling,
electricity and transport**

Table

(Table prepared with data calculated in 4a and 4b)

	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
RE-heating and cooling	42.7	45.3	46.7	47.6	48.2	48.1	48.6	49.3	50.0	50.6	51.5	53.4
RE-electricity	44.9	44.7	46.3	47	47.2	49.9	51.4	52	53.4	55.2	57.1	59.8
RE-transport	0.9	4	4.1	4.2	4.4	4.5	4.6	5.5	6.3	7.2	8.2	10
Total RE share	32.6	32.7	33.8	34.3	34.7	35	35.6	36.3	37	37.7	38.5	40
Of which from cooperation mechanism												
Surplus for cooperation mechanism												

			2011-2012	2013-2014	2015-2016	2017-2018		2020
In accordance with Annex I.B to the Directive			$S_{2005} + 20\%$ ($S_{2020} - S_{2005}$)	$S_{2005} + 30\%$ ($S_{2020} - S_{2005}$)	$S_{2005} + 45\%$ ($S_{2020} - S_{2005}$)	$S_{2005} + 65\%$ ($S_{2020} - S_{2005}$)		S_{2020}
RE minimum trajectory			34.1	34.8	35.9	37.4		40
RE minimum trajectory (ktoe)			1408	1491	1590	1714		1918

Source: Ministry of Economics

Table 4a

Calculation table for the contribution of renewable energy in each sector to final energy consumption ('000 tonnes oil equivalent)

Table

		2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
A	Expected gross final consumption of RE in heating and cooling	1114	1020	1068	1104	1134	1148	1179	1214	1249	1282	1325	1395
B	Expected gross final consumption of electricity generated from RES	261	261	276	286	293	316	332	346	365	389	414	446
C	Expected final energy consumption generated from RES for transport	7	42	44	46	48	51	53	64	73	80	82	83
D	Expected total consumption of RES	1377	1320	1384	1432	1471	1510	1560	1619	1682	1746	1814	1918
E	Expected RE transfer to other Member States												
F	Expected RE transfer from other Member States and third countries												
G	Expected RE consumption adjusted for target (D) – (E) + (F)	1377	1320	1384	1432	1471	1510	1560	1619	1682	1746	1814	1918

Source: Ministry of Economics

Table 4b**Calculation table for the share of renewable energy in transport ('000 tonnes oil equivalent)***Table*

		2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
C	Expected RE consumption in transport	7	42	44	46	48	51	53	64	73	80	82	83
H	Expected consumption of electricity generated from RES in transport	1	1	1	1	1	1	2	2	2	2	2	2
I	Expected consumption of biofuels from waste, residues, non-food cellulosic and lingo-cellulosic material in transport	0	0	0	0	0	0	0	0	2	7	21	44
J	Expected RE contribution to transport for RE target C + $(2.5 - 1) * H + (2 - 1) * I$	9	44	46	48	51	53	55	66	78	90	105	130

Source: Ministry of Economics

4. Measures for the attainment of targets

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

Within the framework of industry and services policy, promoting the use of energy generated from RES is included in the following policy sectors:

Construction policy;

Energy policy;

Within the framework of environmental policy, promoting the use of energy generated from RES is included in the following policy sectors:

Nature conservation;

Climate change;

Environmental protection.

Within the framework of natural resource, agricultural production and processing policy, promoting the use of energy generated from RES is included in the following policy sectors:

Agricultural policy;

Forestry policy;

Fisheries policy.

Within the framework of budget and financial policy, promoting the use of energy generated from RES is included in the following policy sectors:

Tax policy.

Within the framework of transport and communications policy, promoting the use of energy generated from RES is included in the following policy sectors:

Transport policy;

In addition, the following policy areas include promoting the use of energy generated from RES:

Table 5

Overview of all policies and measures

Table

<i>Name and reference of measure</i>	<i>Type of measure</i>	<i>Expected results</i>	<i>Target group and/or operating sphere</i>	<i>Existing or planned</i>	<i>Start and end dates for Measure</i>
1. The right to sell generated electricity through the mandatory purchase of electricity in terms of quantity (Cabinet Regulation No 262 of 16.03.2010)	The public utility is obliged to purchase electricity generated from RES from those electricity generators who have received the right to sell electricity under mandatory	Utilisation of renewable energy and promoting the competitiveness of energy generated from renewable energy sources.	Economic operators that generate or plan to generate electricity from RES at power plants within Latvia, utilising: hydro power, biogas, any type of solid or liquid biomass, wind power, solar energy.	Existing	As from 22 August 2007

EMZino_111010_RES; Information Report: Republic of Latvia National Renewable Energy Action Plan for implementing Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC by 2020

	procurement.				
2. The right to receive guaranteed payment for the electrical capacity installed in a power plant. (Cabinet Regulation No 262 of 16.03.2010)	The system operator is obliged to pay for the electrical capacity installed in power plants to economic operators that generate electricity from biomass or biogas and are qualified to receive this right.	Promotion of electricity generation from RES	Generators generating electricity in power plants with installed electrical capacity above 1 MW, utilising biomass or biogas.	Existing	14 March 2009
3. Mandatory procurement of electricity generated in cogeneration power plants (Cabinet Regulation No 221 of 10.03.2009)	The public utility is obliged to purchase electricity generated in efficient cogeneration processes.	Promotion of electricity generation from cogeneration processes utilising RES.	Electricity generators	Existing	As from 11 November 2006
4. The right to receive guaranteed payment for electrical capacity installed in cogeneration stations (Cabinet Regulation No 221 of 10.03.2009)	System operator is obliged to pay for power plants' installed electrical capacity to economic operators that generate electricity from biomass or biogas and qualify to receive this right.	Promotion of electricity generation from cogeneration processes utilising RES.	Electricity generators	Existing	As from 18 March 2009
5. Financial support quotas for types of biofuel (Cabinet Regulation No 280 of 15.04.2008)	Direct State aid	Promotion of biofuel manufacturing	A financial support quota is the minimum annual required quantity of biofuel made up by bioethanol and biodiesel and whose production is granted direct State aid to ensure that biofuel makes up not less than 5.75% of the total quantity of transport fuel in the economy by 31 December 2010	Existing	As from 24 April 2008
6. Reduction of excise duty (the Law on Excise Duty)	Type of indirect aid by means of reducing tax		<p>1. If rapeseed oil or biodiesel obtained from rapeseed oil are added to oil products in excise goods warehouse in Latvia, tax for the corresponding products shall be calculated as follows:</p> <p>1) at the rate of LVL 223 per 1000 litres, if the added rapeseed oil or biodiesel makes up between 5 and 30 % by volume (not inclusive) of the total quantity of product;</p> <p>2) at the rate of LVL 164 per 1000 litres, if the added rapeseed oil or biodiesel makes up at least 30 % by volume of the total quantity of product.</p> <p>2. For rapeseed oil sold or used for heating or fuel and biodiesel obtained wholly from rapeseed oil, tax shall be calculated at the rate of 0 LVL per 1000 litres.</p> <p>2. If unleaded petrol, its substitutes and component products in excise goods warehouses in Latvia have had added ethanol obtained from agricultural raw materials and which is dehydrated (with alcohol content of at least 99.5 % by volume), the tax for the corresponding products (per 1000 litres) tax shall be calculated:</p> <p>1) at the rate of LVL 256 if the added absolute alcohol content makes up 5.0 % by volume of the total quantity of product;</p> <p>2) at the rate of LVL 80.70 if the added absolute alcohol content makes up between 70 and 85 % by volume (inclusive) of the total quantity of product;</p>	Existing	

7. Technology transfer from fossil to RES	Climate change financial instrument	The purpose of the tender is the reduction of carbon dioxide emissions, ensuring the transfer from technologies using fossil energy resources to those using RES.	The funding available to the tender is LVL 8 082 346: Latvian city or regional local governments and education institutions – LVL 2 108 412; micro-, small- and medium-sized economic operators registered in Latvia, also research institutions registered in the register of research institutions – LVL 5 973 934.	Existing	4 June 2010 – 4 August 2010
8. Development of public awareness as regards the significance of greenhouse gas emissions and the options for reducing them	Climate change financial instrument	The purpose of the tender is to promote public awareness as regards the significance of greenhouse gas emissions and the options for reducing them, fostering informed decision-making and actions not harmful to the environment.	Project applicants shall be: 1. Associations or foundations registered in Latvia or economic operators registered in Latvia whose publication is registered in the mass media register of Latvia's Enterprise Register, if the publication's readers or website's users are in line with the objective of the financial instrument; 2. Associations or foundations registered in Latvia with one or more project cooperation partners whose operating sphere is environmental education or popularising energy saving measures; 3. Associations registered in Latvia representing construction and architecture, energy, construction engineering-environmental specialists, energy auditors or associations that are members of the European Association of Chambers of Commerce and Industry with one or more project cooperation partners.	Planned	July 2010 – August 2010
9. Complex solutions for the reduction of greenhouse gas emissions in State and local government vocational education institution buildings	Climate change financial instrument	The purpose of the tender is the reduction of carbon dioxide emissions, reducing electricity consumption for heating and lighting in Latvia's State and local government vocational education institution buildings.	Project applicants shall be State or local government vocational education institutions. The financial instrument funding available within the framework of the tender is LVL 10 225 798. The minimum financial instrument funding available to one project within the framework of the tender under is LVL 30 000 and the maximum financial instrument funding is LVL 1 000 000.	Existing	up to 12 August 2010
10. 'Increasing energy performance in local government buildings'	Climate change financial instrument	The objective is the reduction of carbon dioxide emissions, reducing the consumption of heat energy in Latvia's local government public buildings and in buildings that local governments require to function autonomously.	Local governments	Existing	From July 2009
11. Development of greenhouse gas emission-reducing technologies.	Climate change financial instrument.	The funding is provided by means of open tender for use in projects to develop new environmental technologies and products that would reduce heat energy consumption.	Project submission applicants (hereinafter – projects applicants) shall be Latvian direct or indirect administrative bodies, derived public persons or also economic operators registered in Latvia	Existing	From February 2010
12. Increasing energy performance in tertiary education institution buildings.	Climate change financial instrument	As a result, heat energy consumption for heating will not exceed 100 kWh/m ² , and the effectiveness indicator for carbon dioxide emissions reduction will not be less than 0.35 kg CO ₂ /LVL per annum. Project implementation will concurrently foster an increase in employment in the national construction sector.	Tertiary education institution buildings	Existing	Project applications to be submitted between 27 January and 6 May 2010
13. Complex solutions for the reduction of greenhouse gas emissions in manufacturing buildings.	Climate change financial instrument	Reduction of GHG emissions by jointly implementing RES and energy efficiency measures.	Economic operators	Existing	20 October 2010 – December 2012
14. Complex solutions for the reduction of greenhouse gas emissions in local	Climate change financial instrument	Reduction of GHG emissions, implementing an integrated solution – RES together with energy efficiency measures,	City and regional local governments	Existing	6 September 2010 – 1 December

EMZino_111010_RES; Information Report: Republic of Latvia National Renewable Energy Action Plan for implementing Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC by 2020

government buildings (round II local government buildings)		including those saving electricity			2011
15. Support for technology transfer from fossil to RES	Climate change financial instrument	Reduction of GHG emissions by replacing fossil fuels with renewables in the production of both electricity and heat	Micro-, small- and medium-sized economic operators; Latvian city and regional local governments; education institutions. Does not include biogas projects and biomass cogeneration projects.	Existing	6 August 2010 – December 2011
16. RES utilisation in the transport sector.	Climate change financial instrument	Conversion of vehicles to use biofuel (biogas, vegetable oil, biodiesel, bioethanol)	Economic operators	Planned	
17. RES utilisation to reduce greenhouse gas emissions.	Climate change financial instrument	Reduction of GHG emissions by increasing RES utilisation in the production of both electricity and heat	Economic operators and local governments. Support for all RES types, particularly in the waste sector.	Planned	November 2010 – December 2012
18. RES utilisation in households.	Climate change financial instrument	Reduction of GHG emissions by implementing micro-generation in households	Natural persons and apartment owner associations	Planned	November 2010 – December 2012
19. Low heat-consuming building pilot projects.	Climate change financial instrument	Reduction of GHG emissions by increasing building energy performance and utilising RES.	Economic operators, natural persons, local governments, State bodies	Planned	November 2010 – December 2012.
20. Development of public awareness as regards the significance of greenhouse gas emissions and the options for reducing them	Climate change financial instrument	Promote public awareness as regards the significance of greenhouse gas emissions and the options for reducing them, fostering informed decision-making and actions not harmful to the environment	Economic operators and associations	Planned	November 2010 – December 2011
21. Reduction of GHG emissions in local government lighting	Climate change financial instrument	Facilitate the reduction of GHG emissions by installing more efficient lights for street and pedestrian way lighting provided by local governments	Local governments and authorities providing street and pedestrian way lighting and who own the lights to be changed	Planned	January 2011 – 2012 1 July
21. Energy production from biomass of agricultural and forestry origin	State and EU aid for rural and fisheries development	The purpose of the sub-measure is to support economic operators who generate energy from biomass of agricultural or forestry origin, providing for the selling of electricity generated by means of a biogas cogeneration process. Biogas is gas obtained from an anaerobic fermentation process	Support applicants shall be: 1. economic operators that produce the agricultural and forestry products referred to in Annex I to the Treaty on the Functioning of the European Union; 2. capital companies of which a shareholder is a legal person producing the agricultural and forestry products referred to in Annex I to the Treaty on the Functioning of the European Union, or agricultural services cooperative societies that, in accordance with the compliance criteria of legislation on cooperative societies, are considered to be appropriate agricultural cooperative societies and whose members produce the agricultural and forestry products referred to in Annex I to the Treaty on the Functioning of the European Union, and which own not less than 51 % of the total number of shares in the capital company	Existing	2010 deadline for submission s ended on 7 June
22. Support for the formation and development of undertakings (including for diversification into non-agricultural activities) <i>Sub-measure: Support for the formation and development of micro-undertakings</i> <i>Sub-measure: Diversification into non-agricultural activities</i>	State and European Union aid for rural and fisheries development	The objective of the measure is to promote non-agricultural economic activity or employment in rural areas and diversify non-agricultural activities to develop alternative sources of income and to increase income levels in rural regions. Fuel production from agricultural and forestry products is included in the Activity 'Development or diversification of existing economic activity' which supports the production of firewood, wood chips,	Support applicants shall be: 1) for sub-measure 312(311)/1 'Support for the formation and development of undertakings': natural persons wishing to form new micro-undertakings or legal persons, more than 75 % of whose equity capital is private capital and which comply with the definition of micro-undertakings pursuant to the classification stipulated in Annex I to Commission Regulation No 800/2008; 2) for sub-measure 312(311)/2 'Diversification into non-agricultural activities': natural or legal persons producing the agricultural products referred to in Annex I to the Treaty establishing the European Community	Existing	The deadline and submission of project applications for the sixth round have already finished, the deadline for submitting the next round of

EMZino_111010_RES; Information Report: Republic of Latvia National Renewable Energy Action Plan for implementing Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC by 2020

		charcoal, granules and briquettes. The following sector is also supported: electricity, gas supply, heat supply and air conditioning (NACE Rev. 2 Section D, Division 35), excluding gas production and the distribution of gaseous fuels by pipelines (NACE Rev. 2 Section D, Group 35.2).	pursuant to Article 35 of Commission Regulation (EC) No 1974/2006 of 15 December 2006 laying down detailed rules for the application of Council Regulation (EC) No 1698/2005 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD). Aid applicants' revenue from agricultural activity shall be not less than 51 %. If aid applicants are legal persons, their equity capital shall be more than 75 % privately owned. Aid applicants for this sub-measure may be micro-undertakings, small- and medium-sized economic operators complying with the definition specified in Annex I to Commission Regulation No 800/2008, or large economic operators complying with the definition specified in Article 2(8) of Commission Regulation No 800/2008		project applications is not yet known
23. Development of cogeneration power plants utilising RES	Cohesion Fund	The objective of the Activity is to significantly increase the quantities of electrical and heat energy produced from RES, thus reducing Latvia's dependence on the import of primary energy resources.	Heat energy and electricity users, local governments and economic operators	Existing	As from 12 March 2009
24. Measures to increase the efficiency of district heating supply systems	Cohesion Fund	The objective of the Activity is to significantly increase the efficiency of producing heat energy from RES, to reduce heat energy losses in transmission and distribution systems and to foster the replacement of fossil fuels with renewable or other types of fuel.	Heat energy users, local governments and economic operators	Existing	As from 12 March 2009
25. Payment of premiums for renewable electricity generation (draft Law on Renewable Energy)	Payment of premiums for generated electricity	Promoting the utilisation of renewable energy and the competitiveness of energy generated from RES.	Renewable energy generators generating electricity within Latvia, Latvia's territorial waters, Latvia's exclusive economic zone and continental shelf are entitled to receive a premium for renewable electricity generated and sold in the electricity market	Planned	
26. Payment of premiums to heat energy generators (draft Law on Renewable Energy)	Payment of premiums for generated heat energy	Promoting the utilisation of renewable energy and the competitiveness of energy generated from RES	(1) Energy generators, including energy generators operating district heating or district cooling or energy generators utilising energy in a manufacturing cycle or for manufacturing any other products may receive support: 1) for the implementation of such energy generating installations that utilise biomass, biogas or bioliquid fuels to generate heat energy; 2) the conversion of energy generating installations using fossil energy resources to energy generating installations using RES; 3) to increase the efficiency of heat energy generation, reducing heat losses in transmission and distribution systems	Planned	
27. Transmission system operators cover that part of the cost of connecting renewable energy generators' systems incorporating the reconstruction costs of connecting the existing transmission and distribution system to generating plants at connection points chosen by renewable energy generators, as well as the costs of supplied and received electricity recording/measurement	Indirect State aid	Promoting the utilisation of renewable energy and the competitiveness of energy generated from RES	1) for renewable energy generating plants with installed electrical capacity up to 500 kilowatts (inclusive), transmission system operators shall reimburse connection costs in full; 2) for renewable energy generating plants with installed electrical capacity from 500 kilowatts to one megawatt (inclusive), distribution system operators shall reimburse connection costs in full; 3) for renewable energy generating plants with installed electrical capacity from one megawatt to five megawatts (inclusive), distribution system operators shall reimburse connection costs to the amount of 50%	Planned	

equipment.					
28. Mandatory admixture of 4.5-5 % by volume of biofuel in fossil fuel of the total amount of end product	Promotion measure	Promoting manufacturing and consumption of biofuel to attain the target of 5.75% of the total amount of transport fuel in the economy prescribed by the Law on Biofuel.	In Latvia, only diesel with biodiesel content of 4.5-5 % by volume of the total amount of end products and petrol with 4.5-5 % bioethanol by volume of the total volume of petrol added may be sold. The requirement on the mandatory admixture of 5% biofuel does not apply to Class 0, 1, 2, 3 and 4 diesel for use in arctic or severe winter conditions. The mandatory admixture of biofuel applies to Category A, B, C, D, E, and F diesel and 95 octane petrol for use in temperate climatic conditions	Existing	As from 1 October 2009
29. Promoting the final consumption of biofuel complying with the Sustainability criteria of Directive 2009/28/EC	Promotion measure	Section 5 of the Law on Biofuel prescribes local government competence in promoting biofuel.	Obligation to include vehicles utilising biofuel complying with the Sustainability criteria in local government transport procurement and evaluate options to move from fossil fuels to biofuel complying with the Sustainability criteria	Planned	As from 1 January 2011
30. Tax relief (the Law on Electricity Tax)	Type of indirect support –tax relief.		Section 6 (1) of the Law on Electricity Tax prescribes that (1) electricity obtained as below is exempt from tax: 1) from RES 2) from hydropower plants 3) from cogeneration power plants complying with the efficiency criteria for electricity generation by cogeneration processes prescribed in legislation	Existing	As from 7 July 2009
31. Support for the implementation of energy generating installations using biomass, biogas or bioliquid fuels for generating heat energy (draft Law on Renewable Energy)	State, EU or other funding	Promoting the utilisation of renewable energy and the competitiveness of energy generated from RES.	It is planned that aid will be available for energy generators, including energy generators operating district heat supply or district cooling or energy generators that utilise the energy in a manufacturing cycle or to manufacture any other products	Planned	
32. Support for the conversion of energy generating installations using fossil energy resources to energy generation installations using renewable energy sources (draft Law on Renewable Energy)	State, EU or other funding	Promoting the utilisation of renewable energy and the competitiveness of energy generated from RES	It is planned that aid will be available for energy generators, including energy generators operating district heat supply or district cooling or energy generators that utilise the energy in a manufacturing cycle or to manufacture any other products	Planned	
33.Support for increasing the efficiency of heat generation, reducing heat losses in transmission and distribution systems (draft Law on Renewable Energy)	State, EU or other funding	Promoting the utilisation of renewable energy and the competitiveness of energy generated from RES	It is planned that aid will be available for energy generators, including energy generators operating district heat supply or district cooling or energy generators that utilise the energy in a manufacturing cycle or to manufacture any other products	Planned	
34. Support for new or fossil-fuel-replacing biomass plants generating heat (for heat generating installations) with capacity above 10 MW (draft Law on Renewable Energy)	State, EU or other funding	Promoting the utilisation of renewable energy and the competitiveness of energy generated from RES	It is planned that aid will be available for energy generators, including energy generators operating district heat supply or district cooling or energy generators that utilise the energy in a manufacturing cycle or to manufacture any other products	Planned	

Source: Ministry of Economics

4.2. Specific measures to fulfil the requirements of Articles 13, 14, 16 and 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) Explain the current national, regional and local rules concerning the authorisation, certification and licensing procedures applied to plants and associated transmission and distribution network infrastructure:

To commence and carry out energy generation from RES in Latvia, the following permits are required:

1. A permit issued by the Ministry of Economics for increasing electricity generation capacity or the implementation of new capacity pursuant to Cabinet Regulation No 883 of 11 August 2009 ‘Regulation on permits for increasing electricity generation capacity or the implementation of new generating installations’;

2. A licence issued by the Public Utilities Commission (hereinafter – the PUC) in the cases prescribed by legislation pursuant to Cabinet Regulation No 664 of 30 March 2005 ‘Public service licensing regulation’;

3. Electricity system operator’s permit for connecting a power plant to the system;

4. An Environment State Bureau decision on an environmental impact assessment or the technical regulations issued by a Regional Environmental Board of the State Environmental Service. The Law on Environmental Impact Assessment applies to power stations with significant environmental impact (hydropower plants, large wind parks, large biogas complexes);

5. A permit for polluting activity issued by a Regional Environmental Board of the State Environmental Service;

6. A permit to emit greenhouse gases issued by a Regional Environmental Board;

7. If a generator wishes to obtain the rights to sell electricity under mandatory procurement, the Ministry of Economics will issue a decision regarding qualification for mandatory procurement or the allocation of an entitlement to receive guaranteed payments for installed electrical capacity;

8. Heating and electricity tariffs approved by the PUC.

Legislation in the construction sector:

1. Law on Territorial Planning;
 2. Law on Construction;
 3. Law on Protected Zones;
 4. Law on the Security of Hydropower Plants’ Hydraulic Structures;
- Cabinet Regulation No 236 of 5 April 2005 ‘Regulation on territorial planning in planning regions’;

- Cabinet Regulation No 1148 of 5 October 2009 'Local government planning regulation';
- Cabinet Regulation No 121 of 14 February 2006 'Procedure for granting special-purpose grants for the drawing up and amending of planning region, district and local government spatial plans';
- Cabinet Regulation No 689 of 30 June 2009 'Regulation on agricultural land of national significance';
- Cabinet Regulation No 157 of 23 March 2004 'Procedure for performing strategic environmental impact assessments';
- Cabinet Regulation No 496 of 20 June 2006 'Procedure for the classification of purpose of use for immovable property and specifying and changing the purpose of use for immovable property';
- Cabinet Regulation No 131 of 20 February 2007 'Methodology for specifying protective zones around dams';
- Cabinet Regulation No 508 of 27 June 2006 'Regulation on protective zones surrounding national protected sites and the width of these protective zones';
- Cabinet Regulation No 806 of 28 September 2004 'Forestry land transformation regulation';
- Cabinet Regulation No 112 of 1 April 1997 'General building regulation';
- Cabinet Regulation No 168 of 2 May 2000 'Regulation on Latvian construction standard LBN 005-99 'Regulation on engineering surveys in construction'';
- Cabinet Regulation No 142 of 27 March 2001 'Regulation on Latvian construction standard LBN 006-00 'Key requirements for buildings'';
- Cabinet Regulation No 342 of 25 June 2003 'Regulation on Latvian construction standard LBN 304-03 'Regulation on supervision of construction works by their designers'';
- Cabinet Regulation No 75 of 10 February 2004 'Regulation on Latvian construction standard LBN 303-03 'Construction supervision regulation'';
- Cabinet Regulation No 299 of 13 April 2004 'Regulation on commissioning of buildings';
- Cabinet Regulation No 1069 of 28 December 2004 'Regulation on the siting of external utility equipment in urban, village and rural areas';
- Cabinet Regulation No 454 of 28 June 2005 'Regulation on mandatory civil liability insurance in construction';
- Cabinet Regulation No 852 of 17 October 2006 'Regulation on Latvian construction standard LBN 229-06 'Hydraulic structures of hydropower plants'';
- Cabinet Regulation No 841 of 8 November 2005 'Procedure for construction of electrical supply structures';
- Cabinet Regulation No 866 of 11 December 2007 'Regulation on Latvian construction standard LBN 201-07 'Fire safety of structures'';
- Cabinet Regulation No 261 of 16 March 2010 'Procedure for construction of drainage systems and hydraulic structures';
- Cabinet Regulation No 70 of 26 January 2010 'Regulation on security programmes and declarations on hydraulic structures for hydropower plants';
- Cabinet Regulation No 424 of 30 May 2006 'Procedure for issuing and annulling security certificates for the hydraulic structures of hydropower plants';

- Cabinet Regulation No 319 of 25 April 2006 'Regulation on the mandatory civil liability insurance of managers of hydropower plants' hydraulic structures';
- Cabinet Regulation No 93 of 25 February 2003 'Security of dams and the security control measurement equipment for hydraulic structures at hydropower plants and methodology for specifying protective zones';
- Cabinet Regulation No 94 of 25 February 2003 'Methodology for specifying protective zones for aquatoria above and below dams'.

Local government permits:

A building permit issued by the local government pursuant to local government building regulations if the activity is connected with construction, having regard to the local government's spatial plans or detailed plans (if required pursuant to legislation).

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

1. Energy administration is executed by the Ministry of Economics;
2. The energy sector is controlled and regulated by the Public utilities regulator;
3. Local planning: local governments;
4. Local governments: approve territorial planning documents and issue building permits;
5. Authority responsible for environmental control: State Environmental Service.

(c) Revision foreseen with the view to take appropriate steps as described by Article 13(1) of Directive 2009/28/EC by: [date]

Should regulations be required when implementing the appropriate measures referred to in Article 13(1) of Directive 2009/28/EC, a review is planned for 2011.

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

Currently, there is no mandatory requirement for local governments to take local-level measures.

Amendments are planned to planning documents and building regulations to incorporate the promotion of the RES utilisation requirements incorporated in the Law on Renewable Energy.

(e) Are there unnecessary obstacles or non-proportionate requirements detected 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?

Latvia has no unnecessary obstacles or non-proportionate requirements relating to authorisation, certification and licensing procedures applied to the production of electricity, heating or cooling from RES, or to the process of transformation of biomass into biofuels or other energy products in relation to the associated transmission and distribution network infrastructure.

Analysing administrative procedures, although there are no obstacles to the development of energy generation from RES in Latvia, Latvia regularly evaluates the validity of the timeframes in implemented administrative procedures.

Analysing the time taken to issue permits, it can be concluded that, having regard to the quantity of documents to be examined and evaluation procedures, the currently implemented time periods are justified. Category A permits for polluting activity take the longest to issue.

To promote the implementation of new energy capacity, in drafting legislation on RES the need to review the time taken for decision-making and licence issuing, system-connection and tariff-calculating procedures will be evaluated and reduced if necessary.

(f) What level of administration (local, regional and national) is responsible for authorising, certifying and licensing renewable energy installations and for spatial planning? (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?

Existing situation:

Permits and licences are issued at the national level, territorial planning and construction are supervised at the local level, and building permits are issued at the local level. There is no coordination between these two levels.

Planned situation:

Utilising national energy planning as an example, it is planned to introduce local level energy planning. With the draft Law on Renewable Energy, it is planned to task local governments with evaluating the compliance of local government spatial planning with the Law on Renewable Energy, the national action plan and, if necessary supplement local government planning documents with the planned number and sites of renewable energy generating plants.

(g) 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?

Responsible authorities ensure the availability of all types of information.

(h) How is horizontal coordination facilitated between different administrative 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?

Latvia does not have a designated one-stop shop.

The Ministry of Economics has drawn up and sent for signing the interdepartmental agreement 'On the exchange of information concerning restrictions on economic activity in the utilisation of Latvia's territorial waters and exclusive economic zone', which provides for cooperation between parties and mutual exchange of information in accordance with the competence of the parties as regards permitting the utilisation of Latvia's territorial waters and exclusive economic zone for the implementation of electricity generating installations, the utilisation of mineral deposits, including the stipulation of areas for hydrocarbon prospecting, surveys and mining licences, thus facilitating the cooperation of institutions in the permit issuing process, which is not provided for in all legislation. Cooperation within the framework of the Interdepartmental agreement will reduce the time required to issue permits as information will not need to be obtained under the procedure in Section 59 of the Law on Administrative Processes, which can take at least one month. Furthermore, the permit issuing process will be coordinated among all the institutions involved in the corresponding sphere which will reduce the risk for persons that the permit they have been issued will not be accepted by an institution involved in the corresponding sphere

The times taken to examine applications and receive permits at various administrative bodies are as follows:

Table 5.1

	Type of permit	Responsible authority	Time to make decision, days
1.	Issuing of licences	PUC	30
2.	Permits for connections to system	System operator	60
3.	Permits for the implementation of new capacity	Ministry of Economics	30
4.	Environment State Bureau decision/opinion pursuant to the Law on Environmental Impact	Environment State Bureau	60

	Assessment		
5.	Technical Regulations	A Regional Environmental Board of the State Environmental Service	20
6.	Permits for polluting activity	A Regional Environmental Board of the State Environmental Service	A activity – 180 B activity – 90 C activity – 30
7.	Permits for emitting greenhouse gases	A Regional Environmental Board of the State Environmental Service	90
8.	Decision on qualification for mandatory procurement/guaranteed payment for installed electrical capacity	Ministry of Economics	30
9.	Heating and/or electricity tariffs	PUC	90

Source: Ministry of Economics

A specially established one-stop shop has not been designated in the renewable energy sector.

To ensure faster coordination of construction processes, the Ministry of Economics has commenced the ERDF-funded project 'Development of a construction information system' under which it is planned to computerise the circulation of construction information and documentation, thus improving cooperation between the parties involved in construction and reducing the time required for coordination.

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

The Law on Public Utilities Regulators classifies energy as a sector regulated at the national level. On the basis of the Law on Public Utilities Regulators, on 27 October 2009 the Cabinet issued Regulation No 1227 'Regulation on types of public utility to be regulated', stipulating that, in the supply of electricity, electricity generation power plants with installed electrical capacity greater than one megawatt, and in the cogeneration of electricity and heating, cogeneration installations whose total installed electrical capacity is greater than one megawatt, require regulation. In heating supply, heat generating

installations with total installed heat capacity greater than one megawatt require regulation. The corresponding licences are issued by the PUC.

Tariff calculation formulas for the electricity to be purchased within the framework of mandatory procurement have been stipulated on the basis of investment-repayment periods for different generating installations, having regard to the size of installed electrical capacity.

In addition, the requirement to undertake environmental impact assessment and evaluate the proposed technical solution must be taken into account when issuing Category A or B polluting activity 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?)

Existing regulation:

Currently no special procedures for small decentralised installations have been implemented.

Planned regulation:

In Latvia, legislation for the implementation of net metering to promote domestic consumption of renewable electricity is at the drafting stage.

Latvia plans to introduce a register of renewable energy generating plants in which renewable energy generating plants, including autonomous heat supply or cooling systems and the heat energy sources installed therein with nominal capacity greater than 20 kilowatts and the RES they use will be registered. It is planned that notification procedures for small, decentralised installations (capacity range or type of owner) will be simpler than notifications for large installations (capacity range, type of owner).

(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?

Fees are payable in accordance with the requirements of legislation currently in force and this information is available to the public. This legislation is available to the public the *Latvijas Vēstnesis* newspaper, in the free database www.likumi.lv and the legislation information system www.NAIS.lv.

(l) Is official guidance available to local and regional administrative bodies on planning, designing, building and refurbishing industrial and residential areas to install equipments and systems

EMZino_111010_RES; Information Report: Republic of Latvia National Renewable Energy Action Plan for implementing Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC by 2020

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?

When drafting spatial plans, local governments take into account legislation currently in force and national development planning documents.

Section 51 (1) of the Energy Law prescribes that local governments, when performing the permanent function prescribed by the Law, shall organise heat supply in their administrative territory and also promote energy efficiency and competition in the heat supply and fuel markets. On the basis of Section 51 (2) of the Energy Law, local governments within the framework of their administrative spatial plans, having regard to regulations on the protection of the environment and cultural monuments as well as local RES utilisation and cogeneration potential and evaluating the security and long-term marginal costs of heat supply, may determine the development of heat supply and issue binding regulations.

Five Latvian cities (Riga, Jelgava, J•kabpils, Valmiera and Tukums) have signed the Covenant of Mayors, an initiative of the European Commission and the EU Committee of Regions, voluntarily undertaking to draft regional action plans by 2020, which also mandate increasing RES utilisation in the region's energy balance. Riga, which is home to one third of the national population and housing stock and more than 50% of national district heating, approved its action plan on 6 July 2010 and sent it to the Covenant of Mayors Office.

It is planned to introduce local level energy plans with the objective of improving coordination.

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

No special training is given to employees working with the reviewing and issuing of permits for renewable energy installations.

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

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

Aid schemes do not include any regional renewable energy technology standards that differ from EU standards.

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

(a) reference to any and regional legislation (if any) and summary of local legislation concerning an increase of the share of energy from renewable sources in the building sector:

The Law on the Energy Performance of Buildings prescribes the necessity to move toward RES utilisation, evaluating their utilisation potential. Section 7 of the Law on the Energy Performance of Buildings prescribes that when designing buildings with a total area greater than 1000 m², technical, environmental and economic considerations as well as binding local government regulations and other legislation shall be taken into account to evaluate the option to use systems using RES as an alternative solution in such buildings, , for example decentralised energy supply systems, cogeneration systems, local heating and cooling systems or heat pumps.

(b) responsible ministry(-ies)/authority(-ies):

The Ministry of Economics is the responsible institution.

(c) revision of rules, if any, planned by: [date]

Having regard to the requirements of Article 6(2) of Directive 2010/31/EU of the European Parliament and of the Council of 19 May 2010 on the energy performance of buildings (recast), legislation regulating planning, construction and building energy performance will be reviewed, stipulating the requirement to document an evaluation of RES-utilisation at the pre-design or design stage. Planned to enter into force: 1 January 2012.

(d) summary of existing and planned measures at regional/local levels:

The planning of measures at local and regional level is in the competence of local governments. The organising of information campaigns and seminars targeted at local governments is necessary.

(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?

Building legislation does not prescribe minimum levels for the use of renewable energy.

To promote the use of renewable energy in buildings, legislation regulating planning, construction (especially design) and building energy performance will be reviewed and, if necessary, amended.

(f) what is the projected increase of renewable energy use in buildings until 2020? (If possible differentiating between residential – ‘single-unit’ and ‘multiple unit’, commercial, public and industrial.) (To answer this question you may use a table as Table 6 below. Data could be given

yearly, or for selected years. Both heating and cooling and electricity consumption from renewable energy sources should be included.)

Currently, the largest share of RES utilisation in buildings comprises biomass used mainly on an individual basis for heating detached houses and for centralised heating of apartment buildings. District heating has a significant role in Latvia as around 70% of households are connected to such heating systems. Households consumed 62.5% of the amount of heat energy consumed in district heating in 2008. Data on RES utilisation in industrial buildings is not available but this is not significant compared with the other sectors.

Table 6

Expected share of renewable energy in the building sector (%)

	2005		2010		2015		2020	
	<i>RES-A*</i>	<i>RES-E*</i>	<i>RES-A</i>	<i>RES-E</i>	<i>RES-A</i>	<i>RES-E</i>	<i>RES-A</i>	<i>RES-E</i>
Residential sector	61	44.9	64	44.7	66	51.4	72	59.8
Commercial consumers	30	44.9	30	44.7	34	51.4	44	59.8
Public sector	NI	NI	NI	44.7	NI	NI	NI	NI
Industry	NI	NI	NI	44.7	NI	NI	NI	NI
TOTAL	45.5	44.9	47	44.7	50	51.4	58	59.8

RES-A renewable energy sources in heating and cooling

RES-E renewable energy sources for electricity including centralised electricity supply

NI – no information

Source: Ministry of Economics

The main activities to increase the use of RES for heating and cooling are:

- Reducing the share of energy consumption by heating and cooling in buildings by implementing energy efficiency measures;
- Increasing the share of RES for heating and cooling in new buildings, including in the services and public sectors;
- Increasing the share of RES in the district heating sector.

Table 6 collates information on the planned increase in use of RES in buildings. In the future, in addition to already widely used biomass, it is planned to provide heat supply in buildings through solar collectors for hot water supply, solar PV for electricity generation and heat pumps.

(g) Have obligations for minimum levels of renewable energy in new and newly 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?

Policy documents do not stipulate minimum renewable energy utilisation requirements for new and renovated buildings.

To stipulate a policy for minimum renewable energy utilisation requirements for new and renovated buildings, the Ministry of Economics will incorporate this in the relevant construction policy guidelines by 2012.

(h) Please describe plans for ensuring the exemplary role of public buildings at 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 EPBD).

The Ministry of Economics will incorporate the required measures in construction policy guidelines by 2012, in particular regarding newly constructed and reconstructed buildings.

(i) How are energy efficient renewable energy technologies in buildings 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))).

Section 7 of the Law on the Energy Performance of Buildings stipulates that when designing buildings with total area greater than 1000 m², technical, environmental and economic considerations as well as binding local government regulations and other legislation shall be taken into account to evaluate the option to use as an alternative solution in such buildings systems using RES, for example decentralised energy supply systems, cogeneration systems, local heating and cooling systems or heat pumps. Section 17 of the Law stipulates that if a building's heating boiler's nominal capacity is greater than 20 kilowatts or its heating system is more than 15 years old, an energy auditor shall assess the heating boiler together with the heating system and provide an opinion on the efficiency of the heating boiler and recommendations as to whether it should be changed or other possible changes to the corresponding building's heating system and alternative solutions to reduce energy consumption and the amount of carbon dioxide emissions.

To ensure that building heating systems are designed and constructed more effectively, a review of the building legislation regulating the designing of corresponding systems is required. Cabinet Regulation No 534 of 23 September 2003 'Regulation on Latvian construction standard LBN 231-03 'Residential and public building heating and ventilation'' needs to be redrafted.

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

(a) reference to current national and/or regional legislation (if any) concerning the information requirements referred to in Article 14 of Directive 2009/28/EC:

Cabinet Regulation No 983 of 5 December 2006 'Regulation on the Construction information system'.

The draft Law on Renewable Energy is at the drafting stage.

(b) responsible body(-ies) for disseminating information at national/regional/local levels:

The Ministry of Economics is responsible for disseminating information at national/regional/local levels.

(c) a summary of current and planned measures at regional/local levels (where relevant):

Information is published on the Ministry of Economics website. Three regional energy agencies have been established in Latvia under the EU programme *Intelligent Energy Europe* and two more are planned with the operating objective to promote increased energy efficiency and the use of RES in the public and private sectors, as well as ensuring the availability of information on these issues to citizens.

(d) Please indicate how information is made available on supporting measures for 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?

In accordance with Section 10 of the Freedom of Information Law, the purpose of which is to ensure public access to information at the disposal of institutions or which institutions in accordance with their competence are obliged to publish, in compliance with good governance principles, institutions shall on their own initiative ensure access to certain types of generally available information, and shall also provide such information on demand.

There is no internet site compiling all the information on support measures concerning the use of RES in electricity, heating and cooling and transport. Public access to information is ensured as follows:

- 1) institutions' websites;
- 2) publications in the official newspaper *Latvijas Vēstnesis*;
- 3) where possible, seminars are held for interested parties, etc.

Key information, for example on support mechanisms for renewable technologies, must be readily available. The dissemination of knowledge and technology in the renewable energy sector must be facilitated in Latvia. As the internet offers 24-hour access to information and information can be easily updated, the place for general information may be a website.

Given the public's growing interest in RES, more extensive availability of information is needed. Therefore, special information measures must be directed at the following objectives: all interested parties must be identified and public campaigns must be run on the various RES solutions available.

The approach must be based on extensive information campaigns at the local level, highlighting RES as a means of climate protection.

These activities must be carried out at two levels: the first level must feature communication with the general public (press conferences, websites, posters and advertisements, brochures), and at the second level communication must be with special target groups (training materials, symposia, pilot projects). Each campaign must focus on a specific renewable energy source.

It is important that the information reaching the public comes from credible and 'independent' organisations and is based on solid research.

Planners and architects must have an internet site with information on the options of including renewable energy, highly efficient technologies, district heating and cooling in new or existing buildings. The site must contain not only up-to-date information on technologies, their installation and information on the long-term return on investments, it must also contain detailed information on successfully implemented examples, the regulatory framework and measures for this sector. Local information on the applicability of solar technology and the availability of district heating and cooling is desirable. Furthermore print-outs of this information should be obtainable as well as publications explaining various issues in detail. Website content should be supplemented with contact information for all of the professional associations and other local representatives in the relevant spheres.

Information must be compiled in consultation with experts in the spheres of energy, technology, construction and installation and must be continuously updated to ensure it is relevant and up to date. The website should be monitored with the aid of the chamber of architects, planners' associations and relevant consumer advice centres to ensure that it addresses all target groups adequately. These organisations can also communicate with their members and consumers to raise the level of understanding of the site within target groups.

The technical designs of buildings must also incorporate integrated energy plans and energy performance calculations. These must be linked with the minimum targets set in new building regulatory framework concerning energy efficiency and RES-H and RES-E shares.

This can be achieved by organising the training of planners and architects on specific issues, for example integrated building energy planning, detailed climate studies or the physics of buildings. It is also important that the

requirements are implemented in legislation, having regard to RES in industrial and residential district planning, design, construction and renovation processes.

Circulation of construction information is ensured by the national Construction Information System.

Within the framework of the project commenced by the MoE 'Development of the Construction Information System', the creation of an information portal to be used by all parties involved in construction – national and local government institutions, utilities, designers, builders, etc. – is planned

(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?*)

Ministry of Economics.

(f) How is guidance for planners and architects provided to help them to properly 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?

Currently, no structural units that would provide additional guidance to planners and designers have been established, therefore seeking optimal solutions is in the competence of the developers of projects themselves. Given that local and regional level planning issues are within the competence of local governments, they can provide guidance on territorial planning requirements.

In construction, the developers (State, local governments or private individuals) specify the requirements.

(g) 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?

Currently, a one-stop shop has not been established in Latvia and there are also no internet sites compiling all the information on support measures concerning the use of RES in electricity, heating and cooling and transport. Public availability of information is ensured as follows:

1. Institutions' websites;
2. Publications in the official newspaper *Latvijas Vēstnesis*;
3. Where possible, seminars are organised for interested parties etc.
4. In addition, regional energy agencies, training and research centres and energy undertakings advise the public on their own initiative, for example the public electricity trader AS *Latvenergo* etc.

Key information, for example on support mechanisms for renewable technologies, must be readily available. The dissemination of knowledge and technology relating to renewable energy must be facilitated in Latvia. As the internet offers 24-hour access to information and information is easily updated, the place for general information could be a website.

Given the public's growing interest in RES, more extensive availability of information is required. Therefore, special information measures must be directed at the following objectives: all interested parties must be identified and public campaigns must be run on the various RES solutions available.

The approach must be based on extensive information campaigns at the local level, highlighting RES as a means of climate protection.

These activities must be carried out at two levels: the first level must feature communication with the general public (press conferences, websites, posters and advertisements, brochures) and at the second level, communication must be with special target groups (training materials, symposia, pilot projects). Each campaign must focus on a specific renewable energy source.

It is important that the information reaching the public come from credible and 'independent' organisations and be based on solid research.

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

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

The Law on Regulated Professions and the Recognition of Professional Qualifications prescribes the regulation of professions.

(b) Responsible body/(ies) for setting up and authorising certification/qualification 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 Ministry of Economics and the Ministry of Education and Science

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

Currently, there is neither a qualification system nor certification schemes for the operatives referred to in Article 14(3) of Directive 2009/28/EC.

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

Given that currently, neither a qualification system nor certification schemes for the operatives referred to in Article 14(3) of Directive 2009/28/EC have been stipulated, there is also no publicly available information.

(e) a summary of current and planned measures at regional/local levels (where relevant)

The introduction of a qualification recognition system pursuant to Article 14(3) of Directive 2009/28/EC is planned.

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

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

1. The *Electricity Market Law* (hereinafter – EML), Section 8 of which prescribes the regulation and supervision of the system operator's activities. Paragraph two of this Section prescribes that the regulatory authority stipulates common system connection provisions for generators and users, as well as a methodology for setting connection fees.

2. PUC council decision No 280 of 3 September 2008 approved the 'System connection regulation for electricity generators', issued pursuant to Section 8 (2) of the EML.

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

EML:

Section 4. The electricity system

(1) The electricity system (hereinafter – the system) is made up of electricity generation installations, transmission and distribution systems and electricity consumption installations that are mutually connected and necessary for the transportation of electricity from the generator to users.

(2) The procedure for the management and use of the system and the activities of market participants, excluding end users, is prescribed by the Grid Code. The Grid Code shall be drawn up by the transmission system operator and approved by the regulator. Execution of the procedures prescribed in the Grid Code is ensured by the transmission system operator. The regulatory authority can require the transmission system operator to draft amendments to the Grid Code and stipulate a deadline for the drawing up of such amendments and submission to the regulator.

Grid Code:

EMZino_111010_RES; Information Report: Republic of Latvia National Renewable Energy Action Plan for implementing Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC by 2020

2.4. Planning development of the electricity system

27. The electricity generator and distribution system operator shall, pursuant to the system-utilisation contract, submit to the transmission system operator short-term and long-term forecasts on factors that could affect electricity consumption or output forecasts.

28. The transmission system operator is entitled to correct the forecasts submitted by the electricity generator and distribution system operator if the transmission system operator considers that the received forecast is inaccurate, advising the relevant electricity generator or distribution system operator accordingly.

29. If the system operator plans extensions to the electricity system that directly affect the utilisation of system services or the provision of system services at a specific connection site, the system operator and system participant shall agree the amendments required to the connection contract.

30. The transmission system operator, when drawing up the annual assessment report, shall evaluate the electricity system's static and dynamic stability under various operating conditions, in compliance with criterion 'n-1'. Depending on the properties of the electricity system, in certain cases the transmission system operator is entitled to use a stricter security criterion ('n-2' and higher).

31. The transmission system operator shall plan development of the electricity system in terms of the necessary emergency back-up, taking into account the disconnection potential of the largest generating unit, the most highly loaded electrical transmission line and potential emergency development scenarios.

Cabinet Regulation No 322 of 25 April 2006 'Regulation on the annual assessment report of the transmission system operator'

4.4. compliance of the transmission system with demand and maintenance quality. This section shall present:

4.4.1. the transmission system operator's conclusions on how appropriate the transmission system is for the transportation of electricity and the ability to ensure uninterrupted operation of the electricity system if one of the system's facilities is not operating, as well as measures (individually and together with other system operators) for secure system operation in future years (minimum forecast period: 10 years);

4.4.2. information on planned system inter-country connections (minimum forecast period: 10 years);

4.4.3. the transmission system operator's conclusions concerning the electricity transmission system's security and its adequacy to provide all users with a secure electrical supply in the previous year and in future years (minimum forecast period: 10 years);

4.5. existing and planned electricity generation capacity above 1 MW, as well as the measures required if demand is at maximum or if one or more suppliers is missing (only the capacity in operation on the day the assessment report is prepared or about which there is information on the progress of its implementation and operation will commence within five years).

Planned situation:

The need to update the fundamental principles of constructing electricity transmission and distribution grid connections in accordance with Article 16(1) and Article 16(3) to (6) of Directive 2009/28/EC is being evaluated.

(c) What will be the role of intelligent grids, information technology tools and storage facilities? How will their development be ensured?

The potential to implement intelligent grids in Latvia has not been evaluated and the re-structuring of Latvia's electrical grids is not planned.

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

Effective interconnection in the Baltic Sea region was stipulated as one of six priority infrastructure projects in the 2nd strategic energy overview adopted by the Commission in November 2008. Drafting of the Baltics energy market interconnection plan was commenced at the European Commission in autumn 2009 at the instigation of Commission President Barroso.

(http://ec.europa.eu/energy/infrastructure/bemip_en.htm).

Report on the results of the monitoring of the system's operating aspects (Approved by the Public Utilities Commission (PUC) council meeting of 28 September 2009 (Minutes No 37, Paragraph 6)).

Latvia has inter-country connections with the Estonian, Russian and Lithuanian electricity systems. The transmission system's inter-country connections with neighbouring countries' electricity systems are adequate for ensuring the export and import of electricity. The difference between net capacity and annual maximum flow capacity is 110 MW for the Russia-Latvia inter-country connection, 130 MW for the Estonia-Latvia inter-country connection and 1 095 MW for the Latvia-Lithuania inter-country connection.

However, under certain conditions when Latvia and Lithuania are importing electricity, the volume of electricity supply from the Russian electrical system can be limited as a result of restrictions in the Smolensk-Belarus and Lithuania-Belarus cross-sections.

Latvia's total inter-country connection capacity with neighbouring countries is 2 850 MW for export and 2 780 MW for import. In 2008, Latvia's total quantity of incoming electricity was 4.64 TWh and maximum capacity 1 046 MW, the total quantity of outgoing electricity was 2.12 TWh and maximum capacity 884 MW, in turn transit quantities were 1.9 TWh and 628 MW respectively. Having regard to the said data, market transactions via inter-country connections are not in any way restricted as Latvia's inter-country connection capacity with neighbouring countries is adequate and with considerable reserves, and electricity traders have no restrictions on delivering electricity from neighbouring countries to Latvia's users. The volume of Latvia's cross-border electricity trading reaches as much as 40% of total domestic electricity consumption whereas the average proportion for European Union Member States is 8-10%.

According to the research project carried out on the Baltic States energy system 'Baltic Transmission Grid 2025', Latvia's energy system will not require new inter-country connections with neighbouring energy systems before 2012. The final BEMIP report sees 2020 as the earliest date for a new Latvia-Estonia inter-country connection.

(e) How is the acceleration of grid infrastructure authorisation procedures 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.)*

Current legislation prescribes two months as the time for permits to be received.

- Permits to increase electricity generation capacity or for the implementation of new generating installations.

The requirements to be fulfilled for electricity generators to receive permits to increase electricity generation capacity or implement new generating installations, as well as the procedure for issuing, annulling and extending the validity period for permits is prescribed in Cabinet Regulation No 883 of 11 August 2009 'Regulation on permits for increasing electricity generation capacity or the implementation of new generating installations' (hereinafter – Cabinet Regulation No 883).

The Ministry examines the documents submitted, checks the veracity of the information therein and, within 30 days, makes a decision on the issuing of a permit.

- Licensed system operators renew and develop grid infrastructure in accordance with their approved Development plans and Development programmes.

Section 9 of EML. System operation

(1) System operators, within the operating zone and validity period of their licence, are responsible for the operation, servicing and security of the system, system management and development, connections with other systems, also for the system's long-term capacity for the transportation of electricity in accordance with forecast demand.

and

Section 15 of the Energy Law

(6) System operators are responsible for the operation, servicing and security of energy transmission or distribution systems or natural gas storage facilities, system management and development within the operating zone of their licence, connections with other systems, and also for the system's long-term capacity for transmission or distribution of energy or natural gas storage in accordance with demand.

- To connect to the system, technical regulations shall be issued.

Public Utilities Commission (PUC) Regulation of 3 September 2008 'System connection regulation for electricity generators'.

7. System operators shall specify connection sites and conditions within 60 days of receiving applications, issuing clear and technically valid technical regulations whose validity period is two years to generators.

As the technical regulation must be drafted, specifying a 60-day period is justified.

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

Technical designs for connections to the grid must be approved by local institutions (construction board, environment, etc.).

8. Generators shall coordinate system connection construction designs with system operators and approve them in accordance with the requirements of building legislation.

9. After the approval of system-connection construction designs, the system operator and generator shall conclude a connection contract which also

specifies connection construction works conditions, connection fees, connection payment deadlines and connection installation deadlines, also conditions for connecting the generator's power plant to the system.

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

Currently, guaranteed connection for new installations is not planned, mainly because of limits on grid capacity.

See Sub-division 4.2.7, Clause A of this plan.

(h) 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?

In July 2009, AS *Latvenergo* submitted project applications to receive financial grants allocated under the European Regional Development Fund for the development of a Baltics-Sweden interconnection (NordBalt) and projects to strengthen Latvia's western region transmission grid (Kurzeme loop). Within the framework of the second phase, the construction of the 330 kV high-voltage line Grobiņa–Ventspils–Dundaga is planned.

Various wind park projects have been commenced, reaching the first stage of preparedness (key permits have been received and wind measurements taken) and have expressed interest in connection to the electricity grid. Nevertheless, because of capacity limitations, only 80 MW of the applied for 834 MW can be connected to the national west section. The 'Kurzeme loop' project is planned for implementation by 2015. Construction of the first phase of the Kurzeme loop provides for the construction of a 330 KV cable connecting the Riga TEC-2 with the Imanta sub-station, while in turn the second phase will ensure the construction of the 330 KV high-voltage line Grobiņa-Ventspils-Dundaga. Modernising the Kurzeme loop will not only increase electrical supply security and stability, but also create the basis for the development of wind parks along the Kurzeme coast

Key to Figure 4, the Kurzeme Loop, below:

Sea cable to Estonia	
Existing lines	Wind power plant
Planned lines	Planned wind power plant
Planned HVD C cable	Hydro power station
Planned high-voltage cable	District heating plant

110 kV Sub-station
330 kV Sub-station
Planned 330 kV Sub-station

Planned district heating plant

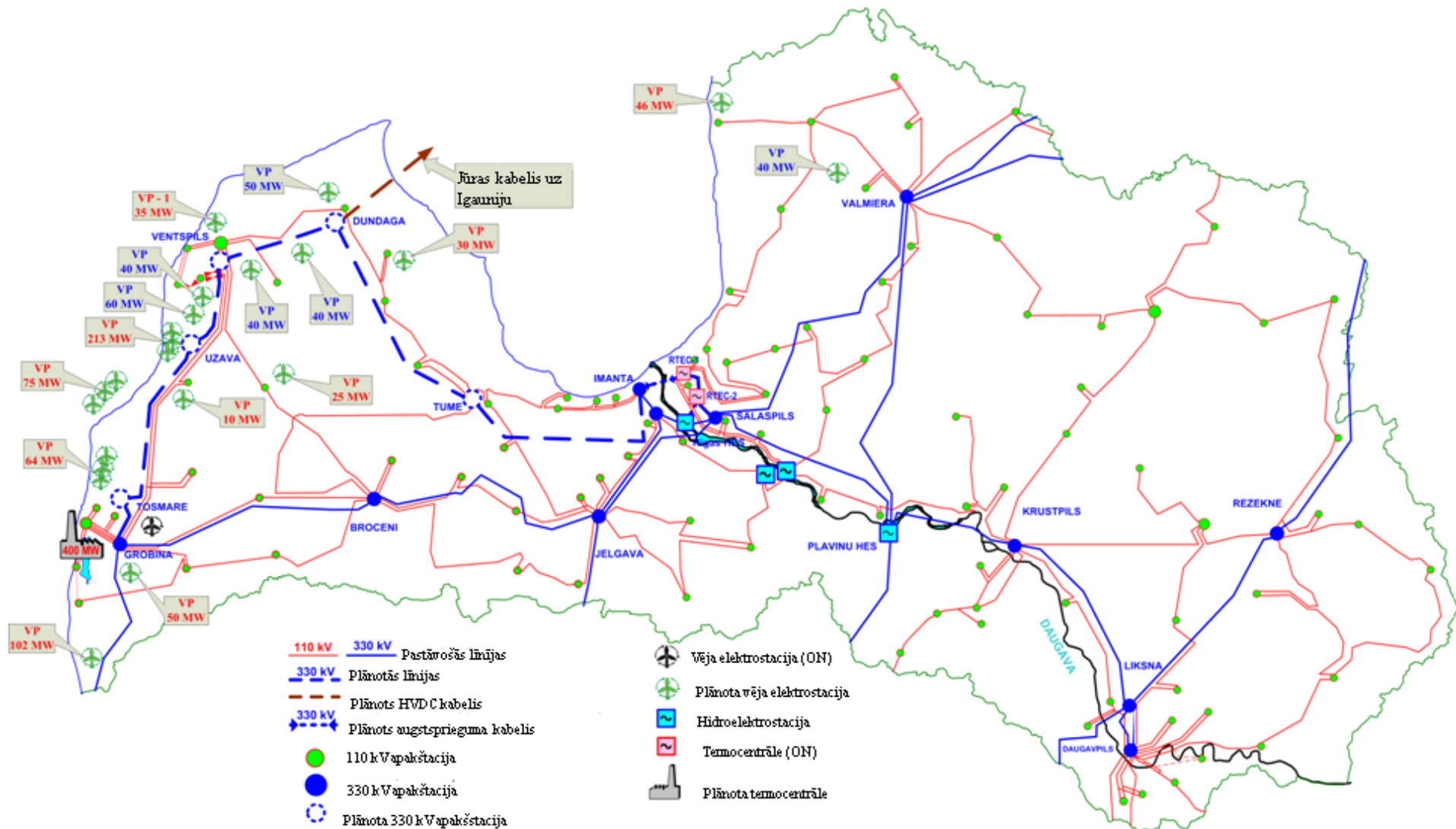


Figure 4 The Kurzeme loop

(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 generators 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 generators that all benefit from the same reinforcements or new lines.)*

System connection regulations for electricity generators were approved by Public Utilities Commission council decision No 280 of 3 September 2008 which prescribes unified electricity system connection regulations and a methodology for calculating connection fees for electricity generators. These are published on the PUC internet site www.sprk.gov.lv. See below for the attribution of costs The system connection regulations for electricity generators stipulate: 12. All costs relating to the construction of system connections shall be paid by the generators.

(j) Please describe how the costs of connection and technical adaptation are attributed to generators 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.)*

Existing regulation:

System connection regulations for electricity generators (approved by Public Utilities Commission council decision No 280 of 3 September 2008) 'System connection regulation for electricity generators' stipulate that all costs relating to the construction of system connections shall be paid by generators. In accordance with Section 13 of this Regulation, if the construction works of the connection's technical design for system connection require the reconstruction of the system operator's electrical grid, the system operator and generator shall agree in writing on the execution of the required reconstruction works. Generators shall pay for the reconstruction works specified in this Section.

Planned regulation:

1. Specify that the electricity system operator is obliged to cover connection costs, including the costs of connecting generating plants to connection points, grid optimisation, reconstruction or capacity increases, and also for the measuring equipment required for metering of delivered and received electricity. Connection costs do not include line and cable construction from generating plants to connection points.

2. Specify that the regulatory authority is obliged to approve the procedure for covering the connection costs indicated in Paragraph three of this Section, stipulating that:

1) for generating plants with installed electrical capacity up to 500 kW (inclusive), the system operator shall cover the connection costs in full within two years of the generating plant being commissioned and the generation and sale of electricity has commenced;

2) for generating plants with installed electrical capacity from 500 kW to 1 MW (inclusive), the system operator shall cover the connection costs in full within five years of the generating plant being commissioned and the generation and sale of electricity has commenced;

3) for generating plants with installed electrical capacity from 1 MW to 5 MW (inclusive), the system operator shall cover 50% of the connection costs within five years of the generating plant being commissioned and the generation and sale of electricity has commenced;

4) for generating plants with installed electrical capacity greater than 5 MW, the connection costs for connection to the boundary of the electrical installation shall be covered by the renewable energy generating plant operator;

5) The system operator is obliged to start paying a renewable energy generating plant operator's connection costs to the transmission or distribution system within six months of the generating plants being commissioned and the generation and sale of electricity has commenced.

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

There are no rules for sharing the costs between initially and subsequently connected generators. The benefits of connected generators are not taken into account.

(l) How will it be ensured that transmission and distribution system operators provide new generators 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?

Existing regulation:

EMZino_111010_RES; Information Report: Republic of Latvia National Renewable Energy Action Plan for implementing Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC by 2020

The ‘System connection regulations for electricity generators’ approved by Public Utilities Commission council decision No 280 of 3 September 2008: Paragraph 7 stipulates that the connection site and conditions shall be specified by the system operator within 60 days of applications being received, issuing generators clear and technically appropriate technical rules, with a validity period of two years.

Planned regulation:

It is planned that the transmission system operator will publish a procedure for connecting renewable energy generators to the transmission and distribution system, specifying in detail the technical requirements and conditions to be complied with to connect new renewable energy generating plants to the system or to increase load. It is planned that the transmission system operator will specify the requirements on receiving a request for information on the technical condition of the connection site and for the System operator to connect a new renewable energy generating plant or to increase load, if the renewable energy generator submits to the distribution system operator a developed construction design in accordance with the published connection procedure and the condition of the connection site.

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

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

Section 9 (1) Paragraph one of the EML prescribes that system operators, within the operating zone and validity period of their licences, are responsible for the operation, servicing and security of their systems, the management and development of systems, and the long-term capacity of systems to ensure the transportation of electricity in accordance with forecast demand, including the transmission and distribution of energy generated from RES.

The legislation in force (**Section 9 (2) of the EML**) prescribes that *system operators* (both transmission and distribution operators), *within the operating zone and validity period of their licences, have a standing commitment to provide system participants with the connection required for the relevant system pursuant to the common System-connection Regulation stipulated by the*

regulator, if the system participant fulfils the technical requirements stipulated by the system operator for setting up connections. Legislation does not provide for other participants, i.e. RES generators to gain priority access to systems, with all system participants having equal right to connect to the grid (non-discriminatory factor). **Section 9, Paragraph two of the EML** guarantees RES generators access to the grid, as it does for any other system participant.

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

LV legislation does not stipulate any regulation that transmission system operators (hereinafter – TSO) should give preference to the connection of generating installations that use RES.

(c) How are grid- and market-related operational measures taken in order to minimise the curtailment of electricity from renewable energy sources? What kinds of 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).)

Taking into account that, pursuant to **Section 1 (10) of the EML**, electricity market participants are electricity generators, traders and end users that operate in the electricity market pursuant to voluntary participation principles, the regulation prescribed in the Electricity Market Law is applicable to renewable energy generating plants.

Currently, Cabinet Regulation No 262 of 16 March 2010 ‘Regulation on the generation of electricity from renewable energy sources and procedure for determining prices’ (hereinafter – Cabinet Regulation No 262) is in force.

It is anticipated that the required amendments to legislation will be made in 2010 and 2011.

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

It is anticipated that the required amendments to legislation will be made in 2010 and 2011, also advising the public utilities regulation commission accordingly.

(e) Are plants generating electricity from renewable energy sources integrated in the electricity market? Could you please describe how? What are their obligations regarding participation in the electricity market?

Latvia's electricity market has been open since 2007. Electricity generating plants using RES to generate electricity may sell the generated electricity for a negotiated (market) price or also claim the State aid price (Sections 29 and 30 of the EML).

Renewable energy source electricity generating plants do not have special conditions stipulated for operating in the electricity market. They must comply with the requirements prescribed by the EML.

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



Figure 5. Electricity market participants

Key: Generators, Transmission grid, Distribution grid, Suppliers, End consumers

RES electricity generating plants only pay for transmission and distribution in the case specified in Section 57 of Cabinet Regulation No 262 i.e. a power station generates less electricity than it consumes for its needs, or does not generate any electricity and buys electricity from the public trader. Usually, such plants transfer electricity to the grid for a negotiated (market) price or the State aid price.

If RES generators operate in the market, then pursuant to Section 5 (2) of the Electricity Market Law, they are entitled to use transmission and distribution systems for the transportation of electricity at the system service tariffs stipulated under the procedure provided for in this Law and the Law on the Public Utilities Regulatory Authority. System service tariffs shall be calculated pursuant to methodologies approved by the PUC. The methodologies do not

provide for the calculation of differentiated tariffs for the transmission and distribution of RES energy, or differentiated tariffs if energy is received by RES electricity generating plants. All system participants have common transmission and distribution tariffs.

If an RES electricity generating plant buys electricity, it is an electricity user and Cabinet Regulation No 793 of 21 July 2009 'Electricity trading and utilisation regulation', Paragraph 39 of which prescribes that charges for system services shall be calculated in accordance with the readings of electricity commercial-metering measuring equipment and pursuant to tariffs determined under the procedure stipulated by the Electricity Market Law, is applicable.

The costs for using renewable energy sources grids shall be calculated in accordance with the requirements of the Electricity Market Law. Grid operators are responsible for grid utilisation costs. Operators shall cover costs by including them in the electricity price to end consumers (Section 32 of the EML, Cabinet Regulation No 452 of 26 June 2007 'Electricity trading and utilisation regulation').

In accordance with the requirements of Section 36 (2) of the EML, each electricity generator (also RES) and user that is a market participant, and each distribution system operator shall conclude a contract with the relevant system operator on the delivery of balancing electricity and ensuring the balance of electricity supplied to or consumed from the grid at any time.

Section 37. Balancing and balancing calculations

(1) System operators, pursuant to the Grid Code, shall perform balancing calculations in a transparent and non-discriminatory manner as regards all recipients of balancing services. Users and generators who are market participants and distribution system operators are obliged to pay for balancing services whose scope is determined on the basis of transmission and distribution operators' data.

(2) Balancing calculations shall be performed on the basis of electricity transactions metered within a specified period, to determine the scope of the balancing electricity. Balancing calculations shall be available to the market and system participants involved in transactions, ensuring the security of commercial secrets.

(3) System participants shall supply information to system operators that is reasonably required for balancing and balancing calculations.

(4) System operators may demand guarantees from system participants and traders, to ensure payment for balancing services, pursuant to criteria and

the procedure developed by the system operator and approved by the regulatory authority.

While wind power plants that have obtained the right to sell electricity within the framework of mandatory procurement and whose installed capacity is greater than 0.25 MW are generating less electricity than they consume for their own needs, or are not generating, they shall buy electricity from the public trader in accordance with the provisions of legislation regulating electricity trading. Electricity generators and the public trader shall agree a procedure for coordinating fixed trading interval schedules by way of a contract pursuant to the requirements of the Grid Code. Electricity generators shall agree schedules for a day's trading interval with the public trader at least one working day prior to commencing trading. Electricity generators can change previously agreed fixed trading interval schedules, coordinating this with the public trader at least two hours prior to the start of the trading interval. When buying electricity in accordance with fixed trading interval schedules, the public trader shall buy electricity transferred to the grid exceeding that specified in the schedule from the electricity generator for the price stipulated in Paragraph 37 of this Regulation multiplied by the coefficient 0.8, and shall also sell to electricity generators their missing electricity for the price stipulated in Paragraph 37 of this Regulation multiplied by the coefficient 1.2.

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) How is it ensured that the charging of transmission and distribution tariffs does not discriminate against gas from renewable energy sources?

Latvia does not have a legal framework for the introduction of biomethane into the network. In accordance with Article 49 of Directive 2009/73/EC of the European Parliament and of the Council of 13 July 2009 concerning common rules for the internal market in natural gas and repealing Directive 2003/55/EC (hereinafter – Directive 2009/73/EC), Articles 4, 9, 37 and/or 38 shall not apply to Estonia, Latvia and/or Finland until any of those Member States is directly connected to the interconnected system of any Member State other than Estonia, Latvia, Lithuania and Finland. This subparagraph is without prejudice to derogations under the first subparagraph of this paragraph.

Permits for direct lines were postponed until 4 April 2014. (Section 15 of the Energy Law).

Currently, one economic operator operates in Latvia's natural gas market – AS *Latvijas Gāze* – which, pursuant to licences issued by the Public Utilities Commission (PUC) undertakes the transmission, distribution, storage and trading of natural gas. On the basis of what is stipulated in the share-acquisition contract, AS *Latvijas Gāze* has been granted exclusive rights for the transmission, distribution and storage of natural gas up to 2017, and exclusive rights to utilise the Inčukalna underground gas storage facility.

To date, the Law on the procedure for the entry into force of certain sections of the Energy Law prescribed the date of entry into force of the section of the Energy Law liberalising the natural gas market: 1 January 2010. Having regard to what is prescribed in European Union directives, any natural gas 'new market' where the first delivery under a long-term supply contract was effected not more than ten years ago, gains the right to not liberalise its natural gas market. Latvia's first delivery of natural gas, arising from the long-term supply contract concluded on 18 July 2003, was effected on 5 April 2004, therefore, in 2009 the Ministry of Economics drew up amendments to the Law on the Procedure for the entry into force of Certain Sections of the Energy Law stipulating the opening date for the natural gas market as 4 April 2014. The Saeima adopted the amendments to the Law on the procedure for the entry into force of certain sections of the Energy Law on 3 December 2009.

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

No, the need to extend existing gas network infrastructure to streamline the integration of gas generated from RES has not been evaluated.

Given that AS *Latvijas Gāze* has been granted exclusive rights for the transmission, distribution and storage of natural gas up to 2017, the need to extend existing gas network infrastructure to streamline the integration of gas generated from RES has not been evaluated.

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

Existing regulation:

Currently, there are no such rules. (Section 15 (5) and (7) of the Energy Law enter into force on 4 April 2014)

Planned regulation:

Certification of the quality and origin of biogas is planned.

The draft Law on Renewable Energy provides for the stipulation of biogas generators' rights to receive biogas certificates and biogas generators' rights to acquire rights for biogas enriched to natural gas quality to gain access to and be transmitted in natural gas networks.

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

(a) Please provide an assessment of the need for new district heating and cooling 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?

Latvia is not considering the necessity for significant new district heating and cooling system infrastructure development. Emphasis is being placed on the development of the existing district heating systems.

Latvia has considerable biomass potential. Having regard to the successful experience over the last ten years in converting district heating systems to biomass, which proved that good results could be achieved with limited resources, the development potential for more extensive use of biomass in Latvia must be linked to both district heating and electricity generation. Price increases in the fossil resource market and their possible restrictions can be partly compensated with economically justified use of RES, for example the efficient use of RES and energy generation by the cogeneration process need to be increased.³

Given that, when generating electricity from biomass, technological considerations mean that no more than 25% of electrical energy can be obtained from the total amount of energy generated, and considering that the remainder is made up of heat energy and losses are around 10%, it would firstly be useful to evaluate more extensive use of wood-fuel in boiler houses for heat generation and in cogeneration stations in the vicinity of the fuel source.⁴

One of the main obstacles to the use of solar energy in Latvia is the high investment cost for installations. Current heating prices are 2.5-3 times lower compared with the cost of solar energy utilising installations, consequently solar

³ Didzis Palejs, Assessment of wood-fuel energy resources in Latvia, publication 'Renewable energy source potential in Latvia, Renewable energy and its development opportunities in the future', (Construction, Energy and Housing State Agency, 2008)

⁴ J•nis Re•is, Renewable energy utilisation potential in Latvia, publication 'Renewable energy source potential in Latvia, Renewable energy and its development opportunities in the future', (Construction, Energy and Housing State Agency, 2008)

EMZino_111010_RES; Information Report: Republic of Latvia National Renewable Energy Action Plan for implementing Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC by 2020

energy is not currently competitive in centralised heat supply. Practical research is needed to prove the theoretical research on the potential use of solar energy in Latvia's climatic conditions.⁵

Research into geothermal energy resources has been carried out in Latvia since the 1980's, when led by the Institute of Marine Geology and Geophysics at the request of the Energy Ministry, geothermal energy resource surveys were carried out in Latvia, including an assessment of the amount of Latvia's petro-thermal resources and evaluating the options to utilise underground rocks for the storage of seasonal heat. Between 1970 and 1990, 23 boreholes were drilled in the western part of Latvia. The data obtained was taken into account in evaluating Latvia's geothermal situation. In 1991, the operation of the Institute of Marine Geology and Geophysics, and consequently its research, was terminated.

Between 1993 and 1996, under the management of Danish company *Petroleum Geology Investigators*, projects were carried out in Latvia and Lithuania within the framework of which Latvia's geothermal energy potential was evaluated. It was assessed as being 65 000 PJ in the Devonian and Cambrian strata, equating to 1.6 billion toe. Having regard to the calculations done in the survey, as pointed out by Doctor of Geology Astrīds Freimanis, one of the research participants at the 2007 meeting of Latvia's Academy of Sciences, if the warm waters in Latvia's territory could be utilised, the total thermal station capacity could be starting from 175 MW.⁶

⁵ Andra Blumberga, Gatis Bažbauers, Dagnija Blumberga, Ivars Veidenbergs, Marika Roš, Gatis Žogla, Ilze Dzene, Francesco Romagnoli, Claudio Rochas, Dzintars Jaunzems, Anna Volkova, Agnese Mārniece, Research project 'Utilising Latvia's renewable energy sources and a model and action plan for increasing energy efficiency', (Riga Technical University, Energy and Electrical Equipment Faculty, Environmental Protection and Heat System Institute, Environmental Protection and Heat System Institute 2009.); 55.

⁶ Andra Blumberga, Gatis Bažbauers, Dagnija Blumberga, Ivars Veidenbergs, Marika Roš, Gatis Žogla, Ilze Dzene, Francesco Romagnoli, Claudio Rochas, Dzintars Jaunzems, Anna Volkova, Agnese Mārniece, Research project 'Utilising Latvia's renewable energy sources and a model and action plan for increasing energy efficiency', (Riga Technical University, Energy and Electrical Equipment Faculty, Environmental Protection and Heat System Institute, Environmental Protection and Heat System Institute 2009.); 48.-50.
EMZino_111010_RES; Information Report: Republic of Latvia National Renewable Energy Action Plan for implementing Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC by 2020

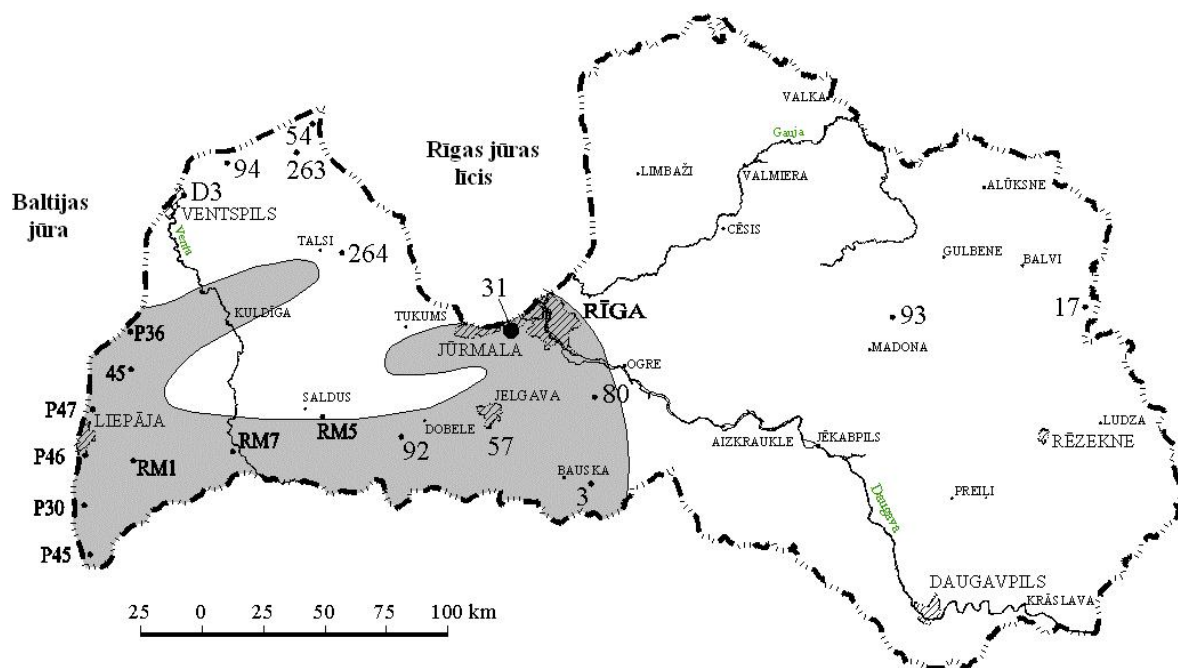


Figure 6. Location of geothermal energy potential in Latvia

The main obstacle, however, to the utilisation of geothermal energy is the high cost of sourcing it.

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

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

Required amendments to legislation are planned:

i) amendments to the Law on Biofuel: application sector

Sustainability criteria apply to biofuels/bioliquids that are produced in the EU and to imported biofuels/bioliquids and shall be applied when biofuels/bioliquids:

(1) are considered to be renewable energy targets pursuant to the Renewable Energy Directive;

(2) are used pursuant to renewable energy obligations;

(3) consumption receives financial support;

(4) are recorded as a Fuel Quality Directive target to reduce greenhouse gas emissions (only for biofuels);

(5) receive investment and/or operational assistance pursuant to Community guidelines on State assistance for environmental protection (only for biofuels);

(6) are taken into account pursuant to the rules on the Regulation concerning the conversion of alternative fuel vehicles to CO₂ from passenger automobiles (only for E85 bioethanol).

ii) restrictions on amendments to the Law on Biofuel

The sustainability criteria apply to greenhouse gas savings, land with high biodiversity value, land with high carbon stocks and agri-environmental practices.

iii) Ensuring record-keeping

The responsibility for submitting information on biofuels will be placed on the economic operators paying duty. Information concerning long-term maintenance criteria must be available throughout the fuel chain.

(b) How will it be ensured that biofuels and bioliquids that are counted towards the 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?)

The base-concept provides for the concluding of mutual contracts between the Ministry of Economics and an organisation (economic operators, associations, agencies, etc.) on the basis of Public-Private Partnership principles. The organisation's function will be to ensure checks on and confirmation of economic operators' sustainability criteria. The organisation will be chosen having regard to the criteria referred to by the EC. In this way it is planned to provide the organisation with rights to obtain all the information required to track the complete production cycle, and mandatory annual auditing requirements will be stipulated for the organisation.

(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?

Legislation must be amended by 30 December 2010, and the contract with the responsible organisation will be concluded by 1 January 2011.

(d) Please provide information on the existence of national law on land zoning and 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.)

1. The Law on Territorial Planning prescribes:

In accordance with Section 1 of the Law on Territorial Planning, spatial plans are long-term territorial planning documents or sets of planning documents

drawn up and entered into force under procedures stipulated by legislation and which, in accordance with the planning level and plan type, reflect in written and graphical form the current and lawfully planned (permitted) use of land and restrictions on the use of this land.

- the Ministry of Regional Development and Local Government Affairs maintains a local government territorial planning database and archive (information on all approved spatial plans is available at the Ministry of Regional Development and Local Government Affairs website: <http://www.rapl.gov.lv>).

2. The State Regional Development Agency is developing a spatial planning information system (hereinafter – the SIS) in cooperation with the Ministry of Regional Development and Local Government Affairs. The SIS will provide the centralised electronic circulation of spatial plans and electronic support for the output and coordination of spatial plans. The SIS will be available to all of Latvia's local governments.

3. State SIA the Latvian Environmental, Geology and Meteorology Centre maintains a Nature Conservation information system incorporating: a registry of specially protected nature reserves, locations of protected plant species, specially protected species and habitat micro-reserves.

4. The Nature Conservation Agency plans to implement a computerisation project under the ERDF-funded specially protected nature area protection and management measure whose objective is: to establish a planning and implementation information system for protection and management measures concerning Latvia's specially protected nature areas, including the *Natura 2000* area, which would secure the natural value of specially protected nature areas – specially protected species and habitats – integrated management of the planning, record-keeping and implementation of protection and management measures.

5. The State Land Service registers immovable property as a body of real estate, units of land, sections of land units and descriptive data (including the type of land usage and changes thereto) in the State Real Estate Cadastral Information System (Cadastral Information System).

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

Specially protected nature areas (hereinafter – SPNA) are geographically defined areas under special State protection to protect and conserve natural diversity: rare and typical natural eco-systems, the natural environments of

protected species, original, attractive and typically Latvian landscapes, geological and geomorphic formations, dendrological plantations and great trees, as well as areas of importance for the recreation, education and edification of the public. Altogether, Latvia has 681 specially protected nature areas approved by law or Cabinet Regulation.

Protected areas are divided into the following categories:

Nature reserves are areas untouched or relatively undisturbed by human activity where the uninterrupted development of natural processes is ensured to protect and study rare or typical eco-systems and their components. Four nature reserves have been established in Latvia: the Moricsala (1912), Grīni (1936), Krustkalni (1977) and Teiči (1982) nature reserves.

National parks are extensive areas with nationally significant, outstanding natural features, landscapes untouched or relatively undisturbed by human activity, habitat diversity, and rich cultural and historic heritage. Alongside nature conservation, scientific research, education and the organisation of recreation play significant roles. Latvia has four national parks: the Gauja (1973), Ķemeri (1997), Slītere (1999) and Rāzna (2007) national parks.

Biosphere nature reserves are extensive areas featuring internationally significant landscapes and eco-systems. Their purpose is to ensure the conservation of natural diversity and to promote the sustainable development of the areas. In 1997, Latvia founded the North Vidzeme Biosphere Nature Reserve. This is included in the international network of biosphere nature reserves.

Nature parks are areas that represent the natural and cultural-historic values of defined areas and are appropriate to the recreation, education and edification of the public. Latvia has 42 nature parks, of which the best known are the Lake Engure, Tervete and *Daugavas loki* [Daugava bends] nature parks.

Natural sites are discrete, isolated natural formations: protected trees, dendrological plantations, tree avenues, geological and geo-morphological natural sites and other natural rarities having scientific, cultural-historic, aesthetic or ecological value. 206 geological and geo-morphological natural sites, 89 dendrological plantations and 60 tree avenues are protected in Latvia.

Nature conservation areas are natural areas relatively untouched by human activity or at various stages of transformation which feature specially protected plant and animal species in their natural habitat and specially protected habitats. Altogether, Latvia has 259 nature conservation areas.

Protected marine areas are locations in Latvia's territorial waters, exclusive economic zone or continental shelf established for the protection of

specially protected habitats and the habitats of specially protected species, as well as significant feeding and wintering sites of migrating birds. Latvia has established seven protected marine areas.

Protected landscape sites are areas that stand out with unique or diverse landscapes and special beauty. Their purpose is to protect and conserve natural environments and landscapes characteristic of Latvia in their diversity, also to ensure the conservation of environments suitable for public recreation and tourism, and the application of nature-conservation methods. Latvia has nine protected landscape sites.⁷

International level:

1. The *Natura 2000* network has been established to implement the EU Birds (full name – Council Directive 79/409/EEC of 2 April 1979 on the conservation of wild birds) and Habitats (full name – Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild fauna and flora) Directives. In Latvia, this network was established on the basis of the existing specially protected nature area system, evaluating the compliance of existing protected areas with the scientific criteria stipulated in the directives. Consequently, an inventory of existing specially protected nature areas was commenced in 2001 and additional research to determine new areas was undertaken to ensure adequate protection of the EU species and habitats. As a result of this process, 327 *Natura 2000* areas were established, in total making up 12% of Latvia's territory. All *Natura 2000* areas in Latvia are approved as specially protected nature areas (for example, nature parks or nature conservation areas) or micro-reserves in accordance with national legislation. Latvia's *Natura 2000* areas are enumerated in the Annex to the Law on Specially Protected Nature Areas.

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

- the **Law on Territorial Planning** is a long-term spatial planning document or set of planning documents drawn up and entered into force under procedures stipulated by legislation and which, in accordance with the planning level and plan type, reflects in written and graphical form the current and lawfully planned (permitted) use of land and restrictions on the use of this land

⁷ Ministry of the Environment,

http://www.vidm.gov.lv/lat/darbibas_veidi/ipasi_aizsargajamas_dabas_teritorijas/

EMZino_111010_RES; Information Report: Republic of Latvia National Renewable Energy Action Plan for implementing Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC by 2020

and, pursuant to Section 6 of this Law, stipulates a planning procedure for the area.

Pursuant to **Section 5 of the Law on Territorial Planning**, spatial planning in Latvia is implemented at national, planning region and local government levels by drawing up mutually agreed spatial plans.

Cabinet, having regard to the delegation granted by **Section 7 (1) (3) of the Law on Territorial planning**, prescribes the components of spatial plans, procedures for the drawing up, public discussion, entry into force, amendment, suspension, supervision of the evaluation and compliance of such plans, prescribes the responsible ministry which shall execute the functions referred to in this Law and prescribe agricultural areas of national significance and conditions for their use. Pursuant to **Cabinet Regulation No 1148 of 6 October 2009 ‘Local government territorial planning regulation’ issued under Section 7, Paragraph one, Clause 3 and Section 12, Paragraph three of the Law on Territorial Planning, Paragraph 3 prescribes that planned (permitted) land use, land use and building regulations that incorporate requirements for land units and construction on them, also for the improvement of each section of land (with stipulated different planned (permitted) uses), planned administrative areas, city and village boundaries and the development of areas’ population structures shall be specified in local government spatial plans.**

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

Latvia has implemented mutual compliance, including provisions on good agricultural and environmental conditions pursuant to the terms of R73/2009 and stipulated in Division 2.4 ‘Provisions on good agricultural and environmental conditions’ (Clauses 24-27) of Cabinet Regulation No 269 of 17 April 2007 ‘Procedure for granting State and European Union aid under agricultural direct aid schemes’, in turn a list with the requirements of legislation that farmers must comply with in terms of mutual compliance can be found in Annex 1¹ to the same Regulation.

Control (both administrative and on-site at farms) of mutual compliance is ensured by competent authorities:

- the Rural Support Service – controls the compliance of farmers with the provisions for good agricultural and environmental conditions, as well as mutual compliance with environmental conformity requirements;

- the State Plant Protection Service – in public, animal and plant health protection issues connected with plant health protection, and environmental issues connected with crop fertilization plans in specially sensitive areas;
- the State Forestry Service – environmental issues connected with forested areas.

In infringement cases, direct payments are reduced.

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

Currently, this is not planned.

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

A Regulation

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

Current situation:

In Latvia, the Energy Law of 3 December 1998, the EML of 5 May 2005 and, issued pursuant to the latter, Cabinet Regulation No 262 and Cabinet Regulation No 221 of 10 March 2009 ‘Regulation on electricity generation and price determination when generating electricity by cogeneration’ (hereinafter – Cabinet Regulation No 221), also the Law on Public Utility Regulators of 19 October 2000 and the Cabinet Regulations issued pursuant to it may be considered to be special legislation concerning the use of RES in electricity generation.

The EML includes legal provisions arising from the following EU Directives:

1) Directive 2001/77/EC of the European Parliament and of the Council of 27 September 2001 on the promotion of electricity from renewable energy sources in the internal electricity market (hereinafter – Directive 2001/77/EC);

2) Directive 2003/54/EC of the European Parliament and of the Council of 26 June 2003 concerning common rules for the internal market in electricity and repealing Directive 96/92/EC;

3) Directive 2004/8/EC of the European Parliament and of the Council of 11 February 2004 on the promotion of cogeneration based on a useful heat demand in the internal energy market and amending Directive 92/42/EEC (hereinafter – Directive 2004/8/EC).

The EML was adopted on 5 May 2005. Pursuant to Section 29 (2) of the EML, it is mandatory that a certain share of all the electricity consumed by Latvia's end users is covered with electricity generated from RES. Pursuant to Directive 2001/77/EC, the proportion of electricity generated from RES of the total electricity consumed in Latvia must reach 49.3% in 2010. Latvia's indicative target, to be achieved by 31 December 2010, is stipulated in the energy development guidelines 2007-2016, as well as in the EML.

Pursuant to Section 29 (2), (4) and (5) and Section 29¹ (2) and (5) of the EML, concerning electricity generation from RES, the Cabinet of Ministers (hereinafter – Cabinet) prescribes qualification criteria to obtain the right to sell the electricity generated within the framework of mandatory procurement and criteria pursuant to which generators who generate electricity in power plants with installed electrical capacity above 1 MW, utilising biomass or biogas, may acquire the right to receive guaranteed payment for the electrical capacity installed in power plants.

Pursuant to Section 28 (2) and (7) and Section 28¹ (2) and (5) of the EML concerning electricity generation by the cogeneration process, Cabinet prescribes criteria for the qualification of cogeneration power plants to acquire the right to sell the electricity generated within the framework of mandatory procurement or to receive guaranteed payment for the electrical capacity installed in cogeneration stations.

Planned situation:

Latvia, as a European Union Member State, is required to develop and regularly evaluate national policy promoting the use of RES and the effectiveness of aid policy therein, emphasising the significance of RES in the development of sustainable national energy policy, the need to increase self-sufficiency in electrical capacity and to reduce the amount of imported electricity and Latvia's energy dependence.

Directive 2009/28/EC imposes certain obligations concerning RES on Member States. The Latvian government, recognising the need to promote the use of RES in Latvia, has tasked the Ministry of Economics (responsible for Latvia's energy policy) with drafting a Law on RES.

Restricted rights to sell electricity to the public trader are an obstacle to the dynamic development of the sector. Restrictions have also been frequently encountered when selecting technologies, capacity or volume.

Having regard to the above, the draft Law on Renewable Energy, with the adoption of which it is planned to replace the currently implemented aid instruments for electricity generated from RES with ones promoting both

EMZino_111010_RES; Information Report: Republic of Latvia National Renewable Energy Action Plan for implementing Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC by 2020

electricity generation from RES and the efficient utilisation of district heating, mainly by facilitating the competitiveness of energy generated from RES, is at the drafting stage.

To achieve the targets prescribed by Directive 2009/28/EC, permanent State aid mechanisms promoting the use of energy generated from RES are still needed, while maintaining investor confidence. Directive 2009/28/EC emphasises the appropriate operation of State aid schemes in accordance with Directive 2001/77/EC as being significant. Thus, the objective of the planned regulation is not only to promote the use of RES in Latvia and incorporate legal provisions arising from Directive 2009/28/EC, but to simultaneously also review the currently implemented aid schemes for RES use in accordance with the memorandum signed on 17 June 2009 by Baltic region government leaders, including the three Baltic States' government leaders, 'Memorandum of understanding on the implementation plan for the Baltic energy market' (*BEMIP – Baltic Energy Market Interconnection Plan*), also approved by the European Commission. BEMIP provides for common market conditions to be established for all market participants in the three Baltic States' electricity markets and free electricity trading to attain the BEMIP objective: integration of the Baltic energy market in the common European Union energy market.

For electricity generated from RES and sold in the electricity market, the regulatory framework planned for the renewable energy sector must provide for rights for generators generating electricity from RES and selling it to receive premiums established on the basis of socio-economic calculations. It is anticipated that premiums, to be covered by Latvia's electricity end users, may be received by renewable energy generating plant operators generating electricity at renewable energy plants within Latvia for which the number of hours the installed electrical capacity is utilised is not less than 3500 hours per annum.

To maintain investor confidence and the protection of small generators, it is planned that the draft Law on RES will stipulate that renewable energy generators can sell electricity to the public trader if the existing total installed capacity of generating plants owned or used by the renewable energy generator and related persons is less than two megawatts, and impose an obligation on AS *Latvenergo* to purchase this electricity.

It is planned that with entry into force of the draft Law, Cabinet Regulation No 262 will cease to be in force.

The draft Law on Renewable Energy anticipates the elimination of excessive State aid by implementing a free electricity trading market as well as stipulating smaller amounts of State aid to electricity generators.

The new aid mechanisms provided for in the drafted regulatory framework can be received by electricity generators who qualify under administratively stipulated criteria to receive premiums. Electricity generators may receive premiums for no more than 15 years.

(b) Are there any technology-specific targets?

Current situation:

Current legislation does not provide for technology-specific targets.

Planned situation:

Technology-specific targets have not been defined for the future.

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

Current situation:

Current legislation does not prescribe obligations/targets.

Planned situation:

Separate targets are not planned for each technology.

(d) Who has to fulfil the obligation?

On the basis of Section 29 (2) of the EML, it is mandatory that a certain share of all the electricity consumed by Latvia's end users is covered with electricity generated from RES.

(e) What is the consequence of non-fulfilment?

Consequences for non-fulfilment are not planned.

(f) Is there any mechanism to supervise fulfilment?

Current situation:

Pursuant to Section 29 of the EML, it is mandatory that a certain share of all the electricity consumed by Latvia's end users is covered with electricity generated from RES. It has been delegated to Cabinet to stipulate the share for each RES type for a five-year period commencing from 1 January 2006.

Planned situation:

The draft Law on Renewable Energy provides for the supervision and coordination of the renewable energy sector to be undertaken by the Ministry of Economics, which in cooperation with other ministries will within the framework of their competence monitor the implementation of the national target.

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

Current situation:

Targets and obligations are incorporated in sector policy planning documents, in new policy planning documents stipulated by Cabinet or by updating existing documents that could be the basis for further changes to legislation.

Cabinet Regulation No 262 prescribes the scale of aid for annual mandatory procurement for different RES types for the period from 2010 and the subsequent ten years, expressing this scale as a percentage share of the total electricity consumed by end users in Latvia.

Planned situation:

The draft Law on Renewable Energy provides for specifying a national target for the proportion of renewable energy generation in the total gross final energy consumption that must be attained by 2020, and provides for financial instruments to promote the use of renewable energy.

It is anticipated that the supervision and coordination of the renewable energy sector will be undertaken by the Ministry of Economics which in cooperation with other ministries will within the framework of their competence monitor the implementation of the national target.

Financial support

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

Current situation:

Cabinet Regulation No 221 prescribes, within the framework of mandatory procurement, a tariff and guaranteed payment for installed electrical capacity for electricity generated from RES. Price formulas are applied to the determination of mandatory procurement prices for electricity generated from biomass, biogas, solar or wind power plants, as well as hydropower plants whose installed electrical capacity is less than 5 MW.

Planned situation:

The draft Law on Renewable Energy provides for the stipulation of criteria to receive premiums.

(b) Is it a voluntary or obligatory scheme?

Participation in the scheme is voluntary.

(c) Who manages the scheme?

Current situation:

Pursuant to Section 29 (2), (4) and (5) and Section 29¹ (2) and (5) of the EML, Cabinet Regulation No 262 was adopted on 16 March 2010, which

stipulates conditions for acquiring rights to sell electricity generated from RES within the framework of mandatory procurement.

Support mechanisms are monitored by the Ministry of Economics which undertakes control of generators and maintains the right to rescind decisions on rights to sell electricity should rules be infringed within the framework of mandatory procurement (Section 49 of Cabinet Regulation No 262).

Procurement tariffs are covered by the system operator who, in turn, incorporates the procurement tariff cost in the tariff for end consumers.

The public utility regulatory authority coordinates relationships between system users and system operators.

Planned situation:

Procurement tariffs for all plants with capacity under 2 MW, procurement premiums for larger capacity plants.

Procurement tariffs are covered by system operators

Procurement premiums are covered by transmission system operators.

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

Costs are covered by end consumers of electricity.

Section 30 of the EML prescribes that for the buying and selling of electricity generated from RES,

[...] costs are covered by all of Latvia's electricity end users in proportion to their consumption of electricity, buying a stipulated share of electricity generated using RES from the public trader, or by reimbursing the public trader's expenditure. The methodology for calculating the eligibility of procurement costs shall be prescribed by the regulator.

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

Current situation

Pursuant to Section 30 of the EML, generators using RES to generate electricity and who commenced operations prior to the EML entering into force, shall sell electricity to the public trader in accordance with those conditions regarding the operating regime, procurement time periods and price that applied to them at the time this Law entered into force.

For economic operators who have acquired the right to sell electricity generated from RES pursuant to those regulations issued on the basis of the EML, the selling price for the volume of electricity they are entitled to sell within the framework of mandatory procurement, shall be calculated utilising

price calculation formulas for a 20-year period pursuant to the current regulation in force.

Planned situation:

Legislation is needed to resolve long-term security issues, for example by providing for those renewable energy generating plants acquiring the right to receive a premium to have financial support maintained for a period of not less than ten years.

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

Current situation:

Existing regulation does not provide for planned periodic revisions. Regulations have been revised several time since their adoption, with price calculation formulas revised at the same time, with the objective of stipulating stricter control mechanisms for persons who have acquired mandatory electricity procurement rights, creating the opportunity to control project implementation and prevent the inappropriate granting of mandatory electricity procurement rights and to resolve issues on the procedure for submitting applications to acquire right to sell electricity generated from RES within the framework of mandatory procurement,.

Planned situation:

The draft Law on Renewable Energy provides for a procedure for monitoring the attainment of the target stipulated by Directive 2009/28/EC.

Should the national target stipulated for the end of the intermediate stage by Directive 2009/28/EC be lower than that planned, it must be ensured that the Ministry of Economics shall submit a new national action plan to the European Commission to ensure the fulfilment of the obligation stipulated by Section 2 (2) (1) of this Law no later than by 30 June of the following year.

(g) Does support differ according to technology?

Current situation:

Cabinet Regulation No 221 and Cabinet Regulation No 262 of 16 March 2010 prescribe that support shall be differentiated depending on the RES used and depending on the power plant's installed electrical capacity by applying coefficients.

Planned situation:

The draft Law on Renewable Energy provides for preference to be given to those technologies that can ensure electricity base capacity, stipulating supplementary premiums for renewable energy generating plants.

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

See the tables and forecasts in this document.

(i) Is support conditional on meeting energy efficiency criteria?

Pursuant to Section 28 (2) and (7) and Section 28¹ (2) and (5) of the EML concerning electricity generation by the cogeneration process, Cabinet prescribes criteria by which cogeneration power plants qualify to acquire the right to sell their generated electricity within the framework of mandatory procurement or receive guaranteed payment for a cogeneration station's installed electrical capacity. The legal provisions incorporated in Cabinet Regulation No 221, arising from Directive 2004/8/EC of the European Parliament and of the Council of 11 February 2004 on the promotion of cogeneration based on a useful heat demand in the internal energy market and amending Directive 92/42/EEC, as well as Cabinet Regulation No 221, do not provide for any quantitative restrictions on the purchasing of electricity generated from RES in a cogeneration process within the framework of mandatory procurement.

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

It is in force.

It is regulated by the EML and on the basis of Cabinet regulations issued under the EML.

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

The draft Law on Renewable Energy provides for the establishment of new support mechanisms for energy generated from RES.

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

The existing mechanisms have operated since 21 August 2007 when Cabinet Regulation No 503 of 24 June 2007 'Regulation on electricity generation from renewable energy sources' entered into force and will operate until the time prescribed by the draft Law on Renewable Energy, with a transition period to be stipulated.

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

Under the existing and planned situation, it is not suitable for hydropower plants with capacity > 5 MW to apply (Section 29 of the EML).

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

Current situation: combining support schemes is not possible.

Section 31 of the EML regulates generators' rights to choose, stipulating that if generators' power plants can simultaneously claim the rights stipulated in Sections 28, 28.1, 29, 29.1 and 30 of the Law, generators can only utilise by their own choice one of the said rights.

Upon the draft Law's entry into force, the Law on Renewable Energy provides for avoiding excessive support of renewable energy projects by evaluating options to combine different support mechanisms.

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

Currently, there are no regional/local support mechanisms and none are being developed.

Specific questions about financial support for investments

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

Pursuant to the EML, economic operators who generate electricity from RES can claim rights to sell electricity to the public trader within the framework of mandatory procurement or, meeting such criteria, generators who generate electricity in power plants with installed electrical capacity above 1 MW using biomass or biogas may acquire the right to receive guaranteed payment for power plants' installed electrical capacity.

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

Economic operators complying with the qualification criteria stipulated by Cabinet Regulation No 262.

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

Pursuant to Cabinet Regulation No 262, tenders are organised once a year for wind power plants, biogas and biomass and solar power plants. Hydropower plants (with capacity up to 5 MW) may apply to acquire rights in accordance with the amount of electricity to be purchased by the public trader each year, stipulated within the framework of mandatory procurement.

Pursuant to Cabinet Regulation No 221, applications may be submitted continuously.

Specific questions for tradable certificates

(a) Is there an obliged share of electricity produced from renewable sources in the total supply?

Not applicable.

Specific questions for feed-in fixed tariffs

(a) What are the conditions to get the fixed tariff?

Pursuant to Cabinet Regulation No 262 mandatory procurement rights for biomass, biogas, solar and wind power plants shall be allocated by a tender procedure, evaluating the compliance of submitted applications against administrative and qualitative evaluation criteria. This application-evaluation

procedure enables the high-quality evaluation of applications, taking into account the electricity generation capacity to be installed, power plant operating conditions, the potential to use the heat generated by power plants and the raw materials used for the energy source. Cabinet Regulation No 262 has made administrative procedures more transparent and stipulates that decision-making procedures must be transparent to economic operators.

The subject of the tenders is the volume of electricity for the selling rights of which the tender is being held within the framework of mandatory procurement. Cabinet Regulation No 262 stipulates that tenders must be held annually from 1 to 31 October. Economic operators that generate or plan to generate electricity at hydropower plants may acquire mandatory procurement rights by submitting an application and documents in accordance with Cabinet Regulation No 262 to the Ministry by 1 April of the respective year.

Administrative criteria:

Annex 5 to Cabinet Regulation No 262.

Quality criteria:

Annex 6 to Cabinet Regulation No 262.

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

1. In accordance with the EML:

Section 29. Electricity generation utilising RES:

(2) It is mandatory that a specified share of the total electricity consumed by all of Latvia's end users be covered by electricity generated from RES. For a five-year period commencing 1 January 2006, this share for each RES type shall be prescribed by Cabinet such that by 31 December 2010 the proportion of this share in relation to total electricity consumption shall be not less than 49.3%.

2. The share of the total electricity consumed by all of Latvia's end users that it is mandatory to cover with electricity generated from RES, for the period up to 31 December 2010 and in future years, by year and RES type, is specified in Annex 1 to Cabinet Regulation No 262.

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

Tariffs are differentiated depending on RES type and installed electrical capacity.

(d) Are there other criteria differentiating tariffs?

Pursuant to Cabinet Regulation No 262, price formulas shall be applied to the determination of the mandatory procurement price for the electricity generated from biomass, biogas, solar or wind power plants, as well as hydropower plants with installed electrical capacity of less than 5 MW.

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

The procurement price is stipulated for a 20-year period, stipulating a reducing coefficient for the second ten-year period from the commencement of operation.

(f) Is there any tariff adjustment foreseen in the scheme?

In all cases, tariffs are reduced after ten years of operation.

Specific questions for feed-in premiums

(a) What are the conditions to get the premium?

Currently, there are no feed-in premiums.

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

Currently, there are no feed-in premiums.

No restrictions are provided for annually generated electricity or installed capacity when claiming premiums.

(c) Is it an alternative to fixed tariff?

Currently, there are no feed-in premiums.

An alternative to fixed tariffs is planned.

(d) Is it a technology-specific scheme? What are the premium levels for each?

Currently, there are no feed-in premiums.

(e) Is there a floor and/or a cap for the premium? Please specify.

Currently, there are no feed-in premiums.

(f) For how long is the premium price guaranteed?

Currently, there are no feed-in premiums.

(g) Is any tariff adjustment foreseen in the scheme?

Currently, there are no feed-in premiums.

Specific questions for tendering

(a) What is the frequency and size of the tenders?

Currently, existing support mechanisms provide for tendering to acquire the rights to sell electricity within the framework of mandatory procurement once a year, organising separate tenders for each RES type.

(b) Which technologies are specified?

Not applicable to technologies.

(c) Is it integrated with grid development?

No.

B Regulation

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

Cabinet Regulation No 165 of 17 February 2009 'Regulation on operational programme 'Infrastructure and Services' complementary Activity

3.5.2.2 ‘Development of cogeneration power plants using renewable energy sources’.

Pursuant to Cabinet Order No 508 of 24 August 2010 ‘Amendments to operational programme ‘Infrastructure and Services’’, Activity 3.5.2.2 was allocated additional funding, with the total aid granted to the Activity being EUR 48 908 718.

(b) Are there any technology-specific targets?

No, as the scheme is voluntary.

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

No, as the scheme is voluntary.

(d) Who has to fulfil the obligation?

No, as the scheme is voluntary.

(e) What is the consequence of non-fulfilment?

No, as the scheme is voluntary.

(f) Is there any mechanism to supervise fulfilment?

No, as the scheme is voluntary.

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

No, as the scheme is voluntary.

Financial support

For any scheme you use, please give a detailed description answering the following questions?

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

The objective of Activity 3.5.2.2 ‘Development of cogeneration power plants using renewable energy sources’ is to significantly increase the volumes of electricity and heat generated from renewable energy sources, thus reducing Latvia’s dependence on imports of primary energy resources.

Support is provided to the construction of new cogeneration power plants using RES and for the re-construction of existing boiler houses into cogeneration power plants using RES.

(b) Is it a voluntary or obligatory scheme?

The scheme is voluntary.

(c) Who manages the scheme?

Activity 3.5.2.2 is a current MoE-managed Activity financed from the Cohesion Fund (CF).

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

Under Activity 3.5.2.2, fulfilment of the national target is promoted by providing CF-financed support to cogeneration-station construction projects.

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

Within the framework of the scheme, revenue created within its framework is monitored during project implementation and five years after project implementation.

When granting support under Activity 3.5.2.2, evaluation is made regarding whether a project will be viable five years after its implementation.

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

The scheme's implementation conditions (Cabinet Regulation on implementing the Activity) will be amended on the basis of the results of the first round of Activity 3.5.2.2 project application selection.

Given that the Activity is being implemented as a support scheme for commercial activity, amendments must be coordinated with the EC.

(g) Does support differ according to technology?

The maximum permissible Cohesion Fund funding intensity under Activity 3.5.2.2 is 50 % of the total eligible expenditure, irrespective of the technology applied.

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

Under Activity 3.5.2.2, support can be obtained if, when implementing the project, primary energy resource savings are gained compared with separate generation of both energy types. If the primary energy resources saving achieved within the framework of projects is less than 1 %, projects do not qualify for support under the Activity.

(i) Is support conditional on meeting energy efficiency criteria?

Under Activity 3.5.2.2, support can be obtained if, when implementing the project, primary energy resource savings are gained compared with separate generation of both energy types. If the primary energy resources saving achieved within the framework of projects is less than 1 %, projects do not qualify for support under the Activity.

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

The scheme is in force. It is regulated by Cabinet Regulation No 165 of 17 February 2009 'Regulation on operational programme 'Infrastructure and Services' complementary Activity 3.5.2.2 'Development of cogeneration power plants using renewable energy sources'.

On the basis of the results of the first round of Activity 3.5.2.2 project application selection, the scheme's implementation conditions (Cabinet Regulation on implementing the Activity) will be amended as regards the second round of Activity project application selection.

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

The scheme is in force. On the basis of the results of the first round of Activity 3.5.2.2 project application selection, the scheme's implementation conditions (Cabinet Regulation on implementing the Activity) will be amended as regards the second round of Activity project application selection.

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

12 March 2009 to 21 December 2013

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

No minimum or maximum sizes have been stipulated within the framework of the scheme.

Existing restrictions:

Under Activity 3.5.2.2, the minimum permissible amount of Cohesion Fund funding per project application is LVL 100 000 and the maximum is LVL 4 000 000.

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

Under the allocated funding scheme, certain eligible expenditures may be combined with funding allocated under another support programme or individual aid project if this is provided in the form of guarantees, loans or risk capital investment or with *de minimis* support, if the following conditions are complied with:

- the funding granted within the framework of this Regulation together with *de minimis* support and funding guarantees or loans does not exceed the maximum permissible regional funding intensity of 70% for micro and small commercial companies, 60% for medium commercial companies and 50% for large commercial companies of the project's total eligible expenditure, regardless of whether the funding is provided from local, regional, State or European Union financial resources;

- for commercial companies who have received funding in the form of risk capital investment, the total permissible amount of funding within the framework of this Regulation shall be reduced by 20 %, not exceeding the amount received in the form of risk capital investment. The said conditions shall apply for three years after the granting of risk capital.

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

No local government support mechanisms for generating energy from RES have been established.

Specific questions about financial support for investment

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

Public funding in the form of grants (CF) is available under Activity 3.5.2.2.

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

Under Activity 3.5.2.2, project applications can be submitted by public utility providers i.e. commercial companies with licences to generate or transmit and distribute heat energy, if energy sector legislation so permits.

Support is not provided for specific technologies. Activity 3.5.2.2 support is granted for the construction of cogeneration stations.

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

Project applications are received within the framework of project application selection.

The first round of Activity 3.5.2.2 project application selection was held from 14 April to 31 August 2009 for CF financing of LVL 17 345 202, and in addition CF financing of LVL 7 028 040 was re-distributed.

Given that the first round of project application selection saw the absorption of the greater part of the funding available under the Activity, a second round of project application selection is being planned pursuant to Cabinet Order No 508 of 24 August 2010 'Amendments to operational programme Infrastructure and Services', and Activity 3.5.2.2 was re-distributed additional funding, granting total aid of EUR 48 908 718 for the Activity.

Specific questions for tendering

(a) What is the frequency and size of the tenders?

Project applications are accepted within the framework of project application selection.

The first round of Activity 3.5.2.2 project application selection was held from 14 April to 31 August 2009 for CF financing of LVL 17 345 202, and in addition LVL 7 028 040 of CF financing was re-distributed.

Given that the first round of project application selection saw the absorption of the greater part of the funding available under the Activity, a second round of project application selection is being planned pursuant to Cabinet Order No 508 of 24 August 2010 'Amendments to operational programme Infrastructure and Services', and Activity 3.5.2.2 was re-distributed additional funding, granting total aid of EUR 48 908 718 for the Activity.

(b) Which technologies are specified?

Support is not provided for specific technologies. Activity 3.5.2.2 support is granted for the construction of cogeneration stations.

(c) Is it integrated with grid development?

Not integrated with grid development.

C Regulation

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

Latvia's Rural Development Programme 2007-2013 (hereinafter – RDP), Measure 'Support for the creation and development of undertakings (considering diversification of activities not connected with agriculture)' Sub-measure 'Energy generation from biomass of agricultural and forestry origin'.

(b) Are there any technology-specific targets?

To promote the production of biogas by means of anaerobic fermentation to generate electricity.

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

Mainly applicants producing biogas from manure are supported.

(d) Who has to fulfil the obligation?

Support applicant.

(e) What is the consequence of non-fulfilment?

Support must be repaid.

(f) Is there any mechanism to supervise fulfilment?

Project execution is controlled and monitored by the Rural Support Service.

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

No.

Financial support

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

The objective of the Sub-measure (Energy generation from biomass of agricultural and forestry origin) is to support economic operators providing energy generation from biomass of agricultural or forestry origin, providing for the selling of electricity generated by means of biogas cogeneration. Biogas is considered to be gas obtained from an anaerobic fermentation process.

(b) Is it a voluntary or obligatory scheme?

The scheme is voluntary.

(c) Who manages the scheme?

Ministry of Agriculture.

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

The Agricultural Support Board will receive funding for the corresponding measure until 2013.

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

The Agricultural Support Board is to monitor projects for five years after their execution.

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

To make improvements and optimise the evaluation procedure, the scheme is being amended and the amendments are being coordinated with the European Commission.

(g) Does support differ according to technology?

Support intensity not exceeding 40% of projects' expenditure is stipulated and the scale of support is differentiated according to the dimensions of generating plants, on the basis of the larger the generating plant, the less support for its construction. The total amount of eligible expenditure is determined from the generating plant's capacity and assuming that investment per kilowatt of electricity does not exceed LVL 3 000 for capacities up to 500 kilowatts and LVL 2 500 for capacities exceeding 500 kilowatts.

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

Promoting energy generation from biomass of agricultural or forestry origin.

(i) Is support conditional on meeting energy efficiency criteria?

Support is directed more to the processing of agricultural manufacturing by-products and energy generation.

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

Yes. Latvia's Cabinet Regulation No 268 of 16 March 2010 'Procedure for granting State and European Union support for the measure 'Support for the formation and development of undertakings (including diversification of operations not connected with agriculture)' Sub-measure 'Energy generation from biomass of agricultural and forestry origin''

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

Existing scheme.

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

The existing scheme has operated since 2008 and will continue until 2013.

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

Total eligible expenditure for one support applicant shall not exceed LVL 4 000 000 during the Programming period.

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

No.

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

There are no local government-established support mechanisms for generating energy from RES.

Specific questions about financial support for investment

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

Support for investment in the construction of biogas production plants.

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

Support applicants shall be:

1. economic operators manufacturing the agricultural and forestry products referred to in Annex 1 to the Treaty on the Functioning of the European Union;

2. capital companies whose participant is a legal person manufacturing the agricultural and forestry products referred to in Annex 1 to the Treaty on the Functioning of the European Union, or agricultural services cooperative societies that, in accordance with the compliance criteria of legislation concerning cooperative societies, are considered to be a conforming agricultural cooperative society and whose members manufacture the agricultural and forestry products referred to in Annex 1 to the Treaty on the Functioning of the European Union, and which own not less than 51 % of the capital company's total number of shares.

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

No, the acceptance of projects is announced in rounds lasting one month. Two projects acceptance rounds have already been announced in 2010.

Specific questions for tradable certificates

Not applicable

Specific questions for feed-in fixed tariffs.

Not applicable

Specific questions for feed-in premiums

Not applicable

Specific questions for tendering

(a) What is the frequency and size of the tenders?

No specific frequency, limiting/residual amount of funding provided for the execution of measure has been stipulated for the tender by the RDP.

(b) Which technologies are specified?

Electricity generation from biogas obtained from anaerobic fermentation.

(c) Is it integrated with grid development?

No.

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

(a) How are the support schemes for electricity from renewable energy sources adapted to encourage the use of CHP from renewable energy sources?

Generators who generate electricity by a cogeneration process utilising biomass and biogas can claim mandatory procurement rights or receive guaranteed payment for power plants' installed capacity pursuant to either Cabinet Regulation No 262 or Cabinet Regulation No 221.

The EML prescribes that generators who generate electricity by a cogeneration process can acquire the right to sell the electricity generated within the framework of mandatory procurement (Section 28 (1)).

Under operational programme Infrastructure and Services complement Activity 3.5.2.2 'Development of cogeneration power plants using renewable energy sources', the construction of cogeneration power plants using renewable energy sources is supported.

(b) What support schemes are in place to encourage the use of district heating and cooling using renewable energy sources?

Latvia supports renewable heat with different fiscal measures, not with direct support mechanisms. Projects are funded from the European Union Structural Funds 2007-2013 by way of direct investment which covers at least 25% of all eligible expenditure. Thus, the minimum permissible amount of financing for one project is LVL 100 000 (€140 657) and the maximum LVL 4 million (€5.6 million). The total budget is LVL 17 345 202 (€24.4 million). Under this scheme, support can be received for investment in the installation of new cogeneration stations and the conversion of existing boilers into cogeneration stations using RES. Furthermore, support will be received for the use of biomass and biogas.

(c) What support schemes are in place to encourage the use of small-scale heating and cooling from renewable energy sources?

Investment support for RES has been commenced utilising Cohesion Fund resources and the climate change financial instrument established by the Law on the Participation of the Republic of Latvia in the Kyoto Protocol Flexible Mechanisms.

Pursuant to Section 10 (3) (1) of the Law on the Participation of the Republic of Latvia in the Kyoto Protocol Flexible Mechanisms, Cabinet Regulation of 12 May 2010 ‘Rules for the Climate change financial instrument-funded project open tender ‘Technology transfer from fossil to renewable energy sources’ is in force.

(d) What support schemes are in place to encourage the use of heating and cooling from renewable energy sources in industrial applications?

Support schemes to promote the use of RES in industry sector heating and cooling are planned to be drawn up by 31 December 2010.

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)?

In order to promote the consumption of biofuel in Latvia and, in accordance with the provisions of the Law on Biofuel, to ensure that its consumption by 31 December 2010 is not less than 5.75 % of the total amount of fuel in the economy for transport, the mandatory admixture of 5% biofuel in fossil fuel was implemented on 1 October 2009.

Cabinet Regulation No 648 of 25 June 2009 ‘Amendments to Cabinet Regulation No 332 of 26 September 2000 ‘Regulation on the conformity assessment of petrol and diesel’ entered into force on 3 July 2009. It prescribes that from 1 October 2009 only diesel (including Category A, B, C, D, E, F diesel for use in temperate climate conditions in accordance with standard LVS EN 590:2005 Automotive fuel – Diesel – Requirements and testing methods) with biodiesel (obtained from rapeseed oil) content of 4.5-5 % by volume of the total volume of end product can be sold in Latvia, also petrol whose Research Octane Number (RON) is 95 or greater, but less than 98, and Motor Octane Number (MON) is 85 or greater, but less than 89, whose alkenes (olefins) do not exceed 18% of the total volume of petrol (95 octane petrol), can only be sold in Latvia if the added bioethanol content is 4.5-5 % by volume of the total volume of petrol.

A reduced rate of excise duty, LVL 80.7 per 1000 litres, is applied to unleaded petrol if the added absolute alcohol content makes up between 70-85 % by volume (inclusive) of the total quantity of product.

The requirement for mandatory admixture of 5% of biofuel does not apply to Class 0, 1, 2, 3 and 4 diesel for use in arctic or severe winter conditions. Research and consultations are currently underway concerning the compatibility of biofuel with Class 0 and 1 diesel for use in arctic or severe winter conditions.

To promote biofuel production, the Ministry of Agriculture has drawn up and implemented the State aid programme 'Support for biofuel production' (N 540/2005; with amendments N 254/2007) under which direct State aid is provided.

Cabinet Regulation No 280 of 15 April 2008 'Regulation on financial support quotas for biofuel' entered into force on 24 April 2008. It prescribes financial support quotas for types of biofuel, as well as deadlines and the procedure for submitting the required aid calculation and its justification each year up to 31 December 2010.

Under the Law on the 2009 State Budget Ministry of Agriculture budget Sub-programme 21.06.00 'Support for the promotion of biofuel production', LVL 2 492 227 was provided for State aid for production of the annual minimum required amount of biofuel, and this was paid out in full.

In accordance with Cabinet Regulation No 303 of 18 April 2006 'Procedure for the monitoring and administration of direct State aid for production of the annual minimum required amount of biofuel', biofuel producers were granted aid for 17 186 003 litres of bioethanol and 35 855 150 litres of biodiesel in 2009.

In addition, on the basis of Cabinet Order No 883 of 16 December 2009 'On State base budget allocations from the Sub-programme 'Contingencies'', the Ministry of Agriculture, by Ministry of Finance Order No 954 of 21 December, was allocated LVL 3 532 830 from Ministry of Finance base budget Sub-programme 41.02.00 'Contingencies' to provide in full the payment of direct State aid for the biofuel produced in 2007 and partly for that produced in 2008.

Having regard to the above, in 2009 LVL 6 025 057 in State aid was paid from the State budget to promote biofuel production.

In addition to direct State aid, indirect State aid is also planned in the form of reduced rates of excise duty. Pursuant to the Law on Excise Duty, the following reduced rates of excise duty were applied to oil product mixtures with biofuel as from 1 February 2009:

- for unleaded petrol, its substitutes and components to which ethanol obtained from agricultural raw materials and which is dehydrated (with alcohol content of at least 99.5 % by volume) has been added, if the absolute alcohol content makes up 5.0 % by volume of the total quantity of product – LVL 256 per 1 000 litres;
- for unleaded petrol, its substitutes and components to which ethanol obtained from agricultural raw materials and which is dehydrated (with alcohol content of at least 99.5 % by volume) has been added, if the absolute alcohol content makes up between 70-95 % by volume of the total quantity of product – the unleaded petrol rate (LVL 269 per 1000 litres) was reduced in proportion to the amount of absolute ethanol, that is from LVL 13.45 to 80.70 per 1 000 litres;
- for diesel (gas oil), its substitutes and components to which 5-30 % (not inclusive) by volume of the total amount of oil product, of rapeseed oil or biodiesel obtained from rapeseed oil has been added – LVL 223 per 1 000 litres;
- for diesel (gas oil), its substitutes and components to which at least 30 % by volume of the total amount of oil product, of rapeseed oil or biodiesel obtained from rapeseed oil has been added – LVL 164 per 1 000 litres;
- for rapeseed oil sold or used as fuel or automotive fuel, and biodiesel obtained totally from rapeseed oil – LVL 0 per 1 000 litres.

Standard excise duty rates for oil products (as from 1 February 2009):

- unleaded petrol, its substitutes and components – LVL 269 per 1 000 litres;
- diesel (gas oil), its substitutes and components – LVL 234 per 1 000 litres.
- Pursuant to Article 17 of Directive 2009/28/EC, sustainability criteria will be applied to biofuel and bioliquid fuels in the future.

(b) Is there differentiation of the support according to fuel types or technologies? Is there any specific support to biofuels which meet the criteria of Article 21(2) of the Directive?

Different support mechanisms for these biofuel types are not provided for in legislation.

4.6. Specific measures for the promotion of the use of energy from biomass

Information on measures for the promotion of the use of energy from biomass in Latvia is available across three sectors: fisheries, agriculture and forestry.

Fisheries:

Latvia has no information at its disposal regarding undertakings using fisheries sector by-products to produce biogas.

In 2009, Latvia produced 4 187 t of inedible waste products that could not be used in foodstuffs, including fish residues. These products have been processed further into fish meal and utilised as fish or animal feed. Information relating to the origin of fish by-products is not compiled, however Latvia's fish-processing undertakings utilise both fish caught by Latvian fishermen and comparatively smaller amounts of imported fish (mainly from EU countries).

Given that Latvia's fish-processing undertakings are not concentrated in one region, which would considerably reduce the transport costs of the raw materials required to produce biogas, but are instead located all along the coast, and furthermore only a small part of fisheries by-products can be used for energy generation (they are mostly water and it is economically more advantageous to process some parts into fish meal), the potential of using such products to obtain biogas and generate electricity from biomass in Latvia is doubtful.

Unfortunately, it is not possible to forecast the amount of fisheries by-products available in 2015 and 2020 as this is dependent on the fishing quotas allocated to Latvian fishermen, the size of which is stipulated each year, and also to a large extent on changes in demand for Latvian fish products in export markets.

Agriculture:

Crop acreage with high energy values comprised 16 847 ha in 2008 and 20 690 ha in 2009.

It should be noted that surveys of the structure of rural farms are undertaken every two years, but counting was omitted in 2009, adding it to the 2010 agricultural tally.

4.6.1. Biomass supply: both domestic and trade

Forestry:

Taking into account that Latvia's combined nomenclature (hereinafter – LKN) goods codes are not sufficiently detailed to obtain data on the external trading of wood-fuel in accordance with the information included in Table 7, Table 7 presents information available for the forestry sector on the amount of wood-fuel energy resources available, exported and imported from 2006 to 2008, with the information available for 2006-2009 presented in the lower part of this Table.

Table 7

Biomass supply 2006-2008, '000 t.

Sector of origin	Amount of domestic resource	Import		Export		Net amount	Primary energy production ktoe
		EU	non-EU	EU	non-EU		
A. Biomass from forestry, of which:	6627						
wood biomass for energy generation from forestry lands and non-forestry lands	2610						
wood biomass for energy generation from wood-processing by-products	4017						
B. Biomass from waste, of which:	145						
wood biomass from used wood	145						
Fuel wood, 2006:	6627	61.9	12.3	3133.4	35.6		158.66
Round-wood firewood	2610	1.2	0.3	275.4	29.0		88.6
Wood residues	2060	38.2	12.1	575.2	2.2		40.26
Woodchips	1957	22.5	0	2282.7	4.5		29.8
Fuel wood 2007:		128.7	11.7	2658.5	57.4		
Round-wood firewood		6.1	1.6	285.8	52.5		
Wood residues		102.8	10.0	683.2	1.3		
Woodchips		19.8	0.113833	1689.4	3.6		
Fuel wood, 2008:		133.0	15.4	2378.9	23.4		
Round-wood firewood		1.2	0.0	333.1	20.9		
Wood residues		59.4	7.8	491.0	0.6		
Woodchips		72.4	7.612082	1554.8	1.9		
Fuel wood, 2009:		25.4	2.5	2865.9	27.3		
Round-wood firewood		4.8	0.0	780.8	5.9		
Wood residues		13.9	2.5	646.2	11.8		
Woodchips		6.7	0	1438.9	9.6		

Source: Ministry of Agriculture

We advise that for 2006-2008, the changes in Latvia's annual total amount of utilisable wood were not large and comprised ~15.882 million m³, where the total amount of harvested forest was ~14.3 million m³ and non-forestry ~0.5 million m³. In addition, the potential total amount of available wood is around 5.5-6.9 million m³.

Since 2007, the amount of sawn-wood production has fallen, which has changed the nature of wood-processing by-products while not affecting the total amount of wood-processing by-products.

The total amount of wood-fuel exported in the last seven years is within the range 2-3 million t and it is felt that such volumes could also be maintained up to 2015, unless there are unforeseen circumstances.

The total amount of wood-fuel imported in the last seven years has not exceed 1/10th of the exported amount.

Short-rotation energy wood-fuel plantations in Latvia cover around 200 ha.

Table 7a

Estimated domestic biomass supply 2015 and 2020

t

Short-rotation energy wood-fuel plantations in Latvia cover around 200 ha. In addition, potentially available wood resources total 5.5-6.9 million m³, including the potentially available amount of wood from forestry and non-forestry land of 1.9-3.3 million m³.

Providing that local consumption remains unchanged, the amount of wood-fuel exported in 2015 and 2020 could be in the range 2-3 million t.

Table 8

Current agricultural land use for production of crops dedicated to energy in 2006

t

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) Please specify how much land is degraded.

A compilation has not been undertaken.

(b) Please specify how much unused arable land there is.

In 2007, Latvia's unused agricultural land totalled 1 456.8 10³ ha.

(c) Are any measures planned to encourage unused arable land, degraded land, etc. to be used for energy purposes?

Existing planning documents do not provide for this.

According to Central Statistical Bureau data, the area sown with rape in 2009 covered around 93 300 ha, while the total 2009 harvest of rape was 208 000 tonnes. The area sown with cereal crops in 2009 was 540 800 ha while the total harvest of cereal crops was 1 663 000 tonnes.

With the implementation of the State aid programme, biofuel production in Latvia has developed. Since 2005, both the number of undertakings producing biofuel and production capacity has increased.

(d) Is energy use of certain already available primary material (such as animal manure) planned?

Having regard to the impact of biogas capture on the reduction of the greenhouse gas (hereinafter – GHG) emissions, replacing fossil fuels and reducing methane emissions to promote environmental protection and agricultural development, it is planned to use biogas obtained from manure for energy generation.

(e) Is there any specific policy promoting the production and use of biogas? What type of uses are promoted?

The objective of the Programme ‘Development programme for biogas production and utilisation 2007-2011’ is to develop the production and utilisation of biogas as a renewable energy source in Latvia, simultaneously offering an integrated solution to managing biodegradable by-products/residues from processing and reworking processes and reducing pollution risks to soil, water and air as well as possible threats to human health. Under the programme, options for obtaining biogas from agricultural products, manufacturing process residues and biodegradable waste are being analysed.

(f) What measures are planned to improve forest management techniques in order to maximise the extraction of biomass from the forest in a sustainable way? How will forest management be improved in order to increase future growth? What measures are planned to maximise the extraction of existing biomass that can already be put into practice?

All of Latvia’s forestry policy documents stipulate requirements to ensure the sustainable management of forestry resources and some documents also specify increasing the value of forests. There are no planning documents directly related to biofuel supply. Cabinet Regulation No 421 of 10 June 2008 ‘Regulation on forest protection measures and the notification of emergency situations in forests’ (*Latvijas Vēstnesis* 92 (3876), 13.06.2008), in force since 14 June 2008, prescribes the requirements for preparing biofuel during logging.

Impact on other sectors

(a) 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?

There are no plans to increase the amount of logging to ensure biofuel supply. The effective utilisation of existing resources needs to be improved. Energy generation can be positively affected by the manufacturing and export of granules which would also have an indirectly positive impact on forestry management practice.

(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?)

Sustainable development principles must be taken into account in energy generation from RES.

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. Procedures aspects

(a) Describe the national procedures (step by step) established or to be established, for arranging a statistical transfer or joint project (including responsible bodies and contact points).

Planned situation:

The draft Law must provide for stipulating fundamental principles for establishing cooperation with third countries, considering that the renewable energy generated within Latvia may be marketed outside Latvia if it is established that, during the relevant period, Directive 2009/28/EC targets have been fully achieved.

There is a need to provide that participation in international renewable energy trading goes ahead when proposed by another country or at the instigation of the responsible Ministry of Economics. Decisions on inter-country cooperation in renewable energy trading must be taken by Cabinet approving draft inter-country cooperation contracts. Furthermore, draft contracts must incorporate provisions concerning renewable energy types, amounts, prices and payment procedures.

(b) Describe the means by which private entities can propose and take part in joint projects either with Member States or third countries.

Not provided for.

(c) Give the criteria for determining when statistical transfers or joint projects shall be used.

Not drafted.

(d) What is going to be the mechanism to involve other interested Member States in a joint project?

Not established.

(e) Are you willing to participate in joint projects in other Member States? How much installed capacity/electricity or heat produced per year are you planning to support? How do you plan to provide support schemes for such projects?

Not planned.

4.7.2. Estimated excess production of renewable energy compared to the indicative trajectory which could be transferred to other Member States

4.7.3. Estimated potential for joint projects

Not planned.

4.7.4. Estimated demand for renewable energy to be satisfied by means other than domestic production

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 in [Member State] ('000 tonnes)

Not planned.

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

Tables No 10-12 present changes to RES consumption in electricity, heating and cooling and transport attributed to the total final energy consumption in the calculation of the target.

The use of RES in electricity generation in 2010 is dominated by hydro power, which comprises 93.6% of total RES electricity consumed. The amount of electricity from RES will increase from 3030 GWh in 2010 to 5191 GWh in 2020 i.e. by 71%. It is planned that in 2020 hydro power will make up 57%, electricity generated from biomass 24% and wind power 18% of the total electricity from RES. It should be noted that the normalisation rules pursuant to Annex II to Directive 2009/28/EC were applied to the calculations for wind and hydro power.

Heating and cooling in 2010 is dominated by RES from biomass, mainly wood-fuel, which comprises 99% of the energy from RES consumed in the sector. The share in district heat supply is 9.2%, while the RES share consumed in households is 68%. It is planned that the use of RES in heating and cooling will increase from 1 020 ktoe in 2010 to 1 396 ktoe in 2020 i.e. by 37%. The share of the total consumption in district heating will increase to 18% in 2020. It is anticipated that the contribution from solar collectors and heat pumps to RES use will increase.

It is calculated that the use of RES in transport will increase from 42 ktoe in 2010 to 83 ktoe in 2020. The major part of RES consumption in transport will comprise biofuel utilisation in vehicular transport, while a smaller share will come from electricity consumption in vehicular transport and railways. It is anticipated that vehicular transport will utilise both first-generation and second-generation biofuels, as well as biogas.

Table 10a

Forecast of total contribution (installed capacity, gross electricity generation) expected from each renewable energy technology in [Member State] to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity 2010-2014 (tonne of oil equivalent)

	2005		2010		2011		2012		2013		2014	
	MW	GWh	MW	GWh	MW	GWh	MW	GWh	MW	GWh	MW	GWh
Hydro power:	1536	2942	1536	2906	1536	2985	1536	2991	1536	2905	1536	2923
< 1MW	24	59	24	59	24	59	24	59	24	59	24	59
1MW-10 MW	1	3	1	3	1	3	1	3	1	3	1	3
> 10MW	1511	2880	1511	2844	1511	2923	1511	2929	1511	2843	1511	2861
of which pumped storage power stations												
Geothermal energy												
Solar energy:	0	0	0	0	0	0	1	1	1	1	1	1
photovoltaic							1	1	1	1	1	1
concentrated solar energy												
Tidal, wave, ocean energy												
Wind power:	26	47	28	58	37	73	49	100	63	134	80	175
land	26	47	28	58	37	73	49	100	63	134	80	175
sea												
Biomass:	10	41	13	72	25	154	39	235	61	365	96	574
solid	3	5	2	8	4	24	8	49	17	99	34	198
biogas	7	36	11	64	21	130	31	186	44	266	62	376
bioliquid fuels ⁽¹⁾												
Total	1572	3030	1577	3036	1598	3212	1625	3327	1661	3405	1713	3673
of which cogeneration	8	40	12	70	24	146	37	220	57	333	87	508

⁽¹⁾ Only taking into account those complying with sustainability criteria

Source: Ministry of Economics

Table 10b

Forecast of total contribution (installed capacity, gross electricity generation) expected from each renewable energy technology in [Member State] to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in electricity 2015-2020 (tonne of oil equivalent)

	2015		2016		2017		2018		2019		2020	
	MW	GWh	MW	GWh	MW	GWh	MW	GWh	MW	GWh	MW	GWh
Hydro power:	1550	2965	1550	2977	1550	3004	1550	3071	1550	3068	1550	3051
< 1MW	25	63	26	64	26	65	26	65	27	67	27	67
1MW-10 MW	1	3	1	3	1	3	1	3	1	3	1	3
> 10MW	1524	2899	1523	2910	1523	2936	1523	3003	1522	2998	1522	2981
<i>of which pumped storage power stations</i>												
Geothermal energy												
Solar energy:	1	1	1	2	2	3	2	4	2	4	2	4
photovoltaic	1	1	1	2	2	3	2	4	2	4	2	4
concentrated solar energy												
Tidal, wave, ocean energy												
Wind power:	104	228	137	300	180	394	235	517	310	681	416	910
land	104	228	107	234	120	264	135	297	180	395	236	519
sea			30	66	60	130	100	220	130	286	180	391
Biomass:	110	664	123	742	137	844	154	931	174	1057	200	1226
solid	46	271	55	321	64	393	76	447	90	531	108	642
biogas	64	39										
	68	421	73	451	78	484	84	526	92	584		
bioliquid fuels ⁽¹⁾												
Total	1765	3858	1811	4021	1869	4245	1941	4523	2036	4810	2168	5191
of which cogeneration	97	568	107	621	117	681	128	746	142	824	161	930

(¹) Only taking into account those complying with sustainability criteria

Source: Ministry of Economics

Table 11

Forecast of total contribution (final energy consumption) expected from each renewable energy technology in [Member State] to meet the binding 2020 targets and the indicative interim trajectory for the shares of energy from renewable resources in heating and cooling 2010-2020 ('000 tonnes)

	t											
	2005	2010	2012	2013	2014	2015	2016	2016	2017	2018	2019	2020
Geothermal energy (not including low temperature geothermal energy heat pumps)												
Solar energy	0	0	0	0	1	1	1	1	1	2	2	2
Biomass:												
<i>solid</i>	1113	1013	1053	1103	1105	1109	1139	1172	1204	1235	1275	1343
<i>biogas</i>	1	7	14	20	28	38	39	40	42	44	46	49
<i>bioliquid fuels (¹)</i>												
Heat pump renewable energy:	0	0	0	0	1	1	2	2	3	3	4	4
<i>of which aerothermal</i>												
<i>of which geothermal</i>												
<i>of which hydrothermal</i>												
Total	1114	1020	1067	1123	1134	1148	1180	1214	1249	1282	1325	1396
<i>of which district heat supply</i>	103	99	112	124	139	159	169	183	198	213	232	257
<i>of which biomass in households</i>	770	708	727	737	739	727	733	743	751	757	768	794

Source: Ministry of Economics

Table 12

Forecast of total contribution expected from each renewable energy technology in [Member State] 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 ('000 tonnes), t

	2005	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Bioethanol and bio-ETBE	0	14	16	17	18	19	19	20	21	22	22	18
<i>Of which biofuel ⁽¹⁾ in accordance with Article 21(2)</i>	0	0	0	0	0	0	0	0	0	0	3	18
<i>Of which imports ⁽²⁾</i>	0	0	0	0	0	0	0	0	0	0	3	9
Biodiesel	3	25	25	25	23	22	20	20	20	22	24	28
<i>Of which biofuel ⁽¹⁾ in accordance with Article 21(2)</i>	0	0	0	0	0	0	0	0	0	1	10	15
<i>Of which imports ⁽³⁾</i>	0	0	0	0	0	0	0	0	0	1	5	8
Hydrogen from renewable resources	0	0	0	0	0	0	0	0	0	0	0	0
Renewable electrical energy	4	3	3	3	3	4	4	5	5	5	5	6
<i>Of which vehicular transport</i>	1	1	1	1	1	2	2	2	2	2	2	2
<i>Of which other transport</i>	3	2	2	2	2	2	3	3	3	3	3	4
Others (for example, biogas, vegetable oil etc.)	0	0	0	1	4	6	10	19	27	31	31	31
<i>Of which biofuel as ⁽¹⁾ in accordance with Article 21(2)</i>	0	0	0	0	0	0	0	0	2	3	4	7
Total	7	42	44	46	48	51	53	64	73	80	82	83

⁽¹⁾ Biofuel as defined in Article 21(2) of Directive 2009/28/EC

⁽²⁾ Of the total amount of bioethanol/bio-ETBE

⁽³⁾ Of the total amount of biodiesel

Source: Ministry of Economics

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

5.3. Assessment of the impacts (Optional)

Table 13

Estimated costs and benefits of the renewable energy policy support measures

t

Developing more extensive use of RES in the energy sector is one of the most significant principles for ensuring sustainable development in the economy. The use of RES not only contributes to the limitation of climate change, but also provides a number of social and economic benefits. They are connected both with the development, manufacturing and installation of RES-utilising technologies, and also with their operation, maintenance and fuel preparation.

The jobs created through the use of RES can be divided into two broad categories:

- direct jobs,
- indirect and induced jobs.

The creation of direct jobs is connected with the following operations in the production cycle:

- jobs created at energy generation installations, including both short-term (usually up to two years) jobs connected with the manufacturing of the equipment and pipework required by the station and construction and setting up of the station (so called *technological jobs*), as well as long-term jobs connected with the station's ongoing operation (so called *operational and servicing jobs*). The number of these jobs depends on the complexity of the station's technologies. When calculating capital investment costs, the number of short-term jobs is usually divided by the station's technical life cycle to arrive at the average number of long-term jobs connected with investment in technological equipment;

- the jobs connected with capital investment in the establishment of energy biomass plantations are of a similar nature;

- the collection/clearing of biomass, including the additional preparation of logging and agricultural-processing technology to collect/clear biomass.

The creation of indirect jobs is connected with activities such as the manufacture of the equipment, pipework and spare parts needed for operation and servicing the station, sale of the product generated by the station (energy), engineering and financial consultancy in the development of projects, as well as the production of plant-protection substances for the agricultural cultivation of biomass.

To ensure that the assessment of the impact on employment takes into account Latvian conditions and factors, a production series model⁸ was used to assess the new jobs created from using RES.

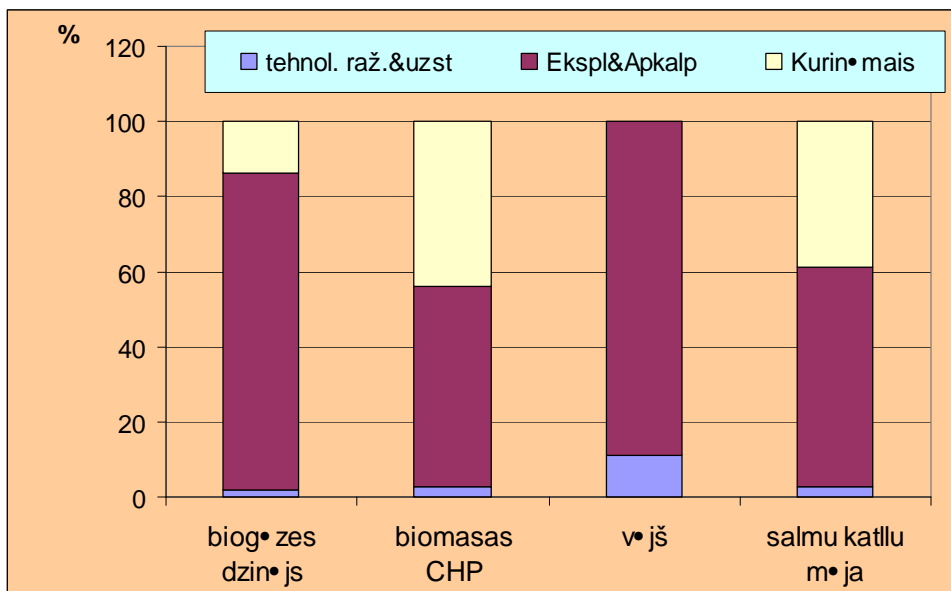


Figure 10. Directly created jobs by different energy generation stages in Latvia

Key:

Blue: manufacture and installation of technologies

Purple: Operation and servicing

Yellow: Fuel

Biogas motors; biomass CHP; wind; straw boiler house

⁸ A more detailed description of the method and calculation examples are given in the Physical Energy Institute's report 'Evaluation of the economic and environmental benefits of using renewable energy sources in Latvia's energy supply scenarios'

EMZino_111010_RES; Information Report: Republic of Latvia National Renewable Energy Action Plan for implementing Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC by 2020

When assessing the impact of more extensive use of RES on the creation of new jobs, the scenario in which Latvia attains the mandatory target for energy generated from RES – 40% by 2020 – was modelled.

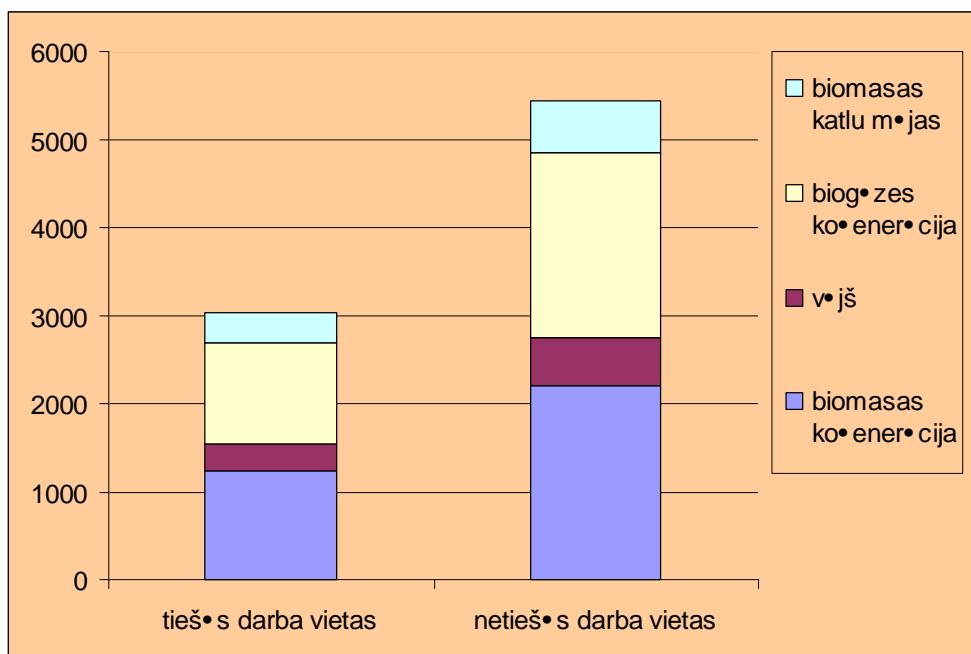


Figure 11. Direct and indirect new jobs from more extensive use of RES in Latvia

Key:

Green: biomass boiler houses

Yellow: biogas cogeneration

Purple: wind

Blue: biomass cogeneration

direct jobs; indirect jobs

Realisation of the RES-utilisation scenario would yield more than 8500 new direct and indirect jobs and over LVL 50 million in additional revenue for State and local government budgets annually. This is a conservative estimate because the assessment is based on the assumption that Latvia is not active at the energy-generation-technology development stage. Participation in technology development could yield additional new jobs.⁹

To attain the target stipulated by the action plan, the premium on the electricity trading end price will not exceed 1.8 santims (LVL 0.018) per kWh.

⁹ Gaidis Klīvs, Antra Kundziņa, Juris Ozolišs, Jānis Reģis, Using renewable energy sources to ensure Latvia's sustainable development, (Soros Foundation Latvia, 2010), 7.
EMZino_111010_RES; Information Report: Republic of Latvia National Renewable Energy Action Plan for implementing Directive 2009/28/EC of the European Parliament and of the Council of 23 April 2009 on the promotion of the use of energy from renewable sources and amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC by 2020

5.4. Preparation of the National Renewable Energy Action Plan and the follow-up of its implementation

(a) How were regional and/or local authorities and/or cities involved in the preparation of this Action Plan? Were other stakeholders involved?

A large number of suggestions have been received about the action plan and energy sector experts were involved in its preparation.

(b) 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?

Planned situation:

Local governments must evaluate their spatial plans, having regard to Latvia's obligations under Directive 2009/28/EC, the Renewable Energy Law and the national action plan and supplement local government spatial plans with the planned number and location of renewable energy generating plants.

On the basis of the experience gained in the *Energy4Cohesion*¹⁰ and *Innovative Thinking*¹¹ projects, it is clear that the incorporation of RES in regional and local spatial planning is necessary firstly in order to correctly assess the potential of RES and, secondly to promote its best potential utilisation. For example, this is very important in the case of biogas, as it allows for identification of the best locations for new biogas stations (including in terms of heat utilisation) and avoidance of potential conflicts with the public because of odours and inappropriate logistics for example.

(c) Please explain the public consultation carried out for the preparation of this Action Plan.

The action plan was drawn up in cooperation with energy sector experts.

(d) Please indicate your national contact point/the national authority or body responsible for the follow-up of the Renewable Energy Action Plan?

Latvian Ministry of Economics.

(e) Do you have a monitoring system, including indicators for individual measures and instruments, to follow-up the implementation of the Renewable Energy Action Plan? If so, could you please give more details on it?

No.

¹⁰ <http://www.e4c.org/>.

¹¹ <http://innovativethinking.eu/>.

Annex
to Action Plan
Republic of Latvia National Renewable Energy Action Plan

List of abbreviations and explanations

RES	–	renewable energy sources
AS	–	joint-stock company
BEMIP	–	Baltic Energy Market Interconnection Plan
EC	–	European Commission
MoE	–	Ministry of Economics
ERDF	–	European Regional Development Fund
EU	–	European Union
EML	–	Electricity Market Law
EUR	–	Euro (European Union common currency)
MoF	–	Ministry of Finance
GFEC	–	gross final energy consumption
GDP	–	gross domestic product
SPNA	–	specially protected nature area
CF	–	Cohesion Fund
ktoe	–	total consumption of primary energy resources
RDP	–	Agricultural Support Board
LVL	–	Latvia's currency, the lats
LV	–	Republic of Latvia
Cabinet	–	Cabinet of Ministers
CIS	–	Commonwealth of Independent States
EEAP	–	First energy efficiency action plan
PJ	–	petajoule (energy measurement unit)
TSO	–	transmission system operator
GHG	–	greenhouse gas
SIA	–	limited liability company
PUC	–	Public Utilities Commission (PUC)
SIS	–	spatial planning information system
TEC	–	thermal power station
TOE	–	tonnes of oil equivalent (energy consumption measurement unit)
MoA	–	Ministry of Agriculture

Decimal prefixes

k=kilo= 10^3

M=mega= 10^6

G=giga= 10^9

T=tera= 10^{12}

P=peta= 10^{15}

Measurement units

kg – kilogram (10^3 grams)

t – tonne (10^3 kg)

m³ – cubic metre

l – litre

W – watt

Ha – hectare

J – joule

t – tonne

million – million

kV – kilowatt

kWh – kilowatt hour

MWh – megawatt hour

TWh – terawatt hour

Gcal – gigacalories

Measurement unit conversion factors

Table 1

	GJ	MWh	toe	Gcal
GJ	1	0.2778	0.0239	0.2388
MWh	3.6000	1	0.0860	0.8598
toe	41.8680	11.6300	1	10.000
Gcal	4.1868	1.1630	0.1000	1

Table 2 GFEC forecast up to 2020

		2008	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2020/ 2008	per annum
GDP in 2000 relative prices	million LVL	8296	6571	6670	6870	7214	7574	7953	8351	8768	9207	9667	10150	22.4%	1.7%
<i>Annual rates of increase</i>			-3.4%	1.5%	3.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%	5.0%		
GFEC intensity	GJ/000 2000 LVL	21.9	25.7	25.7	25.4	24.6	23.8	23.1	22.4	21.7	21.0	20.4	19.8	-7.3%	-0.6%
Elasticity	% / %			1.1	0.6	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.4	0.6	0.6
GFEC	kTOE	4330	4033	4101	4170	4240	4311	4383	4462	4542	4624	4709	4796	11.0%	0.9%
GFEC	GWh	50363	46909	47693	48492	49306	50134	50978	51888	52822	53782	54767	55780		
GFEC	PJ	181	169	172	175	178	180	184	187	190	194	197	201		
<i>Annual growth rates</i>				1.7%	1.7%	1.7%	1.7%	1.7%	1.6%	1.6%	2.1%	1.5%	2.0%		
GFEC by energy type	PJ														
<i>Electricity (E)</i>		27	24	25	25	26	27	27	28	29	29	30	31	14%	1.1%
<i>District heating (DH)</i>		26	24	25	25	26	26	26	27	27	28	28	29	9%	0.7%
<i>Remaining heat energy (H)</i>		75	70	71	72	73	74	75	76	77	78	80	81	8%	0.7%
<i>Fuel (F)</i>		53	50	51	52	53	54	55	56	57	58	59	60	13%	1.1%
GFEC by sector	PJ													13%	1.1%
<i>Industry</i>		27	25	25	26	26	27	27	29	30	31	32	33	23%	1.7%
<i>Households</i>		61	56	57	58	59	60	61	61	62	62	63	64	4%	0.4%
<i>Services</i>		27	25	25	26	26	27	27	28	29	29	30	30	12%	1.0%
<i>Agriculture</i>		6	5	5	5	5	6	6	6	6	6	6	6	17%	1.3%
<i>Transport</i>		54	50	51	52	53	54	55	56	57	58	60	61	13%	1.0%
<i>Losses & own consumption</i>		8	7	7	7	7	7	7	7	7	7	7	7	-9%	-0.8%
Savings pursuant to EEAP	PJ	0	0.4	2.0	4.7	7.5	9.7	11.7	13.6	16.3	18.6	20.9	23.2		

Submitted by:
Minister for Economics

A. Kampars

Endorsed:
On behalf of the State Secretary–
Deputy State Secretary

A. Liepiņš

11.10.2010 12:55
32650

Kristaps Stepanovs
67013249
Kristaps.Stepanovs@em.gov.lv

Baiba Neimane
67013214
Baiba.Neimane@em.gov.lv