Sustainable ICT Procurement for Institutions

Is choosing the most sustainable ICT equipment for your institution confusing and time consuming?

Are you aware of sustainable procurement guidelines?

Are you unsure of how to use WLC tools when procuring for sustainable ICT equipment?

It's often been said that sustainability begins with the consumer and the purchasing of a particular item is a vote for that product. If sustainable development can be defined as "development which meets the needs of the present without compromising the ability of future generations to meet their own needs", then sustainable procurement could be described as one of the engines which delivers it. Pressure is increasing on procurement managers to integrate sustainable thinking into their university and college supply chain processes. Doing so, often means identifying goods and services with the smallest ecological footprint while at the same time reducing problematic social and health & safety issues. The University funding body HEFCE has acknowledged the need to promote wider development of the issue and has promised to continue working with sector bodies to support sustainable procurement.

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What is Procurement?

Procurement is the acquisition of goods and or services at the best possible price that meets the needs of the purchaser in terms of quality, quantity, time, and location. Procurement is used to promote fair and open competition for business while minimizing exposure to fraud and collusion. Almost all FHE institutions, government organizations, local authorities and businesses have a procurement process of some kind in place. Unfortunately, not all procurement processes are as robust as they should be and not all staff members are aware of procurement rules and guidelines. Having a robust procurement process that is adhered to by all members of staff is essential to the operational efficiency of any institution.

Green Procurement: Green procurement is the selection of products and services with a minimal impact on the environment. It involves institutions using their purchasing power to promote the efficient and sustainable use of resources and materials. Sustainable procurement helps to avoid unnecessary purchases and identifies the greenest products according to the specification of use for contracts and whole life costing. It covers all areas of FHE and business activity including construction, energy supply, transport and ICT equipment. By making informed choices about the products purchased, institutions can make a real difference to the environment and improve their overall ecological footprint.

Sustainable Procurement (SP): Sustainable procurement differs from green procurement in that it includes an element of corporate and social responsibility (CSR) as well as a responsibility to human health. CSR ensures the manufacturer of goods or providers of services are awarded a fair price for their product while not adversely impacting the living standards of stakeholders. As sustainability becomes increasingly important in business and educational institutions, it's imperative that the starting point should be procurement.

Green Procurement for ICT Equipment

ICT has a particularly heavy environmental footprint. A typical European PC and LCD monitor weighs around 20kg, contains over 27 different materials, and generates 66kg of waste and 1,096kg of CO2 during its lifetime. In 2009 it was estimated that ICT related energy use in FHE's created over 500,000 tonnes of CO2 and cost the sector £115 million. Procuring the right ICT equipment and services can greatly reduce this footprint, by using smaller, lighter more energy efficient equipment.

Identifying Green Products

Its important to question the validity of manufacturer's sustainable claims as "green-washing" is widespread.
So how do you decide if a product is sustainable or not? As a general rule sustainable products and services ensure

- the use of as few natural resources as possible,

- the containment of little or no hazardous or toxic materials,

- a longer life span than its counterparts,

- the consumption of less energy or water in production or use,

- the generation of less waste during manufacture (using recycled materials),

- the use of less packaging,

- the recyclability of the product at its end of life.

What does the Procurement Process Involve?

The procurement process typically involves the issuing of a tender by an institution or business to suppliers of goods and providers of services. Potential suppliers are asked to submit data and information relating to their ability to provide the institution with items of a suitable quality, in sufficient amounts and in a timely fashion. The institution then makes an informed decision based on the information and data submitted and suppliers must adhere to procurement specification if awarded the contract. The procurement process also identifies "one-off" and "recurring" costs. Examples of one-off costs include initial purchase costs, delivery costs, implementation costs, disposal costs etc. Examples of recurring costs include: energy costs, service charges, downtime or non-availability costs, maintenance and repair costs. The Green Procurement Process operates in the same way but environmental impacts

such as CO_2 emissions created, air miles travelled, level of resources used and waste disposal options are considered. In Sustainable Procurement, CSR issues may also be considered as part of the tender and may include information relating to fair trade prices, health and safety conditions for workers, and impact on local communities etc. However, creating a check-list of green and sustainable criteria to measure and compare goods and services against can become overly extensive. To assist with the process, Whole Life Costing Tools or Total Cost of Ownership tools were created.

Whole Life Costing Tools

WLC tools are tools that calculate the overall cost of the life time use of goods and services. Procurement managers insert data relating to the initial purchase cost, energy use, peripherals, and disposal options of goods and services into the tool where it then calculates its lifetime monetary cost. Institutions often create their own WLC tools based on their requirements and on local and national regulations. Towards the end of the procurement process, all tenders are evaluated by procurement staff and a decision is made regarding the supplier whose goods and/or services are offered at the best overall price and have the least impact on the environment and /or stakeholders.

For ICT equipment, WLC tools should include the cost of maintaining and operating the item as well as the cost of its consumables, staff training in the use of the equipment and the cost of its disposal (or potential sale value at the end of its life). There are no regulations regarding the use of WLC tools, only guidelines. The use of WLC tools is at the discretion of each institution and tools may be amended to suit the needs of the user. Tools can be updated each year in keeping with government regulations, change in CO_2 equivalency factors, Defra values etc. As a general rule, sustainable WLC tools for ICT equipment should question its manufacture, use and disposal. It's important to use the same tool when procuring for the same type of ICT equipment to ensure an accurate like-for-like comparison. For example Forum for the Future created an awarded winning WLC + CO2 tool that not only calculates the financial cost but also the CO_2 created by the product and the costs associated with those emissions during its contract life. Forum for the Future also created a Sustainable Procurement Toolkit. The toolkit is designed to give buyers a

systematic way of considering the full range of sustainability issues, ensuring that opportunities to improve spending decisions are not overlooked. The toolkit firstly examines the need for the item, asks if another exists within the organization and questions the possibility of repairing, refurbishing or renting the item prior to purchasing replacements. This is to minimize "rogue purchases" thus minimizing the wastage of funds, administration costs etc. On establishment of the need for the goods or service, the tool then requests information relating to the overall sustainability of the goods. The suppliers prequalification details are examined ensuring they are eligible to supply goods and services and the sustainable specifications of the items are then examined. The tool then evaluates the product and suggests that procurement managers reward suppliers extra points for being especially sustainable or for incorporating CSR. Finally the tool calculates the capital and non capital cost of the goods or services and requests information and data relating to disposal and health & safety costs.

Green Procurement Criteria

Unfortunately not all information relating to the life cycle of a product or service is available as much of it is immeasurable. It's important therefore that institutions make decisions based on the information that is available and focus on the more sustainable options. To help with making those decisions the Sustainable Procurement Centre for Excellence (SPCE) and English National Purchasing Consortium (ENPC) have been set up to offer such guidance and support.

Immeasurable Criteria
ICT Manufacture

Very little information exists on the manufacture of ICT equipment. Warrantees may include information regarding its country of assembly, origin of distribution or raw materials used in its manufacture but a calculated Ecological Footprint (EF) is rarely included. It's important therefore that procurement managers are aware of the following aspects of ICT equipment when procuring.

1. **The Size of the equipment.**
   Smaller pieces of equipment have a lighter impact on the environment as they are using fewer materials and usually consume less energy.

2. **Manufacturers Guarantee:**
   Check what the duration of the buyers guarantee is for and what it covers.

3. **Repairable:**
   If the equipment is not repairable or its initial purchase price is cheaper than repair costs, this may be an indication of a poorer quality less sustainable item.

Measurable Criteria
ICT Energy Use

The energy use of ICT equipment is one of the few pieces of information that suppliers provide. In fact energy efficiency is one of the most important factors considered when procuring for ICT equipment. As a recurring cost, it can exceed the initial purchase price of the equipment over its life span. As carbon emissions are directly related to energy use and carbon accounting in institutions is on the increase, the energy efficiency of ICT equipment has become even more important.

ICT Equipment Consumables

Consumables and peripherals of ICT equipment such as paper, toner, ink, fuses, adaptors, etc., also need to be factored into the sustainable procurement process as their cost can overshadow a lower purchase price.

ICT Equipment Disposal

Whether equipment can be recycled or donated should be included in the procurement process as a preferred method of disposal over disposal to landfill only. Recycling and donating eWaste has a lighter ecological footprint and is usually the cheaper option.

Note that under EU law, neither Eco-Labels nor EMAS certification can be mandated in specifications, although demonstration of performance equivalent to these standards may be requested.

The Cost of Sustainability

The prices of sustainable products have historically been higher than non sustainable products and have been a barrier to their widespread use. While some products may be more expensive at the initial purchasing stage, many are of equal or better value than their non-sustainable counterparts as they last longer. Furthermore, green procurement usually goes hand in hand with minimisation of resource use and waste so savings increase.

The repercussions of not procuring sustainably are increasing and failing to do so will lead to an underestimation of the overall costs of goods and services and the creation of excess waste. The benefits to FHE institutions procuring sustainably is improved sector reputation by improvement in sustainable performance, increase in student applications and retention of those registered.

FAQ:

How do I implement a sustainable procurement process into my institution?

It is likely that your institution already has a procurement process in place so requesting that the environmental impact of sustainability of goods and services be examined when next procuring is a start. This may be best achieved by discussing with the procurement manager at your institution the tools available and the benefits of procuring more sustainable products and services.

What is the best way to ensure that sustainable procurement at my institutions succeeds?

Providing adequate training and awareness of sustainable issues at your institution that highlights sustainable procurement's role in the reduction of its Ecological Footprint will help in ensuring the success of your procurement process. Appointing a sustainable procurement champion that gets staff trying out new procurement exercises is key.

Who should be involved in my institution's sustainable procurement meetings?

Ideally sustainable procurement committees should consist of a representative from each department. When procuring for ICT equipment, input from an ICT manager, energy manager, finance manager and environmental or sustainable manager should be considered.

How much does procuring sustainably cost ?

While there may be some administration costs to begin with, they will be minimal. SP saves your institution money and the payback time can be relatively short. Research has shown that ROI can be under two years for larger pieces of equipment.

Green and Sustainable Procurement Resources:

Learn more about green and sustainable procurement by visiting the links below.

http://spce.procureweb.ac.uk/guidance-for-commodities/guidance-by-commodity/office-ict

http://www.eauc.org.uk/sustainable_procurement

http://www.susteit.org.uk/publications/index.php

http://www.forumforthefuture.org/projects/buying-a-better-world

http://www.eauc.org.uk/rb_resource/waste

http://www.procureweb.ac.uk

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