Supply of electricity from renewable sources

Metropolitan City of Rome Capital

- 100% of electricity from renewable energy sources for fish incubators
- The percentage of green electricity with guarantees of origin is 100%

Benchmark
Conventional Electricity
- 17.0 t CO2e/year
- 3.6 toe/year

GPP 2020 tender
- 100% green electricity
- 0.7 t CO2e/year
- 3.6 toe/year

Results
- 16.3 t less CO2 emissions
- 3.6 toe of green energy guaranteed

www.gpp2020.eu
Contract tendered

- Electricity from renewable sources for fish incubators utilities of the Metropolitan City of Rome Capital
- The Metropolitan City of Rome Capital has adhered to the Convention of Consip Spa that foresees the supply of electrical energy and connected services, to an indexed price, for all PAs, with prices differentiated according to the utility type;
- The price set within the Convention includes possible costs deriving from the “Emission Trading System” (CO2);
- amount supplied: 42,000 Kwh
- Duration: 1 year with the possibility of semestral extension

Procurement approach

The purchase of electricity by the Metropolitan Area of Rome was made by adhering to a Consip “Convention”

Within the Convention, the possibility to obtain the certification of origin of renewable energy by paying an additional sum is foreseen. This option was chosen by the Metropolitan City of Rome Capital.

<table>
<thead>
<tr>
<th>Technical specifications</th>
<th>Award Criteria</th>
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</thead>
<tbody>
<tr>
<td>100% of the supply must originate from renewable sources. The corresponding guarantee of origin certificates must be included.</td>
<td>Not directly relevant for the purchasing body. MEAT was originally used in the Convention.</td>
</tr>
<tr>
<td><strong>VERIFICATION</strong>: Guarantee of Origin certificate².</td>
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</tbody>
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Criteria Development

The scope of the tender was to increase energy consumption from renewable sources. Criteria were developed by Consip spa, responsible for the Convention, on the base of criteria developed at EU level and best practices adopted at national and EU level. The main focus of the Metropolitan City of Rome Capital was the requirement of the certificates of origin.

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¹ Consip SpA is a public stock company owned by Italy’s Ministry of the Economy and Finance that operates on behalf of the State and as a central purchasing body (CPB), supporting the single administrations on all aspects of the procurement process

² The “Guarantee of Origin” is a certification of the production of electricity from renewable sources introduced in Italy by Dlgs 387/2003 “Implementation of Directive 2011/77/EC on the promotion of electricity produced from renewable energy sources in the internal electricity market”. 
GPP 2020 tender model for electricity from renewable sources, Rome, March 2016

Results

<table>
<thead>
<tr>
<th></th>
<th>CO₂e emissions</th>
<th>Energy consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Carbon Solution</td>
<td>0.7 t CO₂ e/year</td>
<td>3.6 toe/year</td>
</tr>
<tr>
<td>Benchmark</td>
<td>17.0 t CO₂ e/year</td>
<td>3.6 toe/year</td>
</tr>
<tr>
<td>Savings per year</td>
<td>16.3 t CO₂ e/year</td>
<td>0.0 toe/year</td>
</tr>
</tbody>
</table>

Calculation basis

- Total amount of green energy purchased is 42,000 kWh;
- The emission factors used are that given by the GPP2020 “Carbon and energy savings calculator for energy contracting”:
  - Italian electricity mix: 0.405 kg CO₂/kWh
  - Green electricity: 0.017 kg CO₂/kWh
- The percentage of saved CO₂e is 96%
- The energy (in toe) does not change as the amount of energy consumed is the same.

Lessons Learned

There were no difficulties in finding suppliers able to sell electricity generated entirely from renewable sources. It seems clear that at least for the purchase of a small amount of electricity (42,000 kWh as in this case), there are no difficulties in obtaining certificates of origin. The purchase of green energy resulted in a limited cost increase (1%). The information is fundamental to answer to the wrong perception of managers that did not support the choice from the beginning because they feared a much higher increase in costs.

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About GPP 2020

GPP 2020 aims to mainstream low-carbon procurement across Europe in support of the EU’s goals to achieve a 20% reduction in greenhouse gas emissions, a 20% increase in the share of renewable energy and a 20% increase in energy efficiency by 2020.

To this end, GPP 2020 will implement more than 100 low-carbon tenders, which will directly result in substantial CO₂ savings. Moreover, GPP 2020 is running a capacity building programme that includes trainings and exchange. – [www.gpp2020.eu](http://www.gpp2020.eu)

About PRIMES

Across six countries in Europe; Denmark, Sweden, Latvia, Croatia, France and Italy, PRIMES project seeks to help municipalities overcome barriers in GPP processes, many of which lack capacity and knowledge.

PRIMES aims to develop basic skills and provide hands-on support for public purchasing organisations in order to overcome barriers and implement Green Public Purchasing. This will consequently result in energy savings and CO₂ reductions. – [www.primes-eu.net](http://www.primes-eu.net)

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