

# EU GPP Criteria for Electricity

Green Public Procurement (GPP) is a voluntary instrument. This document provides the EU GPP criteria developed for the electricity product group. The accompanying Technical Background Report provides full details on the reasons for selecting these criteria and references for further information.

For each product / service group two sets of criteria are presented:

- The core criteria are those suitable for use by any contracting authority across the Member States and address the key environmental impacts. They are designed to be used with minimum additional verification effort or cost increases.
- The comprehensive criteria are for those who wish to purchase the best products available on the market. These may require additional verification effort or a slight increase in cost compared to other products with the same functionality.

## 1. Scope and definition

These EU GPP criteria cover the purchase of electricity.

The most direct way to reduce the environmental impact of electricity consumption is to reduce demand – through energy efficiency improvements in public buildings and the purchase of more energy efficient products and through measures aimed at consumer behaviour. These issues are beyond the scope of these criteria but are covered by EU GPP criteria for other product groups<sup>1</sup>. The primary focus of the criteria here is to encourage greater use of electricity from renewable sources.

For the **Core** criteria the specifications focus on the proportion of electricity supplied from renewable energy sources (RES-E) (at least 50% recommended). High efficiency combined heat and power (HE CHP) using non renewable sources are also allowed within the core criteria. The award criteria aim to encourage an even higher percentage of RES-E or HE CHP beyond the minimum included in the specifications.

For the **Comprehensive** criteria, the specifications recommend 100% RES-E.

**Definition of RES-E:** Directive 2009/28/EC (the Renewable Energy Directive) defines RES-E as:

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<sup>1</sup> See: [http://ec.europa.eu/environment/gpp/first\\_set\\_en.htm](http://ec.europa.eu/environment/gpp/first_set_en.htm)

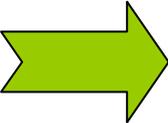
“...energy from renewable non-fossil sources, namely wind, solar, aerothermal, geothermal, hydrothermal and ocean energy, hydropower, biomass, landfill gas, sewage treatment plant gas and biogases;”

In multi-fuel plants using a mix of renewable and conventional sources only the part of electricity produced from renewable energy sources shall be taken into account. The production of electricity in pumped storage units from water that has previously been pumped uphill should be excluded.

Biomass is defined as:

“...the biodegradable fraction of products, waste and residues from biological origin from agriculture (including vegetal and animal substances), forestry and related industries including fisheries and aquaculture, as well as the biodegradable fraction of industrial and municipal waste;”

## 2. Key environmental impacts

Key Environmental Impacts	GPP Approach
<ul style="list-style-type: none"> <li>• The generation of electricity from fossil fuels is responsible for a substantial proportion of greenhouse gas and other emissions</li> <li>• The growing electricity demand combined with the depletion of non renewable sources</li> <li>• CHP based on non-renewable energy sources has only limited impact on CO<sub>2</sub> reduction</li> </ul>	 <ul style="list-style-type: none"> <li>• Increase the share of electricity from renewable energy sources (RES-E)</li> <li>• Switch to High efficiency CHP (HE CHP) or CHP based on renewable energy sources, or gas-fired CHP only</li> </ul>

Please note that the order of impacts does not necessarily translate to the order of their importance.

### 3. EU GPP Criteria for Electricity

Core criteria	Comprehensive criteria
<b>3.1 EU GPP criteria for Electricity</b>	
<b>SUBJECT MATTER</b>	<b>SUBJECT MATTER</b>
Purchase of at least 50% electricity from renewable energy sources (RES-E) and/or high efficiency cogeneration.	Purchase of 100% electricity from renewable energy sources (RES-E).
<b>SPECIFICATIONS</b>	<b>SPECIFICATIONS</b>
<p>1. At least 50% of supplied electricity must come from renewable energy sources and/or high efficiency cogeneration as defined by Directive 2009/28/EC and Directive 2004/8/EC respectively.</p> <p>The tenderer should indicate the proportion of electricity to be supplied from renewable energy sources.</p> <p><b>Verification:</b> Relevant documentation from the Guarantee of Origin scheme has to be submitted. Alternatively, any other equivalent proof will be accepted.*</p> <p><i>*Please see the Explanatory note for further information.</i></p>	<p>1. 100% of supplied electricity must come from renewable energy sources as defined by Directive 2009/28/EC.</p> <p><b>Verification:</b> Relevant documentation from the Guarantee of Origin schemes has to be submitted. Alternatively, any other equivalent proof will be accepted.*</p> <p><i>*Please see the Explanatory note for further information.</i></p>
<b>Award criteria</b>	<b>Award criteria</b>
<p>Additional points will be awarded for <b>additional RES-E and/or high efficiency cogeneration.</b></p> <ol style="list-style-type: none"> <li>Additional points will be awarded in proportion to the electricity to be supplied from renewable energy sources above the minimum requirement in the specification.</li> <li>Additional points will be awarded in proportion to the electricity to be supplied from high efficiency cogeneration above the minimum requirement in the specification.</li> </ol>	

<p>3. If electricity is supplied from high efficiency cogeneration based on renewable energy sources double counting of additional points for both aspects is allowed.</p> <p><b>Verification:</b> Relevant documentation from the Guarantee of Origin schemes has to be submitted. Alternatively any other equivalent proof will be accepted.*</p> <p><i>*Please see the Explanatory note for further information</i></p>	
<p><b>CONTRACT PERFORMANCE CLAUSES</b></p>	<p><b>CONTRACT PERFORMANCE CLAUSES</b></p>
<p>At the end of each year of the contract the contractor must disclose the origin of the electricity supplied to the contracting authority to demonstrate that at least 50% came from renewable energy sources and/or high efficiency cogeneration.</p> <p><b>Verification:</b> Relevant documentation from the Guarantee of Origin schemes has to be submitted. Alternatively any other equivalent proof will be accepted.* This is not required from certified suppliers of 100% green electricity (i.e. carrying a Type-1 ecolabel which uses a definition of RES-E at least as strict as that of Directive 2009/28/EC).</p> <p><i>*Please see the Explanatory note for further information</i></p>	<p>At the end of each year of the contract, the contractor must disclose the origin of the electricity supplied to the contracting authority to demonstrate that 100% came from renewable energy sources.</p> <p><b>Verification:</b> Relevant documentation from the Guarantee of Origin schemes has to be submitted. Alternatively any other equivalent proof will be accepted.* This is not required from certified suppliers of 100% green electricity (i.e. carrying a Type-1 ecolabel which uses a definition of RES-E at least as strict as that of Directive 2009/28/EC).</p> <p><i>*Please see the Explanatory note for further information).</i></p>

## Electricity

### Explanatory notes

**Guarantee of Origin:** All EU countries are legally obliged, under Directives 2009/28/EC and 2004/8/EC, to set up Guarantee of Origin schemes for electricity from renewable energy sources and for the use of high efficiency cogeneration in its production. These provide a good legal basis for verification. Note that the current state of mandatory application of Guarantee of Origin schemes may vary between member states. An alternative would be for the supplier to provide independent proof of the fact that a corresponding quantity of electricity has been generated from so-defined renewable sources or produced by means of high efficiency cogeneration (e.g. a tradable certificate from an independent issuing body such as RECS (Renewable Energy Certificates System: [www.recs.org](http://www.recs.org)), which has been approved by government. Another alternative would be if the electricity supplied carried a Type-1 ecolabel with a definition at least as strict as that in Directive 2009/28/EC.

**Type I or ISO 14024 ecolabels:** The Type I or ISO 14024 ecolabels are those where the underlying criteria are set by an independent body and which are monitored by a certification and auditing process. As such they are a highly transparent, reliable and an independent source of information. These labels have to meet the following conditions:

- The requirements for the label are based on scientific evidence
- The ecolabels are adopted with the participation of all stakeholders, such as government bodies, consumers, manufacturers, distributors and environmental organisations
- They are accessible to all interested parties.

In public procurement, procurers may require that the criteria underpinning a certain ecolabel must be met, and that the ecolabel may be used as one form of proof of compliance. They are however not allowed to request that a product carries an ecolabel. Moreover, procurers may only use ecolabel criteria which refer to characteristics of the product or service itself or production processes, not those relating to the general management of the company.

**Proof of compliances:** Where the verification for the criteria states that other appropriate means of proof can be used, this could include a technical dossier from the manufacturer, a test report from a recognised body, or other relevant evidence. The contracting authority will have to satisfy itself on a case by case basis, from a technical/legal perspective, whether the submitted proof can be considered appropriate.

**Energy auditing:** Energy audits can be very valuable in identifying possible ways in which the energy efficiency of a public authority's buildings and equipment could be improved. Often authorities will have already carried out their own audits, and have staff in place to implement an energy saving strategy. However where such measures are not in place, public authorities are encouraged to obtain such an audit.

## **Cost considerations**

Price differences between conventional and green electricity depend on the status of liberalisation in the respective country, the national support scheme and the existence of green electricity suppliers.

Green electricity is often more expensive, although price differences are narrowing substantially, and there are cases where green electricity is even available at a cheaper rate.

Increased market liberalisation, upgraded RES generation technologies, rising fossil fuel prices, European RES-E targets and promotion of high efficiency cogeneration – all linked to the current climate debate - have the potential of making green electricity ever more competitively priced.