GREEN PURCHASING GUIDE FOR HOSPITALS

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Guidelines for the implementation of Green Procurement in Hospitals

Introduction

Green Procurement of services or products is a relatively new approach targeting private and public organizations which are interested to improve their environmental performance by claiming and procuring environmental friendly products and services.

This approach allows the contracting authorities to systematically embody the environmental direction at the different contract process stages: from the subject matter of the contract to the development of the technical specifications, and to awarding and executing the contract from the contractor.

Green Procurement covers a large part of the market in sectors as: energy, agriculture, consumables, electrical and electronic devices, food, cleaning products, and others. There are also green procurement criteria for the construction and transport sector. By implementing green procurement, energy and raw material savings can be achieved, the pollution from the production and use of products can be constrained, and the waste amount can be lowered.

Implementing green procurement does not feature benefits only for the environment but also for financial aspects, and can lead to financial savings; this can be justified using Life Cycle Assessment. The term Life Cycle Assessment means the assessment of the environmental impacts of a given product or service throughout its lifespan, regarding the raw material production, manufacture, distribution, use and disposal including all intervening transportation steps. The “picture” which is created by the Life Cycle Assessment allows the final user to avoid the transfer of the environmental impacts from one step to another.
The following table provides some useful examples of the use of environmental criteria at the procurement procedures by some European organizations.

### Examples of green procurement by European hospitals

- A hospital in Vienna started buying organic food for the canteens, focusing on products easily available from organic cultures without procurement constraints. These products included cereals, dairy farming products, fruits, fresh vegetables, and meat.
- Swindon Hospital in UK procures energy efficient light bulbs, non PVC products and other green products.
Implementing a green procurement policy usually does not require any organizational changes by the contracting authority. In order for this policy to be implemented strategic planning, procurement employee training, access to environmental information and setting priorities in order to choose the greener contracts, is required. After planning, the contracting authorities will be able to organise better the process of green public procurement.

Planning and implementing a political promotion of green procurement is a very important parameter for a hospital, since if there is not such a policy from the management, the decision making for green contracts will be difficult since in many cases the green products and services are more expensive than the conventional ones.

In this way the hospital Management Council should commit to implement a green procurement policy which will aim to the environmental performance improvement of the hospital. The specific steps for the implementation of a green procurement policy, and some useful examples are following:

**STEP 1 Management’s commitment to green procurement**

- By implementing this policy we intend to procure our goods, services and works in a way that we have a continual, measurable progress in our environmental performance, by reducing our environmental impacts, whilst maintaining the hospital’s economic viability.

**STEP 2 Objective, targets and concrete product commitments:**

- The Hospital aims to reduce the purchasing of new goods, and procure them only when essential, by cutting down on waste and repairing or reusing existing products.

- The Hospital aims to introduce environmental criteria in ..% of its procurement practices by 2....

- No products shall be procured which contain: ozone-depleting chemicals, non-independently certified tropical hardwood, or pesticides on the EU ‘Black list’.

- Service contractors working for the hospital will undertake their services in line with the hospitals’ environmental standards.
STEP 3 Indicate how you will implement this policy:

- A Technical advisory group will be set up to promote the implementation of the policy. A representative of each area will constitute the advisory group. The advisory group will prepare an annual report on the activities carried out and a work programme.

- Technical criteria will be developed to be used in the Call for Tenders of public authority contracts for works and supplies.

STEP 4 Communicate and deliver the policy:

- The Hospital will provide supporting guidelines and resources to allow effective implementation of the policy, provide environmental training and awareness raising tools to its staff and to politicians, and ensure there is effective communication between the central purchasing unit and the individual departments.

- The Hospital will work with its suppliers and contractors to help them improve their environmental performance (e.g. to reduce, reuse and recycle their packaging) and so spread good environmental practice through the supply chain.

- The policy will be promoted to other Hospitals and to the community by various actions (e.g. leaflets, promotional website).

STEP 5 Implementation and improvement

- Once a year a management-review will be undertaken in order to control results and review and update the policy, setting new and stricter targets wherever possible, as the old ones are met.

- The hospital will continually improve its procurement policy and guidelines by regularly reviewing contracts and suppliers and benchmarking this strategy with others, integrate the municipality's procurement standards and process with EMAS or ISO 14001 environmental management system (where it exists), and monitor its performance using environmental performance indicators.

Since the green procurement policy is formed, it is very important to be disseminated to as much stakeholders as possible, including the existing providers and service providers or contractors.
Methodology for the implementation of green procurement in Hospitals

The methodology for implementing green procurement at some product categories has the following stages:

**Stage 1: Baseline situation analysis**

The first fundamental step for starting the implementation of green procurement by the hospital is recording the baseline situation and the evaluation of the environmental impacts which occur from the procurements of the hospital. According to the amounts of products from each product category and their direct and indirect impacts to the environment, the product categories which have the potential to be greened will be traced.

**Stage 2: Selection of the products**

The second stage for the implementation of green procurement is the selection of the product categories to be greened, e.g. paper, electrical and electronic devices, food, consumables, etc. The selection is made according to the characteristics and the needs of each hospital, the availability of products in the market, and the environmental impacts of the products. The appropriate selection of the product categories can contribute to the awareness of the public regarding environmental friendly products.

In order to implement green procurement you can choose a product category for which one or more of the following statements are valid:

- The conventional products that the hospital is procuring feature significant environmental impacts
- There are eco labeled products in the market
- There exist in the market, products with recycled or reused ingredients
- There is an important difference in energy consumption from a product to another
- There is difference at the life cycle costs of the products
- The products are prominent in the hospital areas (devices that are placed in crowded areas so as to be seen by employees and visitors)
- There are biodegradable products in the market
• We can make a joint procurement with another organisation for these products in order to reduce the cost and the packaging material.

Stage 3: Designation of a green title for each product

At the tender documents for the procurement of a product, the subject matter of the contract must be clear that it refers to a green product by using wording as:

• «recycled paper»
• «lamps of energy type A» or «energy efficient lamps»
• «organic food»
• other

Stage 4: Designation of technical specifications

At this stage the technical specifications are designated, and the minimum requirements concerning the environmental criteria of the products which the hospital will procure, are set. The technical specifications of the products are based on the either their performance, or on environmental technical standards. An example of a technical specification based on performance is this of the desirable life time of a lamp (e.g. 15,000 hours of operation), or the desirable value of the room temperature for a central heating or air condition system (e.g. 20°C).

At this point it should be stressed that the introduction of environmental parameters should be done in a way that does not bound or hinder the access to the market.

Stage 5: Designation of award criteria (only for public hospitals)

Awarding the contract is the final stage of the contract process. At this stage the hospital evaluates the quality of the bids and compares prices. When deciding according to the most advantageous offer, criteria as the quality, the technical value, the environmental characteristics, the operational cost, the efficiency, the after sale service, the technical support, the deliverance date, and the deliverance and completion period, can be taken into account.

The different criteria which will appoint the most advantageous offer should be as follows:

• They should be linked to the subject matter
• They should allow the evaluation of the bids based on their financial and quality criteria as a whole, aiming to select the bid that offers the best money utilization.
The awarding criteria can be linked to the requirements which are set by the technical specifications. The technical specifications designate the desirable level of performance, the hospital has the opportunity to designate added value to a product or service which is the most efficient according to the lowest requirements set.
Life Cycle Cost Analysis

When you buy a product, service or work you always pay a price. But the buying price is just one of the cost parts in all the procurement – handling – disposal process. In order to calculate the whole cost of a contract, you have to examine all the different stages (production, distribution, use, final disposal). This approach emphasizes the Life Cycle Cost, and is based on the principle that the decision of buying is taking into account all the costs which will occur during the whole life cycle of the product or service. A simplified approach to the analysis of the life cycle cost is to take into account before the selection of the product the following:

- Buying price
- Eventual additional costs, concerning distribution, installation, operation start
- Operational costs including consumed energy (electricity or fuel), of the spare parts and maintenance
- End of life costs as operation stop, disassembling, and final disposal

Consumer Awareness

The first and most important principle is that the hospital acts as an aware consumer. Each consumer can induce according to its potential, the economy and the market. When the main care of the consumers is to pay as low as much for the procurement of a product, then the competition between the companies leads to products of low cost but this cost decrement is merely due to the aggravation of the quality of the final product, the labours working conditions and security, and also the environmental protection criteria. On the contrary, when the consumer requires products of high quality, excellent performance, and of low environmental impact, then producers and procurers will turn to the production of products which will fulfill these characteristics.
One of the most important parameters for the successful implementation of the green procurement methodology is the training of the employees which are direct or indirect relevant to the contract procedure in the hospital. For this reason there must be drawn training and informing activities. These activities should aim mainly to the hospital employees who are related to the procurement and the procurers.

It is essential for the employees to get the required legal, financial and environmental information in order to take part to the activities implementation. The training of the public clerks should not be the same for all, but should differ according to the relevance to procurement procedures.

**Form of Training**

The different training forms are listed below:

- Simple briefing by printed and electronic material
- Seminars regarding different topics
- Working groups, the leaders of which will be specialists in contracts and green contracts where possible

Providing the appropriate training, the access to environmental information is assured, and the personnel which conduct the procurements has the required legal, financial and environmental knowledge in order to decide at which stages of the contracting procedure is better to insert the environmental elements.
Below, some product categories which have the potential to be greened by the hospitals are presented.

1. Medical

Regarding the hospital and medical products, it is proposed that they do not contain latex, quicksilver, PVC, and toxic substances. For the medical hardware it is proposed that some alternatives, which fulfill the instituted specifications but they might differ in terms of life cycle cost, will be examined. Parameters as the life endurance, energy consumption, spare part cost, and other range to different products, so through the life cycle cost analysis different products can be compared according to their total financial and environmental impact.

Especially for the medical products it is important not to contain dangerous and toxic substances which can cause nuisances, become aggravating for the hospital personnel health, and cause environmental impacts after their disposal.

Below there are presented some green products according to their composition.

- Products without PVC: bed covers, catheters, electrodes
- Products without quicksilver: thermometers, batteries
- Products without Latex: gloves without PVC and latex
- Products without lead: red bags for infectious waste
- Products without halogens: plastics, cables
- Products without toxic substances: purgative products

2. Food

Food products are very common products for the hospital procurements since they are necessary for the hospital daily needs and also for organized events and meetings by the hospital. Due to
the nature of these products the procurement of food should be conducted having very strict requirements and care. The hospital should prefer:

- Procurement of certified organic products.
- Selection of food with the least preservatives.
- Avoidance of products containing pigments or aromatic substances.
- Avoidance of products containing high volumes of phosphor.

3. Other products

3.1. Fabrics and mattresses

The matresses and fabrics which the hospital procures should have strict sanitary and safety specifications since they are products which have direct interaction with the patients. For both the product categories the green products have limited danger of allergies for the patients, and during the production of the fibres, the dangerous for watercourses substances are constrained.

3.2. Cleaning products

Cleaning products are being procured by hospitals in great volumes, and consist a product category with the potential to cause significant environmental impacts.

For the aforementioned reasons it is proposed:

- Rational use, the cleaning frequency should be taken into account, and also that some parts of the buildings require more frequent cleaning than others.
- Selection of environmental friendly products which do not contain toxic substances.
- Products containing VOC’s, synthetic perfumes and colors, EDTA, phosphoric salts or bleaching substances based on chlorine, should be avoided.
- Large packs of products are procured.
- Use of the appropriate cleaning product for different uses.
- Sign contract with cleaning workshop certified to ISO14001 and/ or EMAS.
3.3. Lamps

The needs of a hospital regarding lamps are always great, since a large amount of the energy consumed is consumed in order to achieve effective lighting.

- Procurement of economic lamps (energy efficient, fluorescence lamps) and gradual replacement of the old ones. The lamps labelled as “A” should be preferred against the conventional, since they are energy efficient.
- Choose lamps of life endurance 10,000 hours or higher.
- Choose quicksilver free lamps
- Reduce unnecessary use.
- Precise and systematic lighting program of the various hospital areas

3.4. Consumables (paper, ink, toners, pens, pencils)

- Procurement of recycled paper and products which contain recycled paper
- Use of refillable pens where applicable.
- Use of refillable toners and cartridges.

3.5. Electronic devices

- Procurement of energy efficient hardware
- Procurement of monitors with long life endurance

Technical specifications for the aforementioned product categories can be found in the «Green Procurement Guide» available from: www.ecohospitals.gr