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**REPORT OF THE REPUBLIC OF SLOVENIA IN ACCORDANCE WITH
ARTICLES 6(3) AND 10(2) OF DIRECTIVE 2004/8/EC OF THE
EUROPEAN PARLIAMENT AND OF THE COUNCIL ON THE PROMOTION OF
COGENERATION BASED ON A USEFUL HEAT DEMAND IN THE INTERNAL
ENERGY MARKET AND AMENDING DIRECTIVE 92/42/EC**

1. Transposition/implementation of the legal text of Directive 2004/8/EC

***Q1** What is the level of transposition of the Directive in your country? What is the timeline for the remaining parts of the transposition of the Directive, if any?*

In the Republic of Slovenia, Directive 2004/8/EC has been fully transposed, and there is no need to plan regulatory changes to transpose any part of Directive 2004/8/EC.

In 2008 and 2009, Slovenia fundamentally updated the Energy Act and secondary legislation on support for electricity generation from renewable sources and high-efficiency cogeneration of heat and power. The support scheme was undertaken in compliance with Community guidelines on state aid for environmental protection (2008/C 82/01) and with the decision of the European Commission (2007/580/EC) dated 24 April 2007, and was reported to the European Commission in 2009. The Commission permitted the scheme under decision C(2009)8353 dated 23 October 2009, as it concluded that the support scheme for electricity generated from renewable resources in cogeneration equipment is compatible with the single market in accordance with Article 87(3)(c) of the EU Treaty.

***Q2** What is the timeline for implementing measures based on the Commission Decision of 19.11.2008 establishing detailed guidelines? Please indicate how this has taken place (revision of a general energy law, a specific law, decree, regulation,...).*

The necessary measures were carried out in Slovenia on the basis of the Commission Decision defining detailed guidelines. The Regulation on determination of the amount of electricity from cogeneration of heat and electricity which is generated with high efficiency and determination of efficiency of transformation of energy from biomass (OJ RS 37/09) was adopted.

This Decree regulated implementation of the Commission Decision of 21 December 2006 establishing harmonised reference values for separate production of electricity and heat for the implementation of Directive 2004/8/EC. To determine the efficiency of high-efficiency cogeneration, the quantity of electricity from cogeneration, and the primary energy savings achieved, the Decree regulated implementation of the Commission Decision of 19 November 2008 determining detailed guidelines for implementation and application of Annex II to Directive 2004/8/EC of the European Parliament and Council.

This Decree transposed into Slovenian law Articles 3 and 5 and Annexes 1, 2 and 3 of Directive 2004/8/EC.

Article 8 of the Regulation on determination of the amount of electricity from cogeneration of heat and electricity which is generated with high efficiency and determination of efficiency of transformation of energy from biomass stipulates that the

guidelines from the Annex to Decision 2008/952/EC shall be used in calculating the efficiency of high-efficiency cogeneration, in determining the amount of electricity from high-efficiency cogeneration, and in calculating the primary energy savings.

***Q3** To what extent do you consider your country to have already significantly implemented the Directive?*

Directive 2004/8/EC has been fully transposed and is fully implemented in the Republic of Slovenia.

***Q4** Is your country using the alternative calculation method according to Article 12(2)?*

No. Slovenia decided that the procedures for determining electricity generated in high-efficiency cogeneration will not use the option or procedures enabled by Article 12 of Directive 2004/8/EC.

***Q5** Is there any need for your country to review in accordance with Article 13 the threshold values used for calculation of electricity from cogeneration and/or the threshold values used for calculation of efficiency of cogeneration production and primary energy savings?*

In Slovenia there is no need to review threshold values (75% and 80%) from Annex II of Directive 2004/8/EC used in calculating electricity from cogeneration and primary energy savings.

2. National potential to increase the share of high-efficiency cogeneration

***Q6** Can your country already show progress in high-efficiency cogeneration since the last report on national potential which can be ascribed to either EU or national legislation and support schemes?*

From the responses of promoters who, due to the planning of concrete projects for CHP generation equipment, contact the Ministry of the Economy seeking information relating to the support they can expect, we conclude that the greatest influence on their final decision on whether or not to commence construction is the support scheme for electricity cogeneration provided by the Republic of Slovenia.

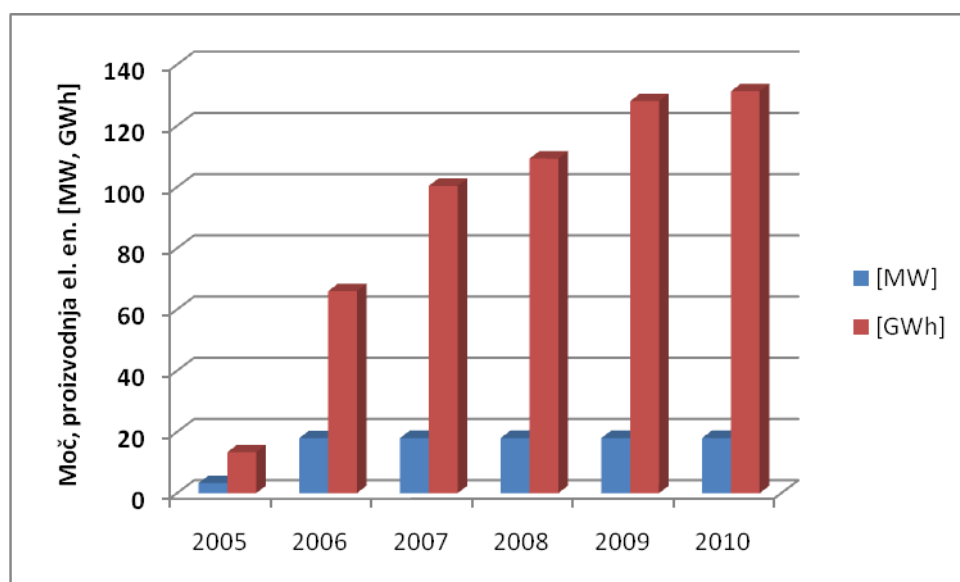
The level of support, its duration, and certainty that the conditions for support will not change during its provision are essential for investors. The last of these - assurance that

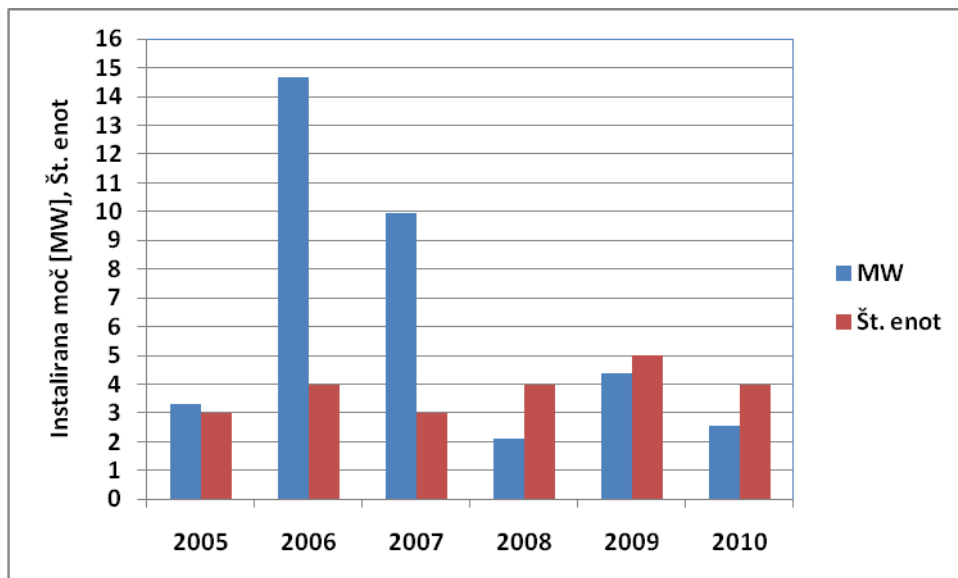
there will be no changes to the support scheme that will affect projects initiated but not yet depreciated - is also of greatest interest to banks that assess the investment plans of clients seeking loans.

***Q7** What is your evaluation of the progress towards increasing the share of high-efficiency cogeneration in your country? Your assessment should be based on the specific figures to be included in the **attached spreadsheet (Excel file)** designed to facilitate the submission of your data.*

The data in the table in the proposal received for preparing the report show that progress has been achieved. This primarily involves smaller CHP units promoted under a new support scheme designed in 2008. The lack of greater progress can objectively be ascribed as a consequence of the economic crisis, which has delayed many investments.

NEW UNITS INSTALLED IN INDIVIDUAL YEARS.						
	2005	2006	2007	2008	2009	2010
[GW]	0.003327	0.014684	0.00997	0.002119	0.004366	0.002542
[TWh]	0.0134	0.0526	0.0344	0.0089	0.0188	0.00321
CUMULATIVE BY YEAR						
	2005	2006	2007	2008	2009	2010
[MW]	3.327	18.011	18.02097	18.02309	18.02746	18.03
[GWh]	13.4	66	100.4	109.3	128.1	131.31





3. Barriers to high-efficiency cogeneration

Q8 Please give your views on the current barriers to high-efficiency cogeneration in your country

- barriers in relation to administrative procedures (authorization, coordination among competent authorities, streamlined simplified procedures, etc.);

Legislation defining spatial planning and procedures for granting building permits for generating equipment for cogeneration of heat and electricity

- Spatial Management Act (ZUreP-1), OJ RS 110/02, 8/03, 58/03-ZZK-1, 33/07-ZPNačrt;
- Spatial Planning Act (ZPNačrt), OJ RS 33/07, 70/08-ZVO-1B;
- Ordinance on Spatial Planning Strategy of Slovenia (OdSPRS), OJ RS 76/04;
- Decree on Spatial Order of Slovenia, OJ RS 122/04;
- Construction Act, OJ RS 110/02, 41/04-ZVO-1, 45/04, 47/04, 92/05-ZJC-B, 93/05-ZVMS, 126/07, 108/09;
- Environmental Protection Act (ZVO-1), OJ RS 41/04, 17/06, 20/06, 49/06-ZmetD, 33/07-ZPNačrt, 57/08-ZFO-1A, 70/08, 108/09-ZPNačrt-A, 108/09;
- Nature Conservation Act, OJ RS 56/99, correction-31/00, 110/02-ZGO-1, 119/02, 41/04, 61/06-ZDru-1;
- Waters Act (ZV-1), OJ RS 67/02, 110/02-ZGO-1, 2/04-ZZdrI-A, 41/04-ZVO-1, 57/08;
- Energy Act (EZ-UPB1), OJ RS 27/07 – officially consolidated text, 70/08 and 22/10.

Important phases of spatial planning for installing generating equipment for cogeneration of heat and power (CHP) prior to obtaining a building permit pursuant to the Construction Act are:

Pursuant to the Decree on the types of spatial planning of national significance (OJ RS 95/07 and 102/08), CHP generating equipment using biomass or biofuel with nominal electric power greater than 16 MW must be included in the National Energy Programme and installed in accordance with the National Spatial Plan. CHP generating equipment using biomass or biofuel with nominal electrical power less than or equal to 16 MW shall be installed in accordance with Municipal Spatial Plans.

Before starting procedures to obtain building permits, pursuant to the provisions of Article 49 of the Energy Act investors must obtain an energy permit for power plants with nominal electric power greater than 1 MW.

If generating equipment is expected to use water as a coolant using water resources, water rights must be obtained pursuant to the Waters Act.

For CHP generating equipment using biomass or biofuel with thermal power greater than 1 MW, an environmental protection permit must be obtained for emissions into air or water pursuant to the Environmental Protection Act and the Decree on activities and installations causing large-scale environmental pollution (OJ RS 67/04, 71/07 and 122/07).

The Decree on the types of environmental encroachment for which an environmental impact assessment is required, (OJ RS 78/06, 72/07 and 32/09) prescribes for obtaining a building permit for CHP generating equipment the implementation of an environmental impact assessment for CHP generating equipment with input thermal power of 50 MW or more, or 10 MW or more for solid fuel from waste biomass.

- barriers in relation to electricity grid system and tariff issues (including specific measures for small scale and micro cogeneration units);

With regard to the electricity network, the main barrier for investors is the network connection cost. Pursuant to Article 64k of the Energy Act, CHP generating equipment investors bear the costs of making the connecting line from the generating equipment to the connection to the network of the system operator. Meanwhile, generating equipment investors with a valid declaration do not bear the cost of any upgrade of the existing transmission or distribution network required due to the connection of the generating equipment.

The next important barrier is that investors must themselves obtain land use rights for their connecting line from the owners of land crossed by the connecting line. This sometimes constitutes a major problem.

- other barriers (internalisation of external costs, energy prices, financial & technical barriers, etc.) in accordance with Articles 9 and 6 of the cogeneration Directive 2004/8/EC.

Other remaining barriers to further development of cogeneration include:

- lack of awareness of cogeneration technology and the advantages of its use;

- uncertainty regarding forecast future prices for natural gas and wood biomass;
- protracted administrative procedures;
- insufficiently active local communities in preparing local energy plans and introducing district heating systems;
- uncertain general economic conditions and the impact on the cost of financing new projects and current company operations.

Indicate the measures to overcome them:

In order to shorten procedures for obtaining permits for micro cogeneration equipment, the Decree on Energy Infrastructure (OJ RS 75/10) was amended to include equipment generating electricity through cogeneration of heat and power with a nominal electric power up to and including 50 kW as simple equipment not requiring a building permit for installation in existing buildings. Investors only require consent for the connection from the electricity distribution network systems operator, which checks whether the prescribed requirements have been met.

To ensure greater transparency in procedures for connecting generating equipment to the network, the distribution network systems operator, pursuant to Article 64m of the Energy Act, adopted and published the System operating instructions, incorporating Instructions for connecting and operating power plants with installed electric power up to 10 MW, which include principles for determining connection points and requirements for technical equipment, on the basis of which permits are issued for connections to the network. In the System operating instructions, the systems operator set out standard rules for determining the cost of technical implementation of the connection from generating equipment transmitting electricity generated from renewable sources or from high-efficiency cogeneration in the network to the network connection. These rules are objective, transparent and non-discriminatory and, for generating equipment up to 10 MW, based on the same starting points as are used for connecting electricity consumers.

4. Guarantees of origin and support schemes

Q9 Article 5 of the Directive requires Member States to ensure that accurate and reliable guarantees of origin are issued according to objective, transparent and non-discriminatory criteria. Please indicate what is the situation concerning the implementation of this measure in your country (information on primary energy savings, type of registration system).

The introduction of guarantees of origin for electricity was required of Member States by the Directive on the promotion of electricity produced from renewable energy sources in the internal electricity market (2001/77/EC) and the Directive on the promotion of high-efficiency cogeneration (2004/8/EC). The purpose of introducing guarantees of origin was to simplify trading in electricity generated from renewable sources or in cogeneration, and to increase transparency in the electricity market. The provisions of these two Directives were transposed into Slovenian law by amendments to the Energy Act in 2004.

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

Generators may obtain guarantees of origin for electricity generated in equipment for high-efficiency cogeneration of heat and power with a valid declaration that shows that in the period to which the guarantee relates, the generating equipment operated in such a way as to achieve the conditions and requirements prescribed for high-efficiency cogeneration.

Article 64g of the Energy Act stipulates that guarantees of origin are issued by the Energy Agency in an administrative procedure at the request of an electricity generator. If a generator receives support under the Energy Act for electricity from generating equipment, all guarantees of origin that the generator obtained for electricity from such equipment while in receipt of support are transferred to the Support Centre. In the Regulation on issuing of the Declarations for the production units and of the Guaranties of Origin (OJ RS 8/09), the Government regulated in greater detail the method of issuing guarantees of origin.

Article 64h of the Energy Act stipulates that guarantees of origin for electricity from high-efficiency cogeneration must contain:

- the lower calorific value of the fuel from which the electricity was generated, the use of heat generated together with the electricity, and a precise statement of dates and places of generation,
- detailed statement of the quantity of electricity generated in high-efficiency cogeneration, and

- a detailed statement of the primary-energy savings calculated in accordance with the Regulation on determination of the amount of electricity from cogeneration of heat and electricity which is generated with high efficiency and determination of efficiency of transformation of energy from biomass (OJ RS 37/2009).

Guarantees of origin issued by competent issuers in other European Union Member States in the manner and under the conditions set out in Directive 2004/8/EC have the same evidential power in the Republic of Slovenia as a guarantee of origin issued by the Energy Agency. Refusal to recognise a guarantee of origin as proof must be based on objective, transparent and non-discriminatory criteria. A person that refuses to recognise a guarantee of origin issued by a competent issuer in another European Union Member State is obliged to recognise the guarantee of origin at the request of the European Union.

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

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

Through a general act, the Act on the use of the register of guarantees of origin of electricity and the method of reporting data on electricity generation (OJ RS 33/09), the Energy Agency stipulated in detail the method and rules for maintaining the register of guarantees of origin, the conditions for opening an account with the register, the management and closure of accounts in the register, and the method and form for reporting data on electricity generation.

It follows from the data of the Energy Agency and the Support Centre that the following quantities of guarantees of origin have been transferred to the Support Centre for the purposes of demonstrating the origin of electricity from high-efficiency cogeneration and eligibility for support:

Year	Quantity of guarantees of origin
2009	228.3 GWh
2010	277.2 GWh
2011*	142 GWh

* Data for 2011 cover January to June inclusive. The quantity to the end of the year will primarily depend on temperature conditions and demand for heat in industry.

All guarantees of origin have been claimed by the eligible holders in order to exercise the right to support for electricity generated. No eligible holders claimed guarantees of origin to demonstrate the origin of electricity for other reasons. There are no requirements in valid regulations in the Republic of Slovenia for generators, suppliers or end users to achieve a certain minimum prescribed share of electricity from high-efficiency cogeneration.

Q10 Does your country have support schemes for cogeneration/CHP based on Directive 2004/8/EC (operational and/or investment aid)? What kind of support is provided (feed-in tariffs, certificates and quota, priority access to the grid,...)? Are they designed to provide stable long-term investment conditions? Which sectors will be targeted (agricultural and/or industrial and/or heating cogeneration)?

Amendments to the Energy Act EZ-C (OJ RS 70/08) created the statutory basis for the introduction of a new support scheme providing the right to support for electricity from high-efficiency cogeneration, as stipulated by Directive 2004/8/EC. The scheme was notified to the European Commission in 2009, which authorised it, and has been implemented since November 2009. In accordance with the Community guidelines on state aid for environmental protection, support is financial aid for electricity production in high-efficiency CHP equipment, where the costs of producing such electricity exceed the price that can be obtained for it on the electricity market.

Support for electricity produced in CHP equipment comprises:

- guaranteed purchase of electricity (hereinafter: guaranteed purchase). Pursuant to this support, irrespective of the price of electricity in the market, the support centre buys all the acquired net electricity produced, for which the CHP generating equipment has received guarantees of origin, at guaranteed prices set out in the Regulation on support for the electricity generated in cogeneration with high efficiency (OJ RS 37/09, 53/09, 68/09, 76/09, 17/10 and 81/10).

financial aid for current operations (hereinafter: financial support). This support is allocated for net electricity generated for which a guarantee of origin has been received and which CHP electricity generators 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.

CHP generating equipment with nominal power up to 1 MW is eligible for guaranteed purchase of electricity. For such generating equipment, during the validity of the contract on guaranteed purchase the support centre regulates the registration of the operating forecast and balances the difference between the forecast and actual production, including the balance sheet affiliation.

Operators of CHP generating equipment with nominal power of up to 1 MW may decide, instead of guaranteed purchase, to sell electricity independently in the market, and to receive operating support, where they must themselves arrange the registration of their operating forecast and balancing the difference between forecast and actual production, including balance sheet affiliation. Generating equipment using CHP with nominal power of 1 MW and more may receive only operating support.

The duration of support is defined in the decision allocating support, and is 10 years for new CHP generating equipment. Support is paid out for net electricity production for which the support centre receives guarantees of origin.

The level of guaranteed purchase prices for electricity are the same as the reference costs of electricity generation for the individual production technologies and size classes. The contract price for guaranteed purchase comprises a fixed part, which guarantees depreciation of investment in generating equipment, and a variable part to cover the variable part of reference costs that are a consequence of the costs of the energy product.

Operating support is the difference between the reference costs of producing electricity in individual types of generating equipment and the reference market price of electricity, which is forecast for each year with regard to market conditions.

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

Eligibility for support is held by new and mainly new CHP generating equipment that have a valid declaration for the generating equipment and that fulfil the prescribed conditions observed by the Energy Agency in the process of deciding on eligibility for support.

Natural gas and wood biomass are used as the reference fuels for determining reference costs. An additional criterion was introduced, under which CHP generating plants that attain specific CO₂ emissions of over 600 kg CO₂/MWh in the generation of electricity, may not receive support.

Regulations that form the basis for implementing the support scheme:

1	<ul style="list-style-type: none">- <i>Energy Act (OJ RS, No. 27/07 – officially consolidated text, 70/08 and 22/10);</i> <p>http://zakonodaja.gov.si/rpsi/r00/predpis_ZAKO5820.html</p>
2	<ul style="list-style-type: none">- <i>Regulation on supports for the electricity generated in cogeneration with high efficiency (OJ RS 37/09, 53/09, 68/09, 76/09, 17/10 and 81/10);</i> <p>http://zakonodaja.gov.si/rpsi/r02/predpis_URED5012.html</p>
3	<ul style="list-style-type: none">- <i>Regulation on issuing of the Declarations for the production units and of the Guaranties of Origin (OJ RS 8/09)</i> <p>http://zakonodaja.gov.si/rpsi/r01/predpis_URED4711.html</p>

4	<p>- <i>Regulation on measurements to be performed in production units which are receiving guarantees of origin and support for electricity produced (OJ RS 21/09 and 33/10).</i></p> <p>http://zakonodaja.gov.si/rpsi/r04/predpis_PRAV8784.html</p>
5	<p>- <i>Methodology for determining reference costs for high-efficiency cogeneration.</i></p> <p>http://www.mg.gov.si/fileadmin/mg.gov.si/pageuploads/Energetika/Predlogi_predpisov/Metodolgija_RSEE_SPTE_2009.pdf</p>
6	<p>- http://www.uradni-list.si/1/objava.jsp?urlid=200983&stevilka=3749<i>Regulation on determination of the amount of electricity from cogeneration of heat and electricity which is generated with high efficiency and determination of efficiency of transformation of energy from biomass (OJ RS 37/2009)</i></p> <p>http://zakonodaja.gov.si/rpsi/r09/predpis_URED4709.html</p>
7	<p>- http://www.uradni-list.si/1/objava.jsp?urlid=200983&stevilka=3749<i>Regulation on the rules for the preparation of forecasts on the situation of production plants generating electricity from renewable energy sources and high-efficiency cogeneration (OJ RS 83/2009)</i></p> <p>http://zakonodaja.gov.si/rpsi/r05/predpis_URED5165.html</p>

We take the view that the support scheme ensures stable conditions for long-term investment. The support scheme does not differentiate among target sectors. Reference costs are defined for two groups of generating equipment: generating equipment operating in high-efficiency cogeneration up to 4000 hours per year, and other equipment operating in high-efficiency cogeneration more than 4000 hours per year, so that the scheme is suitable for CHP generating equipment in industry and in heating.

Additional information on the support scheme is available on the following websites:

http://www.mg.gov.si/si/delovna_podrocja/energetika/sektor_za_oskrbo_energetske_vire_in_rudarstvo/podporna_shema_ove_in_spte/

http://www.agen-rs.si/en/informacija.asp?id_meta_type=29&id_informacija=664

<http://www.borzen.si/en/CP/default.aspx>

***Q11** How much money on a yearly basis has been provided in this way in the past years to the promotion of high-efficiency cogeneration in particular? And how much money is expected to be made available on a yearly basis to the promotion of high-efficiency cogeneration in the coming years?*

Prior to the 2008 amendments to the Energy Act, funding for support was obtained through a supplement to the network access fee to cover mandatory purchase of electricity from qualified producers within the framework of the state-aid scheme established in 2001. Since 2009, the supplement has been replaced by a contribution to ensure support for electricity generation in high-efficiency cogeneration and from renewable sources (CHP and RSE). Pursuant to the Decree on the method of determining and charging the contribution for providing support to the high-efficiency generation of electricity through cogeneration and from renewable energy sources (OJ RS 2/2009, 49/2010), all electricity customers are obliged to pay this contribution for each acceptance-sales point. The level of contribution depends on the classification of the end customer in terms of power, voltage level, category of consumption and intended use of electricity, is charged monthly per unit of charged power, and is shown as a special item on the invoice for use of the network, which is charged to end customers.

Table of subsidised electricity generated in high-efficiency cogeneration

	2004	2005	2006	2007	2008	2009	2010
Quantities (GWh)	190	196	276	291	298	288	277
Amount of aid * (EUR million)	7.0	6.0	5.9	7.9	7.0	5.7	13.0

* For the 2004-2006 period, values are converted from SIT to EUR at the central parity rate of EUR 1=SIT 239.64; rounded to the nearest EUR million. Funds paid for support include support for guaranteed energy purchases and operational support for independent sale and own use of energy.

To support high-efficiency cogeneration in future will require funds to implement the support scheme to be specified each year at the level that all eligible parties in the support scheme will receive it. The Energy Act guarantees support for 10 years for each CHP generating equipment meeting the conditions for support that is granted a decision on allocating support by the Energy Agency.

Pursuant to the third paragraph of Article 64s of the Energy Act, and in order to ensure support, through the Decree on the method of determining and charging the contribution for providing support to the high-efficiency production of electricity through cogeneration and from renewable energy sources (OJ RS 2/09 and 49/10), the Government of RS prescribed in detail the method for determining the required quantity of funding for support, such that, before the start of each year being evaluated, the Support Centre at Borzen d.o.o. (market organiser) and the Energy Agency must prepare an estimate of the funding required. This is done on the basis of data on anticipated new

investment in CHP generating equipment, and assessment of the likelihood that the equipment will be built and will receive a decision granting support within the envisaged interval, and on the basis of data from previous years for existing equipment.