

CHP Guarantee of Origin (CHPGO) Certificates

ISSUE OF CERTIFICATES BRIEFING NOTE

Background

Article 5 of the EU Cogeneration Directive on the Promotion of Cogeneration based on a Useful Heat Demand in the Internal Energy Market [2004/8/EC¹] requires that a guarantee of origin (CHPGO) of electricity produced from high-efficiency cogeneration be issued to a CHP Producer on request [the cogeneration of electricity is more commonly referred to in the United Kingdom as electricity produced from combined heat and power or CHP]. "High-efficiency cogeneration" means cogeneration of electricity (i.e. electricity from CHP) that meets the criteria of Annex III of the Cogeneration Directive.

The Cogeneration Directive applies throughout the UK. The Regulations in respect of Article 5 apply to England, Wales and Scotland. Northern Ireland will be legislating separately, but are expected to follow a similar approach to that adopted for the rest of the UK. The Guarantees of Origin of electricity produced from high efficiency cogeneration Regulations 2007² and the associated Regulatory Impact Assessment³ implement Article 5 in Great Britain and extend to England, Wales and Scotland. The Secretary of State for Environment, Food and Rural Affairs will issue CHPGOs in accordance with these Regulations.

The purpose of Article 5 of the Directive requiring Member States to put in place arrangements for issuing Guarantees of Origin is to increase transparency, so that customers for electricity can differentiate between electricity generated by high-efficiency CHP and electricity produced using other generation techniques. In particular the Guarantees will contain information about the primary energy savings the CHP generated electricity provides.

However, in the current legislative framework, the guarantee is only useful if the Producer wishes to trade electricity with another Member State where they are used to determine eligibility for public support. Article 6 states that the CHPGO itself does not imply a right to support. It will not give eligibility to support mechanisms in the UK, and will not in many other Member States.

How to apply

The issue of CHPGO certificates is linked to the existing CHPQA assessment system and an operator who requires a Guarantee of Origin certificate will apply to the CHPQA Administrator as the nominated body and the application will be subsequently assessed. Much of the information required will come from a Producer's previous F1 and F2 submission to CHPQA, with the additional data provided by the applicant on the application form.

The CHPGO certificate will specify:

- Lower CV of fuel source for electricity
- Use of heat and electricity generated
- Dates and places of production
- Quantity of electricity from high efficiency CHP (ref Annex II method)
- Primary Energy Saving (PES) based on harmonised efficiency ref values (Ref Annex III).

The full list of information to be contained in a CHPGO certificate and supplied with a request for one, is given in Schedule 2 and 1 respectively of Statutory Instrument 2007 No. 292 Energy Conservation “The Guarantees of Origin of Electricity Produced from High efficiency Cogeneration Regulations 2007”. This information is also given in the Appendices to this briefing note.

In order to apply for a CHPGO please print, complete and sign the application form entitled “Form CHPGO – Provision of Data for the Assessment of High Efficiency CHP Power Generation for the purpose of Guarantee of Origin” (i.e. the request for a CHPGO). On receipt, the CHPQA administrator will calculate the information required to issue the CHPGO using the Annex II and III methodology as required by the Directive.

As data submission involves the CHPQA Administrator in calculating the information required to issue the Guarantee the system should be demonstrably accurate and reliable, as required by the Directive. The Guarantee of Origin does not currently carry any monetary value and so it is not envisioned that any system to fine producers that attempt to abuse the system will be required. However, the Regulations allow for revocation of Guarantees of Origin certificates, which were obtained on the basis of incorrect information.

Cost to applicants (producers)

The Defra handbook on charging states it is best practice to recover costs where the benefit is to a defined party and is not mandatory. As this is the case for the issue of a Guarantee of Origin certificate, which is at the request of producer and does not imply public support, the Government will charge producers. The charge aims to recover costs and depends on the complexity of the scheme; with small CHP producers charged significantly less than the large complex CHP producers.

The costs to be borne by the applicant are as follows:

Schemes ≤ 2 MWe £1000 (plus VAT at prevailing rate) per application
Schemes > 2 and ≤ 25 MWe £2000 (plus VAT at prevailing rate) per application
Schemes > 25 and < 50 MWe £3000 (plus VAT at prevailing rate) per application
Schemes ≥ 50 MWe £4,000 (plus VAT at prevailing rate) per application

Payment should be made by cheque with submission of the application form.

Cheques should be made payable to “**AEA Technology plc**”. AEA Technology plc, act as CHPQA Administrator on behalf of the Secretary of State for Environment, Food and Rural Affairs.

Where a Guarantee of Origin for CHP electricity has been requested, there may be additional costs to the producer associated with the installation of additional metering (fuel, electricity and heat). The definition in the Directive of CHP electricity to be applied in the Guarantee of Origin, unlike the UK’s CHPQA standard, does not allow heat produced by supplementary firing or in auxiliary boilers or electricity produced by a condensing turbine to be counted. It is for this reason that additional metering may be required. However, the issue of a Guarantee of Origin certificate is at the request of the producer and any additional costs will form part of the commercial decision to request a Guarantee of Origin.

References

These references below are the definitive documents at the time of publication. Applicants seeking further clarification over the procedures associated with CHPGOs (e.g. issue and content; replacement; transfer; revocation) should refer initially to references 2 and 3.

1- 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
http://eur-lex.europa.eu/LexUriServ/site/en/oj/2004/l_052/l_05220040221en00500060.pdf

2- STATUTORY INSTRUMENTS. 2007 No. 292 ENERGY CONSERVATION THE GUARANTEES OF ORIGIN OF ELECTRICITY PRODUCED FROM HIGH EFFICIENCY COGENERATION REGULATIONS 2007
http://www.opsi.gov.uk/si/si2007/uksi_20070292_en.pdf

3- EXPLANATORY MEMORANDUM. THE GUARANTEES OF ORIGIN OF ELECTRICITY PRODUCED FROM HIGH EFFICIENCY COGENERATION REGULATIONS 2007, 2007 No. 292
http://www.opsi.gov.uk/si/em2007/uksiem_20070292_en.pdf

APPENDIX 1

INFORMATION TO BE SUPPLIED WITH A REQUEST FOR A CHPGO CERTIFICATE

- 1.** The name and address (if a corporation or Scottish firm, the registered or principal office) and, if a company, the registered number, of the person requesting the issue of the CHPGO certificate
- 2.** Where the person signing the statement required under regulation 4(4) is not the person making the request, the name and address of the person signing the statement.
- 3.** Whether the person requesting the issue of the CHPGO certificate is the producer of the electricity in respect of which the CHPGO certificate is requested and, if not, the name and address (if a corporation or Scottish firm, the registered or principal office) and, if a company, the registered number, of the producer.
- 4.** The beginning and end of the period covered by the request.
- 5.** The place where the electricity in respect of which the CHPGO certificate is requested was produced, and the name, if any, of the plant.
- 6.** The quantity of electricity in respect of which the CHPGO certificate is requested, together with the total quantity of electricity produced by the plant during the period covered by the request.
- 7.** The information relating to the plant which a person would be required to provide if they requested a certificate in relation to that plant under the Combined Heat and Power Quality Assurance Standard, Issue 1, November 2000, published by the Department for Environment, Food and Rural Affairs(**a**).
- 8.** The primary fuel source from which the electricity was produced.
- 9.** The heat to power ratio of the plant.
- 10.** The amount of useful heat utilised during the period covered by the request.
- 11.** Such further information as the competent authority may, in the particular circumstances of the case, reasonably require—
 - (a) for the purposes of ascertaining the accuracy of the information required to be provided under paragraphs 1 to 10; or
 - (b) to enable the competent authority to be satisfied that any electricity produced is from high-efficiency cogeneration.

APPENDIX 2

INFORMATION TO BE CONTAINED IN A CHPGO CERTIFICATE

- 1.** The name and address (if a corporation or Scottish firm, the registered or principal office) and, if a company, the registered number, of the person to whom the CHPGO certificate has been, or was originally, issued.
- 2.** The date of issue of the CHPGO certificate
- 3.** An identifier.
- 4.** The beginning and end of the period to which the CHPGO certificate relates.
- 5.** The place where the electricity to which the CHPGO certificate relates was produced and the name, if any, of the plant.
- 6.** The lower calorific value of the fuel source from which the electricity was produced.
- 7.** The use of the heat generated together with the electricity produced during the period to which the CHPGO certificate relates.
- 8.** The quantity of electricity from high-efficiency cogeneration calculated in accordance with Annex II of the Cogeneration Directive.
- 9.** The primary energy savings calculated in accordance with Annex III(b) of the Cogeneration Directive.
- 10.** The primary fuel source from which the electricity was produced.
- 11.** The quantity of fuel from which the electricity was produced.
- 12.** The amount of heat utilised during the period to which the CHPGO certificate relates.
- 13.** The achieved power efficiency.
- 14.** The achieved overall efficiency.
- 15.** The total quantity of electricity generated over the period to which the CHPGO relates.