ECORYS
Research and Consulting

Non-cost barriers to renewables – *AEON* study

Slovenia

final report

Client: DG TREN

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Rotterdam, 10th of May 2010

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1 Issue 1 Administrative Procedures

1.1 Introduction

One of the main barriers in production facilities for electricity from renewable energy sources are long administrative procedures and procedures for spatial placing of facilities in environment. Administrative barriers could be separated according to:

- Barriers on a national level;
- Barriers at a local community level.

At the implementation of projects' investors encounter also other barriers, such as:

- Financial barriers;
- Economics of projects;
- Technical barrier.

The biggest problem for investors is spatial placing of facilities on the renewable energy sources (RES). The main problem is reflected in the fact that the spatial planning includes very few production facilities on the RES, therefore investors are obliged to wait for long procedures in changing spatial planning documents. Spatial law is one of the major issues from the investors point of view in terms of time needed to obtain a building permit; so it would be necessary to make some changes in spatial law.

It should be noted that the spatial law is forming the general system and any kind of interference can be very sensitive in terms of operating system itself.

Further barrier in the construction of hydro facilities is a draft of the criteria for determining and monitoring methods and ecologically acceptable flow reporting. Regulation draft denies a comprehensive approach to tackle environmentally acceptable flow, since it is based solely on hydrological platform that does not take into account the actual situation on the ground.

The proposal also has a major negative impact on planning of new projects which comprise of renewable energy source of hydro power. Because of the determined value of ecologically acceptable flow projects become economically unjustified.

1.2 Description of barriers & solutions

1.2.1 Detailed description of the Barriers and solutions

Administrative barriers on a national level

During the project we have identified the following administrative barriers at a national level:

- Long procedures, including long deadlines of governmental decision-making bodies in the procedures of obtaining the necessary permits;
- lack of coordination between different government departments;
- Unpredictability in the processes of public co-decision at interventions and facilities placing in the environment;
- Legalization, which retroactively alter both general and individual legal acts;
- Two-step scheme of the Institute of environmental impact assessment;
- Lack of harmonization of documents required for the general spatial acts under the Spatial Planning Law of and the Construction Law.

Administrative barriers on a local level

At a local level, we have identified the following barriers:

- Lack of integration of production facilities of renewable energy sources in the general spatial acts at local levels;
- Low awareness of benefits of RES between local authorities;
- The assignment of objects in space, in agreement with the local community, where local authorities require individual solutions in conjunction with its own benefits. The benefits are often not even directly related to energy facilities, but by other interests.

Possible solutions

The EU law framework provides only general guidelines, but not specific measures to be taken by each country. In Slovenia, the deadlines, which oblige authorities, could be shorter. Moreover, public comments on the flat plans could be also shorter. For example, in the Article 61 of the Environmental Law it is listed that the environmental permission is given within 3 months. On the other hand, the Law on Spatial Planning takes a period of 30-days for public comments on the assessment of the flat plan.

The legislation for implacement of objects in the environment should change the system of negative response to the positive one. This means that in case of exceeding the deadline, the applicant or other party included in proceedings, automatically receives a license. The current situation considers negative response, unless it is decided within the period laid down by the Law on General Administrative Procedure. The solution of introducing a positive response from the body has been already launched by the European legislator. Legislation may be changed regionally. These three laws could also include special provisions to be used as a priority. In this way a burden of slow decision-making process would be taken by State authorities, and not the party.

In the Construction Law and the Environmental Protection Law would be reasonable to enter shorter procedures in a case of obtaining various permits, including building permit based on the object, which is similar or the same facility for which permits are already issued. These are so-called reference procedures. Changes should be in line with the Law

on spatial planning. In such case only the differences (eg, facts on the ground), would be assessed. The licence and permits used in previous proceedings, could be duplicated or have an effect also on the new procedure.

The process of obtaining approvals and permits would be appropriate to arrange in a simple manner, that a party could start a procedure only with one standard form in one place. Such a change could have been introduced in the Construction Law.
The Institute of Environmental Impact Assessment (EIA), which has a significant importance in decision making process of the facility emplacement in the environment, could be simplified and would retain its function and efficiency. In the Law on Environmental Protection (Chapter 4) would be advisable to edit this institution in the way, that would not require its revision and would be necessary only when legal sources would be used (objections and appeals, the application).

Public participation in emplacement facilities in environment is an essential part of EU and national legislation. The main question is, when is sensible to inform the public and how long does the public have to respond. The article 58 of the Law on Environmental Protection states that the public must be informed in the process of issuing of the EIA and does not specify the time within the process. We suggest that a competent national authority should inform the public immediately upon receipt of the application and should shorten the period of expressing public opinion from 30 to 20 days. It could also be stated that within this period all other acts and activities of state bodies should run normally and that in time, while waiting for an input from the public, the process is not interrupted. It would be also sensible that the public could participate in monitoring, that is determined by construction permit for individual intervention in the environment.

One of the possible incentives for faster procedures could be also electronic organization of the whole process through e-government.

Recommendations for easier spatial emplacement of the facilities could be also transferred to a local level. It would be sensible to additionally encourage local communities in case, when they have to allow specific infrastructure facility, for which the operator must pay a certain consenssion fee. The latter is the revenue of the state budget. These are infrastructure facilities used for explotating water potential, which are defined by the Regulation on water recovery fee. It would be sensible to change this fact, so the water rates would not only be Water Fund's sources, but also sources of local communities. Therefore, the Article 162 of the Water Law should be revised.

In cases, when the local communities with their consent may delay or prevent emplacements of facilities in environment (which has been also highlighted as one of the administrative barriers at the local community) the Law on Spatial Planning and Construction Law could determine, that the competent national authority, could decide without local community consent, under certain conditions. Such case would be possible, when justified reasons are present. The latter would need to be specified (unjustified delay in proceedings, conditionality with the interests of local communities, etc.).

1.2.2 Best Practice Elements and Indicators

No.	Technology	Benchmark	Result
1.1		Is one stop-shopping possible?	NO
1.2		Amount of money to be invested in the administrative process (including cost of work and costs like fees) (in €)	
1.3		Time to be spent for the administrative process (duration to get all the main permits) (in months)	8 -10
1.4		Estimated number of permits required (#)	6

1.3 Literature

- IREET, Eco Consulting, CEE, EIPF, UM PF, UM FE, ApE, 2009. Strokovne podlage za Akcijski načrt za doseganje ciljnih deležev končne porabe električne energije iz obnovljivih virov do leta 2020. 1. fazno poročilo;
- IREET, Eco Consulting, CEE, EIPF, UM PF, UM FE, ApE, 2009. Strokovne podlage za Akcijski načrt za doseganje ciljnih deležev končne porabe električne energije iz obnovljivih virov do leta 2020. 2. fazno poročilo;
- IREET, Eco Consulting, CEE, EIPF, UM PF, UM FE, ApE, 2009. Strokovne podlage za Akcijski načrt za doseganje ciljnih deležev končne porabe električne energije iz obnovljivih virov do leta 2020. Dopolnjeno 3. fazno poročilo IREET, Eco Consulting, CEE, EIPF, UM PF, UM FE, ApE, 2009. Strokovne podlage za Akcijski načrt za doseganje ciljnih deležev končne porabe električne energije iz obnovljivih virov do leta 2020. Identifikacija problemov umeščanja objektov v prostor in ekonometrična analiza proizvodnje el. energije iz OVE. Dodatek k 3. faznemu poročilu;
- Gejzir, 2005. Zasnova energetskega razvoja geotermalnih virov Sloveniji za obdobje 200572015, Gejzir d.o.o., november 2005;
- http://www.gorenjske-elektrarne.si/Izobrazevanje/Strokovni-clanki/Problematika-umescanja-malih-hidroelektrarn-v-prostor;
- ApE, 2007, Analiza spodbujanja skozi “feed-in” sisteme;
- Energy Law (Official Gazette of RS, no. 27/2007, 70/2008).

2 Issue 2 Technical Specifications

2.1 Introduction

In this chapter we analysed if the provisions of the Directive 28/2009/EC concerning technical requirements are fulfilled in Slovenije.

From the preamble:

> "National technical specifications and other requirements falling within the scope of Directive 98/34/EC of the European Parliament and of the Council of 22 June 1998 laying down a procedure for the provision of information in the field of technical standards and regulations and rules on Information Society services, relating for example to levels of quality, testing methods or conditions of use, should not create barriers for trade in renewable energy equipment and systems. Therefore, support schemes for energy from renewable sources should not prescribe national technical specifications which deviate from existing Community standards or require the supported equipment or systems to be certified or tested in a specified location or by a specified entity."

Article 13 (2):

> "Member States shall clearly define any technical specifications which must be met by renewable energy equipment and systems in order to benefit from support schemes. Where European standards exist, including eco-labels, energy labels and other technical reference systems established by the European standardisation bodies, such technical specifications shall be expressed in terms of those standards. Such technical specifications shall not prescribe where the equipment and systems are to be certified and should not impede the operation of the internal market."

Renewable electricity in Slovenia is supported through the feed-in tariff and comprises:

- **Guaranteed purchase of electricity.** Pursuant to this support, irrespective of the price of electricity on the market, the Centre for RES/CHP. Support buys all the acquired net electricity produced, for which the RES generating plant has received guarantees of origin, at guaranteed;
- **Financial aid for current operations**. This support is allocated for net electricity generated for which a guarantee of origin has been received and which RES electricity producers sell themselves on the market or use for their own consumption, provided that the costs of producing this energy are greater than the price that can be obtained for it on the electricity market.

Guaranteed purchase of electricity, support may be received by RES generating plants with a nominal electrical capacity of up to 5 MW. For such generating plants, during the validity of the contract on guaranteed purchase the Centre for RES/CHP Support

regulates the registration of the operating forecast and settles the difference between the forecast and actual production, including the balancing group.

RES generating plants with nominal electrical capacity of up to 5 MW may decide that instead of guaranteed purchase they will opt for independent sale of electricity on the market, and that they will receive support in the form of operating support pursuant to the second indent of the second paragraph of this article, wherein they must arrange their own registration of the operating forecast and the settlement of the difference between the forecast and actual production, including the balancing group.

Other RES support mechanizems on Slovenian market are governmental subsidies through public found for environmental investments (Eko sklad), credites for environmental investments with low interest rate, different tax exemtions, flexible depreciation scheme.

In general technical specifications are already determined in Energy law (Official Gazette of RS, no. 27/2007, 70/2008, 22/2010,), which provides that energy facilities and installations must meet the prescribed technical norms or other conditions which ensure their smooth operation and safety of persons and property.

The technical rules for the layout, design, construction, operation and maintenance of energy facilities, installations, facilities, installations and systems, which ensure safe and reliable operation are authorized by Minister for Economy as responsible for energy. Techical specifications are based on EU standards and Slovenian standards (SIST EN)

In the support scheme and in others support mechanismes ther are no specific requirements for technical specifications. The technical specifications are already reqired in generally in Enery Law (Official Gazette of RS, no. 27/2007, 70/2008, 22/2010,).

2.2 Description of barriers & solutions

Barrier 2.1 – Weak definitions
This is not a barrier in Slovenia.

Barrier 2.2 – no EU standards applied
This is not a barrier in Slovenia.

Biomass systems must complay with technical specifications set by European standard.

Solar thermal system must complay with technical specifications set by European standard EN 12975.

Photovoltaic systems are defined in the Slovenian Technical Report SIST-TP_IEC TR 61836, from September 2005. The Slovenian Technical Report SIST-TP_IEC TR 61836 is based on EU standard.

Barrier 2.3 – Specified locations
This is not a barrier in Slovenia.

Barrier 2.4 – Barrier to trade
No relevant barriers to trade have been identified.

2.2.1 Best Practice Elements and Indicators

No.	Technology	Benchmark	Result
2.1		Are specifications expressed in terms of European standards (including eco-labels, energy labels and other technical reference systems), though such European references exist?	No

2.3 Literature

- http://www.pv-platforma.si/aIndex.html
- http://www.pv-platforma.si/aIndex.html
- Energy Law (Official Gazette of RS, no. 27/2007, 70/2008, 22/2010,)

3 Issue 3 Building integrated technologies

3.1 Introduction

In Slovenia, there are no regulations that specifically address the building integrated technologies. Method of assembling is determined in accordance with Energy Law and its regulations, and in accordance with Construction Law and its implementing acts.

There is available support scheme for building integrated technologies through Eko sklad (public found for environmental investments). The investitions in RES technologies are supported with grants resources and through loans.

3.2 Description of barriers & solutions

Barrier 3.1 – Inefficient general administrative procedures

Photovoltaic system

To install the photovoltaic and solar thermal systems integrated in building, investor does not need construction permit. On this point is coming to discrepancy between the Construction Law (Official Gazette RS, no. 110/02, 47/04, 102/04, 126/07, 108/2009) and administrative procedures, despite the fact that the Construction Law for solar photovoltaic installations, which is building integrated does not need to obtain a building permit, the construction permit is required in the process of connection to the grid, at the point of technical inspection of the facility. So in that case if investor will transmit the electricity in to the grid and will not be used for his own purposes, he must obtain construction permit for photovoltaic system assembled on building. If the investor use produced electricity on it own, it does not have to be connected to the grid. The administrative procedure for obtaining all permits and obtaining project documentation is long. An one stop-shoping is not possible.

Solar thermal system

Innvestor do not need any permit, except if the building is under cultural heritage.

Geothermal heat pumps

To instal geothermal heat pumps investor does not need eny permit if deep of the bore is less than 30 meters. In case that the location of the heat pump is on water protection area, investor need permit for groundwater exploration and permit for water use. If the bore is deeper than 30 meters investor need 3 permitts, permit for drilling, permit for groundwater explortation and permit for water use.

Biomass systems

For the biomass systems installed in domestic is no needed any permits for installation.

Barrier 3.2 – No/insufficient specific rules for building integrated/small scale RES installations

There is a barrier for small scale technologies generating electricity, because no specific procedure is developed. Investors in small-scale technologies, who send generated electricity into grid, have to obtain the same permits and other document as for big-scale technologies.

Barrier 3.3 – Competing public interests

Before the intervention in the cultural heritage it is necessary to obtain conditions and cultural protection consent.

Responsible Regional Unit of the Institute for the Protection of Cultural Heritage of Slovenia issued cultural protection consent on submitted proposal, in line with the prior written Cultural protection conditions. In the consent are given conditions and regulations under which investor must carry out the investment.

In case that heat pump is in on water protected area, investor must obtain two permits, permit for groundwater exploration and permit for water use.

Barrier 3.4 – Renewables obligations insufficient

Use of renewable energy sources are obligatet only for new residential buildings.In the Energy Law and Rules for energy efficiency there are set percentages of obligated use of renewables for all new buildings and reconstructions of buildings.

Rules say, that the energy efficiency of a building is reached, when the limit of energy efficiency are reached and when at least 25% of total final energy for the operating the systems in a building is provided by the use of renewable energy.

Demands for energy efficiency are also reached, if there are set the conductions like:

- At least 15 % of energy needed for heating or cooling, preparing warm sanitary water is obtained from solar energy;
- At least 30 % of energy needed for heating or cooling, preparing warm sanitary water is obtained from gas biomass;
- At least 50 % of energy needed for heating or cooling, preparing warm sanitary water is obtained from solid biomass;
- At least 70 % of energy needed for heating or cooling, preparing warm sanitary water is obtained from geothermal energy;
- At least 50 % of energy needed for heating or cooling, preparing warm sanitary water is obtained from heat from the environment;
- If the building is heated from the district heating or cooling system, it must be at least 50 % of energy needed for heating or cooling, preparing warm sanitary water from RES or from CHP with high efficiency, which requires to take into consideration the Decree on Support for Electricity Produced in High-Efficiency Cogeneration of Heat and Power (Official Gazette of the RS, No. 37/2009);
- If the final energy for operating the systems in the building is calculated on heated volume at least 30 % lower from limited value for the specific building.

The reneweable obligations are not restrictive concerning the applicable technologies.

Barrier 3.5 – Exemplary role of public buildings neglected

Public buildings are not sufficient good role in Slovenia. Most exemplary examples are public buildings in local communities. In the Local energy concepts, which is obligate document for all municipalities, must be set action plane in which are concluded targets for RES on appropriate public buildings. In the document are set locations, appropriate RES technology, financial plan for individual investition and time frame. Providing the adopted Local energy concept is obligated for municipalities, which is controlled by the competent ministry (Ministry of economy), but if the action plan is not providing, there are no sanctions. There are no data hove many predicted investitions are already operating.

Barrier 3.6 – Tenancy law and ownership law impedes development of Building Integrated RES technologies

Providing ownership issues in the context of building integrated technologies is resolved in accordance with generally applicable law.

3.2.1 Best Practice Elements and Indicators

No.	Technology	Benchmark	Result
3.1		Is this installation type in normal cases exempted from an authorization procedure (building permit)?	Yes
3.2		Are legal-administrative requirements adequate for this installation type?	Average
3.3		Number of administrations that must be contacted (#)	1- 3

3.3 Literature

- Website: http://www.pv-platforma.si/aIndex.html;
- Energy Law (Official Gazette of RS, no. 27/2007, 70/2008);
- Regulation for energy efficiency (Official Gazette of RS, no. 93/2008);
- Website:http://www.geosonda.com/energija_podzemne_vode.php?rubrika=tehnologija;

4 Issue 4 – Promotion of energy efficient nrenewable energy equipment

4.1 Introduction

This issue is related to the provisions of article 13 (6) of the Directive (the selection of the words in bold is ours):

> "With respect to their building regulations and codes, Member States shall promote the use of renewable energy heating and cooling systems and equipment that achieve a significant reduction of energy consumption. Member States shall use energy or eco-labels or other appropriate certificates or standards developed at national or Community level, where these exist, as the basis for encouraging such systems and equipment.
>
> **In the case of biomass**, Member States shall promote conversion technologies that achieve a conversion efficiency of at least 85 % for residential and commercial applications and at least 70 % for industrial applications.
>
> **In the case of heat pumps**, Member States shall promote those that fulfil the minimum requirements of eco-labelling established in Commission Decision 2007/742/EC of 9 November 2007 establishing the ecological criteria for the award of the Community eco-label to electrically driven, gas driven or gas absorption heat pumps.
>
> **In the case of solar thermal energy**, Member States shall promote certified equipment and systems based on European standards where these exist, including eco-labels, energy labels and other technical reference systems established by the European standardisation bodies.
>
> In assessing the conversion efficiency and input/output ratio of systems and equipment for the purposes of this paragraph, Member States shall use Community or, in their absence, international procedures if such procedures exist."

Slovenia is promoting the use of renewable energy heating and cooling systems and equipment that achieve a significant reduction of energy consumption. In usage are eco-labels, certificates set by different manufactures and companies for installing heating and cooling technologies, standards for photovoltaic systems which were made on bases of EU standards for photovoltaic.

Eco Fund (the Slovenian environmental public fund) promotes environmental investments in the Republic of Slovenia, which are and energy efficient. The legal framework for Eko sklad and for all constructors, architects, designers and others is Regulation on energy efficiency (Official Gazette of RS, no. 93/2008) and EU standards.

4.2 Description of barriers & solutions

Barrier 4.1 – Non-compliant promotion schemes

In the promotion scheme is promoted only equipment which meet the Regulation on energy efficiency (Official Gazette of RS, no. 93/2008) and equipment which is in accordance with EU standards and Directive 28/2009/EC.

Biomass systems

Eco Fund subsidizes and gives loans for the biomass boilers, with 90% efficiency or more and dust emission at rated output shall be less than 50 mg/m^3.Firewood heating equipment should have attached a heat reservoir the size of at least 50l / kW thermal power boiler.

Photovoltaic systems

It promotion scheme is promotet only equipment which meet Technical Report SIST-TP_IEC TR 61836, from September 2005. This technical report is made on bases of EU standards. Photovoltais systems which have also efficiency label get from the promotion scheme additional support for promotion.

Barrier 4.2 – Lack of substitution of existing inefficient systems

In Slovenia is not an identified barrier.

Barrier 4.3 – Use of national procedures

In Slovenia is not an identified barrier.

Barrier 4.4 – Insufficient information

In Slovenia is not an identified barrier.

4.2.1 Best Practice Elements and Indicators

No.	Benchmark	Result
4.1	Are the requirements of Art 13 (6) of the Directive concerning the promotion of efficient bioheat and heat pumps fulfilled? (yes/no)	Yes

4.3 Literature

- Energy Law (Official Gazette of RS, no. 27/2007, 70/2008);
- Website Eko sklad: http://www.ekosklad.si/html/razpisi/main.html;
- Regulation for energy efficency (Official Gazette of RS, no. 93/2008).

5 Issue 5 Information/awareness raising

5.1 Introduction

Access to the information on renewables, support scheme for renewables and legalisation is the organized good. Most information is available via the Internet by government and non-governmental institutions.

Efficient use of energy and promoting of renewable energy is an integral part of energy policy, which is stated also in the Electricity Law. Promotion of energy efficiency and use of renewable energy sources is provided by different government programs: education, information, public awareness, energy counselling, promotion of energy auditing, promotion of local energy concepts, the establishment of standards and technical regulations, fiscal measures, financial incentives and other forms of incentives.

In the context of state institutions at the local level is organize advising and assistance for general public about the implementation of more efficient energy use in households across ENSVET - Energy advisory network for citizens. Program is implementing by Building Institute - ZRMK with qualified energy consultants energy in advisory offices. The project of advisory offices throughout Slovenia is the result of good partnership with municipalities.

In Slovenia are over 30 offices in which offers advice about 70 energy consultants. Their main task is that with free advice and discussions help in planning and implementing measures for efficient energy use.

In Slovenia also functions seven Local energy agencies, which also play an important role in awareness, education, development, research and promotion of continuous improvement of energy efficiency and accelerated deployment of renewable energy sources. Agencies have been established within the program "Intelligent Energy Europe".

Awareness and information on the use of renewables are implement by various government institutions (Ministry of the Economy, Ministry of the Environment and Spatial planning, Eco Fund), and various non-governmental organizations, research institutes and educational institutions.

All data on legislation is available on websites of Ministry of the Economy and Ministry of the Environment and Spatial planning and

- http://www.mg.gov.si/si/zakonodaja_in_dokumenti/energetika/;
- http://www.mop.gov.si/si/zakonodaja_in_dokumenti/okolje/;
- http://www.mop.gov.si/si/zakonodaja_in_dokumenti/prostor/.

Informations about promotions schemes are available on websites of Borzen d.o.o.o (Center for support scheme for generated electricity)and Eko sklad:

- http://www.borzen.si/slo/#;
- http://www.ekosklad.si/index.html.

The Agency for Efficient use of energy (AURE) , which was founded in 1995, carried a number of activities that have migrated to the withdrawal of agencies within the jurisdiction of the Division for operations efficiency and renewable energy sources Energy Directorate of the Ministry of the Economy. Sector activities aimed at promoting energy efficiency, renewable energy and combined heat and power. In this context, they perform:

- Energy advice;
- Financial promotion of renewable energy and efficiency,
- To encourage investment in energy efficiency and renewable energy;
- Development of new programs to promote energy efficiency and use of renewable energy sources;
- The establishment of standards and regulations;
- International cooperation;
- Information, education, training and promotional activities.

Website since last year is no longer up to date.

5.2 Description of barriers & solutions

Barrier 5.1 – Insufficient availability of information on support measures
In Slovenia is not an identified barrier.

Barrier 5.2 – Insufficient funding for campaigns/programmes
In Slovenia is not an identified barrier.

Barrier 5.3 – Insufficient campaign-/programme-design
In Slovenia is not an identified barrier.

5.2.1 Best Practice Elements and Indicators

No.	Benchmark	Result
5.1	Is sufficient information on support measures available?	Yes

5.3 Literature

- Energy Law (Official Gazette of RS, no. 27/2007, 70/2008);
- Website: http://www.aure.si/index.php?p=1&lang=SLO&navigacija=on;
- Website: www.gi-zrmk.si/ensvet.htm;
- Website: http://www.borzen.si/slo/#;
- Website: http://www.ekosklad.si/index.html.

6 Issue 6 Certification

6.1 Introduction

Until now in Slovenian legislation had not been transferred the Article 14 (3), that reffers the certification schemes or equivalent qualification schemes.

In Slovenia, there is no specilised training courses for biomass, shallow geothermal, solar PV and solar thermal technologies. The Chamber of Commerce and Industry of Slovenia or the Chamber of Craft and Small Buisness of Slovenia organize various education and training programmes which are mainly trainings and familiarization with new technologies. The different manufactures also offers training courses to their partner installers to present their products.

The installers in Slovenia must have formal technical education for installers, which is acquired during formal education for certain technical disciplines. There are two secondary school programs of education, three years long program (level IV) and four years long program (level V). The four year program is successfully concluded, when the candidate made the master exam. Master examinations are provided and organized by Chamber of Craft and Small Business of Slovenia and are not in the authority of education institution.

The Master examination consist of four parts: the practical, professional and theoretical part, management- economic part, teaching part-education. With Master examination the candidat:

- obtain a secondary school qualification (level V), the possibility of further education on vocational college;
- meets the qualifications (educational) make the pursuit of craft;
- completed qualification (education) requirement for education students. With the master exam, a person is qualified to transfer their practical and professional knowledge to students, colleagues, etc.;
- in professions that are related to the Construction Act, the title Master brings the right, that master is responsible head of each part of work on the facility.

Till now was in Slovenia prepared certification scheme only for heat pumps. This is voluntary certification scheme for heat pumps installers and was developed within the frame of the EU-CERT.HP project. The certification scheme is managed by the Slovenian association Refrigeration and Air Conditioning, a privet association dealing with refrigeration and heat pump and the University of Ljubljana, Facultaty of Mechanical Engineering as public institution. The installers has to provide proof of relevant education (installer of mechanical installation) and to attend a five-day professional training

composed of teoreticaland practical test. The practical test consist of reports about already preformed installations.

The certification has to be renwed every three years. The installers has to attend courses about heat pumps (at least three-day traning in the previus 3 years). It is also required to encole data abot three installations the installer has realized. The education took place in 2006 only and the project is now on hold.

Barrier 6.1 - Lack of a Certification body

For establishing the certification body there is a lack of legislative frame work Only certification body for the qualification of installers is private certification body that has been prepared by the Slovenian association Refrigeration and Air Conditioning with cooperation of Facultaty for Mechanical Engineering as public institution. For other RES technologies there are no official certification scheme.

Barrier 6.2 - Lack of guidelines

For installers are guidelines available by the producers of RES technologies. It is in practise that the producers prepare and organise trainings for the installers of their equipments. There is lack of guidnes for architects, designers who can help with the Regulation for efficient energy use. (Official Gazette of RS, no. 93/2008) and with the information that they get on different presentations and conferences.

Barrier 6.3 - Lack of training

The Chamber of Commerce and Industry of Slovenia or the Chamber of Craft and Small Business of Slovenia organize various education and training programmes which are mainly trainings and familiarization with new technologies. These courses are not obligatory.

6.1.1 Best Practice Elements and Indicators

No.	Benchmark	Result
6.1	Are certification schemes or equivalent qualification schemes available for installers?	No
6.2	Is sufficient training on RES provided during the standard education curriculum of installers?	Positive

6.2 Literature

- Energy Law (Official Gazette of RS, no. 27/2007, 70/2008,);
- Website Eurocert: http://eucert.fiz-karlsruhe.de/en/baustein/bs66/;
- Website Qualicert: http://www.qualicert-project.eu/index.php?id=773;
- Website Obrtna zbornica Slovenije: http://www.ozs.si/prispevek.asp?IDpm=1782.

7 Issue 7 Infrastructure Development

7.1 Introduction

Consumption of electricity in Slovenia is rising sharply. Realization of development plans in the production and transmission of electricity does not keep up with growth in electricity demand in the future. The barriers for this issue are also more strict environmental requirements for emplacement objects in environment and their impact on the environment.

Given the increase number of distributed resources connection to the mains and the target of 25% of all electricity from renewable energy sources by 2020, it is necessary to radically change the structure of the electricity grid. It is necessary to adjust the network to the many small energy sources. Furthermore, it is necessary to enable their reliable and secure connection to the network and possibility of balanced consumption and production of electricity.

Barriers to connecting production facilities in the electricity network in Slovenia are:

- Insufficient network capacity;
- The process of connection to the network is not fully transparent;
- Costs connected to the grid;
- long waiting periodsmfor obtaining permission to connect to the network;
- Long-term construction of transmission lines connecting the major facilities.

7.2 Description of barriers & solutions

Barrier 7.1 - Problems concerning connection to existing electricity networks

The new system of purchase price, which came into operation in July 2009, is for majority of RES more encouraging than the previous system of qualified producers requirements, but in the terms of administration is much more demanding than the previous system.

On the other hand, the system of connection to the grid and the acquisition of rights for guaranteed purchase price or operating support for electricity power is procedurally very difficult and a long time. The approach that is clear from the legislation will certainly represent one of the major obstacles to the rapid construction of RES plants.

It is necessary to change the existing complex administrative procedures to connect the production facilities to the electricity grid. We need simple, clear and secure connect standardization to the mains, like the German model.

By the Energy Law all RES technologies must be connected to the grid. In the process of getting the grid connection permits, there is important which operator is operating with the grid on the area where facility is installed. In Slovenia we have five different operators and each of them have their own rules and conditions for grid conection.

Barrier 7.2 - Problems concerning development of electricity network infrastructures according to a long-term strategy

Production facilities in the RES are mostly located in the area of spending so their connection is technically not a problem. Location of production facilities are not known in advance and therefore their connection to the grid are based on project conditions and consent for connection issued by the distribution company (SODO). The connections of facilities are made mainly in the medium or high voltage grid. Network operators should be based on these data and planning their own development plans for electricity grid (the necessary reinforcement of the power system, the necessary funds for the construction of medium voltage (MV) and high voltage (HV) transmission lines and stations) that will connect possible.

In accordance with the provisions of the Energy Law and Regulation on how to implement the public service activity is a transmission grid system operator of electric energy ELES required every two years to prepare a plan for developing the transmission network for the next ten-year period. The transmission network development plan for the period 2009 - 2018 presents the anticipated situation in the electricity system and the necessary interventions in the transmission network with the projected construction of production units, expansion of distribution networks and the projection of power system development in Europe.

Barrier 7.3 - Problems concerning development of a Trans-European Electricity Network

The Slovenian relatively strong power transmission network is sited between the European countries within an inexpensive energy production surplus of the North - East and expensive energy deficient Italy. Because of the European energy market regulations, based on inexpensive usage of the already constructed European transmission network, an extensive market dependent power flow takes place in the demanded directions, using the network capacity reserves, originally foreseen for the power system security purposes.

7.2.1 Best Practice Elements and Indicators

No.	Technology	Benchmark	Result
7.1		Presence of an efficient (in terms of capability of achieving its stated objectives) plan for the reinforcement of the interconnection capacity with neighbouring countries.	Negative
7.2		Presence of an efficient plan for the reinforcement of the connection capacity within the country.	Average

7.3 Literature

- Energy Law (Official Gazette of RS, no. 27/2007, 70/2008);
- Law on Spatial Planning (ZPNačrt), (Official Gazette RS, no. 33/07);
- Spatial Planning Law (ZUrePE1), (Official Gazette RS, no. 110/02, 8 / 03);
- Construction Law, (Official Gazette RS, no. 110/02, 47/04, 102/04, 126/07);
- Gregor Omahen, Electroinstitute Milan Vidmar (EIMV), Slovenia, Pavel Omahen, PhD, Uroš Gabrijel, PhD, ELES, Slovenia, Technical Options and Economic Incentives for Investments in Power Transmission System in Slovenia;
- Eles, Development strategy of electric power systems in Republic Slovenia, Transmission system development plan in the RS from 2009 to 2010.

8 Issue 8 Power Grid Issues

8.1 Introduction

Renewable sources of electricity are distributed and relatively low power compared to conventional energy sources. The process of installing renewable energy sources and their connection to the electricity grid and the whole procedure is administratively very complex, so they need to be simplified and streamlined. In particular, this applies for the connections to the main low voltage power line, where power connection are relatively small, but very numerous.

DSOs and TSO are required to connect on network each installation for electricity production from renewable sources and the high-efficiency cogeneration, which has a valid permission, approval for connection to grid, and a declaration for production facility. The connection is made at the request of the investor under the conditions and in the rules set in Energy Law.

Investor in production facility, which has a valid declaration, does not bear the cost of any reinforcement of transmission or distribution system, which are necessary to connect the production facility to the grid. The system operator must not refuse consent for connection of electricity production facilities from renewable source or high efficiency cogeneration. The network operators bear the cost of analysis for consent for connection to a grid.

The cost connection line (grid) from electricity production facility to the grid connection system bears the investor into the electricity production facility from renewable or high efficiency cogeneration.

8.2 Description of the barrier

Barrier 8.1 - Problems concerning grid connection

- Connecting process to the grid is not fully transparent. In Slovenia we have 5 diferent operators and each of them have their own rules for conection to the grid;
- Long administrative procedure of receiving the permit for grid connection. Role for grid connection permit must investor delivered to the system operator before, he start the procedure of getting the construction permit (in the procedure of getting the project conditions);
- Costs of the connection to the grid. Cost for upgrading the capacity of the grid system is costs of system operator. Costs for links to the grid system are costs of investor.

Barrier 8.2 - Problems concerning grid access

- Insufficient capacity network;
- Long term construction of the grid connection for larger production facilities.

Possible solutions

Renewable sources of electricity are distributed and relatively low power compared to conventional energy sources. The process of installing renewable energy sources and their connection to the electricity grid and the whole procedure is administratively very complex, so they need to be simplified and streamlined. In particular, this applies for the connections to the main low voltage power line, where power connection are relatively small, but very numerous.

We need simple, clear and safe connect standardization. In this case connection to the grid could be as easy as it is currently for households and firms in low-voltage network. Procedures should be transparent by the side of distribution system owners, which would make them technically clear to all qualified designers and operators of electrical installations and connections. In this case, formal procedures can be quick, because the connectors are already designed and implemented according to the instructions and requirements of the owner or operator of the electricity grid.

8.2.1 Best Practice Elements and Indicators

No.	Technology	Benchmark	Result
8.1		Are the rules on cost sharing and bearing of grid connection objective, transparent and non-discriminatory?	Negative
8.2		Is the denial of grid connection by TSOs and DSOs a common problem, constituting an important barrier for RES development?	Positive
8.3		Number of months for getting grid connection (considering also approval of grid connection)	6 -8
8.4		Estimated connection costs in Euros (in case producer pays)	

8.3 Literature

- Energy Law (Official Gazette of RS, no. 27/2007, 70/2008);
- ELES, Eles, Development strategy of electric power systems in Republic Slovenia, Transmission system development plan in the RS from 2009 to 2010.

9 Issue 9 Gas Network Issues

9.1 Introduction

Production of biogas in Slovenia is low. In Slovenia the biogas is not injected into the natural gas network and is it used only in the CHP systems for production of electricity and heat.

9.2 Description of barriers & solutions

Barrier 9.1 – No encouragement for upgrading
No barrier.

Barrier 9.2 – Lack of information
No barrier.

Barrier 9.3 – Authorisation procedures
No barrier.

Barrier 9.4 – Lack of incentives for infrastructure owners to open to biogas
No barrier

9.2.1 Best Practice Elements and Indicators

Please fill in here the results of the Benchmark indicators:

No.	Benchmark	Result
9.1	If green certificates and/or subsidies for biogas are in place, do they de facto make unattractive to feed green gas into the grid due to the high level of subsidy for biogas used for electricity generation?	/
9.2	Are the costs of grid connection for producers of gas from renewable energy sources objective, transparent and non-discriminatory?	/
9.3	Do transmission and distribution tariffs discriminate against gas from renewable energy sources?	/
9.4	Average time needed for grid connection approval (from application for grid connection to formal approval) in months (#).	/

Note: green gas is upgraded biogas to natural gas quality for grid injection.

9.3 Literature

- Energy Law (Official Gazette of RS, no. 27/2007, 70/2008)

10 Issue 10 District Heating

10.1 Introduction

In Slovenia we have 8 big district heating systems that use for the operation fossil fuels, a system on geothermal power and ten systems of district heating on biomass.

Ministry for the environment and spatial planning has been included in the project GEF (Global Environment Fund) with the title "Removing barriers for increased usages of biomass as an energy source, which results was several studies. The ten systems of district heating on biomass has been made in the frame of project GEF. The projects have been financed by private investors and with the subsidies that were available in the GEF project.
The project GEF has also promoted general measures of removing institutional barriers in the form of public awareness and professional training.

Alongside above mentioned barriers there are also financial barriers of implementing new project in district heating systems. We estimate that this barrier is the most problematic of all barriers.

In the area of the law governing the operation of CHP, Slovenia has adopted in the framework of the new support scheme, Decree on Support for Electricity Produced in High-Efficiency Cogeneration of Heat and Power (Official Gazzete of the Republic of Slovenia, No. 37/2009, 53/2009, 68/2009, 76/2009, 17/2010).

Support is financial aid for the generation of electricity in CHP generating plants where the generation of electricity exceeds the price that can be achieved for it on the electricity market.

Support for electricity from CHP generating plants shall be provided as:
Micro and small-scale CHP generating plants may receive support using the method of guaranteed purchase of electricity. The guaranteed purchase of electricity (hereinafter: guaranteed purchase). For this support the Centre for RES/CHP Support shall, regardless of the price of electricity on the market, purchase the entire received net electricity generated in a CHP generating plant for which the plant has received guarantees of origin, at the guaranteed prices set.

CHP generating plants with a nominal electrical capacity of 1 MW or more may receive support as financial aid for current operation (hereinafter: operating support), which is allocated for the net electricity generated that producers in CHP generating plants sell themselves on the market or use as own consumption, on condition that the costs of

generation of this electricity in the CHP generating plant are higher than the price that could be achieved for this electricity on the electricity market.

There are available national subsudies from Eco sklad (public found for environmental investments) to reduce high investment costs in district heatin on RES, specily for DH systems on biomass.

Certain managers of large district heating systems in their long-term strategies are already preparing plans for a slow transition on use of renewable energy sources. At the production of electricity and heat in the largest district heating system in Slovenia (Ljubljana) they are already use for fuel renewable energy sources. From biomass they produce 7% of their electricity.

Barrier 10.1 – Lack of positive conditions for the increase of the share of renewables in existing DHC systems

The lack of conduction for the increase of the share of renewables in existing DHC system is because there is no subsudys for big systems.

Barrier 10.2 –Lack of positive conditions for the initiation and expansion of DH systems largely based on renewable

Most systems use as fuel fossil fuel produced in Slovenia. As part of the Slovenian economy represents the extraction of coal and a significant part of electricity in energy balance of Slovenia is derived from this primary source, the use of RES in district heating and CHP is in the second plan.

10.1.1 Best Practice Elements and Indicators

No.	Benchmark	Result
10.1	Are there policies to promote the increase of the RES share in existing DH networks? (yes/no)	No
10.2	Are there policies to promote the initiation / expansion of DH networks? (yes/no)	No
10.3	Percentage present renewable share (see ECOHEATTOOL)	less than 10 %
10.4	Percentage CHP share (idem)	more than 90 %

10.2 Literature and Sources

- Energy Law (Official Gazette of RS, no. 27/2007, 70/2008);
- Decree on Support for Electricity Produced in High-Efficiency Cogeneration of Heat and Power (Official Gazette of the Republic of Slovenia, No. 37/2009);
- Website TE-TOL: http://www.te-tol.si/index.php?sv_path=2455,2468.

11 Relevant Legislation

11.1 National strategic development documents

- Action plan for Environmental and Transport Infrastructure 2007-2013;
- National Action Plan for Energy Efficiency for the period 2008-2016 / AN-URE;
- Action plan to reduce greenhouse gas emissions by 2012 / OP-GHG;
- Resolution on the National Energy Program / ReNEP / (Official Gazette of RS, no. 57/2004);
- Resolution on the National Energy Program is document that coordinates the operation of institutions dealing with energy supply and setting objectives and provides mechanisms for the transition from the provision of energy supply and electricity to be reliable, competitive and environmentally friendly supplies.

In process of preparing is new Resolution on National Energy Program, which will be concluded in second half of the year 2010.

All administrative procedures in Slovenia are held in accordance with the Law on General Administrative Procedure (UPB, Official Gazette RS, no. 24/06, 126/07 and 65/08). In all administrative procedures apply Procedure Act, as the General Act and is used always and everywhere, where the material / special law does not provide specific procedures and practices.

11.1.1 Energy Law

- Energy Law / EZ (Official Gazette of RS, no. 79/1999);
- The Act Amending the Energy Law: EZ-A (Official Gazette of RS, no. 51/2004); EZ-B (Official Gazette of RS, no. 118/2006, 9 / 2007 Adj.) EZ -C (Official Gazette of RS, no. 70/2008);
- Energy Law (official consolidated text) / EZ-UPB1 / (Official Gazette of RS, no. 26/2005);
- Energy Law (official consolidated text) / EZ-UPB2 / (Official Gazette of RS, no. 27/2007).

Currently is in procedure of preparing new Energy Law, which is already in procedure at the National Assembly).

11.1.2 Energy infrastructure

- Regulation on Energy Infrastructure (Official Gazette of RS, no. 62/2003, 88/2003); NPB-Unofficial consolidated text.

11.1.3 Reliable electricity supply

- Decree on the method of determining and levying contributions for the provision of reliable electricity supply using indigenous primary energy sources (Official Gazette of RS, no. 8 / 2009);
- Decision on determining the amount of contribution to ensure a secure supply using indigenous primary energy sources in electricity (OJ RS, no. 82/2009, 113/2009);
- Regulation on the invitation to tender for the provision of reliable electricity supply using indigenous primary energy sources (Official Gazette of RS, no. 19/2009).

11.1.4 New support schemes for electricity production from RES and CHP

- The rules for the functioning of the Support Centre (Official Gazette of RS, no. 86/2009);
- Forecast production facilities position on renewable energy and high-efficiency cogeneration in the electricity market in 2010 (JARS, November 2009);
- Explanations of the rules for preparing the forecast position of the generating installations in renewable energy and high-efficiency cogeneration in the electricity market (MG, October 2009);
- Regulation on the rules for preparing the forecast position of the generating installations in renewable energy and high-efficiency cogeneration in the electricity market (OJ RS, no. 83/2009);
- Regulation on support of electricity produced from renewable energy sources (Official Gazette of RS, no. 37/2009, 53/2009, 68/2009, 76/2009), NPB - Unofficial consolidated version;
- The methodology for setting the reference cost of electricity produced from renewable energy sources (Decision MG - No. 360-81/2009-1);
- Regulation on support of electricity produced in combined heat and power with high efficiency (Official Gazette of RS, no. 37/2009, 53/2009, 68/2009, 76/2009); NPB-Unofficial consolidated version;
- Regulation on determining the quantity of electricity produced in combined heat and power with high efficiency and determining the conversion of biomass energy (Official Gazette of RS, no. 37/2009);
- The methodology for setting the reference cost of high efficiency cogeneration (Decision MG - No. 360-82/2009-1);
- Regulation on the issue of declarations of production facilities and certificates of origin of electricity (OJ RS, no. 8 / 2009);
- Decree on the method of determining and levying a contribution to support the production of electricity from high efficiency cogeneration and renewable energy (Official Gazette of RS, no. 2 / 2009);

- Decision on determining the amount of contribution to support the production of electricity from high efficiency cogeneration and renewable (Official Gazette of RS, no. 8 / 2009, 113/2009);
- Regulation on minimum measurements in production plants, which receive the electricity generated certificates of origin and support (Official Gazette of RS, no. 21/2009).

11.1.5 Energy efficiency and energy services

- Rules on the method of allocation and costing of heat in residential and other buildings of several parts (Official Gazette of RS, no. 07/2010);
- Rules governing methods for determining the energy savings in the final customers (l RS Official Gazette no. 04/2010);
- Regulation on the provision of energy savings in the final customers (Official Gazette of RS, no. 114/2009);
- Rules on the method of allocation and costing of heat in residential and other buildings with more customers (Official Gazette of RS, no. 52/2005);
- Rules on the method of allocation and costing of heat in residential and other buildings of several parts;
- Regulation on energy efficiency in buildings (Official Gazette of RS, no. 93/2008, 47/2009);
- Rules on the methodology of producing and issuing energy performance certificates of buildings (OJ RS, no. 77/2009);
- Regulation on energy labels for certain types of household appliances (OJ RS, no. 104/2001);
- Rules for the energy labels of household electric refrigerators, freezers and their combinations (OJ RS, no. 104/2001, 64/2004);
- Rules for the energy labels of household washing machines (Official Gazette of the Republic. 104/2001, 100/2006);
- Rules for the energy labels of household electric tumble driers (Official Gazette of the Republic. 104/2001, 100/2006);
- Rules for the energy labels of household combined washer-driers (Official Gazette of the Republic. 104/2001, 100/2006);
- Rules for the energy labels of household dishwashers (Official Gazette of the Republic. 104/2001, 100/2006);
- Rules governing the requirements for the minimum energy efficiency requirements for ballasts for fluorescent lighting (OJ RS, no. 58/2003, 47/2007);
- Regulation on energy labels of household air-conditioners (OJ RS, no. 5 / 2004)
- Rules for periodic reviews of air conditioning systems (Official Gazette RS, No. 26/2008);
- Regulation on energy labels of household electric ovens (OJ RS, no. 89/2003);
- Regulation establishing a framework for the setting of environment friendly energy-using products (Official Gazette of RS, no. 19/2008);
- Rules on efficiency requirements for new hot-water boilers burning liquid and gaseous fuels (OJ RS, no. 107/2001, 20/2002, 63/2007);

- Rules of construction methodology and content of a feasibility study of alternative systems for the supply of buildings with energy (Official Gazette of the Republic. 35/2008);
- Rules of construction methodology and content of a feasibility study of alternative systems of energy supply of buildings (OJ RS, no. 35/2008);
- Decree on the method, object and conditions for implementing compulsory national public service implementation of measurement, inspection and cleaning of ovens, flue ducts and air vents to protect the environment and energy efficiency, protection of human health and protection against fire (OJ RS, No . 129/2004, 105/2007);
- Rules governing the supply of small combustion plants, flue ducts and air vents in the public service implementation of measurement, inspection and cleaning of ovens, flue ducts and air vents (Official Gazette of RS, no. 128/2004, 18/2005);
- Rules on professional training and proficiency test for the management of energy facilities (Official Gazette of RS, no. 41/2009).

11.1.6 Energy permission

- Regulation on Energy Authorization (Official Gazette of RS, no. 5 / 2007);
- Regulation amending the Regulation on Energy Authorization (Official Gazette of RS, no. 67/2009);
- Rules regarding Energy authorization NPB - Unofficial consolidated version.

11.1.7 Local energy concept

- Rules on the methodology and the minimum content of local energy concepts (Official Gazette of RS, no. 74/2009);
- A guide for local energy production concept, December 2009.

11.1.8 Maintenance work in the public interest related to energy

- Regulation on maintenance work in the public interest in the energy sector (Official Gazette of RS, no. 125/04);
- Regulation Amending the Regulation on maintenance work in the public interest in the energy sector (Official Gazette of RS, no. 71/09); NPB-Unofficial consolidated text.

11.1.9 Providing of information on energy operator activities

- Rules governing the types of information provided by operators of Energy Activities (Official Gazette of RS, no. 95/2007).

11.1.10 Electricity

- The rules for the operation of the electricity market (OJ RS, no. 30/2001, 118/2003);
- Regulation on how to implement the public service activity of the system operator electricity transmission system (Official Gazette of RS, no. 114/2004, 52/2006, 31/2007); NPB - unofficial consolidated version;
- Regulation on the expiry of the transformation of the Public Company Elektro-Slovenia, where in the public company Elektro-Slovenia, d.o.o. (Official Gazette of RS, no. 11/2010);
- Instruction on the system operation of the electricity transmission network / SONPO (Official Gazette of RS, no. 49/2007);
- Regulation on the manner and conditions of granting cross-border transmission capacity (Official Gazette of RS, no. 50/2007, 72/2007, 103/2007, 103/2007, 105/2007, 116/2007);
- Regulation on how to implement the public service activity distribution system operators for electricity and public utilities supply electricity to tariff customers (Official Gazette of RS, no. 117/2004, 23/2007); NPB-Unofficial consolidated text;
- Regulation of public service concession activities distribution system operators in electricity (OJ RS, no. 39/2007);
- General conditions for supply and consumption of electricity distribution networks in electricity (OJ RS, no. 126/2007, 1 / 208 - Adj.);
- Regulation on how to implement the public service organization of the electricity market (OJ RS, no. 08/2009);
- Regulation determining the offences and penalties for violations of the provisions of Regulation 1228/2003/EC (OJ RS, no. 105/2007).

11.1.11 Natural gas

- Rules on the technical conditions for construction, operation and maintenance of pipelines with working pressure of 16 bar and the conditions for intervention in the areas of their buffer zones (Official Gazette of RS, no. 12/2010);
- Decree on concession for the implementation of public service activity of the system operator of natural gas transmission system (Official Gazette of RS, no. 109/2004, 73/2008);
- Regulation on how to implement the public service activity of the system operator of natural gas transmission system (Official Gazette of RS, no. 97/2004, 8 / 2005, NPB-Unofficial consolidated text);
- Regulation on the provision of security of natural gas (OJ RS, no. 08/2007);
- Regulation on the operation of the natural gas market (Official Gazette of RS, no. 95/2007).

11.1.12 Regulator of the market

- Decision on establishing the Public Agency for Energy of the Republic of Slovenia (Official Gazette of RS, no. 63/2004, 95/2004);
- Regulation on the issue of certificates of origin of electricity (OJ RS, no. 121/05);

- Regulation on the conditions and procedure for granting and withdrawing licenses for carrying out energy activities (Official Gazette of RS, no. 21/2001, 31/2001, 66/2005) NPB - Unofficial consolidated text + Annex).

11.2 Spatial legislation

Spatial placing of energy facilities in Slovenia is based on the Decree on Spatial Development Strategy of Slovenia (OdSPRS), which provides design planning, the use and protection. At planning energy facilities in the spatial we have to account on specific natural features (forest edge, relief features, landscape features, use of existing locations and integration of energy corridors). It takes into account the principle of residential care and other environment and improving the quality of space. In modernizing and expanding existing facilities and planning new facilities is priority use of renewable energy sources, and reducing pollutant emissions, greenhouse gases and dust into the atmosphere. The main law bases for mentioned issues are:

- Law on Spatial Planning (ZPNačrt), (Official Gazette RS, no. 33/07);
- Spatial Planning Law (ZUrePE1), (Official Gazette RS, no. 110/02, 8 / 03);
- Construction Law, (Official Gazette RS, no. 110/02, 47/04, 102/04, 126/07).

11.3 Environmental legislation

With the Energy Law is also provide energy inspection, inspecting the construction, operation and use of facilities, plant coming lines, appliances and fixtures that are designed for production and transmission, distribution, measurement, security, governance, private consumption and power consumption. At the operation of buildings is important to avoid pollution from the operation of the facility and equipment that is why regulations are also important from an environmental field, which can be divided into two broad areas: nature conservation and environmental protection.
The main law in the field of nature conservation and environmental protection are the following:

- Environmental Protection Law (ZVOE1), (Official Gazette RS no. 41/04, 20/06, 39/06, 70/08);
- Water Law (ZVE1), (Official Gazette RS no. 67/02, 57/08);
- Regulation on the types of interventions in the environment is subject to impact assessment environment, (Official Gazette RS no. 78/06. 72/07);
- Regulation of the Environment report and detailed procedure comprehensive impact assessment process implementation plans on the environment, (Official Gazette RS no. 73/05);
- The instructions on the methodology for making environmental report on the environmental impact, (Official Gazette RS, no. 70/96);
- Nature Conservation Law (ZON), (Official Gazette RS no. 56/99, 31/00, 119/02, 22/03, 96/04);
- Regulation on ecological important areas, (Official Gazette RS no. 48/04);
- Decree on special protection areas (Natura 2000 areas), (Official Gazette RS no. 49/04, 110/04, 59/07, 43/08).