



**EXPERT EVALUATION NETWORK  
DELIVERING POLICY ANALYSIS ON THE  
PERFORMANCE OF COHESION POLICY 2007–2013  
YEAR 1 – 2011**

**TASK 1: POLICY PAPER ON RENEWABLE ENERGY AND  
ENERGY EFFICIENCY OF RESIDENTIAL HOUSING**

**SLOVENIA**

**VERSION:FINAL**

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**A report to the European Commission  
Directorate–General Regional Policy**

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## LIST OF ABBREVIATIONS

- RES: renewable energy sources
- RES-E: Electricity production from renewable energy sources
- CHP: Combined heat and power (cogeneration)
- RES-H&C: Production of heat and cold from renewable energy sources
- NEEAP: The National Energy Efficiency Action Plan
- NEP: National Energy Programme
- NREAP: National Renewable Energy Action Plan
- EE/RE projects: Energy efficiency/Renewable energy projects

## 1. EXECUTIVE SUMMARY

Because Slovenia has only few indigenous fossil energy resources as oil and gas (the most important source in the world is coal), renewable energy sources (RES) are an important source of primary energy in Slovenia. In order to meet objectives set (e.g. share of renewable energy sources in final energy demand of 15.0% and achieving cumulative savings of at least 4261 GWh or 9% of the final energy consumption) Slovenia is carrying out many different activities to promote renewable energy sources and energy efficiency. These include both regulatory and financial measures, as well as awareness-raising measures. The focus of Slovene energy policy is on financial support (subsidies or grants), even though in the field of the energy efficiency (including residential housing) regulatory measures are getting on importance. The scale of support provided has been increasing in the last years and, in general, support does not vary between the different types of energy sources, with the exception of RES-E support to photovoltaic and between different regions or areas.

Cohesion Fund support represents an important part of energy policy in Slovenia. Support is/will be given for promotion and support towards energy efficiency and only to small extent towards renewable energy (use of biomass). Increased energy efficiency of residential housing is not included in the Cohesion Fund support. EUR 160 million is planned to be spent within Development priority "Sustainable use of Energy". The main areas of promotion are the following: (a) energy restoration and sustainable use of buildings; (b) efficient use of electrical energy in industry, public and service sectors; (c) innovative local energy supply systems; (d) demonstrational and pilot projects. There is no overlapping between Cohesion Fund measures and national measures.

Due to the organisational and implementation problems financial absorption is not satisfactory; however, the situation has improved in the second part of 2010 and in 2011. Despite the delays in implementation (spending so far is not in line with plans) there have not been any changes in the scale, form or focus of Cohesion Fund support since the programming period began. Due to the economic downturn Cohesion Fund support has become important source used to counter the effects of the recession.

Because Slovene public and business sectors are very energy-intensive (it takes on average 50% more energy to produce a unit of GDP in Slovenia than it does in Western Europe) the potential for energy savings is huge. There is a clear rationale for public intervention, because Cohesion Fund support could help to secure massive energy savings across the economy and thus reduce energy bills for businesses but also schools, hospitals, and other public buildings. Therefore economic (support for the development of the economy, energy savings) and especially environmental returns (reducing negative environmental impacts) of Cohesion Fund support are considerable.

## 2. NATIONAL POLICY

Slovenia has few indigenous fossil energy resources as oil and gas. Imports of these fuels make up over half of the total primary energy supply. Therefore renewable energy sources (RES) are an important source of primary energy in Slovenia. In general the consumption of RES in Slovenia is about 10% of total energy consumption. The biggest share of RES represents biomass, then hydropower and other RES (geothermal, biogas, heating solar systems and PV). In recent years, development has been most active in the utilisation of solar energy and biogas. In the development of renewable energy sources, Slovenia has set highly ambitious objectives for itself. These will contribute towards increasing the energy supply reliability, reducing the environmental impact, and towards creating new jobs. Share of renewable energy sources in final energy demand was 15.0% in 2008. Slovenia's target is to increase this percentage to 25% of its final energy balance by 2020. Slovenia is currently far away from meeting its RES targets. Situation is even worse in the field of energy efficiency. According to The National Energy Efficiency Action Plan 2008–2016 (hereinafter: NEEAP) Slovenia should achieve cumulative savings of at least 4261 GWh or 9% of the final energy consumption in Slovenia under the Directive 2006/32/EC. The necessary public fund for implementation of all measures in NEEAP is estimated at EUR 380 million.

The historical chronology of Slovenia's activities in the field of RES and energy efficiency goes back to the first year after the independence when the Slovenian government put its efforts into seeking an energy policy to replace the former supply oriented approach. In this way the first substantial budgetary allocations for energy efficiency and renewable energy resources were allocated in the new state budget for 1991.

Slovene energy policy is based on the National Energy Programme, which sets out the long-term developmental goals and trajectories of energy systems and energy supply in Slovenia. The Resolution on the National Energy Programme<sup>1</sup> coordinates the future operations of institutions dealing with the energy supply and determines goals and mechanisms for ensuring the reliable, competitive and environment-friendly supply of electricity services. At the moment the new National Energy Programme (hereinafter: NEP) is being formulated. The main objectives of the programme (draft version) are targeting secure, competitive and sustainable use and supply of energy, which in line with the Energy Act and international commitments gives priority to the improvement of energy efficiency and to the increase in the share of RES<sup>2</sup>.

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<sup>1</sup> Resolucija o Nacionalnem energetskem programu, Official Gazette of the Republic of Slovenia No. 57/2004, ReNEP.

<sup>2</sup> National Reform Programme Slovenia, 2011.

Besides National Energy Programme there are at least the following programmes influencing national policies in Member States to promote renewable energy sources and the energy efficiency (of residential housing): The National Energy Efficiency Action Plan 2008–2016 (NEEAP), National Renewable Energy Action Plan for the period 2010–2020 (NREAP) and Operational programme Environmental and Transport Infrastructure Development (OP ROPI).

The scale of the support has increased considerably in the last years. Due to limited funds from state budget the scope of the implementation of these programmes was considerably below the necessary level. In 2005 the allocated financial incentives for investments amounted to EUR 2.1 million of non-refundable funds; favourable loans in the amount of EUR 4.2 million were also granted. Compared to the average annual goals arising from the National Energy Programme only 8% realisation was achieved<sup>3</sup>.

The policies and measures to promote renewable energy sources and energy efficiency include both regulatory and financial measures, as well as awareness-raising measures. According to different aspects of RES policy the following support was available in Slovenia in the year 2010:

1. RES-E (Electricity production from renewable energy sources):

- a new RES-E support scheme entered into force on 12 July 2009. Together with an old RES-E support scheme (transition period until 31.12.2011) EUR 48.6 million of support was paid in 2010. The biggest share of support was allocated to the power plants using biogas (EUR 14.9 million), followed by CHP plants using fossil fuel (EUR 12.9 million) and hydroelectric power plants (EUR 11.3 million).
- RES-E fiscal support: Slovenia also promotes the RES-E through fiscal measures (loans, subsidies): low interest loans for companies (almost EUR 17 million) and for households (around EUR 700,000) were made available by “Eco Fund” (Ekološki sklad RS – Ekosklad)<sup>4</sup>. Eco Fund facilitates investments which are in line with the national and EU policy. The funds are accessible through annual tenders, which remain open until the fund is fully utilized, or until the end of the respective year. The funds shall trigger investments primarily in the area of energy efficiency, and also in the area of renewable energy by subsidizing investments with 20–25% of the total investment in the year 2011.

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<sup>3</sup> OP Environmental and Transport Infrastructure Development, 2007, p. 117.

<sup>4</sup> Eco Fund is 100 % state owned specialized public financial institution for: granting soft loans, issuing guarantees, equity financing, granting non-reimbursable subsidies, awareness raising activities, financial intermediary for environmental investment projects, energy efficient investment projects and investment projects using renewable energy sources in private companies, municipalities, municipal companies and households.

2. RES-H&C (Production of heat and cold from renewable energy sources): There is no direct support scheme for RES-H in Slovenia. The generation of RES-H is supported by subsidies for households (EUR 5.2 million) and low interest loans for household (around EUR 1.5 million) under the same conditions as RES-E investment projects supported by Eco Fund. Additional support is provided by Cohesion Fund (EUR 39.6 million), which supports investments in the more extensive individual systems and remote and joint systems for production of heat and electrical energy, with emphasis on renewable energy sources and cogeneration. Support of European Agricultural Fund for Rural Development (Rural Development Programme 2007–2013) is very limited.
3. RES-T (Transport): Quota obligation on fuel distributors is in place to promote biofuels in Slovenia. There are few financial measures for RES-T production: excise tax exemption and aids for growing energy crops.

The support does not vary between the different types of energy sources.

The intensity of implementation of energy efficiency measures has been increasing in the last years for all sectors according to the obligations from the EU Directives about the improvement of energy efficiency, promotion of renewable energy sources and decrease of emissions of greenhouse gasses. The main financial source of energy efficiency measures is Eco Fund: low interest loans for households (EUR 2.6 million) and subsidies for households (around EUR 3.8 million) provided by Eco Fund in the year 2010. The main focus of activities in the field of energy efficiency in residential sector in the last years has been on the subsidies of the thermal insulation of building shells and replacement of windows and glass, space heating system and heating of sanitary water using renewable energy sources (biomass heating boilers, heat pumps, thermal solar systems), renovation (energy sanitation) of old buildings, building new low energy and passive solar buildings.

The policies and measures to promote renewable energy sources include both regulatory and financial measures, as well as awareness-raising measures (see Annex). The focus of Slovene energy policy is on financial support (subsidies or grants). Nevertheless in the field of the energy efficiency (including residential housing) regulatory measures are getting on importance. The scale of support provided is increasing and, in general, support does not vary between the different types of energy sources.

Policy has changed since 2007 due to the following reasons:

- Regulatory reasons: as the implementation of Directive 2009/28/EC (Directive 2009/28/EC serves to affirm two objectives in the area of RES, the mandatory 20 % share of RES in gross final energy consumption in the European Community and the mandatory 10% share of RES in transport, which all Member States must achieve by

2020) or implementation of Directive 2006/32/EC (savings of at least 9 % of the final energy consumption in Slovenia.

- Increased RES–Electricity Support Policy: especially solar energy. Eligible technologies are biomass, biogas, wind, solar, geothermal, hydro, biodegradable waste plants up to 125 MW capacity. Support will be provided for 15 years. There is no cap on the total volume of electricity produced in a year or a cap on installed capacity, with the exemption of solar energy (limit is 5 MW installed capacity in the year 2011).
- Cohesion policy: EUR 160 million are targeted at the use of renewable energy sources and energy efficiency projects.

The support has been intensified in the last two years to achieve objectives set on one hand and to counter effects of the economic downturn on the other. The Slovenian government began addressing the crisis at its relatively early stage. A series of measures primarily aimed at the financial and business sector have been adopted, the first "initial" package in November and December 2008 and the second package in February 2009. The second stimulus package includes among others measures aimed to infrastructure, energy, environment and measures for maximizing the use of Cohesion policy & increased efficiency. Slovenia realised the possible win–win effects of energy saving measures for economic recovery and social benefits, therefore it has placed EE/RE projects in the national stimulus packages, in which EU funds appear as a central fiscal instrument.

One of main reasons why the scale of support provided is increasing despite subsequent constraints on public financing are legal obligations to support RES and efficient use of energy (Energy Act, different regulations) and implementation of support is not provided by ministries but by Eco Fund and by power market regulator (Borzen). In general, support does not vary between the different types of energy sources or between regions or areas.

### **3. ERDF AND COHESION FUND SUPPORT AND CONTRIBUTION TO NATIONAL POLICY**

Within the development priority “Sustainable use of energy” support is/will be given for promotion and support towards energy efficiency and more extensive use of renewable energy sources. EUR 160 million is planned to be spent. The main areas of promotion (priority guidelines) are the following:

1. *Energy restoration and sustainable use of buildings*: energy efficient restoration of existing buildings in the public sector, use of modern heating technologies, air conditioning and environment friendly decentralized energy supply systems with emphasis on renewable sources and cogeneration;

2. *Efficient use of electrical energy*: implementation of measures in industry, public and service sectors;
3. *Innovative local energy supply systems*: more extensive individual systems and remote and joint systems for production of heat and electrical energy, with emphasis on renewable energy sources and cogeneration;
4. *Demonstrational and pilot projects and energy consulting programmes*, informing programmes and training of energy users, potential investors, energy services providers and other target groups.

Due to the organizational (responsibility transferred from the Ministry of the Environment and Spatial Planning to the Ministry of the Economy in 2009) and implementation problems the following tenders were published up to the end of 2010:

1. One tender in the priority guideline “Energy restoration and sustainable use of buildings”: energy restoration of hospitals: 20 projects selected in the amount of app. EUR 52 million.
2. One tender in the priority guideline “Efficient use of electrical energy”, but no projects selected in the year 2010.
3. Four tenders in the priority guideline “Innovative local energy supply systems”:
  - district heating systems using biomass: 14 projects in the amount of EUR 6 million,
  - individual heating systems using biomass: 43 projects in the amount of EUR 3.6 million.

Financial absorption is not satisfactory, but the situation has improved in the second part of 2010 and in 2011 when the following new tenders were published (total funds available):

1. Individual heating systems using biomass (EUR 9 million).
2. Energy restoration of secondary schools and students’ residences (EUR 16 millions).
3. Efficient use of electrical energy in industry (EUR 6.5 million).

The scale of support in relation to other aims supported under Operational Programmes seems to be considerable in comparison to other new member states. A comparative view reveals major differences between the funding plans of the different countries. Only Lithuania can be said to be taking EE/RE seriously in its draft plans, by allocating 5.4% of all its SF/CF money for it, followed by Slovenia with 3.8%. On the other side of the spectrum, Poland, Hungary and most probably also Bulgaria are planning to give only token support for EE/RE, allocating just around 1% of all EU funding for it. In particular, the EE allocations are extremely low in both Poland and Hungary – at 0.5% of all their EU funding<sup>5</sup>.

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<sup>5</sup> Budgeting for the Future, Building another Europe, 2008, p. 103.



Comparing the scale of support in relation to national support is questionable, because Cohesion Fund support is focused on efficient use of electric energy in industry and energy efficient restoration of existing buildings in the public sector and only to a small extent to specific form of renewable energy support (use of biomass). Increased energy efficiency of residential housing is not included. The scale and the nature of support for the two aims do not vary between regions.

Support is not aimed at encouraging the development of the same sources of renewable energy or the same energy efficiency measures as national support. There exists division of funding sources according to the aim and form of support and according to the beneficiaries:

- RES-E support scheme is supported on the basis of the Regulation on the way of defining and accounting of fee to assure support to production of electricity from cogeneration with high efficiency and from renewable sources.
- RES-E and RES-H fiscal support for households and industry is financed on the basis of funds collected in line with the Regulation on energy savings ensured to final customers, according to the Regulation on the promotion of efficient energy use and use of renewable energy sources, finances of the Eco Fund and partially by Cohesion Fund (heating systems using biomass).
- Efficient use of energy in industry and public sector is financed by Cohesion Fund.

Despite delays in implementation (spending so far is not in line with plans) there have not been any changes in the scale, form or focus of Cohesion Fund support since the programming period began. Due to the economic downturn Cohesion Fund support has become important source used to counter the effects of the recession.

#### **4. RATIONALE FOR PUBLIC INTERVENTION**

Cohesion Fund support in Slovenia is focused on energy efficiency in industry and public buildings and only to small extent in renewable energy support (use of biomass). Activities conducted will increase energy saving and only partially promote development of renewable energy sources. It takes on average 50% more energy to produce a unit of GDP in Slovenia than it does in Western Europe. Thus the potential for energy savings is huge. Cohesion Fund support could help to secure massive energy savings across the economy and thus reduce energy bills for businesses but also schools, hospitals, and other public buildings. Therefore economic (support for the development of the economy, energy savings) and especially environmental returns (reducing negative environmental impacts) of Cohesion Fund support are considerable. That is in line with the aim of the development priority "Sustainable use of energy".

In general, distinction between different types of renewable energy sources is made only in the case of supporting of electricity production from renewable energy sources, where discount rate of photovoltaic is lower than in case of other types of RES. In other support measures no such distinction is made (only co-financing rate is defined in the tender).

At the moment there is an intensive public debate in Slovenia about the rationale to support biogas plants. It is more advantageous for farmers to sell the plant biomass for biogas than for human food or animal feed. Therefore, biogas plants using substrate which contains more than 40% volume of grain and/or maize silage and other cereals for the production of biogas are not entitled to the financial support according to Decree amending the Decree on Support for Electricity Generated from Renewable Energy Sources from 26 November 2010. Due to absence of transition period, in May 2011 Slovene Government postponed implementation of Decree until 1.7.2012.

## 5. RATE OF SUPPORT AND PROFITABILITY

The rate of support in industry is in line with the state aid rules. In the case of Cohesion Fund investments are subsidized with 30–50 % of the total investment and in the case of Eco Fund only favourable loans are provided.

The rate of support for households is 20–25% in the year 2011 (Eco Fund grants). Energy efficiency projects of public buildings are subsidized up to 90% of the total investment.

In the case of RES-E support scheme the following criteria is used: depreciation period of 15 years and discount rate (the weighted average cost of capital) of 12%. Only in the case of photovoltaic discount rate is 6.4%. Therefore the rate of RES-E support does vary with the profitability of renewable energy production. In the case of support aimed at improving the energy efficiency of residential housing, environmental benefits are the most important reason for public intervention. Support does not vary between regions or and the profitability is not taken into account when deciding the support of energy efficiency projects.

The rates of support tend to vary over time as the cost of fossil fuels changes (in the case of CHP plants using fossil fuel) or due to the changes in prices of technology. According to the methodology from 2009 the reference costs for solar power plants shall be reduced by 7% each year with regard to the baseline level in 2009. However, due to a change in legislation (Off. Gazette, 94/2010) the 2011 level was set at –20% compared to 2009, instead of – 14%. The levels for 2012 and 2013 are forecasted at –30% and –40% respectively. Both relating to 2009 reference cost levels. When entering the support system the costs become fixed and do not change anymore in the case of the power plant in question.

## 6. COSTS, PUBLIC SUPPORT AND PRICES

### Renewable energy

The current amount of public support, given to each type of renewable energy, was approximately EUR 70 million (support, subsidies, favourable loans) in the year 2010, without Cohesion Fund and without European Agricultural Fund for Rural Development support. RES-E support scheme represents the biggest share of RES support (EUR 75 million EUR planned in the year 2011 and EUR 48.6 million spent in 2010). Support does not vary between regions or areas.

There are different costs of producing electricity from each source of renewable energy. Support is paid for net electricity generated which is either: (i) supplied to the grid, (ii) sold on the market or (iii) used as its own off-take. Reference costs form the basis for: (i) the price determination stipulated in the contracts on guaranteed purchase and (ii) the amount of financial operating aid in the contracts on the provision of support.

Reference costs are determined in EUR/MWh of net electricity generated and consist of:

1. The fixed part of reference costs is methodologically determined every five years, or earlier if there are significant changes to capital costs and other investment parameters. They are determined on the basis of investment costs and operating costs. Once the producer enters the system, their fixed reference costs remain the same for the entire duration of receiving support.
2. Variable reference costs are determined only for those RES generating plants where the input fuel represents a financial cost. The variable part of the reference costs shall be determined annually on the basis of changes to the reference market price of electricity and input fuels – determined by the Energy Agency of the Republic of Slovenia.

In accordance with the methodology, for some power plants (such as solar, hydro or wind power plants) all reference costs are defined as fixed; this means that the GP (Guaranteed purchase) price after entering the system remains fixed and the OS (Operating support) level changes with regard to the reference market price of electricity, published annually by the Energy Agency of the Republic of Slovenia. RES-E supports works well, because it enables stable support conditions over a long period of time (15 years in the case of support for electricity generated from renewable energy sources and 10 years in the case of support for electricity produced in high-efficiency cogeneration of heat and power).

Generally, the following rates are/will be applicable for the guaranteed purchase in the period from 2009 to 2013:

**Table A – Guaranteed purchase price for type of RES**

Type of RES	Size classes	Guaranteed purchase price	Type of support
		(EUR/MWh)	GP/OS
Hydro	up to 50 kW	105.47	GP/OS
	up to 1 MW	92.61	GP/OS
	up to 10 MW	82.34	OS
	up to 125 MW	76.57	OS
Biomass	up to 50 kW	-	GP/OS
	up to 1 MW	224.35	GP/OS
	up to 10 MW	167.43	OS
	up to 125 MW	-	OS
Wind	up to 10 MW	95.38	OS
	up to 125 MW	86.74	OS
Geothermal	up to 50 kW	-	GP/OS
	up to 1 MW	152.47	GP/OS
	up to 10 MW	152.47	OS
	up to 125 MW	-	OS
Photovoltaic	up to 50 kW	415.46	GP/OS
	up to 1 MW	380.02	GP/OS
	up to 10 MW	315.36	OS
	up to 125 MW	280.71	OS
Biogas	up to 50 kW	160.05	GP/OS
	up to 1 MW	155.76	GP/OS
	up to 10 MW	140.77	OS
Landfill and sewage gas	up to 50 kW	99.33	GP/OS
	up to 1 MW	67.47	GP/OS
	up to 10 MW	61.67	OS

Determination of the level of support for electricity generated from RES and CHP and the level of support in 2011 is available at:

[http://www.borzen.si/pripone/599/Podpore2011\\_ENG\\_v21jan2011.pdf](http://www.borzen.si/pripone/599/Podpore2011_ENG_v21jan2011.pdf)

### Energy efficiency in residential housing

At the moment, in general, market prices of residential housing and market rents charged for accommodation do not include a premium for the energy efficiency of the building<sup>6</sup>.

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<sup>6</sup> Study(ies) analysing relation between market prices/market rents and energy efficiency of the building in Slovenia do not exist or at least they are not publicly available.

There are different reasons: i) the awareness of the wider population on the possibilities of renewable energy use and efficient use of energy is not yet sufficient, ii) energy costs were not very high in the past, iii) lack of reliable information (energy performance certification of buildings will improve reliability of information).

## 7. CONCLUSIONS

Cohesion fund support represents important part of Slovene energy policy and does not overlap with the national measures. There is a clear rationale for public intervention and the potential for energy savings is huge, especially in the public sector.

Due to the organisational and implementation problems financial absorption is not satisfactory, therefore we propose to continue with the activities planned in order to implement all actions foreseen until the end of programming period. Tenders announced and planned in the year 2011 represent an adequate approach, due to the lower construction costs (around 30%) and the financial crisis (liquidity problems) implementation problems could arise, especially in the Priority guideline Efficient use of electrical energy: implementation of measures in industry, public and service sectors. In order to speed up implementation and to support implementation of energy efficiency in small companies lowering of minimal amount of the projects (EUR 120,000 for micro and small companies at the moment) is advised.

In the next financial perspective measures aiming to promote renewable energy sources and energy efficiency should remain part of ERDF/Cohesion Fund support. In the case of Slovenia, we propose the following:

- In the case of energy restoration of buildings owned by public sector combining grants and loans (EIB) could multiply the effects of ERDF/Cohesion Fund support: at the moment the co-financing rate of support is 90%.
- It is important to promote energy efficiency at the local level. Therefore we propose to include energy restoration of buildings owned by municipalities.
- We propose that measures are implemented by funds and agencies instead of ministries (e.g. Eco Fund).

## REFERENCES

2007 Annual Report of OP Environmental and Transport Infrastructure Development.

2008 Annual Report of OP Environmental and Transport Infrastructure Development.

2009 Annual Report of OP Environmental and Transport Infrastructure Development.

Assessment of National Renewable Energy Action Plans. Fraunhofer ISI, EEG. 14 March 2011.

Budgeting for the Future, Building another Europe. European economic policies from a civil society perspective. Sbilanciamoci, 2008.

COM(2011) 17 final.

Comparative study on the main renewable energy support mechanisms in European jurisdictions. CMS, 2010.

Določanje višine podpor električni energiji proizvedeni iz OVE in SPTE in višine podpor v letu 2011. Borzen. 21.1.2011.

Letno poročilo o dejavnosti in poslovanju Eko sklada, Slovenskega okoljskega javnega sklada v letu 2010.

National Reform Programme Slovenia, 2011.

National Renewable Energy Action Plan for the period 2010–2020.

National Strategic Reference Framework Slovenia 2007–2013. Government Office for Local Self-government and Regional Policy. Unofficial translation of the NSRF approved on 18 June 2007.

Non-cost barriers to renewables– AEON study: Slovenia: final report. ECORYS. 10 May 2010.

OP Environmental and Transport Infrastructure Development.

Potential unfulfilled: EU funds need to deliver more clean and efficient energy in central and eastern Europe. CEE Bankwatch Network, Friends of Europe. November 2009.

Renewable Energy Policy Review Slovenia. EREC. 2009.

Report on the Energy Sector in Slovenia for 2009. Energy Agency of the Republic of Slovenia. 2010.

Re-Shaping: Renewable energy policy: country profiles: 2009 version. ECOFYS, Fraunhofer ISI, EEG, Lithuanian Energy Institute

Review of European and national financing of renewable energy in accordance with Article 23(7) of Directive 2009/28/EC.

Spremembe operativnih programov kohezijske politike Cilja 1 v Sloveniji: predstavitev z utemeljitvijo in vrednotenjem, April 2010.

Strategic Evaluation of Environment and Risk Prevention – Country Report under Structural and Cohesion Funds for the Programming Period 2007–2013: Country Report Slovenia, 2006.

Strateško poročilo o izvajanju Nacionalnega strateškega referenčnega okvira v Sloveniji za obdobje 2007–2013 za leto 2009, 2009.

The National Energy Efficiency Action Plan 2008–2016.

Učinkovito z energijo 2/16. Ministrstvo za gospodarstvo. April 2011. INTERVIEWS

## INTERVIEWS

Janez Kopač	Intermediate body and RES policy (Ministry of Economy: Directorate for Energy): Director General
Hinko Šolinc	Intermediate body and RES policy (Ministry of Economy: Directorate for Energy: Department for Energy Efficiency and Renewable Energy Sources)
Franc Beravs	Eco Fund: Director
Vesna Vidič	Eco Fund: Secretary
Andreja Urbančič	Institut Jožef Stefan: Energy Efficiency Centre
Polona LAH	Institut Jožef Stefan: Energy Efficiency Centre
PHONE INTERVIEWS AND E-MAIL COMMUNICATION	
Jani Turk	Intermediate body and RES policy (Ministry of Economy: Directorate for Energy)
Tomaž Svenšek	Intermediate body and RES policy (Ministry of Economy: Directorate for Energy)
Marko SENČAR	Public Agency for Energy (national energy regulator): Deputy-director
Iba ZUPANČIČ	Managing Authority: Evaluation
Borut RAJER	Market Power Regulator (Borzen)

## TABLES

**Annex Table A – Financial allocation and commitments**

<b>Allocation and commitments of ERDF, ESF and Cohesion Fund (end 2009) in EUR million</b>		
<b>Renewable energy</b>	<b>Allocation</b>	<b>Commitments</b>
39 wind	0.0	0.0
40 solar	27.1	0.0
41 biomass	21.3	5.0
42 hydroelectric, geothermal and other	5.8	0.0
Total	54.2	5.0
<b>Energy efficiency in residential housing</b>	<b>Allocation</b>	<b>Commitments</b>
43 Energy efficiency, co-generation, energy management	105.7	0.0
78 Housing infrastructure	0.0	0.0
Total (1)	105.7	0.0
Total ERDF+ESF+Cohesion fund	4,101.0	1,768.0
Total ERDF+Cohesion fund	3,345.3	1,423.1

Note: not all investment is for energy efficiency in residential housing.

Source: DG REGIO



Annex Table B – Allocation by Programmes

	wind	solar	biomass	hydroelectric , geothermal and other	total (FOI 39–42)	Energy efficiency, co- generation, energy management	Housing infrastructure	Energy efficiency in residential housing (FOI 43+78)	Total ERDF + Cohesion	Total Structural funds
SI	0.0	27.1	21.3	5.8	54.2	105.7	0.0	105.7	3,345.3	4,101.0
Convergence	0.0	27.1	21.3	5.8	54.2	105.7	0.0	105.7	3,345.3	4,101.0
Operativni program krepitve regionalnih razvojnih potencialov za obdobje 2007 – 2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1,709.7	1,709.7
Operativni program razvoja človeških virov za obdobje 2007–2013	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	755.7
Operativni program razvoja okoljske in prometne infrastrukture za obdobje 2007 – 2013	0.0	27.1	21.3	5.8	54.2	105.7	0.0	105.7	1,635.6	1,635.6

Source: DG REGIO

## ANNEX

### Measures to promote renewable energy sources and efficient use of energy residential housing in Slovenia

Financial	Regulatory	Awareness-raising
Support scheme for electricity generated from RES and in high-efficiency cogeneration of heat and power	Certificate of Origin.	Demonstration and model projects, and programmes of energy advice, information and training (OP ROPI)
Energy rehabilitation and sustainable construction of buildings (OP ROPI)	Rules on efficient use of energy in buildings	Programme of information and awareness-raising about renewable energy sources
Innovative systems for local energy supply (OP ROPI)	Decree on the implementation of direct payments in agriculture (Off. Gaz. RS, No. 99/06, 45/08) – promoting the cultivation of field crops for production of biofuels	Citizens' Energy Advice (EnSVet)
Promoting the use of solar collectors in households (Eco Fund tenders)	Decree on green public procurement	
Promoting wood biomass boilers in households (Eco Fund tenders)	Operational Programme for Reducing Greenhouse Gas Emissions up to 2012 – transport sector	
Co-financing construction of low-energy and passive buildings (Eco Fund tenders)	Incentives for local communities in sustainable transport development – testing the use of biodiesel as a motor fuel	
Environmental tax for polluting the air with CO <sub>2</sub> emissions	Rules on the distribution and calculation of costs of heat in residential and other buildings with more than one consumer	
Rural Development Programme 2007–2013 / Measure 121 – Modernising agricultural holdings; Public tender for allocating funds relating to Measure 121: biogas		
Rural Development Programme 2007–2013 / Measure 122 – Increasing the economic value of Forests		
Rural Development Programme 2007–2013 / Measure 123 – Added value for agricultural and forest products: companies		
Rural Development Programme 2007–2013 /		

Measure 311 – Diversification into non-agricultural Activities: RES Rural Development Programme 2007–2013 / Measure 312 – Support for establishing and developing micro companies		
Decree on the promotion of the use of biofuels and other renewable fuels for the propulsion of motor vehicles (Off. Gaz. RS, No. 103/07)		
The Excise Act (Off. Gaz. RS, No. 35/10 – official consolidated text) provides that biofuels used as motor fuels are exempted from the payment of excise duties, if they are used in their pure form.		
Act Amending the Motor Vehicle Tax Act (Off. Gaz. RS, No. 9/10)		