

Italian public buildings save with energy services framework

INTEGRATED ENERGY MANAGEMENT SERVICES (CONSIP-NATIONAL PROCUREMENT AGENCY, ITALY)

Procurement objectives

In order to combine cost savings and incentives for innovation in public procurement, Consip, the Italian central purchasing body, launched a framework contract on "[Integrated Energy Management Services](#)" (heating services including improvement of energy efficiency, consumption reduction and CO₂ emissions avoidance). Pre-procurement market consultation was carried out using online questionnaires addressed to businesses and the main trade associations in Italy.

The tendering process was an open procedure with 12 lots awarded to five different suppliers; the framework was awarded on the basis of the most economically advantageous tender (MEAT), with 70% of marks allocated to price and 30% to quality.

Background

[Energy](#) is a key sector for addressing environmental impacts and this is reflected by the GPP policies and methodologies adopted by Consip.

The need for greening public procurement was identified when, after a market demand analysis performed by Consip in 2006, it was found that heating services accounted for 38% of the total energy consumption of the Italian public administration with costs of about 2.4 billion euro per year, including 1.4 billion for gas, 0.6 billion for diesel oil and 0.4 billion for heating services.



Criteria used

Green considerations were introduced (benchmarked against international best practice) in the following elements of the tender.

Technical specifications:

- Settled temperature (for example, 20°C) to be preserved inside the buildings (public offices, schools, prisons, universities, etc.) during the average Italian heating season (that is, eight hours for four months);
- Installation of electronic meters and constant monitoring for indoor temperatures of the buildings;
- Online monitoring activities (using meters) and online assistance;
- Assessment of the optimal level of consumption for heating and energy services;
- Energy audit performed for every building.

Award criteria:

- Technical report (for each building receiving energy services) including a specific study on the interaction between building users and its energy system;
- Publication of the environmental assessment and/or social budget and/or sustainability report;
- Infrared photography report for each building receiving the energy services.

The quality of each of the above reports was assessed in order to determine the most advantageous offer for each lot.

Contract performance clauses:

- The suppliers were required to ensure a minimum level of reduction for primary energy consumption of the whole building/heating plant system, measured in tonnes of oil equivalent (TOE). The suppliers were also required to provide evidence of the results obtained; credibility was certified by the [AEEG](#) (Italian Regulatory Authority for Electricity and Gas) who operate and maintain heating facilities, including by remote control.

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Results

The award criteria were aimed at encouraging suppliers to reduce primary energy consumption and associated CO₂ emissions of the entire building/heating plant system by measures such as substitution of hot-water heating, insulation, renewable thermal sources, etc. All the suppliers involved were able to comply with the technical criteria requested.

Main effects of the tendering process:

- 27% cost saving for public administrations involving approximately 5,000 buildings;
- Contracts executed had a total (estimated) financial value of 800 million euro;
- Enhanced competition on technical features included in the tender;
- Contract duration of five years.

Environmental impacts

The principal environmental impacts are related to CO₂ emissions caused by energy consumption. In order to reduce these impacts, the contract included a performance clause requiring a minimum amount of energy saved (375 TOE). Actual energy saved under the framework (6,000 TOE) was higher than the minimum required, resulting in the avoidance of 4,800 tonnes of CO₂ emissions. The procurement process ensured two more results:

- In the short term, suppliers are encouraged to reduce energy consumption of buildings;
- In the long term, at the end of the contract, the public administration owns the equipment installed by the suppliers (for example, boilers).

If all Italian public authorities would use Consip's framework, the cumulative effect would be around 100 million euro worth of savings per annum.

Lessons learned

For the renewal of the framework, energy savings will be monitored both by Consip and the public administrations which occupy the buildings, with penalties potentially applicable. The main changes expected are:

- Remuneration of the suppliers will take into account both physical and architectural features of buildings (for example, type of windows, insulation);
- Variable duration of contracts to increase the pay-back period for the supplier (from five to seven years);
- Increase in the minimum level of reductions requested (in TOE);
- Multiple services offered by the supplier (for example, energy certification)

The success of this framework has helped Italian public authorities to play an exemplary role in energy savings, vis à vis citizens and the private sector, while complying with [Directive 2006/32/EC](#) on energy end-use efficiency and energy services as well as their procurement obligations.