According to Tuscan law, which is referenced in the tender documentation, public authorities have the duty to increase their efforts to protect the environment, by encouraging the purchase of supplies of goods which are made of recycled materials in compliance with regulatory obligations. The law also states that public authorities are obliged to integrate environmental considerations when procuring, ensuring that they reduce the environmental impact of products and services, the consumption of non-renewable natural resources and waste production. Public authorities are obliged to increase the use of; recovered and recycled materials (with a quota of 30% recycled materials); technologies, techniques, systems and production processes which have a low environmental impact; and low environmental impact products which are easily disposable.

The Tuscany Region wished to procure toner cartridges, and to establish a framework agreement to purchase cartridges on behalf of various public authorities within its region. The Region wanted to ensure that the cartridges were sustainable and would have a reduced environmental impact. In order to achieve this goal, the Tuscany Region chose to work together with ARPAT, the Regional Agency for the Environmental Protection of Tuscany, in order to avail of their expertise when preparing the tender documentation. ARPAT assisted by advising on the environmental and social aspects of the technical specifications, the award criteria and the contract performance clauses. The Tuscany Region decided to proceed with an open tender.

Procurement objectives

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Criteria used

Subject matter of the contract: Green considerations were introduced to the tender at the very beginning. The Tuscany Region requested the expert services of ARPAT to assist them in preparing the tender specifications. By choosing to title the tender “Open Invitation to Tender for the Supply of consumables for reduced environmental impact printing systems”, the Tuscany Region clearly indicated the environmental focus of this tender. The Tuscany Region acted as the central purchasing body for the public authorities in the Region.

Technical specifications: The winning bidder was obliged to provide a low environmental impact product, paying particular attention to the chemical composition of the product. It was requested that the toner powder should not contain substances classified as carcinogenic, mutagenic or teratogenic in accordance with specific risk phrases (Regulation (CE) n. 1907/2006). These risk phrases are selected from the ‘Blue Angel’ and ‘Nordic Ecolabel’ criteria for remanufactured toner cartridges.

Furthermore, a certain amount of the toner cartridges offered were to be remanufactured. The Tuscany Region committed to buying at least 40% remanufactured toner cartridges, however, it was unable to commit on behalf of for the other public authorities of the Tuscan Region. It is also important to note that the performance of a remanufactured toner cartridge had to be equivalent to an OEM one (OEM, original equipment manufacturer). A specialised test to assess the duration of a remanufactured toner cartridge in comparison to an OEM cartridge, was to be carried out at the expense of the contractor in compliance with international ISO standard (ISO/IEC 19752, ISO/IEC 19798 and ISO/IEC 24711).

Award criteria: The contract was awarded on the basis of the Most Economically Advantageous Tender, with 80 marks available for price, and 20 for environmental and technical quality. This was assessed with reference to the criteria underlying the ‘Blue Angel’ and ‘Nordic Ecolabel’ labels, which cover criteria such as:

- How toner modules are produced and recycled
- Requirements for the composition of toners e.g. specifying toners shall not contain materials containing mercury, cadmium, lead, nickel or chromium VI compounds as constituents
- Emissions from the toners and how these are tested and controlled
- Products bearing the ‘Blue Angel’ or ‘Nordic Ecolabel’ labels would be accepted as means of proof. Equivalent labels or other technical means of proof could also be provided.

The services of ARPAT were also retained for the evaluation of the offers to ensure that the products offered did indeed have a low environmental impact and met the specified requirements.
Contract performance clauses: The Tuscany Region requested that the successful tenderer evaluate and reduce the environmental impact of the supply chain of the products delivered under the contract. They were required to do so by taking into consideration the total life cycle of the product, including the production, collection, transport of the exhausted regeneration toner cartridges and the management of the end of life of the components of the products.

The successful tenderer was required to carry out a number of detailed steps during contract execution, to ensure, not only that they upheld the environmental commitments which they made in their original bid, but also to monitor and make improvements throughout the duration of the contract. These requirements can be divided into four steps.

1. The successful tenderer was required to document the environmental impacts of the life cycle (LCA) of the proposed product within the first 6 months of signing the contract. This study was to be carried out in accordance with the following standards:
   - UNI EN ISO 14040:2006 Environmental management - Life cycle assessment - Principles and framework
   - UNI EN ISO 14044:2006 Environmental management - Life cycle assessment - Requirements and guidelines
   In order to simplify the study, the successful tenderer was required to take into consideration the environmental impacts associated with the life cycle of one of the remanufactured toner cartridges only, preferably the cartridge which is the most frequently used according to the data presented in the first biannual report.

2. The successful bidder was required to present the study which resulted from Step 1 to the Tuscany Region within 18 months of signing the contract (having completed the study between months 6 and 18). As an alternative, the contractor could provide an Environmental Product Declaration (EPD) developed in compliance with the standard ISO 14025 (ISO Type III environmental label) for one type of the offered remanufactured toner cartridges.

3. Based on the results of this study, the successful tenderer was required to perform and also present an analysis of the technical and economic feasibility of possible environmental improvements on the life cycle of the supply. The successful tenderer was required to provide this analysis to the contracting authority within two years of signing the contract. Additionally, the successful tenderer was required to include with the study, a programme of measures which could be taken to improve the environmental impact.

4. Finally, two months before the contract expired, the successful tenderer was required to provide a report of how the improvements which they had proposed, had worked out.

Results

A total of three bids were received for this procurement which was valued at approximately €4.1 million. The Tuscany Region was awarded the Premio CompraVerde Award 2013 for this tender procedure. The Region was commended for the completeness of the tender as well as the accuracy with which environmental aspects are covered in the tender documentation. The Region was also complimented on the fact that they implemented a process whereby the supplier was responsible for ensuring that the impact of the process on the environment was reduced, that this process was continued for the full duration of the contract and that this process was continuously being assessed and improved.

One very notable aspect of this Example is that the provision of print consumables costs the same as the previous contract. Some individual toner cartridge prices are higher, some are lower, but the overall price is the same therefore no green premium is paid for this contract.
Environmental impacts

This procurement procedure resulted in a significant reduction in waste. On average, the savings in waste obtained from a remanufactured toner cartridge is 1.5kg (UNEP, The impacts of sustainable public procurement. Eight illustrative case studies, 2012, page 25). The reduction of the consumption of raw materials, and hazardous substances, are further positive environmental impacts.

Lessons learned

The Tuscany Region learned that it is possible to introduce selective green criteria in the procurement of toner cartridges, and to commit the contractor to evaluate and reduce the environmental impacts of the life cycle of the products during the execution of the contract, making reference to international standards (ISO standards on LCA).

The organisation did not experience any problems verifying the bids and was also pleasantly surprised that they had no issues with the request for the winning bidder to provide documentation on the full waste management chain associated with the consumables.

The authority, however, did note that additional time was required to carry out this procurement procedure in comparison to previous tenders for toner cartridges due to the level of detail entered into.