

**Answers of Bulgaria to the Template for the progress report due by Member States on 21.02.07 under Article 6.3 of Directive 2004/8/EC on the promotion of cogeneration**

**I. Transposition of the legal text of Directive 2004/8/EC**

*1. Has your country already sent in Notifications of transposition to the Commission? Please indicate which document you sent on which date, and which Article was transposed in this way, and where it can be found in the document.*

*(background: there are Member States which transpose (parts of Articles in a general energy law of many pages, making it hardly possible to do a check or specific translation)*

**Notification of the transposition of the directive has been done in December 2006 through the electronic notification system: <https://mne.cec.eu.int>. Currently a "partial" compliance is indicated.**

**The following information has been provided: the Directive is transposed into national legislation with:**

- **Law on energy** - Chapter XI, subchapter II "Promotion of electricity produced from cogeneration" as a whole, together with chapter two "Energy policy", chapter three "Regulation of energy sector activities", chapter four "Licenses", transpose, elaborate and correspond to the requirements of the Cogeneration Directive.
- **Ordinance No 13 for determination of the quantities of electricity produced from cogeneration** relevant in its entirety;
- **Ordinance providing for the content, structure, conditions and order for submission of information required by the *acquis communautaire* in the field of energy to institutions of the European Communities** - Art. 9 and 10 of the Directive are transposed in details with art. 6, para. 1 and 2 and § 2 of the Transitional and Final provisions of the Ordinance.
- **Ordinance on electricity prices regulation** - Chapter Two, Section III "Formation of the prices" of the Ordinance - Art. 19 and especially paragraphs 4, 5 and 6 thereof correspond to the requirements of Directive.
- **Ordinance on issuing of Certificates of the Origin for Electricity Produced by Renewable and/or Combined-Generation Sources** - The Ordinance transposes, elaborates and corresponds to the requirements of art. 5 "Guarantee of origin for electricity produced from cogeneration" of the Cogeneration Directive.

*2. What is the timeline for the remaining parts of the transposition of the Directive? Please indicate how this will take place (revision of a general energy law, a specific law, decree, regulation, ....), at what stage in the legislative process your country is for this part, what the expected reasonable timeline until adoption will be, and what the obstacles are, if any.*

**Bulgaria started preparations for harmonizing the national legislation with the Directive even before its final adoption - the main requirements of the Directive were transposed in the Law on Energy, adopted in December 2003. Subsequently, the Law underwent several amendments, with the last amendment effective as from September 2006.**

In September 2006 the following amendments to the Law of Energy were adopted: Art.4, para.2 point 11 of the Energy Law introduced the requirement of art.6 of the Directive "National potential for high-efficiency cogeneration", by envisaging a new power for the Minister of economy and energy - to prepare **analysis of the national potential for high efficiency cogeneration** and evaluate the progress made in increasing the share of high efficiency cogeneration in the gross consumption of electricity every 4 years.

The Minister of economy and energy will adopt, not later than March 2008, **amendments and supplements to Ordinance • 13 of 27.08.2004 on determination of the quantities of electricity produced from cogeneration**. The Ordinance regulates the method for determining the quantity of electricity produced from cogeneration depending on the type of technology cycle, the requirements to the technical devices for measuring and registering of the electricity produced from cogeneration. **The amendmets and supplements will define** the criteria for the analysis of the national potential for high efficiency cogeneration and will transpose Commission Decision 2007/74/EC on harmonised efficiency reference values and related issues.

In accordance with art.9 and 10 of the Directive and in pursuance of the **Ordinance on the content, structure, conditions and order for submission of information required by the acquis communnataire in the field of energy to institutions of the European Communities** (adopted with CM Decree • 332 of 11.12.2006, promulgated SG 106/27.12.2006, in force since 1.1.2007), the authorised Bulgarian bodies prepare and submit the following reports and information to the European Commission:

- The Minister of economy and energy presents to the European Commission a report with the results of the analysis and the assessment of the national potential for high efficiency cogeneration and the progress made in increasing the share of high efficiency cogeneration in the gross consumption of electricity, prepared according to art.4, para.2 point 11 of the Energy Law.
- The National Statistical Institute submits annually to the European Commission statistical data on the national production of electricity and heat energy by way of cogeneration for the previous year in compliance with the methodology of Eurostat and statistical data on the capacities and fuels for production of electricity by way of cogeneration for the previous year.
- The State Energy and Water Regulatory Commission (SEWRC) prepares, publishes on its internet page and submits to the European Commission a report containing assessment of the effective licensing regime under the Energy Law in its part applicable to the electricity generation by way of cogeneration, in terms of:
  - to what extent the projection of capacities for generation of electricity by way of cogeneration corresponds to the economically justifiable demand for heat supply and to what extent the production of more heat energy than the useful heat is avoided;
  - limitation of the administrative regulation of electricity generation from renewable energy sources;
  - the measures taken for facilitation, simplification and acceleration of the administrative procedures and for improving the coordination between the different administrative bodies;
  - provision of objective, transparent and non-discriminatory rules;

taking account of the specificities of different technologies for electricity generation by way of cogeneration;  
nomination of bodies to mediate in case of disputes between the bodies issuing permits/licenses and the applicants for permits/licenses.

3. *Will your country use any option that is described in Article 12? If so, which one? At*

this stage, we will not make use of the alternative calculations

4. *Will (parts of) the transposition be done by regions? If so, which parts? And by which regions ?*

No

## ***II. Transposition of Commission Decision 2007/74/EC on harmonised efficiency reference values and related issues***

1. *What is the timeline for the transposition of the Commission Decision of 21.12.06? Please indicate how this will take place (revision of a general energy law, a specific law, decree, regulation, ....).*

The transposition will be made with the amendments to Ordinance • 13 and will become effective not later than March 2008.

2. *Article 5 requires Member States to ensure that accurate and reliable guarantees of origin can be issued according to objective, transparent and non-discriminatory criteria not later than 6 months after the adoption of the harmonised efficiency reference values.*

**The Ordinance on issuing of Certificates of the Origin for Electricity Produced by Renewable and/or Combined-Generation Sources** transposes, elaborates and corresponds to the requirements of art. 5 "Guarantee of origin for electricity produced from cogeneration" of the Cogeneration Directive, including the requirements for ensuring the issuance of accurate and reliable guarantees of origin. The Ordinance has been adopted by the Council of Ministers on 19.04.2007.

**The Ordinance will be divided into two parts - one for guarantees of origin of electricity produced from renewable energy sources and the other for electricity produced by co-generation, with the principles of the present ordinance being fully preserved.**

3. *Please indicate how your country is making progress towards meeting this deadline. Can you already indicate which will be the "one or more competent bodies" mentioned in Article 5.2?*

According to art.21, para.1,point 14 of the Energy Law, SEWRC issues certificates to the electricity producers for the origin of the electricity produced by way of cogeneration of electricity and heat energy.

Art. 159, para.3 EL - The form, contents, conditions and order for issuing a guarantee of origin are defined with an ordinance adopted by the Council of Ministers upon a proposal by SEWRC.

*3. Is it already known if your country will adopt the model developed by the Commission and the European Association of Issuing Bodies?*

No.

*If not:*

*-Is the national scheme similar enough to allow a transition to this model in the coming years ?*

We consider that the national scheme allows to be brought in line with the model developed by the Commission and the European Association of Issuing Bodies.

*-Can you indicate how the national scheme is matching the safeguards of fraud-resistance, accuracy and reliability that are provided by the Commission model?*

In Bulgaria, the **State Energy and Water Regulatory Commission** is the independent competent body which issues guarantees of origin of electricity and ensures compliance with the criteria and rules for issuing guarantees of origin.

#### **Mechanism for issuing guarantees of origin:**

1. Producers submit an application to SEWRC for issuing a guarantee of origin of the electricity from each plant owned by them
2. The application covers the quantity of electricity generated within an antecedent period of 3 months
3. The guarantee of origin contains the following information:
  - type of the guarantee of origin;
  - a unique number containing the producer's registration number and running number of the guarantee of origin issued to it;
  - the body which has issued the guarantee of origin;
  - date of issuance, period of electricity generation;
  - quantity of electricity produced by way of cogeneration, whose type is certified with the guarantee of origin;
  - electricity generation technology, including
    - quantity of energy for useful heat demand generated simultaneously with the electricity,
    - type and low heating value of the fuel used
    - the results from the efficiency assessment of the cogeneration facilities, determined in compliance with the ordinance under art. 162, para.3 of the Energy Law, including the saved primary energy of the fuel or RES used for the plant;
  - the generation plant;
  - total installed capacity of the generation plant;
  - installed capacity of the facilities generating electricity by a co-generation process ;
  - producer's name and BULSTAT code;

4. When an application for issuing a guarantee of origin by a given producer is examined for the first time, SEWRC shall deliver a decision within 15 days of receipt of the application in cases where the applicant is a licensed producer, and within two months where the application is submitted by a non-licensed producer.

When examining each subsequent application, SEWRC shall deliver a decision within 15 days of receipt of the application.

5. The issued guarantee of origin becomes effective from the moment of its entry into the register.

6. At a producer's request, SEWRC issues a certificate for the owned guarantee of origin in a paper form.

7. SEWRC **refuses** to issue a guarantee of origin **in case of:**

- Incompleteness, inaccuracy or lack of authentication of the data submitted by the producer
- Nonconformity with the legal requirements for determining the quantity of electricity as generated from cogeneration

8. SEWRC **issues** a guarantee of origin **for a quantity** of electricity **other than the one declared** by the producer if enough data are available for its determination by SEWRC, by adhering to the effective legislative requirements.

9. The guarantee of origin shall be **revoked by the SEWRC if:**

- documents on the ground of which it has been issued are found non-authentic • it is found that the holder of the certificate has provided untrue information that has served as grounds for issuing such certificate

10. A guarantee of origin may be revoked **within a one-year period** following its entry into force

## **Payments and protection of the interests of electricity producers and consumers**

### **1. Protection of producers**

- > Pending the issuance of a guarantee of origin, the producer is paid for the entire quantity of electricity invoiced by him as generated by way of cogeneration at the preferential price valid for this producer.
- > A balancing (equalizing) payment for the respective period is to be made within 10 days following the issuance of the guarantee of origin.

### **2. Protection of consumers**

- > In case of systematic or considerable deviations between the quantities registered with a guarantee of origin and the quantities invoiced by the producer at preferential price, the contracts for purchase of electricity may stipulate special conditions for the advance payments.

## **Register of the guarantees of origin**

SEWRC draws up, maintains and publishes on its Internet page a public register containing: Data for the producers having received a guarantee of origin; The issued and revoked guarantees of origin.

The issuance and revocation of the guarantees of origin become effective from the moment of their entry into the register.

SEWRC enters the changes into the register by the end of the working day following the day of the adoption of the respective decision.

## **Mutual recognition of the guarantees of origin issued in EU Member States**

SEWRC recognizes the guarantees of origin issued in EU Member States under conditions of reciprocity. The guarantees of origin issued in an EU Member State serve as evidence for the truthfulness of the facts and circumstances certified with them.

Each refusal of SEWRC to recognize a guarantee of origin, including in case of reasons related to fraud prevention, shall be grounded on objective, transparent and nondiscriminatory criteria and well-reasoned.

In case of an act by SEWRC entered into force stating refusal to recognize a guarantee of origin, the dispute can be referred to the European Commission.

4. Will (parts of) the transposition be done by regions? If so, which parts? And by which regions? regi

**No**

## **III. Reporting obligations**

*Article 10 of Directive 2004/8/EC requires Member States to submit various reports. Article 10.1 suggests that there could be one big overall report. Due to the developments in the CHP Committee it could be argued that there might be a reason to have a delay in the report mentioned in Article 5.3 but this can not be a justification for a delay in the analysis and evaluations carried out in accordance with Article 9 and hardly for the one in accordance with Article 6.1*

*1. Article 9.1 requires an evaluation on the existing legislative and regulatory framework with regard to authorisation and other procedures, applicable to high efficiency cogeneration units. Article 9.2 requires Member States to provide indications on the stage reached in coordination between administrative bodies, on guidelines for reduced and/or simplified authorisation procedures and the reduction of barriers, as well as the designation of authorities able to mediate in disputes between applicants for cogeneration authorisation with issuing authorities.*

*This report was due on 21.02.2006 and has no relation with the CHP Committee procedure. How far is your country with this report? When can the Commission expect it?*

The report has been sent to the Commission - DG "TREN", with a letter of the Permanent Representation of Bulgaria to the EU dated 16.10.2007.

*Article 6. and 6.2 requires Member States to establish an analysis of the national potential for the application of high-efficiency cogeneration, including high-efficiency micro-cogeneration. This has to be based on well-documented scientific data. It has to identify all potential for useful heating and cooling demands as well as fuels and other energy resources, including waste heat. It also has to include a separate analysis of barriers, in particular relating to prices and costs of and access to fuels, grid system issues, administrative procedures, internalisation of external costs.*

*2.Has your country already submitted this report? If so, when? If not, when can it be expected? Will the final report have taken into account the harmonised efficiency reference values as endorsed by the CHP Committee in August 2006 and officially adopted by the Commission on 21.12.2006? Will the report include an analysis of the heat demand suitable for CHP and the waste heat potential?*

In pursuance of the commitments of Bulgaria in connection with the implementation of Article 6 of Directive 2004/8/EC, the Ministry of economy and energy assigned the preparation of the analysis to the Technical University Sofia. The analysis of the potential will be conformed to Commission Decision 2007/74/EC on harmonised efficiency reference values and related issues.

The subjects of the inquiry of the useful heat demand on the internal energy market by the co-generation of electricity and heat energy in Bulgaria are:

- The district heating;
- The residential and public buildings;
- The industrial enterprises;
- The kinds of technologies for co-generation of electricity, heat and cold.

By 30.12.2007, two stages of the elaboration have been completed, namely:

**1. Choice of methodology for analyzing the existing potential for meeting the demand of heat energy and cold for air conditioning appropriate for applying high efficiency cogeneration.**

**The methodology chosen** through a technical and economic analysis based on well-grounded and documented statistical, scientific and forecast data for the project subjects is adequate for fulfilling the assignment objectives.

Both approaches - top-down and bottom-up - will be used for dealing with the issues. The top-down approach will be used by the analysis and forecasting of the energy production in Bulgaria including the co-generation and the fuel basis used by the latter.

The bottom-up approach will be used by the analysis and forecasting of the co-generation of electricity and heat energy for: district heating, residential and public buildings, industrial enterprises, renewable energy sources.

The kinds of technologies for co-generation of electricity and heat energy will be analyzed for the climatic and geographic conditions of the different regions in Bulgaria in compliance with

the requirement for high efficiency generation, fuel base, economic and ecological expedience.

## **2. Types of technologies for cogeneration and availability of energy resources appropriate to be used by cogeneration**

The suitable kinds of technological schemes for co-generation installation have been considered depending on the fuel used.

In the next stage of the elaboration it is envisaged to analyze and assess the technical and economic indicators of these technological schemes, the energy and ecological efficiency, the investment and operational expenses and prime costs of heat energy, in different cases, depending on prices of primary energy resources and electricity, inflation rate, annual usage of the installation, economic time period of operation, banks interest rate. The prime cost of heat energy and its sensibility towards the above factors will be assessed. The competitiveness of the co-generation installations will be analyzed with this data base.

## **3. Analysis of the obstacles which could hamper the utilization of the national potential for high efficiency cogeneration.**

*The end report to be submitted to the Commission in May 2008 will comprise:*

- Analysis of all potentials for meeting the demand of heat energy and cold for air conditioning appropriate for applying high efficiency cogeneration as well as the availability of fuels and renewable energy sources used by cogeneration;
- Analysis of the impediments - economic and legal - which would hamper the national potential realization;
- Progress assessment of the cogeneration development.

*3. When can the report referred to in Article 5.3 and 10.1 and related to Chapter II of this template be expected?*

The report under Article 5.3 is being sent together with the present answers to the template for the progress of meeting requirements arising from Directive 2004/8/EC.

*4. Will (parts of) the reporting obligations be fulfilled by regions? If so, which parts? And by which regions?*

No.

## **IV. Support schemes**

*Article 7 of Directive 2004/8/EC deals with support schemes for high efficiency cogeneration.*

*1. Does your country already have support schemes for CHP (operational and/or investment aid)? Have these schemes been notified to and approved by the Commission (DG COMP)? If so, please give references. Until when are these schemes running? What kind of support is provided (feed-in tariffs, certificates and quota, priority access to the grid, ...)? How much money on a yearly basis has been provided in this way in the past years to the promotion of cogeneration in general and to the promotion of high efficiency cogeneration in particular?*

The Law on Energy envisages in Chapter XI, Section II "Promotion of the electricity production by way of cogeneration" preferences by:

- Construction of cogeneration plants
- Connection of the cogeneration plants to the electricity transmission and distribution networks;
- Buying out of the electricity produced by the cogeneration plants •
- Formation of the price of electricity from cogeneration

The Law contains a special provision stipulating that in case of a declared need for heat energy, new installations with capacity above 5MW and fired with natural gas shall obligatorily be built according to the combined heat and power generation principle.

### **Priority connection**

The transmission company and the distribution companies are obliged to connect by priority to the network all power plants generating electricity using high-efficiency cogeneration, having **installed capacity up to 10 Mwe.**

The extension and reconstruction of the network related to the connection of such plants is an obligation of the transmission company or the distribution company respectively.

In order to carry out the extension and reconstruction of the network, the transmission and/or respectively distribution company are entitled to apply for external financing.

### **Buying out**

The public supplier, respectively the end suppliers (retailers), are obliged to purchase the **entire quantity of electricity from high- efficiency cogeneration** of heat and power, registered by a guarantee of origin, **with the exception of** quantities used by the producer for own needs or **with which the said producer participates in the open electricity market.**

The energy capacities in Bulgaria operating at present are built mainly in the 70s and 80s-both the condensation and cogeneration plants - and therefore considerable financial resources are needed for their renovation.

Taking into account this specific national energy structure and the national strategy for the energy sector development, Bulgaria takes advantage of the possibility offered by Directive 2004/8EC for each Member State to choose different support mechanisms, and **until 1 January 2010** the preference for mandatory buying out will be used also by the thermal power cogeneration plants existing by the moment of entry into force of the Energy Law (December 2003), **which have not reached high-efficiency indicators.**

**The mechanism for determining the preferential prices aims at ensuring long-term security of investments in cogeneration and is the following:**

1. The mandatory buying out of the electricity from high-efficiency cogeneration at preferential prices is applied for a **8-year** period as from 8 September 2006 for the producers existing by this date.
2. For electricity producers starting high-efficiency cogeneration **after 8 September 2006**, the 8-year period runs **from the starting date but not later than 31 December 2011.**

**3. Until 1 January 2010** the quantity of electricity registered with a guarantee of origin and produced by cogeneration from the thermal power plants **existing by the moment of entry into force of the Energy Law** and **having not reached high-efficiency indicators** will also be purchased at preferential prices.

4. The Minister of economy and energy shall propose **until 31 December 2011** a draft law to be approved by the Council of Ministers introducing a **market mechanism for promotion** of electricity produced by cogeneration.

The preferential prices for sale of electricity produced by cogeneration from plants built by 31.12.2011 are valid until **31 December 2019** and are determined by SEWRC pursuant to the Ordinance on price regulation under art.36 para.3 of the Energy Law.

The preferential prices of electricity produced by cogeneration plants are set **on the basis of the individual production expenses and a supplement determined by SEWRC** for groups of producers. The groups of producers and the supplements for each of them are determined by SEWRC in compliance with the Ordinance on price regulation under art.36 para.3 of the Energy Law according to the following criteria:

- Prevailing nature of the main heat load - for technological needs or for heating, air conditioning and hot water supply;
- Kind of the fuel used ;
- Technology of the cogeneration;
- Capacity of the plant/installation.

*2. Is your country in the process of developing or introducing new support schemes to promote cogeneration? Will these be reserved for high efficiency cogeneration units based on Directive 2004/8/EC and Commission Decision 2007/74/EC? What kind of support is planned? Which sectors will be targeted (agricultural and/or industrial and/or heating cogeneration)? Will these measures be general or based on certain principles or criteria? If so, which? Have they been based on an assessment, including cost-effectiveness, of earlier support schemes in your country or elsewhere, and if so, which ones? Are they designed to provide stable long-term investment conditions? At which stage in the legislative process are these new schemes? When are these new schemes expected to be notified to the Commission? How much money is expected to be made available on a yearly basis to the promotion of high efficiency cogeneration in the coming years?*

The results of the Analysis of the national potential for cogeneration development will be used for assessing the necessity of developing new support schemes.

*3. Will there be regional support schemes? If so, please answer these questions for each of them.*

## V. Statistics

*Under Article 10.3 of Directive 2004/8/EC Member States shall submit statistics on national electricity and heat production from cogeneration, in accordance with Annex II, as well as annual statistics on cogeneration capacity and fuels used for cogeneration. Most Member*

*States seem to be able to comply with this obligation, even without detailed guidelines being in place.*

*Do you have any comments regarding this requirement? Does your country also submit statistics on primary energy savings achieved by cogeneration in accordance with Annex III, or does it plan to do so in the future? If so, when?*

The National Statistical Institute of Bulgaria submits the respective data to Eurostat.

## **VI. Concrete progress**

*Can your country already show progress in high efficiency cogeneration since the publication of the Directive on 21.02.2004 which can be ascribed to either EU or national legislation and support schemes? If so, please inform the Commission of the details (success factors, problems, risks, ....). If regions are responsible for (part of the) legislation and support schemes please specify your answer at the level of these regions as well.*

About 100 MW new highly efficient cogeneration capacities have been put into operation since 2004 until now.