



Supply of electricity from renewable energy sources

Student Centre of the University and the Polytechnic College Rijeka, Croatia

- 30% of electricity derives from renewable energy sources
- Encouraging bidders to offer electricity derived from renewable energy sources
- Environment protection improvement



Standard product = benchmark

- Replacement of conventional electricity
- 754 t CO₂ emissions/ 2 years

GPP 2020 tender

- 30 % green electricity
- 540 t CO₂ emissions/2 years

Results

- Reduction of 30% of the CO₂ emissions
- 214 t CO₂ emissions/ 2 years

Contract tendered

- Approximate quantity of electric energy put up for tender for a two-year-based calculation was 2.471.000 kWh.
- Tender for replacement of existing conventional electricity consumption for Student Center with electricity consumption combined in a ratio of 70% conventional electricity and 30% electricity from renewable sources and therefore lowering of greenhouse gas emissions.
- 2 years contract
- Total cost: 133.000 € (excluding VAT)
- Open procedure



Procurement approach

<p>Technical specifications</p> <ul style="list-style-type: none"> - 30% of electricity from renewable sources – mandatory requirement <p>Verification: Statement of the bidder that shall supply minimum 30% of total required electricity from renewable sources</p>	<p>Award criteria / most economically advantageous tender (MEAT):</p> <ul style="list-style-type: none"> • 90% price • 10% for a greater percentage of electricity from renewable sources then the mandatory 30%
<p>Eligibility of bidders</p> <ul style="list-style-type: none"> - The bidder/tenderer must proof that he has the permit from the national energy regulatory agency <p>Verification: The bidder/tenderer shall supply this permit as the proof of legit manipulation with electricity harmonized with Croatian Act on the Regulation of Energy Activities, the Energy Act and other acts regulating particular energy activities.</p>	

Contract clauses

Upon completion of the contract, the selected bidder must provide a statement with supporting documentation as a proof that at the percentage of energy from renewable sources that he offered in the tender (at least 30%) is really from renewable sources.

Criteria development

The ambition of the public tender was to increase consumption of electricity from renewable sources and to improve sustainable consumption of energy in local government.

Results

Energy savings and CO₂ emission reductions were calculated based on GPP 2020 methodology for a lifetime of 2 years. The results are as follows.

	CO ₂ e emissions	Energy consumption
Low Carbon Solution – 30% green electricity	270 t CO ₂ e/year	106.3 toe/year
Benchmark – Conventional electricity	377 t CO ₂ e/year	106.3 toe/year
Annual savings	107 t CO ₂ e/year	0 toe/year
Total savings	214 t CO ₂ e	0 toe

Calculation basis

Calculation is based on the developed GPP2020 methodology. Total amount of contracted energy is 2,471,000 kWh, and it was decided to contract:

- At least 30% or 741,000 kWh from renewable sources and
- The rest of 70% or 1,730,000 kWh to be energy from conventional sources
- The new contract leads to total deduction of 107 t of CO₂ per year or 30% of CO₂ deduction.

The procurement of energy partially from renewable sources had no negative financial impact –only a positive impact on the environment due to the total deduction of CO₂ by 30% can be seen. It is equal to the percentage of electricity from renewable sources which are a result of direct correlation between CO₂ deduction and renewable sources usage in production of electricity.

Lessons learned

Significant reduction of CO₂ combined with the same level of budget consumption, with no competitiveness compromised is surely an indicator that the energy market in Croatia is getting stronger from year to year. Surely, more ambitious criterions will be used for future public procurement procedures when energy will be contracted and disseminated.

Contact

Student centre Rijeka

51000 Rijeka, Radmile Matejčić 5, Croatia

scri.uniri@scri.hr

www.scri.uniri.hr

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

4



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



Co-funded by the Intelligent Energy Europe
Programme of the European Union

The sole responsibility for the content of this publication lies with the authors. It does not necessarily reflect the opinion of the European Union. Neither the EACI nor the European Commission are responsible for any use that may be made of the information contained therein.

