



**Direcção Geral  
de Energia e Geologia**

**Report in accordance with Article 10(1), containing the elements referred to in Article 5(3), on the measures taken to ensure the reliability of the guarantee of origin system.**

**Report in accordance with Article 10(1), containing the elements referred to in Article 9(1) and 9(2), on the existing legislative and regulatory framework**

**(December 2010)**



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## **1. Scope**

Article 10 of Directive 2004/8/EC of the European Parliament and of the Council of 11 February 2004 on the promotion of cogeneration based on a useful heat demand in the internal energy market and amending Directive 92/42/EEC requires Member States to submit evaluation and progress reports.

In the scope of this Directive, Portugal decided to combine in one document the reports provided for in Article 10(1) containing the elements referred to in Article 5(3) on the guarantee of origin system, with the elements referred to in Article 9(1) and (2) on the existing legislative and regulatory framework.



## **2. Report in accordance with Article 10(1), containing the elements referred to in Article 5(3), on the measures taken to ensure the reliability of the guarantee of origin system.**

According to the provision in Decree-Law No 23/2010 of 25 March 2010, the law which transposes Directive 2004/8/EC into Portuguese law (amended on 23 August by Law No 19/2010), the Portuguese State entrusted the procedure for issuing Guarantees of Origin to the concession holder of the National Transport Network (NTN).

The REN (Rede Eléctrica Nacional), the concession holder of the NTN, is a member of the AIB (Associating of Issuing Bodies), an international organisation which promotes the use of a standard certification system based on a harmonisation of concepts, structures and procedures which has the ultimate aim of ensuring the correct functioning of the international system of energy certificates.

All members of the AIB contain a body which issues RESC (Renewable Energy Certificate System) certificates. With the creation of the EECS (European Energy Certificate System) system, the scope of the certificate systems supported by the AIB was extended to include, with the support of the European Commission, the requirements resulting from Directive 2004/08/EC, developing an approach which includes the Guarantees of Origin (GO) indicated in Article 5 of the Directive.

With these structural changes, the members had to adapt their operating procedures and the REN approved its version of the RESC Domain Protocol for Portugal and of the Standard Terms and Conditions, thereby meeting all the conditions for carrying out this procedure in accordance with the criteria required: objective, transparent and non-discriminatory.

The way in which the EEGO (entidade emissora de garantias de origem = body responsible for issuing guarantees of origin) functions are carried out will be contained in a manual of procedures to be drawn up by that body and approved by the Directorate-General for Energy and Geology (DGEG).

### **Operation scheme of the EEGO**

Pursuant to Decree-Law No 23/2010 of 25 March 2010, it is the responsibility of the EEGO to issue guarantees of origin in response to requests from electricity producers with high-efficiency cogeneration plants.

It is the responsibility of the EEGO to carry out audits to check that these classifications are being maintained.



Incentives are provided for based essentially on three criteria: the reduction of the consumption of primary energy and the subsequent reduction of CO<sub>2</sub> emissions relative to the separate production of electric and thermal energy, the promotion of cogeneration which uses renewable resources and the promotion of the participation of cogeneration producers in the electricity market. These incentives can only be given on presentation of a GO.

- **Guarantees of origin**

GOs are intended to prove the quantity of electricity produced in high-efficiency cogeneration plants as well as to certify that the plant allows primary energy savings in accordance with the assumptions of the Directive, and that it can be used in the European Union for statistical purposes.

GOs contain the following specifications:

- a) The lower calorific value of the source of fuel with which the electricity was produced;
- b) The type and quantity of each fuel used;
- c) The use of the heat produced in combination with electricity;
- d) The dates and places of production;
- e) The quantity of electricity produced from high-efficiency cogeneration, covered by the guarantee of origin;
- f) The primary energy savings calculated in accordance with the methodology of the Directive and based on harmonised efficiency reference values established by order of the Director-General of Energy and Geology and published on the website of the DGEG;
- g) The CO<sub>2</sub> emissions associated with the production of electricity;
- h) The CO<sub>2</sub> emissions avoided per MWh electricity produced, in comparison with the separate production of heat and electricity using the same fuels;
- i) Additional information to be laid down by order of the Directorate-General for Energy and Geology.

GOs issued in other Member States are recognised by Portugal, however, the recognition of a GO from another Member State may be refused whenever there is suspected fraud, based on objective, transparent and non-discriminatory criteria.

In order to ensure better control of its activity, the EEGO is subject to audits carried out by the DGEG, which will disseminate the annual summary report of these audits on its website.



It is the responsibility of the EEGO to develop and manage a system for issuing guarantees of origin for electricity produced in high-efficiency cogeneration plants, including registering, issuing, annulling and cancelling the relevant documents.

- **Audits**

Audit actions and monitoring of plants and equipment for cogeneration production will be carried out by the EEGO or by external auditors recognised by the DGEG, as well as of energy measurement equipment, which will enable and ensure the correct categorisation of the plants and the guarantee of origin of the electricity produced.

In addition to the whole process, the impartiality and reliability of this scheme will be ensured by carrying out annual audits for at least a third of all cogeneration plants, ensuring that all plants are audited in each three year period.

It is provided that, in cases where, in a given quarter, there is a difference compared with the relevant figures established in the last audit which imply a change in the amount of the primary energy saving of more than five percentage points, the cogeneration producer must inform the EEGO by any available electronic means.

- **EEGO activity reports**

By way of consolidating all the scheme described, the EEGO will have to supply the data and reports necessary for complying with the above, or resulting from the legal obligations to which it is subject. Accordingly, by 30 April each year, the EEGO will draw up an annual report on the activity undertaken in the previous year, which must include the findings made by the audits carried out and must be submitted to the DGEG, by electronic means, as well as disseminated on its website.

- **Obligations on cogeneration producers**

By the end of each month and by electronic means, cogeneration producers are obliged to provide the EEGO with the data on the quantities of thermal, electric, and if appropriate, mechanical energy produced, the quantities of electric energy acquired and sold to the supplier of last resort and the quantities of electric energy acquired and sold to third parties, relating to the penultimate month, in compliance with the form available on the relevant website.

The cogeneration producer will have to provide the EEGO with all the information and documents necessary for issuing and checking the guarantees of origin, authorise



access to the production plants for EEGO experts or bodies accredited by the DGEG which offer services to the EEGO, in the performance of functions which have been legally assigned to it.

The cogeneration producers must also enable audit and monitoring activities to be carried out, offering the necessary cooperation, with regard to the cogeneration plants and production and energy measurement equipment, as well as with regard to the fuel used and the relevant renewable fraction, in the case of the use of biomass, in terms of energy content, in compliance with the EEGO's manual of procedures.

### **3. Report in accordance with Article 10(1), containing the elements referred to in Article 9(1) and 9(2), on the existing legislative and regulatory framework.**

The rules which apply to cogeneration are laid down, in Portugal, in Decree-Law No 538/99 of 13 December 1999, and were amended later by Decree-Laws No 312/2001 of 10 December 2001 and 313/2001 of 10 December 2001.

Decree-Law No 23/2010 of 25 March 2010, with the amendments introduced by Law No 19/2010 of 23 August 2010, introduces the legal framework for the activity of cogeneration and a new remuneration regime for cogeneration producers, adapting the rules of this activity to developments for a free market restricted by climate concerns and in accordance with the provisions of Directive 2004/8/EC.

- **Remuneration regime**

The remuneration regime now established is based on two methods, to be chosen by the cogeneration producer, which are available to efficient or high-efficiency cogeneration plants:

- a) General method, available to all cogeneration producers without restrictions on the installed power;
- b) Special method, available only to cogeneration producers with an installed capacity of 100 MW or less.

The remuneration for energy provided by cogeneration producers can be summarised in the following way:

- a) Plants covered by the General method:



- remuneration by supply of thermal energy to third parties, with the sale price being established by contract;
- remuneration by supply of electric energy to customers directly linked to the plant, the sale price of which is freely established between both parties, with the tariff for general use of the system and the marketing tariff being applicable;
- remuneration by supplies in organised markets, the price of which is that which results from the sales made on these markets;
- premium for participation in the market, based on a percentage of the reference tariff, for plants with an installed power of 100 MW or less.

b) Plants covered by the Special method:

- remuneration by supply of thermal energy to third parties, with the sale price being established by contract;
- remuneration by supply of electric energy to the supplier of last resort, the sale price of which is equal to the reference tariff;
- efficiency premium calculated according to the primary energy savings of each plant;
- renewable energy premium (plants with at least 50% of primary energy consumed being of renewable origin), according to the proportion of fuel of renewable origin consumed.

c) The reference tariff must comply with the following requirements:

- it must not discriminate in favour of or against certain fuels compared with others;
- it must be indexed to the international development of the price of fuel, to the development of the consumer price index and to exchange rate developments;
- it must reflect the environmental benefits, the losses avoided on the transport and distribution networks, the reduced use of the transport network and the profile operating times for production of electricity, which together summarise the difference of the overall contribution of cogeneration to primary energy savings.

- **Licensing**

The licensing of cogeneration plants, whether done by the DGEG or by the Regional Directorates of the ministry responsible for energy (DRE), complies with the rules laid down in the new law, as well as the rules contained in the Regulation on Licences for Electricity Plants.

In the context of these two legal documents, licences should be obtained for establishment, for production, and finally, for operation, with the latter being issued after a visit to check that the plants comply with the licences previously issued and with the legislation in force, in particular with regard to the legal schemes for integrated pollution





prevention and control and for the European trading of greenhouse gas emission allowances (CELE), when applicable.

In the case of small-scale cogeneration plants, the operating licence will be issued on the basis of a guarantee document from the technician responsible for operating the electricity plants.

In plants with the **special method of remuneration regime**, it is obligatory for the cogeneration plant to be linked up in advance to the Public Service Network (RESP), being covered at a procedural level by the provisions of Decree-Law No 312/2001 of 10 December 2001 (amended by Decree-Law No 33-A/2005 of 16 February 2005), from the Preliminary Information Request to the awarding of the Reception Point. It is also necessary, in accordance with Article 10 of Decree-Law No 23/2010, for the reception point to have been awarded within 18 months of submitting the request for award of the cogeneration production licence (when justifiable this period can be amended).

For the **general method of remuneration**, there needs to be **conditions for the linking to the RESP** (including in the case of public service electricity plants for the transport and distribution of electricity generally), given that the reception capacity of the RESP is inadequate in cases where the power to be injected exceeds the total capacity of the reception point.

With this new scheme, cogeneration plants which use fuel with **emission coefficients** that are equal to or less than those of natural gas will be given **priority when production licences are awarded**.



## 4. Conclusions

**Due to the process of transposing Directive 2004/8/EC**, some barriers were encountered, resulting in Portugal being delayed in sending the Commission the reports on this subject. It was also not possible to gather the results of the measures described in this document and so the progress achieved will be presented in a future report.

We are convinced that the amendments introduced by the new law of the whole legal procedure, from the licensing of plants to the remuneration standards, and including the scheme created by the guarantee of origin, will be the motor for the potential estimated in the Report on the Potential of Cogeneration to be realised and to go forward based on criteria which are objective, robust, transparent and non-discriminatory.