Renewable Energy Country Profile
Version 0.6b

These profiles are a work in progress. They are presented to the international community for review and comment. The profiles are undergoing continual updating for technical content, formatting, grammar, and other issues. Each country profile will be modified on a continuous basis as new information is made available.

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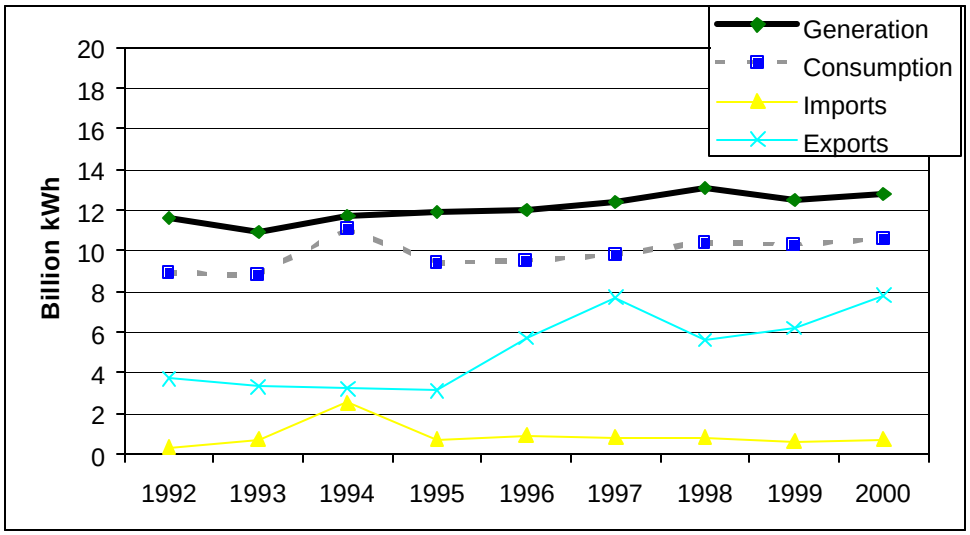
23.0 Slovenia

23.1 Overview of Electricity Supply

Table 7-5
Installed Generation Capacity

Fuel	Number of Units	Capacity (MWe)	Percent of Capacity
Nuclear			
Coal			
Natural Gas			
Hydro			
Other Renewables			
Total			



1.1.1 Wind Resources

Current Status of Wind Energy

There are no operational wind turbines in Slovenia.

The republics of the former Yugoslavia were among the least dependent of the Central and Eastern European states on the former Soviet Union for their energy needs. This was due to extensive utilization of hydroelectric power and greater freedom of choice in the source of fossil fuel imports. Prior to the war, the country was one of the more prosperous in the region, boasting living standards approaching those in some Western European countries. However, conditions have deteriorated significantly in the last two years, with day-to-day survival the main issue of concern for most citizens of the region.

A country wide wind-atlas is not available.

No information concerning legal frame work was available.

No industry association or manufacturer was identified.

No Project was identified

Wind Energy Resource Potential

Due to insufficient data no statement can be made for the technical potential for wind energy development in Slovenia. Nevertheless, Austria's largest wind station is being built near the town of Bruck an der Leitha close to where Austria borders Slovenia and Hungary. It would be reasonable to assume that similar winds will prevail over the border.

Therefore it would be recommended to asses country wide wind energy resources by state of the art wind measurements.

Identification of Areas/Projects with High Potential for Wind Energy

Austrian experience implies possibly promising sites north of Slovenia. Another possible area is the south west, the Adria coast.

Barriers/Incentives for Wind Energy

Specific incentives for the implementation of wind projects in Slovenia are not known.

Specific barriers to the implementation of wind projects in Slovenia shall probably include:

- Lack of knowledge of country's wind energy resource potential.
- Current political situation

Table 1-3. Slovenia Wind Energy Profile.

Current status of wind energy	
Installed capacity	None
Projects under construction	None
Supporting regulations?	None
Industry association?	No
Wind energy resource potential	
Level of information available	Poor
Highest wind class	Insufficient data
Country-level wind atlas available?	No
Estimated potential	Insufficient Data
Estimated potential	Insufficient Data
Target established?	No
High wind speed locations	Adria Coast
Identification of areas/projects with high potential for wind energy	
Recommended strategic assessments	Study 1 : Country wide appraisal of wind resources, by state of the art wind measurements at 50 m Study 2 : an appraisal of legal and economical frame work
Identified areas/projects	None
Incentives/barriers for wind energy	
Significant incentives	No significant incentives
Significant barriers	• Poor knowledge of wind resources • Political situation
Overall Prospects	**Poor** There was no information available on wind energy in Slovenia. Combined with the current political situation the prospects were wind energy development during mid-term are poor.

1.0 Renewable Energy Country Profiles

PROFILE FOR SLOVENIA

C O N T E N T S

1.1. SLOVENIA RENEWABLE ENERGY PROFILE

Slovenia came into existence in 1991 upon the breakup of the Federal Republic of Yugoslavia. It is well advanced in its transition to a free market, including the energy sector. It follows closely Cyprus in leading the list of applicants to join the EU as a Full Member, which is expected to be confirmed at the EU Summit in December 2002.

Slovenia has few indigenous resources of oil and gas. Imports of these fuels make up over half of the total primary energy supply. There are brown coal resources in the country, which account for 95% of coal consumption. It is expected that the present level of domestic coal extraction will be maintained over the coming years. Coal is of major importance to Slovenia both for heating and electricity generation. Slovenia is also moving towards the use of gas. The gas distribution system is expanding rapidly, and Slovenia is in a good position to benefit from being a transit country for various gas pipelines.

The current energy generation mix of Slovenia consists of about 31% hydropower, 43% conventional thermal sources and 26% nuclear power provided by a plant that is jointly operated with Croatia.

Extensive educational campaigns have been carried out in recent years, supported by energy audits, for promoting energy conservation in buildings, industry and other sectors of the economy.

There are additional opportunities for hydro, geothermal, biomass and wind energy.

1.1.1 Overview of Electricity Supply (US DOE 2002[a], EUROREX and NV Consultants)

Energy affairs, policy and strategy in Slovenia lie within the jurisdiction of the Ministry of Economic Affairs and the Inspectorate for Energy, Mining and Construction.

The Slovenian Energy Agency has also been established recently to act as a Regulatory Body for liberalizing the energy market, opening up the market to newcomers, licensing new entrants and ensuring fair competition.

The main tenets of their strategy include:

a. Maintaining a sustainable level of electric power production in the present power plants (coal-fired, or oil and gas-fired and in newly constructed capacities (e.g. combined heat and power plants);
b. Disengaging and decommissioning nuclear power production
c. Increasing natural gas use by commercial and residential users

d. Promoting RES (Renewable Energy Sources) in line with EU targets.
e. Meeting Kyoto Protocol targets (CO_2 emissions reduction by 2008-2012).

Like most East European countries, Slovenia during the early 1990's was registering a kind of "stagnation" - negative or small growth rates, combined with high inflation rates (550-201% during 1990-92).

Between 1994 and 2000 GDP growth rates ranged between 3,1% and 5,0% p.a. In per capita terms, GDP has been increasing steadily from U.S.$6.366 in 1993 to $12.000 in 2000.

Table 0-1. Slovenia Electricity Overview (EBRD 2001, EBRD 2002, US DOE 2002a* EUROREX, NV).

General information			
Population, millions		1,99 (Year 2000, mix year)	
Land area, thousand Ha		2.030	
Macroeconomic Information (2001)			
GDP, billion US$		…….	
Real GDP growth rate, percent		……	
Foreign direct investment (net), million US$		…….	
EU accession status			
Electricity sector			
EBRD electric power transition indicator		…….	
Electricity tariff, US¢/kWh (year of data)		……	
Collection rate, percent (year of data)		……	
Load utilization factor, percent (2000)		……	
Electricity disposition, billion kWh (2000)			
Generation		……	
Consumption		…..	
Exports		…..	
Imports		…..	
Generation capacity mix (2000)	No. of Plants	Capacity (MWe)	Percent of Total
Nuclear	….	….	….
Coal	….	….	….
Natural gas	….	….	….
Natural gas & fuel oil	….	…	….
Fuel oil	….	….	….
Hydro	….	….	…..
Other renewables	….	…..	…..
Total	….	….	…..

Renewable Energy Installed Capacities

According to the IEA Country Submissions (2001) in the Year 2000 Slovenia had a total generation of electricity from RES of …. twh. Electricity generated was defined to be Gross Production minus amount of electricity produced in Pumped Storage Plants.

Its Generation capacity of RES totaled 825 MWe, virtually all from Hydro. Another 467 MW from a variety of other sources, by far the biggest being 359 MW forest residues, 103 MW geothermal heat and 5 MW from municipal solid and digestible waste and landfill gas. Solar and wind installations made a negligible contribution.

According to EUROREX (The European Research Energy Exchange), the Renewable Energy Installed Capacities (Gross) in 2000 were as follows:

4,9 Mtoe

Renewable energy installed capacities

(Gross MW unless otherwise specified)

Electricity	MW
Wind	0
Small Hydroelectric	61
Large Hydroelectric	764
Photovoltaics	0,03
Wave	0
Tidal	0
Geothermal electric	0

Heat/electricity/cogeneration	MW
Solar Thermal	0,04
Energy crops (wood)	0
Energy crops (ethanol/million litres)	0
Energy crops (biodiesel/million litres)	0
Forest residues	359
Solid Agricultural waste	0
Liquid Agricultural waste	0
Municipal Solid waste	70
Municipal Digestible waste	0
Solid industrial waste	1
Liquid industrial waste	0
Landfill gas	2
Geothermal heat	103

1.1.2 Wind Resources

(a) Current Status of Wind Energy and Resources

As in the case of Hungary, there is currently little use for wind energy in Slovenia, except for minor installations for recording purposes, or minor remote locations for water pumping and feed grinding.

Average wind speeds recorded by the Hydrometeorological Office of Slovenia (Hidrometeoroloski zavod Slovenia) over many years show the following results:

Table 1-2(a): Wind average speeds in Slovenia

Place	Average speed
Ajdovscina	3.6 m/s
Brnik	1,7 m/s
Krsko	2,1 m/s
Maribor	2,8 m/s
Portoroz	4,5 m/s

- **Identification of Areas/Projects with High Potential for Wind Energy**

It is evident that only the Portoroz region has wind energy average speeds, which are close to those justifying economic exploitation, without subsidies (4,5-5,0 m/s).

- **Barriers/Incentives for Wind Energy**

The Slovenian Government provides only fiscal incentives for promoting wind and other RES. But it has not been possible to establish the precise nature and extent of such incentives.

Clearly the main barriers to wind energy development are the relatively low speeds. It might be desirable for the Slovenian Authorities concerned to provide additional incentives; or consider adopting policies guaranteeing minimum prices for highest wind locations, which is the trend in stimulating private sector BOT or BOO investment amongst EU countries.

Table 1-2(b). Slovenia Wind Energy Profile. **Year 2001**

Current status of wind energy	
Installed capacity	XX MW, Project Name 1, Project XX MW, Project Name 2, Project Location 2 none? XX MW, Project Name 3, Project Location 3, etc. XXXX MW Total
Projects under construction	XX MW, Project Name 1, Project Location 1 none known XX MW, Project Name 2, Project Location 2 none " XX MW, Project Name 3, Project Location 3, etc. XXXX MW Total
Supporting regulations?	Yes/No. Very brief description.
Industry association?	Yes/No. Name.
Wind energy resource potential	
Level of information available	Poor
Highest wind class	Class 1-7
Country-level wind atlas available?	Yes. Reported as existing but not received yet
Estimated potential	XXXX kWh/yr or MW, gross (theoretical) potential XXXX kWh/yr or MW, technical potential XXXX kWh/yr or MW, economic potential
Target established?	No.
High wind speed locations	Location 1 Portoroz (See Table 1-2a)

1.1.3 Solar Resources

Current Status of Solar Energy

Adequate potential for low intensity solar energy has been identified. However, currently there is no widespread implementation of this resource. Limited use of solar energy for water and space heating has been observed, based on flat plat collectors. Photovoltaic applications have been implemented on an experimental basis in the telecommunications and other sectors. But this technology has not yet reached wide scale of commercialisation in Slovenia.

Solar Energy Resource Potential

According to a study by U. Stritin, C. Arkar & others (See Ref.) measurement of environmental data have been made in Slovenia for many years. Amongst others

records on solar radiation is one of the most important. Data are given in the book Soncno obsevanje v Sloveniji (Solar radiation in Slovenia) (1). From these one can see that solar radiation is non-uniform in a year cycle. The use of solar energy is therefore closely connected with energy storage.

Average day values are presented in the Table below for the towns: Ajdovscina, Brnik, Novo Mesto, Koper, Maribor and Ljubljana.

Table …… Records ……

Place	Average day solar radiation
Ajdovscina	3210 Wh/m^2dan
Brnik	2950 Wh/m^2dan
Novo Mesto	3030Wh/m^2dan
Koper	3400 Wh/m^2dan
Maribor	3010 Wh/m^2dan
Ljubljana	22960 Wh/m^2dan

The theoretical potential of solar radiation in Slovenia can be calculated concerning the area of the State:

$H_{glob,0}$ = 93700 PJ/a = solar radiation on horizontal surface

The theoretical potential must be reduced in order to account for areas, which cannot be covered with solar technology devices.

- the area of forests 1111006 ha 1111006*10^4 m^2
- the area of fields 490863 ha 490863* 10^4 m^2
- ate area of rivers and lakes 1704 ha +4845 ha 6549* 10^4 m^2
- area of roads 7117 ha 7117* 10^4 m^2

Therefore the total potential of solar radiation on horizontal area which can be used for heat and electricity conversion is:

$H_{glob,0}$ = 19200 PJ/a

The solar insolation in Slovenia is relatively poor averaging …….. kWh/m^2/day (BP / Solarex 1996).

Identification of Areas/Projects with High Potential for Solar Energy

As stated above, there are only poor or limited prospects or opportunities for solar development in Slovenia based on photovoltaics. Their cost is 300-500% higher than electrical or thermal energy produced from traditional sources of energy.

Likewise the potential and prospects for flat plate collectors are also limited.

Barriers/Incentives for Solar Energy

The primary barrier to solar energy utilization in Slovenia for commercial purposes is its high cost (especially that of photovoltaics). Other restrictive factors are

f. The poor insolation and its wide fluctuation over the day and amongst seasons, which would dictate investment in back-up systems.
g. The relatively low per capita income of the population.

Uses of photovoltaics will most likely be restricted to installations, which cannot conveniently or economically be served by the grid (e.g. telecommunications), to daring individuals or for use by research organizations, which normally will try to obtain subsidies or grants.

1.1.4 Geothermal Resources

Current status:

The existing capacity of Geothermal resources in Slovenia amount to about 103 MW of heat plant providing heat to health spas, agriculture and institutions.

Potential / Prospects

The theoretical potential of geothermal energy in this country have been estimated as amounting to 19,6 PJ/a (U. Stritih, C. Arkar etc).

Its utilization depends on the construction of the earth. The geological construction of Slovenia is complicated since it consists of five different units: Panonia land, Eastern and Southern Alps bordering between them and external Dinaridi.

Identification of Areas/Projects with High Potential for Geothermal Energy

No explicit reports or information could be secured regarding identification of new areas, other than those where exploitation exists at present, and the targets spelled out in the concluding section.

Table ..... Slovenia Geothermal Energy Profile.

Current status of geothermal energy	
Installed capacity (electric)	XX MWe, Project Name 1, Project Location 1 XX MWe, Project Name 2, Project Location 2, etc. XXXX MWe Total
Installed capacity (thermal)	XX MWth, Project Name 1, Project Location 1 XX MWth, Project Name 2, Project Location 2, etc. XXXX MWth Total
Projects under construction (electric)	XX MWe, Project Name 1, Project Location 1 XX MWe, Project Name 2, Project Location 2, etc XXXX MWe Total
Supporting regulations?	Yes/No. Very brief description.
Industry association?	Yes/No. Name.
Geothermal energy resource potential	
Level of information available	Poor / Fair / Good / Very Good
Country geothermal atlas available?	Yes/No. Very brief information.
Estimated potential (electric)	XXXX kWh/yr or MW, gross (theoretical) potential XXXX kWh/yr or MW, technical potential XXXX kWh/yr or MW, economic potential
Target established?	Yes/No.
High enthalpy geothermal locations	Location 1 Location 2 Location 3, etc.
Identification of areas/projects with high potential for geothermal energy	
Recommended strategic assessments	Study 1 Study 2, etc.
Identified areas/projects (electric)	XX MWe, Project Name 1, Project Location 1 XX MWe, Project Name 2, Project Location 2 XX MWe, Project Name 3, Project Location 3, etc.
Incentives/barriers for geothermal	
Significant incentives	Incentive 1 Incentive 2, etc.
Significant barriers	Barrier 1 Barrier 2, etc.
Overall Prospects	Poor / Fair / Good / Very Good. Brief summary.

1.1.5 Biomass Resources

(a) Current status

Over half of Slovenia is covered with forests and wooded areas. Wood is an important fuel for space heating, particularly in the residential sector. Forest residues consist of about 359 th MW installations.

In the country's wood processing industry there are about 80 wood waste boilers of capacities of greater than 1 MWth. There are also two small municipal wood-fueled district heating plants. Other main installations are a 6 MWth facility in the city of Zelezniki that supplies hot water to local business, public and residential buildings. A 4 MWth unit is operating in the city of Gornji Grad, which also supplies hot water to public and residential buildings. Moreover, many rural households and farms use firewood as a fuel source.

No energy crops or bio-fuels have been reported as being produced in Slovenia.

On the other hand there are 2 MWth of energy from Municipal Digestible waste (biogas plants), 1 MW of Solid Industrial waste and 2 MW of Landfill gas.

(b) Biomass Energy Resource Potential

Biomass energy resource raw data on Slovenia are shown in Table 1-4

Table 0-4. Slovenia Biomass Resource Data (FAO 2002a, FAO 2002b).

Biomass resource type	Total production	Production density
Primary crop production, tonne	(avg. 1999-2001, tonne)	(tonne /1000 Ha)
Total primary crops (rank among COO)	3,155,141 (26)	1,568 (13)
Top 10 primary crops		
Maize for Forage & Silage	1,058,951	526
Sugar Beets	405,401	201
Maize	293,221	146
Mixed Grasses, Legumes	275,000	137
Potatoes	192,072	95
Wheat	147,996	74
Clover for Forage & Silage	140,000	70
Alfalfa for Forage & Silage	130,133	65
Grapes	117,211	58
Apples	113,502	56
Animal units, number	(number)	(number / 1000 Ha)
Cattle	462,261	230
Poultry	7,150,000	3,554
Pigs	575,418	286
Equivalent animal units	763,928	380
Forest products, cubic meters	(avg 1999-2000, cu meters)	(cubic meters /1000 Ha)
Wood fuel and charcoal	518,500	258
Wood residues	134,902	67

As explained in the case of Hungary, a number of detailed studies and steps will be needed to assess in detail biomass energy resource potential from forests, crops, livestock, agro-industry, municipal organic component etc.

It is not anticipated to Switch crops from food and industrial use to energy. The main additional potential should come from uncultivated or under-employed land. And a greater utilization of solid and liquid wastes.

The area of forests in Slovenia has been increasing from year to year. In 1990 it was 1.071.151 ha. It reached 1.111.006 in 1998. On the assumption that for the sake of sustainability only about 57% of the total potential can be tapped, the potential amount has been estimated as Qt=27,9 PJ/a (U. Stritih, C. Arkar etc). Qt = heat.

The potential for biofuels, such as bioethanol and biomethanol, produced by fermentation plants from sugar and cellulose has been calculated as Qt=10,7 PJ/a. Production only uncultivated or marginal land.

An estimate for a biogas potential of Qt* = 25,4 PJ has also been made for utilizing waste from farms, people animals and others. However, no explanation has been given as to the absolute level of solid and liquid wastes estimated. There is a suspicion that the full potential through this technological route has not been fully taken into account.

1.1.6 Hydro-electric Resources (DOE)

(a) Current status

There are three river systems in Slovenia. The longest of these is the Sava, which flows southeast across the middle of Slovenia; its basin, which includes its major tributory, the Savinja, drains the middle one-third of Slovenia before entering Croatia and eventually joining the Danube River at Belgrade, Yugoslavia. The Drava River also flows southeast across Slovenia before joining the Danube at Croatia's border with Yugoslavia; its basin, which includes its major tributary, the Mura, drains the northern one-third of Slovenia. The other significant river in Slovenia is the Soca (a.k.a. the Isonzo River), which flows southward through the western part of Slovenia before entering Italy and emptying into the Adriatic Sea. A map showing Slovenia's river systems is shown in Figure 1.

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* Qt = Heat

Figure 1: Slovenia's River Systems

Source: European Commission Regional Environmental Centre for Central & Eastern Europe

Hydropower supplies about one-third of Slovenia's electricity generating capacity. The Drava River is the major source of hydroelectric power in Slovenia. There are eight large hydroelectric plants in the Slovenian Drava cascade; all are owned and operated by the Dravske Elektrarne power company, headquartered in the city of Maribor, which was made part of the new Slovenske Hidroelektrarne holding company in June 2001. At average flow, the Drava cascade of power pla nts can produce more than 2.5 billion kilowatt-hours (kWh) of electricity per year; the Drava cascade covers about 37% of the country's total summer electricity demand and about 20% of the winter demand.

Two other hydroelectric operating companies were also brought into Slovenske Hidroelektrarne. Soske Elektrarne, headquartered in Nova Gorica, manages a cascade on the Soca River, representing about 90 MWe in total generating capacity. Savske Elektrarne, headquartered in Ljubljana, has four hydroelectric power plants on the Sava River, representing not quite 115 MWe in total generating capacity. A summary of the larger power plants in Slovenia is shown in Table ….., which follows:-

Table ….: Slovenian Hydroelectric Power Plants

Power Plant	Location (River)	Capacity (MWe)	Mean Annual Production (million kWh)	Reservoir Size (million cubic meters)	Cascade
Dravograd	Drava	26	152	5.7	Drava
Vuzenica	Drava	57	251	7.0	
Vuhred	Drava	61	307	11.1	
Ozbalt	Drava	61	314	11.0	
Fala	Drava	51	237	4.4	
Mariborski Otok	Drava	62	280	13.7	
Zlatolicje	Drava	141	608	4.5	
Formin	Drava	127	562	20.5	
Doblar	Soca	30	150	5.8	Soca
Plave	Soca	15	80	1.7	
Ajba I	Soca	4	6	n/a	
Solkan	Soca	32	110	1.2	
Zadlašcica	Soca	8	32	n/a	
Moste	Sava	21	64	n/a	Sava
Mavcice	Sava	38	61	n/a	
Medvode	Sava	20	77	n/a	
Vrhovo	Sava	34	126	n/a	

n/a - not available
note: power plants are ordered in this listing sequentially in their respective cascades
Sources: Dravske Elektrarne; Soske Elektrarne; Savske Elektrarne

Besides these larger hydroelectric generating units, there are approximately 40 very small units along the Sava and Soca rivers. Many of the smaller hydro plants are very old (pre-World War II) and will need to be refurbished to remain operational.

- **Hydro Power Potential and Targets in Slovenia**

Renovation will increase the efficiency of these units, and could add as much as 150 MWe in generating capacity. Refurbishment of existing small scale hydropower, as well as increasing the capacity of the large-scale units, are part of the Government's renewable energy strategy. The Slovene Government would also like to develop another five hydro sites along the lower Sava River, which could add about another 200 MWe of new hydro capacity to the system by 2010. A joint Slovenian-Austrian company, Sava, received the concession to construct these five hydroelectric stations, which will be located at Boštanj, Blanca, Krško, Brezice, and Mokrice.

A complete assessment of H ydro-Power Potential in Slovenia by U. Stritih, C. Arkar etc. consistent with EU targets shows the following results (N.B. it is not clear how far this potential estimate takes into account renovation of existing plants):-

Table ….. portrays the estimated potential of water power in Slovenia

Table …..: The potential of total hydro energy in Slovenia

River	Power (MW)	Energy(GWh/a)	Share(%)
Drava	646	2969	38
Sava	920	3323	43
Soca	368	1057	14
Mura	75	400	5
Total	2009	7749	100

Converting the total power into SI units one obtains

$$E = 27PJ / a$$

E = Electric energy

In the frame of renewable energy sources only hydro power stations with the nominal power of 10 000 kW are classified (small hydro power stations).

The theoretical potential of small hydro power station is presented in Table … and the classification is made on the basis of regulations for connecting and operating small hydro power stations in Slovenia.

Table ….: The potential of small hydro power in Slovenia

	classification (kW)	**Total power (kW)**	**Energy (MWh)**
210	0-36	20.700	123.000
250	37-125	19.500	85.000
320	126-1000	106.700	491.000
40	1001-10000	105.100	416.00
Total	0-10000	252.000	1.115.000

In SI units this part is only

$$E = 4{,}01 PJ/a$$

E = Electric energy

It is important to note that in the case of small hydro power in Slovenia the extent of exploitation is close to 40%. It would have to be doubled to reach 80% of the theoretical potential.

1.1.7 Overall Assessment of Potential and Targets for RES in Slovenia

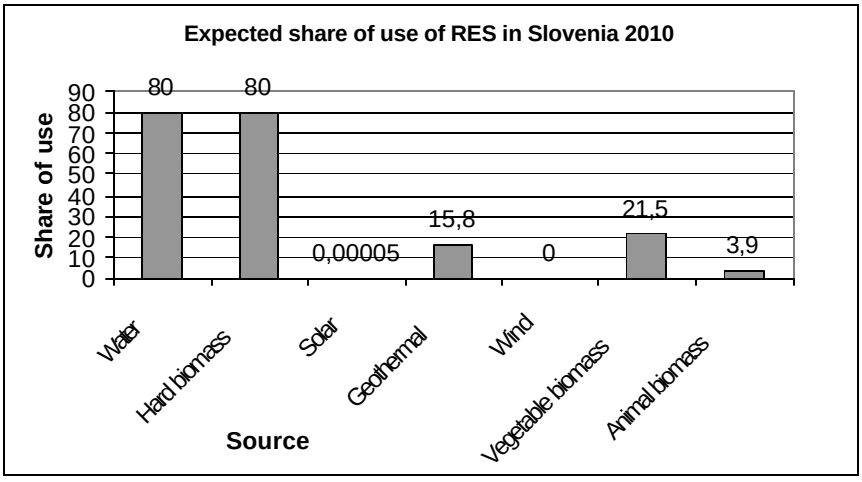
With an intensive Promotional Programme supported by subsidies and fiscal incentives Slovenia can to a large extent help achieve EU targets of raising RES from 6% to 15% till the Year 2010. To do this Slovenia will have to reach 31,5 PJ of renewable energy sources as compa red to about 14 PJ at present.

The study U. Stritih, C. Arkar, R. Maksic and S. Medved suggests that these targets can be achieved, or almost achieved, as follows:

- **double use of biomass**; supplementary 11 PJ/a – 10 PJ/a of heat and 1 PJ/a of electricity
- **double production of electric energy from small hydro power stations**; 1.1 PJ/a
- **to add bioethanol to unleaded fuels**; what is 2 PJ/a which represents only 18 % of potential of unused farm lands in recent years
- **to use biodiesel fuel**; with 0,3 PJ/a representing only 3% of the potential of unused land
- **with biogas utilisation**; in the frame of 1 PJ/a being 4% in comparison to the estimated animal potential
- **triple use of geothermal energy**; that is 2 PJ/a – 1,7 PJ/a of electric energy from aquifer Termal II and 0,3 PJ/a of heat
- **solar energy use**; 0,5 PJ/a constituting 100% of the potential for hot water preparation in new buildings (5000 in the year) and 0,25 PJ/a for heating

individual buildings and industry objects with low and middle temperature systems

In the following Diagramme illustration is made of the estimated share of renewable energy sources in Slovenia. It can be seen that it cannot be expected to increase the share of small hydro power stations significantly and biomass since 80 % is the highest value of economically possible use.



1.1.8. CONTACT INFORMATION

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re: Study of THE PROGRAM OF USING RENEWABLE ENERGY SOURCES IN SLOVENIA

1.1.9. REFERENCES

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