



Acquisition of low energy consumption personal computers

City of San Giuseppe Vesuviano

- Reduction of CO₂ emissions by the acquisition of low energy consumption PC
- Criteria and technical specifications required for the purchased equipment include parameters for energy efficiency and for the reduction of noise emissions



Benchmark

- 0.11 t CO₂ e/year
- 0.02 toe/year

GPP 2020 tender

- 0.05 t CO₂ e/year
- 0.01 toe/year

Results

Savings:

- 0.06 t CO₂e/year
- 0.01 toe/year
- 0.30 t CO₂e/5 years
- 0.06 toe/5 years

Contract tendered

- The object of the contract consisted in the acquisition of desktop computers and laptops.
- The acquisition has been realized via the “Electronic market for public administration” (MePa). MePa represents the digital market within which the accredited administrations can buy, for values that are below the EU thresholds, goods and services from suppliers that are entitled to present their offers in the system.
- The acquisition has been realized by publishing an “acquisition request” on MePa by inviting qualified suppliers to present their offer.
- The total amount of the acquisition was: € 3,933. Number of received offers: 6.

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Procurement approach

The procurement type was the open procedure, realized in one lot.

Technical specifications	Award criteria
<p>Environmental characteristics required for the equipment:</p> <p>PC DESKTOP</p> <ul style="list-style-type: none"> • To comply with the ENERGY STAR® criteria for this kind of equipment • TEC values (typical electricity consumption) must be at least 5% lower than Energy star values for this kind of equipment • Equipment sound power level LWAd must be below following limits: a. LWAd < 45 dB(A) with active hard disk or access to hard disk (measured according to EN ISO 7779); b. LWAd < 40 dB(A) in “idle” phase • The primary packaging must have minimum 80% of recycled paper or cardboard or minimum of 60% recycled plastic <p>MONITOR</p> <ul style="list-style-type: none"> • To comply with the ENERGY STAR® criteria for this kind of equipment • The backlight system light of LCD monitor mustn't have mercury <p>NOTEBOOK</p> <ul style="list-style-type: none"> • To comply with the ENERGY STAR® criteria for this kind of equipment • TEC values must be at least 5% lower than Energy star values for this kind of equipment • Equipment sound power level LWAd must be below following limits: a. LWAd < 40 dB(A) with active hard disk or access to hard disk (measured according to EN ISO 7779); b. LWAd < 35 dB(A) in “idle” phase • The primary packaging must have minimum 80% of recycled paper or cardboard or minimum 60% recycled plastic <p>Verifications: DESKTOP PC / MONITOR / LAPTOP: Equipment compliant with Ecolabel, Nordic Ecolabel or any other label ISO (type I) will be considered as approved. Any other proof will be accepted, as technical documentation from the producer or a relation from an accredited body.</p>	<p>Maximum rebate.</p>

Development of the criteria

The technical specifications of the tender are compliant with the Minimal Environmental Criteria elaborated by the by the Italian Ministry of the Environment and for Protection of the Land and Sea and published in the Ministerial Decree from 13 December 2013 “Supply of IT electric and electronic office equipment”.

Results

	CO ₂ emissions	Energy consumption
Low carbon solution	0.05 t CO ₂ e	0.01 toe
Benchmark	0.11 t CO ₂ e	0.02 toe
Savings per year	0.06 t CO ₂ e	0.01 toe
Savings in 5 years	0.30 t CO ₂ e	0.06 toe



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Calculation basis

The estimations have been realized through the Office-ICT calculator from the GPP2020 project (version: December 2014) for 1 PC, 1 monitor and 3 notebooks that have been object of the tender. The results are presented below:

Benchmark: the figures of the benchmark come from the original energy star calculator offered by the EPA (United States Environmental Protection Agency) and the DOE (Department of Energy).

Annual electric consumption: 262 kWh.

Low emission solution: annual electric consumption: 115 kWh.

Emission factor for the Italian electricity mix: 0.405 kg CO₂e/kWh.

We estimate that the devices are used for 5 years.

Lesson learnt

At the beginning, the request on the electronic market did not receive any answer from possible bidders, thus a second call was necessary to find, finally, 6 bidders compliant with the technical specifications.

The market is ready to satisfy the request for more efficient, low energy consumption and noise emissions equipment, even if such products not yet have a wide diffusion.

Contacts

Luigi Acquaviva: luigi.acquaviva@comune.sangiuseppevesuviano.na.it

Phone: +39 0471 41 40 10

Website: <http://www.comune.sangiuseppevesuviano.na.it/>

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



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



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