



RENEWABLE ENERGY POLICY REVIEW

SLOVENIA

Slovenia exhibits an energy import dependency close to the EU average and mainly imports oil and natural gas. Slovenia produces nuclear energy, solid fuels and renewable energy, all of which are also used in electricity generation in almost equal shares. The share of renewable sources in primary energy supply is steadily increasing. Slovenia's energy intensity is much higher than the EU-25 average.

KEY FIGURES

- The **share of RES in primary energy consumption** was of 10.27% in 2007.¹
- The **share of RES in the gross final energy consumption** was 16% in 2005.
- The **share of RES in the gross electricity consumption** was 21.94%% in 2007
- The **share of RES heating and cooling** was of 4,5 % in 2006
- The **share of all biofuels** in the transport fuels was by energy 2% in 2006².
- Dependence on external energy supplies is about 55.9% in 2005.

¹ EurObserv'er

² Figures from the Slovenian Restructuring Agency

RES POLICY

RES TARGETS

Mandatory targets set by the Directive on the Promotion of the use of energy from renewable sources

- 25% share of RES on the final consumption of energy in 2020.
- At least 10% share of renewable energy in final consumption of energy in transport by 2020.

Indicative Target set by the RES- electricity European Directive from 2001³

- 33.6% share of RES on gross electricity consumption by 2010

Indicative Target set by the European Biofuels Directive from 2003⁴

- Biofuels consumption of 5% of petrol and diesel use for transport in 2010, just slightly below the reference value of 5.75%.

National Commitments

According to the 2004 National Energy Programme Slovenia plans to:

- Increase the share of RES in primary energy balance from 9% to 12% by 2010;
- Increase the share of RES in heat supply from 22% in 2002 to 25% by 2010.

Progress towards the target

Indicative targets according to the renewable electricity directive of 33,6 % (2010) will probably not be reached.

RES POLICY INSTRUMENTS

Support for RES electricity

New support system

³ Directive 2007/71/EC on the promotion of electricity produced from renewable energy sources in the internal electricity market. Currently in force, sets targets up to 2010.

⁴ Directive 2003/30/EC on the promotion of the use of biofuels or other renewable fuels for transport. Currently in force, sets targets up to 2010, with indicative targets by 2005.

The current Energy Act (EZ-C, OGRS, 70/2008) determines the principles of energy policy, the rules for the energy market, the manner and form of the implementation of commercial public services in the area of energy, the principle of reliable supply and efficient use of energy, the conditions for the operation of energy facilities, the conditions for the performance of energy-related activities, the issuing of licences and permits, and the bodies performing administrative tasks under this Act.

RES and CHP support system

The support system is supporting the producers that are producing energy from renewable energy sources (RES) and high-efficiency combined heat and power (CHP). The support system is a feed-in tariff with premium. The government annually defines both the price for electricity from eligible power plants and the premium. The producer can sign the contract with the state-owned buyer (Power Purchase Agreement) for the unified price, in which the premium is already calculated. The producer can choose to sell his electricity on the open market. In that case he, if eligible, still receives the premium. The premium is by the definition of the new Energy Act (EZ-C) now named "support".

With the Energy Act, RES under 125MW and high-efficiency CHP under 200MW and younger than 15 years (RES) or 10 years (CHP) are eligible for the support.

The producers can get the support when their electricity production costs, including normal profit, are higher than the electricity market price.

The support is carried out in two forms:

1. As a power purchase guarantee for RES and CHP power plants under 5MW, where price is defined by the government (feed-in) and
2. Financial aid for current operation for other producers.

Feed-in system is designed as follows:

1. The Support Centre has to purchase all energy produced by RES-CHP producers by the price defined by the government.
2. If RES-CHP producer sells his electricity on the market, the Support Centre pays him only the support (premium), otherwise already included in government's price.

The Support Centre is a division of the Market Organizer – Borzen d.o.o. – Slovenian energy exchange.

RES-CHP producer has to be eligible for the support by obtaining guarantees of origin (GO's) for his electricity on the base of "declaration of the power plant". The declaration is an order, issued by the Energy Agency that confirms that the RES or CHP power plant is complying with the rules, prescribed for such power plants. In any case of selling, either to the Support Centre or individually, GO's has to be transferred to the Support Centre in order to get the support (premium).

Eligibility is also checked by the principle of production costs. If the production costs, including normal market profitability, are higher than the market price, RES-CHP producer is eligible for the support.

Because the new Energy Act was adopted while the current support system was still active (some producers have long-term contracts with the system operator), there is a transition period, within

which the producers can still operate by the support system, defined by the previous Energy Act. The transition periods are:

Condition (if the producer is in current support system)	Transition period for RES producers
Is still eligible for the support (age of power plant under 15 years, obtained GO's...)	1 year
Is not eligible for the support (age of power plant over 15 years, obtained GO's...)	3 years

Refurbished RES power plants, older than 15 years, are eligible for support if the refurbishing costs are higher than 50% of investment costs into such new power plant. In this case the support lasts 15 years, as well.

Slovenia doesn't have neither a quota system (green certificates) nor a tax exemption system for RES, but investment support is given by "Eco fund" (Ekološki sklad RS – ekosklad) in form of financial credit to investors. The credit has lower interest rates comparing to banks. The annual fund for RES and Energy efficiency programmes is 7.5 million EU.

a) Directive 2007/77/EC: status of Guarantees of Origin (GOs)

In Slovenia, GOs were transposed in the national law with the Energy Act and the government's decree (2005). They are issued by the Energy Agency (www.agen-rs.si). They are used for proving eligibility to enter the support system – getting the support in form of a premium (above market price, but both defined by the government).

All GOs, issued in any other EU country, are in accordance with the RES Directive (2001/77/EC) or CHP Directive (2004/8/EC) recognised in Slovenia.

The GOs are issued to eligible producers that have obtained the status of qualified producer (by former legislation). By the new Energy Act the producers will have to obtain the *Declaration of the power plant* from the Energy Agency, proving it uses RES or high efficiency CHP, in order to apply for GOs.

For the issued GOs the central registry is established and operated by the Marked organizer (Borzen d.o.o.)⁵.

The GOs could be used for volunteer green-e market.

When the RES-CHP producer chooses to enter the support system, he is obliged to transfer his GOs to the Support Centre. In exchange, the Support Centre pays him the support (premium).

If the RES-CHP producer decides NOT to be in the feed-in system, his GO's can follow the physical electricity. That means that in this case the producer can sell his GOs only to whom he sells his electricity.

⁵ Publicly available data – the producers, addresses, energy source or technology, installed power of the power plant, GO's number and its status can be found at this web address: <https://poi.borzen.si/register/Default.aspx>

Loans with reduced interest-rate

Two different soft loans are normally offered every year by the "Environmental fund of the Republic of Slovenia". In 2006 the total amount of loans was EUR 34.7 millions.

1. Public tender for loaning ecological investment

This soft loan for companies, municipalities and other legal entities located in Slovenia amounted in total to 12 million €. The object of this tender was the stimulation of investments in RES-E. The loan can cover up to 90 % of the investment. However, in average they cover 50% of the investment. There was a fixed annual interest rate of 3m-Euribor+0.3 % for a maximum duration of 15 years with moratory interest of up to 2 years.

2. Public tender for loaning ecological investments

This soft loan for citizens located in Slovenia amounted in total to 10 million €. The goal was to stimulate investment in small-scale RES-E plants with a nominal power of up to 50 kW. Loans can cover up to 90% of the investment. However, in average they cover 50% of the investment. There was a fixed annual interest rate of 3,9 % for a duration of up to 10 years and not more then 40.000 € per PV plants.

For the remaining RES-E plants the credit limit is 20.000 € per installation.

Subsidies for RES-electricity for households are assigned by the department of the Ministry for Environment and Spatial Planning. There was a 40 % subsidy for correctly installed PV power plants, restricted to 600 SIT (2.5 €/Wp) for modules installed and to 500,000 SIT (2,086 €) for the whole system. For investments in remote areas with no connection to the network (solar collectors, PV and biomass), there is the possibility to apply for an additional 20% subsidy (in total up to 60%) of the investment costs.

The duration of the supporting for the eligible power plant is ≤ 15 years

Eligible power plants for the supporting:

- new power plants
- mostly new power plants ≤15 years old

		SHP	Wind	Solar		Geothermal	Biomass	Biogas	Biogas	Biogas	RES
				as part of construction	independent						
Micro (< 50 kW)	TTL price	105	98	401	351	(1)	(1)	159	86	99	/
	Support	50	46	343	294			102	26	40	/
Small (< 1 MW)	TTL price	93	94	390	330	152	224	155	74	67	77
	Support	37	42	332	273	93	165	96	15	8	18
Medium (1 - 10 MW)	TTL price	82	87	370	301	152	167	140	66	62	74
	Support	24	31	311	242	93	108	80	7	3	15

(1) Price is calculated by each power plant individually

The aforementioned prices refer to what is mentioned in the Decree proposal and have to be considered as provisional as the Decree has not been adopted yet.

Support for biofuels

Slovenia has adopted the following legislative acts:

a. An operational programme to reduce greenhouse gas emissions, a revised version of which was adopted by the Slovenian government in 2006, and an initial programming document introducing measures to promote biofuels. The operational programme states that the objective of introducing biofuels in transport from 2008–2012 is to reduce greenhouse gas emissions by 120 000 tonnes CO₂ equivalent a year, which will mean replacing 45 000 tonnes of diesel and petrol a year. Converting this Kyoto objective into the percentage of the share of biofuels in transport, the average annual use of biofuels for the period 2008–2012 comes to around 3% of all road vehicle fuel.

b. The Excise Duty Act (Slovenian Official Gazette No 84/98, last amended in No 122/06), which exempts biofuels used as motor fuels from the excise inspection and payment system when used in their pure form. When biofuels are blended with fossil fuels, a maximum 5% exemption from the payment of excise duty can be claimed, or more for standard fuels containing biofuels. The level of exemption from excise duties is proportional to the share of biofuel added.

c. The Rules on the content of biofuels in motor vehicle fuels (Slovenian Official Gazette No 83/05, corrigendum No 108/05), which, in accordance with Directive 2003/30/EC, defines:
- the types of biofuels used as transport biofuels and- the minimum level of biofuels in motor vehicle transport which fuel distributors must ensure for motor vehicles each calendar year up to 2010.

Obligations of fuel distributors

In accordance with the Rules on the content of biofuels in motor vehicle fuels (Slovenian Official Gazette No 83/05, corrigendum 108/05), distributors of fuel for transport vehicles must ensure that the annual average content of biofuels in all transport fuels placed on the Slovenian market in the particular calendar year is as follows:

- 2006 - equivalent of at least 1.2%,
- 2007 - equivalent of at least 2%,
- 2008 - equivalent of at least 3%,
- 2009 - equivalent of at least 4% and
- 2010 - equivalent of at least 5%.

The content of biofuels is expressed as a percentage of the energy value of all motor vehicle fuel placed on the market.

Distributors may transfer obligations from one year to the next if the price of purchasing biofuels exceeds the total made up of the price of fossil fuels and the excise duties on them.

Incentives to grow crops for biofuel production

Upon accession to the EU, Slovenia adopted the market regulations and the system for direct payments for crops, introducing direct payments for the production of energy crops. In accordance with the Decree for direct payments for producers of certain arable crops (Slovenian Official Gazette No 10/05, last amended by Nos 113/05 and 99/06), in addition to direct payments, producers of energy crops (rape seed oil) who received SIT 71 291/hectare in 2005 could also receive aid for energy crops in the amount of SIT 6 474/hectare.

Incentives for local communities for sustainable development of transport

The Ljubljana Public Passenger Transport Office (LPP) joined the European Commission's CIVITAS II - MOBILIS programme to encourage local authorities to develop sustainable transport. The objectives are to test the use of biodiesel to power urban bus vehicles. In July 2005 a blend of fossil diesel (80%) and biodiesel (20%) was tested in two LPP urban buses but, due to the difficulties of storing the fuel, there was a switch in 2006 to 100% biodiesel.

Support for heat

According to data from the Slovenian Statistics Office, Slovenia's consumption of wood and other solid biomass as fuel to produce electricity and heat produces at least 18.7 PJ a year, or approximately 6% of total primary energy consumption (320 PJ) per year.

Subsidies or loans with reduced interest-rates are also available. Financial incentives aim at using RES for heating.

Sources

European Commission Factsheets by Country

http://ec.europa.eu/energy/energy_policy/facts_en.htm

Member States Reports in the framework of the Directive 2001/77/EC on renewable electricity

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Energy Restructuring Agency Ltd.

<http://www.ape.si>

<http://www.pv-platforma.si>

<http://www.soncnikolektorji.si>

Ministry of the Economy

<http://www.mop.gov.si/en/>

EurObserv'er Barometer

<http://www.energies-renouvelables.org/observ-er/sig/eufores/sig.asp>

Slovenian Small Hydropower Association

<http://www.zdmhe.si>



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