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Progress Report for Slovenia under Directive 2009/28/EC
[corrected version](#)

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1. Sectoral and overall shares and actual consumption of energy from renewable sources in the preceding two years (n-1; n-2, e.g. 2010 and 2009) (Article 22(1)(a) of Directive 2009/28/EC)

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

	2011	2012
RES – H and C ² (%)	28.68%	30.57%
RES – E ³ (%)	30.81%	31.36%
RES – T ⁴ (%)	2.11%	2.88%
Overall RES share ⁵ (%)	19.42%	20.23%
Of which from cooperation mechanism ⁶ (%)	0.00%	0.00%
Surplus for cooperation mechanism ⁷ (%)		

Table Ia: Calculation table for the renewable energy contribution of each sector to final energy consumption (ktoe)⁸

	2011	2012
(A) Gross final consumption of RES for heating and cooling	583.6	588.9
(B) Gross final consumption of electricity from RES	383.4	390.1
(C) Gross final consumption of energy from RES in transport	39.8	55.4
(D) Gross total RES consumption ⁹	1 006.7	1 034.4
(E) Transfer of RES to other Member States	0.0	0.0
(F) Transfer of RES from other Member States and third countries	0.0	0.0
(G) RES consumption adjusted for target (D)-(E)+(F)	1 006.7	1 034.4

¹ Facilitates comparison with Tables 3 and 4a of the NREAPs.

² Share of renewable energy in heating and cooling (H and C): gross final consumption of energy from renewable sources for heating and cooling (as defined in Articles 5(1)(b) and 5(4) of Directive 2009/28/EC), divided by gross final consumption of energy for heating and cooling. The same methodology as in Table 3 of the NREAPs applies.

³ Share of renewable energy in electricity (E): gross final consumption of electricity from renewable sources for electricity (as defined in Articles 5(1)(a) and 5(3) of Directive 2009/28/EC), divided by total gross final consumption of electricity. The same methodology as in Table 3 of the NREAPs applies.

⁴ Share of renewable energy in transport (T): final energy from renewable sources consumed in transport (cf. Articles 5(1)(c) and 5(5) of Directive 2009/28/EC), divided by the consumption in transport of 1) petrol; 2) diesel; 3) biofuels used in road and rail transport; 4) electricity in land transport (as reflected in row 3 of Table 1). The same methodology as in Table 3 of the NREAPs applies.

⁵ Share of renewable energy in gross final energy consumption. The same methodology as in Table 3 of the NREAPs applies.

⁶ In percentage points of overall RES share.

⁷ In percentage points of overall RES share.

⁸ Facilitates comparison with Table 4a of the NREAP.

⁹ According to Article 5(1) of Directive 2009/28/EC, gas, electricity and hydrogen from renewable energy sources shall only be considered once. No double counting is allowed.

Table 1.b: Total actual contribution (installed capacity, gross electricity generation) from each renewable energy technology in Slovenia to meet the binding 2020 targets, and the indicative interim trajectory for the shares of energy from renewable resources in electricity¹⁰

	2011		2012	
	MW	GWh	MW	GWh
Hydro ¹¹ :	1 253.0	4 196.6	1 254.0	4 158.4
<i>non-pumped</i>	1 073.0	3 601.7	1 074.0	3 860.3
<1 MW	117.0	203.6	119.0	216.1
1 MW—10 MW	42.0	183.1	41.0	189.5
>10 MW	914.0	3 215.0	914.0	3 454.7
<i>pumped</i>	180.0		180.0	
<i>mixed</i> ¹²	0.0	0.0	0.0	0.0
Geothermal	0.0	0.0	0.0	0.0
Solar:	57.0	65.7	142.0	162.8
<i>photovoltaic</i>	57.0	65.7	142.0	162.8
<i>concentrated solar power</i>	0.0	0.0	0.0	0.0
Tide, wave, ocean	0.0	0.0	0.0	0.0
Wind:	0.0	0.0	0.0	0.0
<i>onshore</i>				
<i>offshore</i>				
Biomass ¹³ :	54.0	251.8	59.0	267.3
<i>solid biomass</i>	33.0	125.1	30.0	114.2
<i>biogas</i>	21.0	126.6	29.0	153.1
<i>bioliquid</i>	0.0	0.0	0.0	0.0
TOTAL	1 364.0	4 514.0	1 455.0	4 588.5
<i>of which in combined heat and power</i>		246.0		262.4

¹⁰ Facilitates comparison with Table 10a of the NREAPs.

¹¹ Normalised in accordance with Directive 2009/28/EC and Eurostat methodology.

¹² In accordance with the new Eurostat methodology.

¹³ Take into account only those complying with applicable sustainability criteria, cf. last subparagraph of Article 5(1) of Directive 2009/28/EC.

Table 1c: Total actual contribution (final energy consumption¹⁴) from each renewable energy technology in Slovenia to meet the binding 2020 targets, and the indicative interim trajectory for the shares of energy from renewable resources in heating and cooling (ktoe)¹⁵

	2011	2012
Geothermal (excluding low-temperature geothermal heat in heat pump applications)	28.2	31.0
Solar	8.8	9.4
Biomass ¹⁶ :	546.5	548.6
<i>solid biomass</i>	538.6	536.8
<i>biogas</i>	7.9	11.7
<i>bioliquid</i>	0.0	0.0
Renewable energy from heat pumps		
- of which: <i>aerothermal</i>	0.0	0.0
- of which: <i>geothermal</i>		
- of which: <i>hydrothermal</i>		
TOTAL	583.6	588.9
<i>Of which DH</i> ¹⁷	0.0	0.0
<i>Of which biomass in households</i> ¹⁸	462.4	471.3

¹⁴ Direct use and district heat as defined in Article 5(4) of Directive 2009/28/EC.

¹⁵ Facilitates comparison with Table 11 of the National Renewable Energy Action Plans.

¹⁶ Takes into account only those complying with applicable sustainability criteria, cf. last subparagraph of Article 5(1) of Directive 2009/28/EC.

¹⁷ District heating and/or cooling from total renewable heating and cooling consumption (RES-DH).

¹⁸ From the total renewable heating and cooling consumption.

Table 1d: Total actual contribution from each renewable energy technology in Slovenia to meet the binding 2020 targets, and the indicative interim trajectory for the shares of energy from renewable resources in the transport sector (ktoe)^{19, 20}

	2011	2012
Bioethanol/bio-ETBE	3.7	5.3
<i>Of which biofuels²¹ Article 21 (2)</i>	3.7	5.3
<i>Of which imported²²</i>	3.7	5.3
Biodiesel	31.3	45.7
<i>Of which biofuels²³ Article 21 (2)</i>	31.3	45.7
<i>Of which imported²⁴</i>	30.9	44.8
Hydrogen from renewables		
Renewable electricity	4.8	4.4
<i>Of which road transport</i>		
<i>Of which non-road transport</i>	4.8	4.4
Others (e.g. biogas, vegetable oils, etc.) – specify		
<i>Of which biofuels²⁵ Article 21 (2)</i>		
TOTAL	39.8	55.4

Slovenia has no oil refineries. We import all liquid fuels, for transport as well as for heating. The liquid fuels for transport which we import frequently contain a small proportion of biofuel.

¹⁹ For biofuels, takes into account only those complying with sustainability criteria, cf. last subparagraph of Article 5(1).

²⁰ Facilitates comparison with Table 12 of the NREAP.

²¹ Biofuels included in Article 21(2) of Directive 2009/28/EC.

²² From the total amount of bioethanol/bio-ETBE.

²³ Biofuels included in Article 21(2) of Directive 2009/28/EC.

²⁴ From the total amount of biodiesel.

²⁵ Biofuels included in Article 21(2) of Directive 2009/28/EC.

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

Table 2: Overview of all policies and measures

Name and reference of the measure	Type of measure*	Expected result**	Target group and/or activity***	Existing or planned****	Start and end dates of the measure
1. Support for electricity produced from renewable sources	Financial measure: Feed-in support scheme	By 2020, an increase of 1,913 GWh of electricity produced from RES in comparison with 2005	Independent electricity producers in the electricity production business	A new support scheme from 2009 that upgrades the previous support scheme from 2002	Start of implementation of new support scheme 1 December 2009, which we will have to re-notify to the European Commission in ten years' time for the following ten years.
2. Promoting the installation of biomass boilers	Allocation of financial incentives in the form of grants	Production of energy from renewable sources	End-users	Existing	2009 - 2015
3. Promoting micro district heating and district heating systems for wood biomass	Allocation of financial incentives in the form of grants	Production of energy from renewable sources	End-users	Existing	2009 - 2015
4. Promoting the use of solar collectors in households	Financial incentives, investment subsidies (non-refundable financial incentives, loans)	Additional heat production through solar collectors	Households	Existing	from 2008 loans from 2004
5. Promoting the use of wood biomass boilers in households	Financial incentives, investment subsidies (non-refundable financial incentives, loans)	Increased heat production from wood biomass	Households	Existing	from 2008 loans from 2004

6. Promoting the use of heat pumps for the preparation of sanitary hot water and heating in households	Financial incentives, investment subsidies (non-refundable financial incentives, loans)	Increased use of renewable energy sources	Households	Existing not in the NREAP	from 2010 loans from 2004
7. Promoting the production of electricity from renewable sources	Financial incentives, investment subsidies (loans)	Increased production of electricity from renewable sources	Legal persons, households	Existing not in the NREAP	from 1998

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

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

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

**** Does this measure replace or complement measures contained in Table 5 of the NREAP?

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

We added a new Article 5a to the Act Amending the Energy Act (Official Gazette of the Republic of Slovenia [UL RS] No 22/10, EZ-D) which establishes an exception for owners of generating plants up to 50 kW – specifically, there is no requirement for them to be organised in accordance with the provisions of the Companies Act, but they may perform their electricity production business as natural persons.

With the adoption of the Decree Amending the Energy Infrastructure Decree (UL RS No 75/10), we simplified procedures for installing electricity generators that use renewable energy sources and are mounted on or in buildings. No construction permit is required for fuel cells and wind power plants up to 50 kW or for solar power plants up to 1 MW, since the installation of such plants is regarded as investment maintenance work.

The recast Mining Act (UL RS No 111/13) specifies that no mining permit is required to exploit geothermal energy using geoprobes and geocollectors and, for reinjection, only for depths exceeding 30 m.

In September 2010, in cooperation with Borzen, the electricity market organiser, and SODO, the electricity distribution network system operator, the ministry responsible for energy issued a booklet containing useful advice for the construction of small-scale installations for the generation of electricity from renewable sources and the cogeneration of heat and power (an updated third edition of the booklet was published in January 2012) (http://www.mg.gov.si/fileadmin/mg.gov.si/pageuploads/Energetika/Dokumenti/Elektrarne_OVE_SPTE_brosura.pdf). The aim of this booklet is to disseminate information on and educate potential investors in the possibility of constructing small-scale electricity-generating installations, and to serve as a guide to procedures for acquiring permits and commencing production.

The draft new Energy Act (EZ-1) currently before the National Assembly and scheduled for adoption in January 2014 abolishes the obligation for all energy facilities to obtain an authorisation (including wood biomass boilers and district heating systems using RES) except for power plants of more than 1 MW. It also abolishes the licence for the performance of energy activities, thereby eliminating some administrative barriers.

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

Measures for ensuring access to the network for electricity generated from renewable sources and for high efficiency cogeneration have already been laid down in legislation for implementation of Directive 2001/77/EC; they ensure access to the network and provide for exemption from the costs of grid connection, excluding the costs of implementing a connecting line and priority dispatch. This is ensured on the basis of the following articles of the Energy Act: 64j, 64k, 64l and 64m.

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

Support for electricity produced from renewable sources:

The Slovenian support scheme for electricity produced from renewable sources and for high-efficiency cogeneration has been harmonised with EU regulations. It accords with the Guidelines on State Aid for Environmental Protection (2008/C82/01) and aims to foster the establishment of a stimulative investment environment for new projects related to renewable energy sources and efficient energy use.

In accordance with the guidelines, support is defined as financial aid for electricity production in RES generating plants, where the costs of producing such electricity exceed the price that can be obtained for it on the electricity market.

In Slovenia, support for electricity produced in RES generating plants and in the cogeneration of heat and power (CHP) comprises:

- guaranteed purchase of electricity ('guaranteed purchase'). On the basis of this support, irrespective of the price of electricity in the market, the support centre buys all the acquired net electricity produced, for which the RES or CHP generating plant has received guarantees of origin, at the guaranteed electricity prices set out in the Decree on support for electricity generated from renewable energy sources (UL RS No 37/2009, and amendments) and the Decree on support for electricity produced from high-efficiency cogeneration (UL RS No 37/2009, and amendments);
- financial aid for current operations ('operating support'). This support is allocated for net electricity generated for which a guarantee of origin has been received and which RES and CHP electricity producers sell themselves on the market or use for their own consumption, provided the costs of producing this energy are greater than the price that can be obtained for it on the electricity market.

RES generating plants with a nominal power of up to 5 MW and CHP generating plants with a nominal power of up to 1 MW are eligible for the guaranteed purchase of electricity. For such generating plants, during the validity of the contract on guaranteed purchase, the support centre regulates the registration of the operating forecast and balances the difference between the forecast and actual production, including the balance-sheet affiliation. RES generating plants engaged in the co-incineration of wood biomass are not eligible for guaranteed purchase, irrespective of the size class of the plant.

RES generating plants with a nominal power of up to 5 MW and CHP generating plants with a nominal power of up to 1 MW may decide, instead of guaranteed purchase, to sell electricity independently on the market and to receive operating support, where they must themselves arrange the registration of their operating forecast and the balancing of the difference between forecast and actual production, including balance-sheet affiliation.

RES generating plants with a nominal power of 5 MW or more and CHP generating plants with a nominal power of 1 MW or more are entitled to receive operating support only.

The duration of support is defined in the decision allocating support, and is 15 years for new RES generating plants and 10 years for new CHP generating plants.

Support is paid out for net electricity production for which the support centre receives guarantees of origin.

Those eligible for support entitled to choose the method of support they receive communicate their decision on the method of support provision in their applications for a decision allocating support sent to the Energy Agency.

The level of guaranteed purchase prices for electricity is the same as the reference costs of electricity generation for individual production technologies and size classes. The price in the contract on guaranteed purchase, where the input energy product does not represent a cost, is formulated only from the fixed part of the price, but at RES generating plants at which the input energy product represents a cost, it is also formulated from the variable part of the price, in the same ratio as the fixed and variable parts of the reference costs.

Operating support is the difference between the reference costs of producing electricity in individual types of generating plants and the reference market price of electricity.

If on the basis of the Energy Agency's forecast reference market prices of electricity it is determined that the price of electricity in the market, where account is also taken of the characteristics of operating individual types of generating plant, is higher than the reference costs of electricity production applying to the period in question, operating support for electricity for the period in question is not paid.

Eligibility for support is held by new and mainly new RES and CHP generating plants that are in possession of a valid declaration for the generating plant and that meet the prescribed conditions observed by the Energy Agency in the process of deciding on eligibility for support.

Further information:

<http://www.energetika-portal.si/podrocja/energetika/podporna-shema-ove-in-spte/>

The new Energy Act currently before the National Assembly and scheduled for adoption in January 2014 provides for changes in the support scheme; specifically, the new provisions in EZ-1 empower the Slovenian Government to decide on the projected growth of investments in RES and CHP generating plants for subsequent periods, depending on the achievement of interim targets fixed in the action plans for renewable energy and energy efficiency and taking into account the possibility of increasing contributions and the availability of other resources for the support scheme, as provided for by the Energy Act.

In order to prevent the costs of the support scheme rising too rapidly in future, the thresholds for generating plants eligible for support are being lowered from 125 MW to 10 MW for RES generating plants except for wind-powered plants for which the threshold is 50 MW, and from 200 MW to 20 MW for CHP generating plants. In the period 2009-2013, no generating plants were built that would exceed the threshold set by the amendment.

The Act requires the Energy Agency to conduct a public call each year for projects for RES and CHP generating plants that wish to enter the support scheme; in this process, when ranking projects, account should be taken of the conditions to be set by the Government determining the volume of the new investments and adhering to the action plans for the period stipulated.

There are other important new provisions in the Energy Act which specify other resources potentially at the disposal of the Government to ensure funding for the implementation of support schemes and thereby reduce pressure on final customers. To safeguard the competitiveness of the energy-intensive economy, the Government may also redistribute the contribution burden among customer groups, if this does not conflict with State aid rules.

Programme for promotion of the energy use of wood biomass

The programme for promotion of the energy use of wood biomass is carried out via two public calls for applications: Those entitled to grants are, primarily, companies and sole traders. Both calls for applications are carried out under the state aid allocation rules; aid intensity therefore ranges from 30 to 50%.

Financial incentives are intended to promote innovative systems based chiefly on high-efficiency energy conversion technologies and the exploitation of renewable energy sources.

The promotion programme is carried out via two public calls for applications. The first call for applications is intended for the construction of district heating systems and the second for the construction of micro district heating systems and the installation of individual wood biomass boilers. In both cases, projects entitled to financing under axes 1 and 3 of the Rural Development Programme are excluded.

Grants may be obtained for the construction or extension of district heating systems which use wood biomass or geothermal energy as their energy source. Eligible costs include a boiler room incorporating one or more wood biomass boilers up to 20 MW or equipment for the cogeneration of heat and power from wood biomass, and the installation of a solar energy system, but not the implementation of a geothermal borehole. Investors that construct a new boiler room incorporating wood biomass boilers as the energy source for an existing district network are also eligible for funding. An investment project must amount to at least EUR 150,000 in the case of expansion and EUR 400,000 in the case of the new construction of wood biomass heating installations.

Likewise, grants are allocated for the installation of wood biomass heating equipment with a power of at least 150 kW and for the implementation or modernisation of the primary section of a micro district heating distribution line with a total line length of not more than 300 m and four users of heat in buildings outside the facility in which the heating installation is located.

Where the use of solar energy as an additional energy source contributes to improving the cost-effectiveness of heat generation, the solar energy system may form part of the project.

In accordance with the Directive on the energy performance of buildings, the ministry responsible for energy is drafting an analysis of cost-effective levels of minimum energy performance requirements for buildings and a National Action Plan for Promoting Almost Zero-Energy Buildings. It is expected that the Analysis will be completed in January 2014 and the Action Plan by April 2014. It will include an overview of the situation, the targets set and the measures to achieve these targets. The measures will be divided into systemic and incentivising measures to increase the proportion of almost zero-energy buildings. Targets and measures shall be set separately for the public sector.

The ministry responsible for energy is drafting a National Action Plan for Promoting Almost Zero-Energy Buildings, planned for completion by mid-2014. It will include an overview of the situation, the targets set and the measures to achieve these targets. The measures will be divided into systemic and incentivising measures to increase the proportion of almost zero-energy buildings. Targets and measures shall be set separately for the public sector.

[Translator: lines repeated in the last two paragraphs are as in the original.]

Table 3: Support schemes for renewable energy

RES support schemes in 2012		Per-unit support	Total (EUR millions)
Installation of solar panels^a		EUR/m ²	
Grant incentive	Investment subsidies (capital grants or loans) (EUR/unit)	maximum by tender 150.00 average 144.43	1.391
Installation of vacuum solar panels^a		EUR/m ²	
Grant incentive	Investment subsidies (capital grants or loans) (EUR/unit)	maximum by tender 200.00 average 189.40	0.522
Installation of ground/water or water/water heat pumps (HP) for heating and the preparation of hot sanitary water^a		EUR/pc.	
Grant incentive	Investment subsidies (capital grants or loans) (EUR/unit)	maximum by tender 2 000.00 average 2 298.94	0.931
Installation of air/water HP for heating and the preparation of hot sanitary water^a		EUR/pc.	
Grant incentive	Investment subsidies (capital grants or loans) (EUR/unit)	maximum by tender 1 500.00 for COP <3.6 1 000.00 average 1 264.66	1.915
Installation of air/water HP for the preparation of hot sanitary water^a		EUR/pc.	
Grant incentive	Investment subsidies (capital grants or loans) (EUR/unit)	maximum by tender 250.00 average 249.89	0.756
Replacement of central heating boilers with biomass boilers (woodchips, pellets, logs)^a		EUR/pc.	
Grant incentive	Investment subsidies (capital grants or loans) (EUR/unit)	maximum by tender for woodchips and pellets 2 000.00 for logs 1 500.00 average 1 446.74	5.209
Hydroelectric power plants^b		EUR/MWh	b+h: 5.8
Guaranteed purchase of electricity	Hydroelectric power plants up to 50 MW	105.47	
	Hydroelectric power plants up to 1 MW	92.61	
	Hydroelectric power plants over 1 MW	82.34	
Wind generators^c		EUR/MWh	c+i: >0
Guaranteed purchase of electricity	Wind generators	95.38	
Solar power plants^d		EUR/MWh	d+j: 38.2
Guaranteed purchase of	Solar power plants on buildings up to 50 kW	150.00	

electricity			
	Solar power plants on buildings up to 1 MW	137.19	
	Solar power plants on buildings over 1 MW	113.85	
	Ground-level solar power plants up to 50 kW	140.95	
	Ground-level solar power plants up to 1 MW	129.86	
	Ground-level solar power plants over 1 MW	104.68	
Geothermal power plants ^e		EUR/MWh	
Guaranteed purchase of electricity	Geothermal power plants	152.47	
Wood biomass power plants ^f		EUR/MWh	f+l: 8.7
Guaranteed purchase of electricity	Wood biomass power plants up to 50 kW	/	
	Wood biomass power plants up to 1 MW	246.29	
	Wood biomass power plants over 1 MW	185.70	
Biogas power plants ^g		EUR/MWh	g+m: 18.3
Guaranteed purchase of electricity	Biogas power plants using agricultural biomass up to 50 kW	160.56	
	Biogas power plants using agricultural biomass up to 1 MW	156.31	
	Biogas power plants using agricultural biomass over 1 MW	141.42	
	Biogas power plants using biomass from waste up to 50 kW	139.23	
	Biogas power plants using biomass from waste up to 1 MW	139.23	
	Biogas power plants using biomass from waste over 1 MW	129.15	
	Biogas power plants using biomass from sewage sludge up to 50 kW	85.84	
	Biogas power plants using biomass from sewage sludge up to 1 MW	74.42	
	Biogas power plants using biomass from sewage sludge over 1 MW	66.09	
	Biogas power plants using biomass from landfill gas up to 50 kW	99.33	
	Biogas power plants using biomass from landfill gas up to 1 MW	67.47	

	Biogas power plants using biomass from landfill gas over 1 MW	61.67	
Hydroelectric power plants^h		EUR/MWh	
Feed-in premium	Hydroelectric power plants up to 50 MW	57.49	
	Hydroelectric power plants up to 1 MW	44.63	
	Hydroelectric power plants over 1 MW	32.13	
Wind generatorsⁱ		EUR/MWh	
Feed-in premium	Wind generators	50.75	
Solar power plants^j		EUR/MWh	
Feed-in premium	Solar power plants on buildings up to 50 kW	105.42	
	Solar power plants on buildings up to 1 MW	92.61	
	Solar power plants on buildings over 1 MW	50.68	
	Ground-level solar power plants up to 50 kW	96.37	
	Ground-level solar power plants up to 1 MW	85.28	
	Ground-level solar power plants over 1 MW	58.58	
Geothermal power plants^k		EUR/MWh	
Feed-in premium	Geothermal power plants	101.14	
Wood biomass power plants^l		EUR/MWh	
Feed-in premium	Wood biomass power plants up to 50 kW	/	
	Wood biomass power plants up to 1 MW	195.52	
	Wood biomass power plants over 1 MW	134.37	
Biogas power plants^m		EUR/MWh	
Feed-in premium	Biogas power plants using agricultural biomass up to 50 kW	111.46	
	Biogas power plants using agricultural biomass up to 1 MW	105.54	
	Biogas power plants using agricultural biomass over 1 MW	90.09	
	Biogas power plants using biomass from waste up to 50 kW	90.13	
	Biogas power plants using biomass from waste up to 1 MW	88.46	
	Biogas power plants using biomass from waste over 1 MW	77.82	
	Biogas power plants using biomass from sewage sludge up to	34.51	

	50 kW		
	Biogas power plants using biomass from sewage sludge up to 1 MW	23.09	
	Biogas power plants using biomass from sewage sludge over 1 MW	14.76	
	Biogas power plants using biomass from landfill gas up to 50 kW	48.00	
	Biogas power plants using biomass from landfill gas up to 1 MW	16.14	
	Biogas power plants using biomass from landfill gas over 1 MW	10.34	
Heating using wood biomass (boilers, micro district and district heating systems) ^b			
Production incentive	tendering	30 to 50% of the investment value	3.2
Total annual estimated support in the electricity sector		143,73 €/MWh	42.4
Total annual estimated support in the heating sector			9.437
Total annual estimated support in the transport sector			

* The quantity of energy supported by the per unit support gives an indication of the effectiveness of the support for each type of technology.

a: The table includes the financial incentives approved (decisions issued) for the programmes listed. The figures are for the year 2012.

b, c, d, e, f, g, h, i, j, k, l, m: support deployed for 2012. In 2012, in spite of the smaller amount of electricity produced, payments were much higher than in previous years. This is mainly due to the elimination of units covered by the old support scheme, which was terminated at the end of the year (that scheme included many hydroelectric plants which, under the scheme, operated in return for a low average level of support). Although the total quantity of electricity generated in 2012 was 31% less than in 2011, 29% more support was paid than in 2011.

Solar power plants (d and j): the amount of aid has changed several times, in particular in 2012, reflecting the situation on the market.

Demonstration and pilot projects, and energy consulting, information and training programmes

Demonstration and pilot projects are not implemented from Cohesion Fund resources. The old regulations on the minimum energy performance of buildings were in force when the Operational Programme for Environmental and Transport Infrastructure Development was being drawn up. Demonstration projects were planned in order to show that buildings could be built with a greater level of energy-efficiency than was laid down in the minimum energy performance standards. The new Rules on the efficient use of energy in buildings (UL RS Nos 93/08, 47/09 and 52/10) began to be applied in 2010; these set substantially higher standards of energy efficiency for all new and renovated buildings. The Rules introduce stricter requirements for public buildings. The requirements are so strict that there is no

longer any need for demonstration projects that would undertake to build to a superior energy-efficiency standard.

Rules on the efficient use of energy in buildings

The new Rules on the efficient use of energy in buildings (PURES, UL RS No 52/10), which entered into force on 1 July 2010, will have a significant impact on buildings that will be renovated and constructed in the future, determining strict criteria for thermal insulation and the mandatory share of renewable energy sources in new buildings. The Rules were adopted on the basis of the requirements laid down by the European Directive on the energy performance of buildings.

The more important requirements of PURES are as follows:

- 25% of energy to be provided from renewable sources;
- more efficient thermal insulation in new buildings and buildings to be renovated (this must be $U < 0.28 \text{ W/m}^2\text{K}$ for residential buildings, which means 10 cm or more of insulation on modular brick);
- a reduction in temperature in water heating systems from 70 or 90 to 55 degrees Celsius;
- a maximum permitted level of power for the cooling of a building which may not be exceeded;
- restrictions in the average illumination of a building and in the use of lighting equipment.

The shares of heat from renewables to be met by all district heating systems are set out in the NREAP and the requirement will be incorporated in the new Energy Act that by 2020 all district heating and cooling systems must be efficient.

The new Energy Act also imposes the requirement that the local energy plan (LEK) – the basic energy act drawn up by each local authority – must be coordinated with the authority's spatial plan. Based on LEC guidelines, local authorities may stipulate the priority use of energy for heating.

Decree on promotion of the use of biofuels and other renewable fuels for the propulsion of motor vehicles (UL RS No 103/07)

The Decree on promotion of the use of biofuels and other renewable fuels for the propulsion of motor vehicles (UL RS Nos 103/07, 92/10, 74/11) is being implemented.

Decree on Green Public Procurement

The Decree on Green Public Procurement (UL RS No 102/11) started to be implemented from 13 March 2012. Among other things, the Decree specifies an obligatory share of electricity to be produced from renewable sources for all liable entities.

Statistical data:

In 2012, 58 contracts were awarded for the supply of electricity, with a total value of € 37 634 187 (excluding VAT). Environmental aspects (presumably, chiefly the mode of generating the electricity) were taken into account in the award of 20 of these contracts, worth a total of € 24 589 551 (excluding VAT). Thus, in terms of the number of procurement procedures for the supply of electricity, as many as 34% were green, corresponding to 65% of the value of the contracts. According to the claims of the contracting authorities, when awarding the public procurement contracts environmental aspects were taken into account in seven cases in the technical specifications, in 11 cases in the selection criteria and in two

cases in both the technical specifications and the selection criteria. The share of electricity produced from renewable energy sources or high-efficiency cogeneration required or graded with extra points under the selection criteria within the public procurement process is not known. The statistical data indicate that at least nine of the contracts awarded are such that the contracting authorities are being delivered a share of less environmentally burdensome energy, since environmental aspects were included (inter alia) in the technical specifications. As for the remaining 11 green public procurement contracts we do not know whether or not offers were selected as offering a share of electricity produced from renewable energy sources or high-efficiency cogeneration.

Joint public procurement:

On the basis of a joint governmental public procurement procedure, in 2012 approximately 135 contracting authorities (ministries and their constituent bodies, government departments, administrative units, the National Assembly, all courts, five municipal authorities, four primary schools and a kindergarten) were supplied with electricity by GEN-I d.o.o. of Vrbinja 17, 8270 Krško. In 2012, they received a total 60 476 MWh of electricity, which included 42 447 MWh from renewable energy sources or high-efficiency cogeneration. As per the requirements of the tender documents and procurement contracts, the supplier must ensure that at least 70 % of the electricity supplied is from renewable energy sources or high-efficiency cogeneration. The Decree on green public procurement (UL RS Nos 102/11, 18/12, 24/12, 64/12 and 2/13) stipulates 40% as the minimum share of electricity produced from renewable energy sources or high-efficiency cogeneration.

Obligatory shares of RES in district heating systems and promoting RES in local energy plans

The shares of heat produced from RES that must be attained by all district heating systems are laid down in the NREAP. The Rules Amending the Rules on the Methodology of the Obligatory Contents of Local Energy Plans (UL RS No 3/11) lay down that energy activities ensuing from a plan must meet the targets set out in the NREAP.

Improving administrative procedures for installing facilities for decentralised electricity generation

The government has adopted the Decree amending the Decree on energy infrastructure (UL RS No 75/10).

Citizens' Energy Advice (EnSvet)

The ENSVET – Citizens' Energy Advice project, aimed at providing advice and raising awareness and the level of information provided to the public regarding the rational use of energy and greater use of renewable energy sources, was supported throughout the period 2010-2013. In 2011, the co-financing of activities by the Ministry of the Economy – then responsible for energy – was transferred to the Eco Fund.

Within the limits of cofinancing, EUR 567 072 were disbursed in 2012 while the expenditure for 2013 is estimated to be EUR 605 124. Through written reports, energy advisers provided 5 867 pieces of advice in 2012 as against 6 164 in 2013, again less than the 6 381 achieved in 2010, the chief reason being the limited funding allotted in that period to cofinancing activities. In recent years, efficient energy use has, on average, accounted for 55% of the advice given and renewable energy sources for 45% (10% wood biomass, 9% heat pumps, 13% solar energy systems, the remainder being accounted for by other RES topics, including photovoltaics). In a four-year period, in addition to providing 24 048 pieces of advice on specific topics, advisors have held over 50 000 short advisory sessions with citizens, produced over 1 000 expert articles, participated in more than 1 000 local radio and TV

broadcasts, and completed more than 1 000 lectures, mentor hours, field visits and other agreed activities.

A total of more than EUR 2.37 million of budget funds and funds drawn from the Eco Fund pursuant to Article 4(2)(6) of the Decree on energy savings at end-users (UL RS No 57/2011) were spent on implementation of this instrument from 2010 to 2013.

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

Beneficiaries of support were obliged to submit guarantees of origin to the support centre for electricity produced from renewable sources and supported by support funds paid by all final electricity customers. These guarantees are granted to all final electricity customers in Slovenia in proportion to the contribution they pay to the total support funds used. For electricity that is no longer eligible for support, suppliers may request guarantees of origin and take them into account when presenting to final customers, in their accounts and promotional material, the contribution made by renewable energy in the total amount of electricity supplied.

4. Please provide information on how, where applicable, the support schemes have been structured to take into account RES applications that give additional benefits, but may also have higher costs, including biofuels made from wastes, residues, non-food cellulosic material and ligno-cellulosic material) (Article 22(1)(c) of Directive 2009/28/EC).

The support scheme for electricity produced from renewable energy sources has been designed so that certain sustainability criteria must be taken into account if electricity is to be eligible for support. In certain cases, a more sustainable approach to the use of renewable sources means eligibility for additional bonuses:

- Generating plants that exploit the energy potential of watercourses may receive support only if they ensure the ecologically acceptable flow of the watercourse.
- Electricity produced from wood biomass must be produced alongside the simultaneous use of at least a part of the heat so that 60% total efficiency is achieved. If the wood biomass used has an FCS or PEFC certificate, the electricity produced is eligible to a 10% bonus.
- Biogas generating plants are not eligible for support if they use substrate that contains more than 40% by volume of the main field crops.

There were no producers of biofuels from waste, residues, food cellulosic material or ligno-cellulosic material in Slovenia in 2011 and 2012.

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

Article 64f of the Energy Act stipulates that a guarantee of origin of electricity is a document that enables generators to show that the electricity they produced was generated in high-efficiency cogeneration or from renewable sources. Guarantees of origin may be transferred to another party, or may prove that electricity was generated in high-efficiency cogeneration or from renewable sources when obtaining operational support or for guaranteed purchases of electricity.

A producer may obtain a guarantee of origin for electricity generated in a plant for the production of energy from renewable sources which has a valid declaration and which shows that, in the period to which the guarantee relates, the generating plant operated in such a way as to meet the conditions and prescribed requirements.

Article 64g of the Energy Act stipulates that guarantees of origin are issued by the Energy Agency in an administrative procedure at the request of an electricity producer. If a producer receives support under the Energy Act for electricity from a generating plant, all guarantees of origin that the producer obtained for electricity from that plant while in receipt of support are transferred to the Support Centre. The Government has regulated in greater detail the method of issuing guarantees of origin in the Decree on the issuing of declarations for production plants and of guarantees of origin (UL RS No 8/09).

A guarantee of origin issued by competent issuers in other European Union Member States in the manner and under the conditions set out in Directive 2009/27/EC have the same evidential power in the Republic of Slovenia as a guarantee of origin issued by the Energy Agency. Refusal to recognise a guarantee of origin as proof must be based on objective, transparent and non-discriminatory criteria. A person that refuses to recognise a guarantee of origin issued by a competent issuer in another European Union Member State is obliged to recognise the guarantee of origin at the request of the European Commission.

Article 64i of the Energy Act stipulates that the Energy Agency shall maintain a register of guarantees of origin. The register must contain at least data on:

- electricity generated by individual electricity generating plants,
- guarantees of origin held by an individual holder, including data on the country in which the individual guarantee was issued,
- all transfers of individual guarantees of origin,
- the use of guarantees of origin to demonstrate that a certain quantity of electricity was generated in high efficiency cogeneration or from renewable sources (use of guarantees), with all data on the guarantee used and data on the owner of the guarantee used,
- a list of guarantees of origin that have been exported and imported.

Through the general Act on the use of the register of guarantees of origin of electricity and the method of reporting data on electricity generation (UL RS No 33/09)), the Energy Agency has stipulated in detail the method and rules for maintaining the register of guarantees of origin, the conditions for opening an account with the register, the management and closure of accounts in the register, and the method of and form for reporting data on electricity generation.

- * Amount of raw material, if possible, in m³ for biomass from forestry and in tonnes for biomass from agriculture and fishery, and biomass from waste.
- ** The definition of this biomass category should be understood in line with Table 7 of Part 4.6.1 of Commission Decision C (2009) 5174 final establishing a template for National Renewable Energy Action Plans under Directive 2009/28/EC.
- a - Source of data: Joint Forest Sector Questionnaire (JFSQ) for 2010. The value includes the quantity of forest wood produced for heating.
- b - The value includes quantities of biomass from municipal and industrial waste processed in 2009 and 2010 using the R1 process (use principally as fuel or for obtaining energy – Annex 5 of the Decree on waste management (UL RS No 34/2008)). The values also include the quantities of waste imported (from EU and non-EU countries); however, the Statistical Office of the Republic of Slovenia does not handle precise data on the share of imported biomass in the share of waste processed using the R1 process. We have taken the biodegradable waste referred to in Annex 1 of the Decree on the treatment of biodegradable waste (UL RS No 62/2008) as waste from biomass. Directive 2009/28/EC lays down that biomass also includes biodegradable waste.

Table 4a. Current domestic agricultural land use for production of crops dedicated to energy production (ha)

Land use	Surface area (ha)	
	2011	2012
1. Land used for common arable crops (wheat, sugar beet, etc.) and oilseeds (rapeseed, sunflower, etc.) (Please specify main types)	4 770	5 141
2. Land used for short-rotation trees (willows, poplars) (Please specify main types)		
3. Land used for other energy crops such as grasses (reed canary grass, switch grass, Miscanthus), sorghum (Please specify main types)		

The data concern rapeseed.

In Slovenia, the production of biofuels from oil – obtained by pressing oilseed rape seeds – offers the greatest potential. The bulk of rapeseed produced in Slovenia is sold to Austria, while vegetable oil is imported from the Balkan region for the production of biodiesel.

In Slovenia in 2010 only one registered producer produced biodiesel, in the amount of 20 561 tonnes. In 2011 it produced 649 tonnes and, in 2012, 1 059 tonnes.

In the assessment of the ministry responsible for agriculture, Slovenia has an area of at most 6 000 to 7 000 hectares suitable for the cultivation of rapeseed, which would be sufficient to produce approximately 11 to 22 tonnes of biodiesel.

7. Please provide information on any changes in commodity prices and land use within your Member State in the preceding 2 years associated with increased use of biomass and other forms of energy from renewable sources. Please provide, where available, references to relevant documentation on these impacts in your country. (Article 22(1) (h) of Directive 2009/28/EC).

When assessing commodity price impacts, it is suggested to consider at least the following commodities: common food and feed crops, energy wood, pellets.

We have no information on prices.

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

Table 5: Production and consumption of biofuels from Article 21(2) (ktoe)

Biofuels from Article 21(2) ²⁶	2011	2012
Production – Fuel type X (Please specify)		
Consumption – Fuel type X (Please specify)		
Total production of Article 21(2) biofuels		
Total consumption of Article 21(2) biofuels		
% share of Article 21(2) fuels in total RES-T		

There were no producers of biofuels from waste, residues, food cellulosic material or ligno-cellulosic material in Slovenia in 2011 and 2012.

9. Please provide information on the estimated impacts of the production of biofuels and bioliquids on biodiversity, water resources, water quality and soil quality within your country in the preceding 2 years. Please provide information on how these impacts were assessed, with references to relevant documentation on these impacts within your country (Article 22(1)(j) of Directive 2009/28/EC).

We have no assessment of impacts.

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

Table 6: Estimated GHG emission savings from the use of renewable energy (t CO₂eq.)

Environmental aspects	2011	2012
Total estimated net GHG emission saving from using renewable energy²⁷	4.400.958	4.776.419
- Estimated net GHG saving from the use of renewable electricity	2.763.292	3.081.351
- Estimated net GHG saving from the use of renewable energy in heating and cooling	1.574.543	1.602.211
- Estimated net GHG saving from the use of renewable energy in transport	63.124	92.857

²⁶ Biofuels produced from waste, residues, non-food cellulosic material and ligno-cellulosic material.

²⁷ The contribution of gas, electricity and hydrogen from renewable energy sources should be reported depending on the final use (electricity, heating and cooling or transport) and only be counted once towards the total estimated net GHG savings.

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

Table 7: Actual and estimated excess and/or deficit (-) production of renewable energy compared to the indicative trajectory which could be transferred to/from other Member States and/or third countries in [Member State] (ktoe)^{28, 29}

	(2009)	(2010)	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Actual/estimated excess or deficit production (Distinguished per type of renewable energy and per origin/destination of import/export)	0	0	0	0	0	0	0	0	0	0	0	0

11.1. Please provide details of statistical transfers, joint projects and joint support scheme decision rules.

Statistical transfers were not performed.

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

There were no producers of biofuels from waste, residues, food cellulosic material or ligno-cellulosic material in Slovenia in 2011 and 2012.

Please note that in the first progress report (2011 report), Member States are invited to outline their intentions with regard to the questions addressed in Article 22(3) (a)–(c). In addition, Member States are also welcome to provide any other information considered relevant to the specific situation of developing renewable energy of each Member State.

In connection with the questions addressed in Article 22(3) (a)–(c) in Slovenia:

- (a) we currently do not intend to establish an administrative body responsible for processing authorisation, certification and licensing applications for renewable energy installations and for providing assistance to applicants. These tasks are divided between the ministry responsible for energy (www.mzip.gov.si), the Ministry of Agriculture and the Environment (www.mko.gov.si), the Energy Agency of the Republic of Slovenia (www.agen-rs.si) and Borzen (www.borzen.si). Information is available from these institutions' websites;

²⁸ Please use actual figures to report on the excess production in the two years preceding submission of the report, and estimates for the following years up to 2020. In each report, the Member State may correct the data of the previous reports.

²⁹ When filling in the table, for deficit production please mark the shortage of production using negative numbers (e.g. -x ktoe).

- (b) likewise, we currently have no intention of providing for automatic approval of planning and permit applications for renewable energy installations in the event that the body responsible for issuing permits fails to respond by the deadline set;
- (c) we are pursuing a project which will make clear the geographical locations suitable for the exploitation of energy from renewable sources in land use planning and the establishment of district heating and cooling. The database is still being completed, which means that some data are missing; however, the data currently accessible are available for perusal by all interested parties at <http://www.engis.si>.