



Sustainable Procurement: Buying for a better world



Sustainable Procurement Manual Resource Book

May 2008

INTRODUCTION	3
SECTION I: PROCUREMENT IN THE UN	4
HOW THE UN PURCHASES	4
UN PROCUREMENT SYSTEM	5
TRANSITIONING FROM PROCUREMENT TO SUSTAINABLE PROCUREMENT	6
SECTION II: SUSTAINABLE PROCUREMENT	7
WHAT DOES “SUSTAINABLE PROCUREMENT” MEAN?	8
WHAT ARE THE KEY ELEMENTS OF SUSTAINABLE PROCUREMENT?	8
<i>Adverse Environmental Impacts</i>	<i>8</i>
<i>Local Entrepreneurship.....</i>	<i>9</i>
<i>Human Rights</i>	<i>9</i>
<i>Labour Rights.....</i>	<i>9</i>
<i>Gender and the Empowerment of Women</i>	<i>10</i>
<i>Poverty Eradication</i>	<i>10</i>
<i>Governance.....</i>	<i>10</i>
WHAT ARE THE BENEFITS OF SUSTAINABLE PROCUREMENT?	11
THE CHALLENGE OF SUSTAINABLE PROCUREMENT.....	13
QUESTIONS AND ANSWERS.....	13
SECTION III: HOW TO TRANSITION TO SUSTAINABLE PROCUREMENT	16
SETTING GENERAL PRIORITIES FOR SUSTAINABLE PROCUREMENT	17
IMPLEMENTING SUSTAINABLE PROCUREMENT.....	18
<i>Stages of Sustainable Procurement</i>	<i>18</i>
<i>Procurement Planning</i>	<i>18</i>
<i>Sourcing and Selecting Suppliers, Service Providers and Contractors.....</i>	<i>21</i>
<i>Evaluation of Quotations, Bids and Proposals</i>	<i>22</i>
SECTION IV: CASE STUDIES	25
SECTION V: INTERNET SOURCES OF INFORMATION.....	26
SECTION VI: GLOSSARY	28
ANNEX I: OVERVIEW OF EXISTING FRAMEWORKS	32

INTRODUCTION

This manual presents an overview of what sustainable procurement is and outlines key initial steps needed to facilitate the shift to sustainable procurement. Sections, on the key elements of sustainable procurement, the benefits and challenges; as well as how to transition to more sustainable procurement, are presented. Case studies illustrating how UN bodies have implemented sustainable procurement principles are offered as concrete examples of progress to date.

Recent commitments from the UN Secretary General and the Chief Executives Board for Coordination have placed sustainability at the heart of the procurement process. Already some UN Agencies, Funds and Programmes have taken up the challenge. It is now time for sustainable procurement to become the standard operating procedure across the UN. This manual endeavours to contribute to this important process.

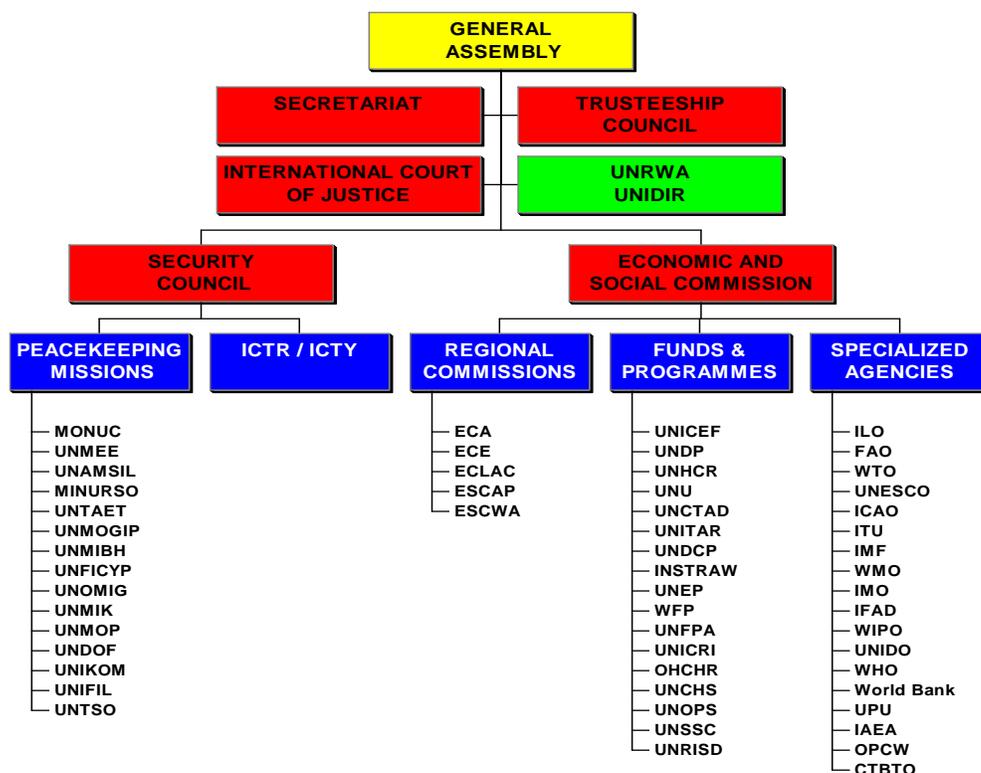


United Nations Environment Programme
Division for Technology, Industry and Economics
15, rue de Milan
75441 Paris Cedex 09
France
Tel: + 33 1 44 37 14 21
Fax: + 33 1 44 37 14 74
www.uneptie.org

SECTION I: PROCUREMENT IN THE UN system

How the UN system Purchases

The United Nations system is made up of a variety of organizational entities—Agencies, Funds and Programmes—each having a distinct and separate mandate, covering political, economic, social, scientific and technical fields. The major bodies are shown below.¹



In 2006, total procurement of goods and services for operational activities of the UN System—technical cooperation, humanitarian assistance and peace keeping operations—was just over US\$ 1.9 billion of which US\$ 767 million was for the procurement of goods and approximately US\$ 1.14 billion for services.²

The major goods procured by the UN System are:³

- Food
- Medical equipment
- Telecommunications equipment
- Shelter and housing
- Chemical and petroleum products
- Laboratory equipment
- Pharmaceutical supplies
- Vehicles and transportation
- IT equipment
- Generator sets
- Air conditioning/heating/plumbing
- Rental/lease equipment

¹ For a complete listing of all UN bodies see: http://www.un.org/aboutun/chart_en.pdf

² 2007 Procurement Statistics by Major Commodities. For a summary of the major groups see: <http://www.un.org/depts/ptd/statistics.htm>

³Ibid

The major services procured are:⁴

- Security
- Engineering services
- General management
- Maintenance and repair
- Telecommunications
- Construction
- Leasing or rental
- Freight and air transportation
- Consultancy
- Outsourced personnel services (catering, cleaning, travel)

Ten countries—listed below alphabetically—represent more than 67% of supply to the UN:⁵

- Canada 2.93%
- Italy 6.85%
- Lebanon 2.64%
- Russian Federation 11.57%
- Switzerland 2.49%
- France 3.55%
- Jordan 2.98%
- Panama 5.49%
- Sudan 8.6%
- USA 20.83%

Despite the above figures, the estimated value of UN direct and indirect spending is quite small. It is however significant in terms of visibility and demonstrative effect and therefore can play a catalytic role. Therefore **by adjusting how it procures, the UN can send a strong signal to business and countries as to what its priorities are.**

Moreover, on 5 December, 2007, the Chief Executives Board for Coordination committed to making the UN be climate neutral, first by reducing emissions—primarily through energy efficiency and other mitigation measures—and then through carbon off-set mechanisms. **This commitment builds on the Secretary General’s World Environment Day message and firmly establishes the UN presence in driving and supporting sustainable procurement.**

“On this World Environment Day, let us recognise the need to slow the momentum of the dramatic environmental change we are seeing at the poles and around the globe. And let each of us pledge to do our part to fight climate change.”

Message from UN Secretary-General, World Environment Day, June 5, 2007.

UN Procurement System

Procurement in the UN must be conducted in accordance with the *Financial Regulations and Rules of the United Nations*. A contract for the procurement of goods or services must also incorporate a reference to the *General Conditions for General Contracts of the United Nations*, which specifies the legal status of the supplier and issues such as dispute resolution, governing law, use of UN name and logo, taxation, privileges and immunities.

However specific procurement activities of the UN system are based on the objectives of the UN Agencies, Funds and Programmes concerned. Each entity has its own Procurement Manual—including specific requirements for goods and services—conducts its own procurement activities and constitutes a separate and distinct customer.⁶ The UN system

⁴ Ibid.

⁵ Ibid.

⁶ For example, UNHCR and UNIDO allow for a 15% price addition for those goods and services that come from developing countries.

operates on budgets funded by its members and each Agency, Fund or Programme has a separate budget approved by its respective Executive Board.

Although provisions vary between procurement manuals four basic principles are common to all:

1. Best value for money;
2. Fairness, integrity and transparency;
3. Effective international competition; and,
4. The interest of the United Nations.

Transitioning from Procurement to Sustainable Procurement

Sustainable procurement directly supports two of the four basic procurement principles; *best value for money* and *interest of the UN*.

Quality and the environment are often closely linked as quality usually means a longer product life and thus less consumption of resources because of lower replacement rates. Moreover, an eco-efficient product usually uses less energy, meaning lower energy costs over the life-time of the product. An eco-efficient product is often cheaper to dispose of either because it is included in a recovery or re-use system or because it does not contain hazardous substances and thus does not require special handling.

Ultimately, when buying a product more than the purchase price must be considered. The price calculation must include **all** the costs relating to the product throughout its life. When products are examined from a life-cycle perspective, those that meet sustainability criteria are frequently cheaper. Many sustainably produced products also have a smaller carbon footprint, i.e. they are produced with less energy or consume less energy. As the UN has committed to being carbon-neutral, products or services that have low carbon impacts can be classified as being “in the interest to the UN”.

Compliance with fundamental labour standards throughout the supply chain during contract execution also supports the goals of “interest to the UN” and “best value for money”. Moreover, ensuring decent working conditions and the non-use of child labour and forced labour demonstrates that the UN does as it preaches as well as contributing to achieving the Millennium Development Goals.

SECTION II: SUSTAINABLE PROCUREMENT

Emission of harmful and toxic substances into water or atmosphere, the generation of waste, the consumption of natural resources and damage to, or destruction of, ecosystems are elements of unchecked consumption. Increasingly local communities are bearing the brunt. At the heart of numerous policies and activities—developed to address these negative impacts—is a shift in production and consumption patterns.

Collectively, the public sector—government bodies, UN etc.—represents a huge opportunity to leverage markets to produce more sustainable goods and services. Through procurement, the public sector can also affect policy objectives such as gender equality, support for small businesses, or meeting sustainable development goals.

Procurement can be called sustainable when an organisation uses its buying power to signal preferences to the market by its choice of goods and services which meet sustainable development criteria. This power is widely recognized in a number of local and national authorities both in developed and developing countries where the application of sustainable procurement is becoming increasingly common and where a wealth of implementation tools exists.⁷

Although procurement can be instrumental in facilitating the development of sustainable markets, procurement activities conversely must be supported by a clear demand for responsibly-produced goods and services and in the training and support for private suppliers and producers to assist them in meeting the “new” requirements.

Sustainable procurement is not about “burdening” the market with extra requirements; rather it is a well-defined strategy that gradually phases in sustainable requirements in bids, supports measures, promotes dialogue and open communication between the suppliers and procurers. Applied properly, sustainable procurement can be used as a mechanism to further the economic, social and environmental development of recipient countries and/or regions and help producers—especially in the developing world—to become more efficient and competitive in larger markets.

In South Africa, public procurement is seen as an important policy lever in the post-apartheid world. The Black Economic Empowerment (BEE) initiative outlines how the public sector should prioritise buying from black-owned businesses in order to redress the economic advantages offered to white-owned businesses during apartheid. Businesses are scored according to a set of pre-defined criteria:

BEE Score Card

- 30% : buying goods or services from black owned companies
- 30% : numbers of black board members, employees and training
- 30% : how well a company promotes black-owned enterprise
- 10% : issues which will be determined by each industry

INVESTEC—an international specialist banking group with offices in South Africa—envisages meeting the BEE criteria in the following ways:

- Procuring from BEE companies 50% (present level 13%)
- Increasing black South African board members 33% (present level 25%)
- Having 25% South African executives (present level 10%)

⁷ Isa to insert footnote on the Marrakech process.

What Does “Sustainable Procurement” Mean?

Procurement is the process by which public or private organisations buy supplies and services to fulfil various functions, e.g. shelter, transport, infrastructure needs, etc. However procurement is not simply about the purchasing of goods and services.

Procurement also has to meet the obligations of timeliness; effectiveness; efficiency; competition; transparency; equitable distribution; and, development. At the macro-level, public procurement creates a dynamic; a chain reaction which benefits the economic life of a country and supports development of the private sector. Thus, there is a direct link between the performance of the procurement function and the collective fulfilment of economic objectives.

Sustainable procurement is about combining social and environmental factors with financial considerations when making purchasing decisions. It involves looking beyond the traditional economic parameters and making decisions based on life-cycle costs, associated environmental and social risks and benefits as well as broader social and environmental implications.

By adopting a sustainable procurement policy UN Agencies, Funds and Programmes can develop and adopt policies and practices that:

- Secure best value for money, price, quality, availability, functionality;
- Support a precautionary approach to environmental challenges;
- Are cleaner and safer; make efficient use of resources, ensure adequate management of chemicals;
- Incorporate environmental costs, reduce pollution and risks for humans and the environment; and,
- Influence purchasing decisions to support issues such as poverty eradication, international equity in the distribution of resources, labour conditions, and human rights.

The most important environmental and social challenges in today’s consumer society are:

- Reducing the emissions of greenhouse gases
- Reducing the emissions of hazardous chemicals
- Avoiding over-consumption of resources and limiting the volume of waste
- Stopping the use of ozone depleting substances
- Safeguarding biodiversity
- Promoting safe and equitable work environment
- Supporting local entrepreneurs

In procurement, it is therefore important to manage:

- Consumption of raw materials and energy
- Chemicals in products
- Polluting emissions
- Waste generation
- Work conditions
- Diversity of supplier

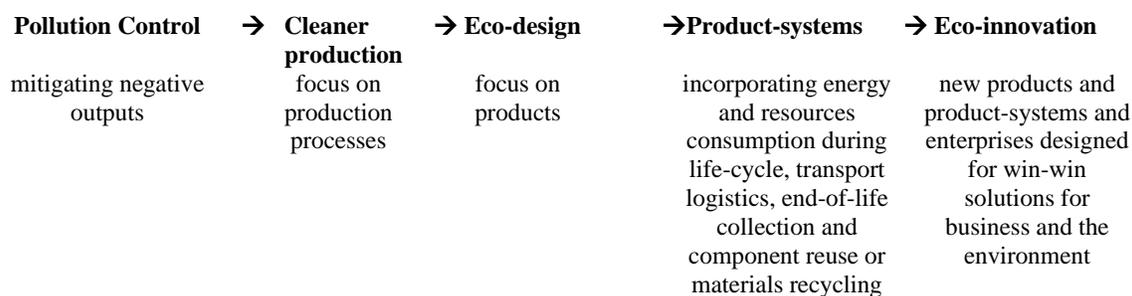
What are the Key Elements of Sustainable Procurement?

Sustainable procurement policies and processes incorporate appropriate safeguards and checks to avoid abuses or inadvertent infringement on key issues, the most important of which are noted below.

Adverse Environmental Impacts

Procurement can play a key role in promoting sustainable production and consumption patterns. It is widely recognised that industrial development will only be truly sustainable if it

is built on firm ecological foundations. The growing attention to issues of sustainable consumption and production (SCP) is the result of decades of work on cleaner production and eco-efficient industrial systems. SCP represents the latest step in a progressive evolution from pollution control; an evolution which has gone from:



Local Entrepreneurship

Strategic procurement practices can also support the development of local entrepreneurs by requiring that a certain percentage of goods and services be locally sourced.

Human Rights

Human rights are increasingly acknowledged as a business issue. They are inextricably linked to corporate risk and reputation management. The expansion of supplier sourcing from developing countries means that procurers—and UN procurers in particular given where the UN does business—are increasingly exposed to companies operating in countries with repressive governments, where there is ethnic conflict and weak rule of law, or poor labour standards. The procurement function must include processes that identify companies that flaunt their responsibility to uphold the universal human rights both towards their employees and the communities in which they operate.

Labour Rights

With the rise of globalisation—and with it the extension of global supply chains—procurers have the unique opportunity as well as responsibility to ensure that procurement supports workers rights. Companies operating in global markets are increasingly expected to assume some level of responsibility for labour practices along their supply chains. This responsibility can and should also form an integral component of the procurement function, by ensuring that the contracted companies operate within the universally accepted ILO’s core conventions on labour standards.⁸ At a minimum, procurers should be aware of a prospective supplier’s performance concerning:

- Rights to freedom of association and the effective recognition of the right to collective bargaining;
- Elimination of all forms of forced or compulsory labour;
- Effective abolition of child labour; and,
- Elimination of discrimination in respect of employment and occupation.

While the above four elements do not cover the full range of labour rights issues they do address some of the deepest and most challenging aspects of this subject area.

⁸ http://www.ilo.org/global/What_we_do/InternationalLabourStandards/Subjects/lang--en/index.htm

Gender and the Empowerment of Women

The Millennium Development Goals (MDGs) set a target to:

[eliminate the] gender disparity in primary and secondary education preferably by 2005, and to all levels of education no later than 2015

The procurement function can promote gender equity and the empowerment of women by adopting practices that support minority businesses, particularly those owned by women. A straight-forward and simple approach is to use an evaluation preference that awards additional points to minority businesses.⁹

Poverty Eradication

The MDGs call for the eradication of extreme poverty and hunger by:

[halving] between 1990 and 2015, the proportion of people whose income is less than one dollar a day....[and halving] between 1990 and 2015, the proportion of people who suffer from hunger.

International aid agency procurement can contribute to the eradication of poverty by providing capital investment through local and regional sourcing strategies in the respective economies. By sourcing products and services in-country or within a particular region procurement can:

- Support job creation;
- Stimulate increases in income;
- Improve the purchasing power of the local population;
- Generate economic opportunities within communities; and,
- Contribute to economic development.

Governance

Sustainable procurement can play a strategic role in achieving and ensuring good governance. Good governance encompasses a functioning regulatory system, as well as institutional set-up, well-designed processes and proven capacity to meet identified needs. Effective public procurement is a good indicator of how well those processes are managed. Moreover, a well functioning procurement system can ensure:

- Better value for money;
- Increase in efficiency and effectiveness of delivery;
- Reduction in the potential for corruption;
- A positive, country-level investment climate;
- Non-discriminatory practices;
- Transparency; and,
- Accountability.

Strategic approaches to procurement, as well as information exchange of best practices and capacity building between national government procurement entities can also assist in the development of good governance practices.

⁹ For an example, see the World Bank's Domestic Preference policy.

What are the Benefits of Sustainable Procurement?

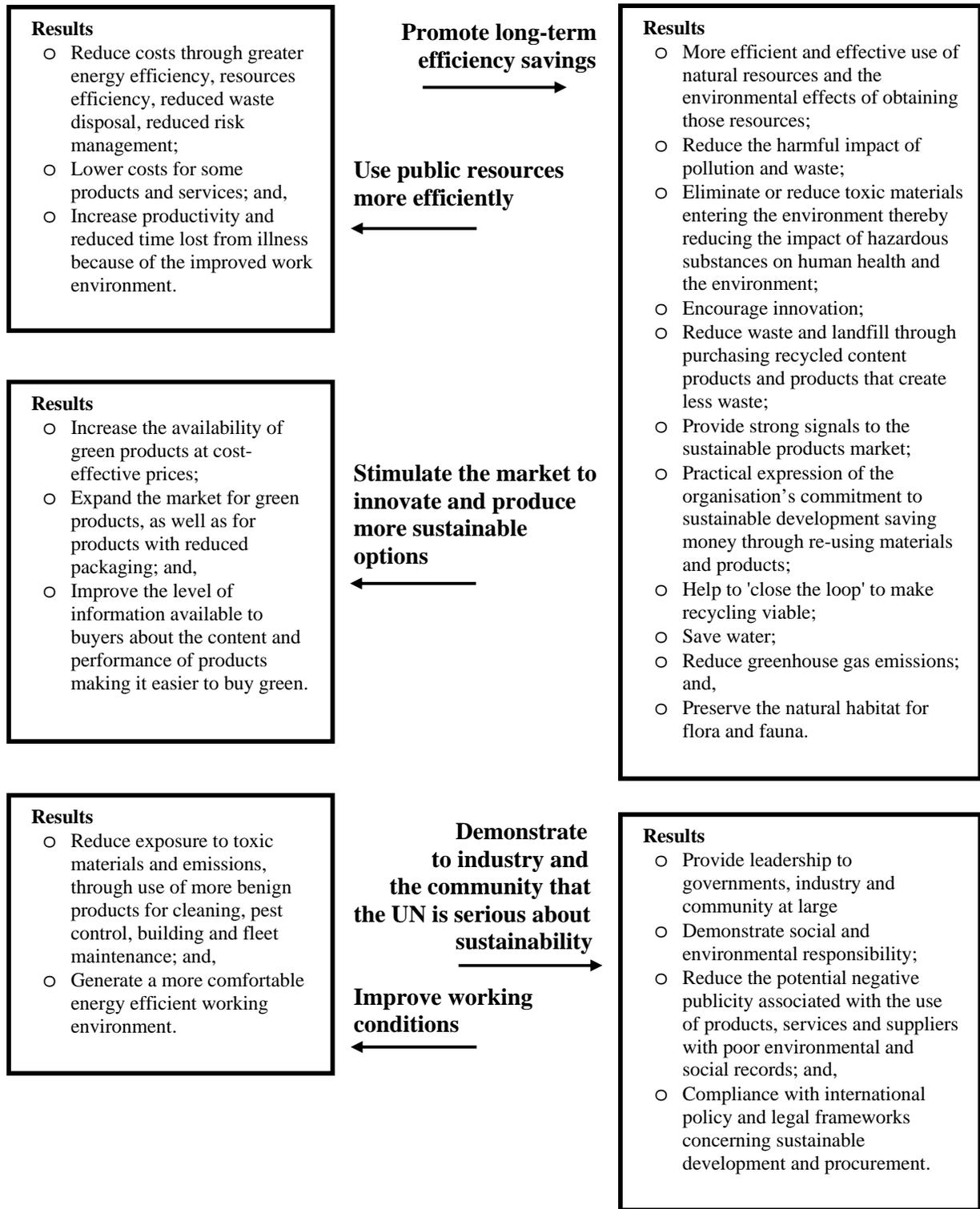
Traditional procurement focuses on “value for money” considerations. The aim and challenge of sustainable procurement is to integrate environmental and social considerations into the procurement process with the goal of reducing adverse impacts on human health, social conditions and the environment, thereby saving money for organisations and the community at large. The benefits that can accrue to an organisation practicing sustainable procurement include:

- A more open debate both internally with staff and externally with partners;
- Better inter-organisation co-operation with different departments/services, e.g. finance, environment, industry, etc.;
- Improved relationship with employees and users of dangerous products, e.g. chemicals used by cleaning services; and,
- A general improvement of transparency and ethics with and from suppliers

Specific benefits of sustainable development include:

- Contributing to the modernization and international competitiveness of local industry which can encourage foreign investment and employment generation;
- Improving the efficiency in the public sector so that more money can be invested in social and economic development;
- Improving working conditions, e.g. labour standards, health and safety;
- Assisting disadvantaged groups in society;
- Reducing harmful emissions and waste generation;
- Improving air and water quality;
- Reducing the use of natural resource;
- Complying with a growing international trend in requirements and/or expectations of donor community;
- Complying with Multilateral Environmental Agreements and Labour Conventions ratified at the national level;
- Alleviating global environmental problems e.g. global warming, ozone depletion;
- Setting an example of engagement;
- Demonstrating commitment and strong political will to encourage change in other countries;
- Improving the efficiency and transparency of procurement procedures and structures; and,
- Generating savings through life-cycle costing and the avoidance of superfluous purchasing.

Procurement can also support long-term sustainability objectives if designed with these objectives in mind. Below are a series of sustainability objectives (listed in BOLD) with corresponding results arising from sustainable procurement activities.¹⁰



¹⁰ This section has been adapted from Environment Procurement Practice Guide, UNDP Practice Series, February 2008.

The Challenge of Sustainable Procurement

The relevance and practical application of the **environmental** aspects of a public procurement can be demonstrated fairly easily. Green requirements can be detailed in the technical demands for the production technology and the selection of materials. Performance and quality standards included in the technical specification can be easily defined and introduced at any stage of the procurement process.

The relevance and specification of **social and ethical** aspects of sustainable procurement on the final product is more difficult to measure as it involves “social” behaviour which often cannot be quantified. This makes it hard to verify and benchmark the effects of social and ethical behaviour in tender evaluation.

Some ways to measure the effects of social and ethical behaviour in the tender evaluation include using voluntary initiatives such as the Global Compact¹¹ as a way to pre-screen potential vendors. Performing “upstream” activities, i.e. ahead of the procurement process, such as factory audits of suppliers, pre-qualification of suppliers and the establishment of more long-term agreements to ensure that those vendors solicited for bids meet minimal social and/or ethical criteria. Checklists that outline minimal criteria against which procurers can assess a potential vendor is another way to check that social and ethical criteria have a good possibility of being met.

Questions and Answers

Moving from procurement based on the concept of “best value for money” to procurement based on broader ethical and environmental issues naturally raises a host of questions. Below is a selection of questions that are frequently asked as companies and organisations transition from procurement to sustainable procurement.

The next section, “How to Transition to Sustainable Procurement” will address the transition process step-by-step.

Why to link procurement and sustainable development?

In committing to sustainable procurement benefits accrue to the organisation including:

- Controlling costs by adapting a wider approach to the whole life costing;
- Involving the local business community to help build a more sustainable supply chain for the future;
- Complying with environmental and social regulation (meeting country regulations);
- Managing risk and reputation;
- Building; and,
- Improving internal and external standards.

Procurement is a well-placed tool to facilitate the promotion of sustainable development. Through the development of procurement criteria that support sustainability principles, requisitioners and procurers can send strong signals to the market in favour of goods and services that promote sustainability. Key procurement criteria such as energy efficiency or

¹¹ See Annex I page: XXXX for more information on the Global Compact

water conservation can help engage businesses in emerging and developing economies to curb emissions while contributing to goal of meeting the international challenge of climate change. Simultaneously, employing such measures will increase the competitiveness of these businesses in international markets, where issues as climate change and resource depletion are already addressed in public procurement policies, e.g. Japan, EU, USA, Canada.

What defines as sustainable product?

A sustainable product is the result of a design process in which environmental, social, ethical and economical questions were partly or totally integrated. National or product eco-labels are useful to help identify products. Company policies can also be used to help the procurer understand the sustainable characteristics of its products.

Does sustainable procurement require more work from the procurer?

Like any change, it takes time to become familiar and comfortable with the new process. Once requisitioners and procurers understand what sustainable procurement means—and how to incorporate new criteria into the tending documents and evaluate bids—then the process is the same.

Is it easy to find sustainable products in all categories?

Increasingly companies are rising to the challenge of addressing sustainability issues. In the majority of markets it is becoming easier to define a “sustainable” leader. In markets that are still evolving there is a need to ensure that sustainability principles are being followed rather than simply talked about in promotional literature. For this reason, sustainable procurement criteria need to be carefully adapted and complemented with training of requisitioners and procurers to support and encourage a gradual migration of companies towards cleaner production and more sustainable business practices overall. This is particularly important in developing markets.

Can most companies meet sustainability criteria?

The ability of a company to meet defined criteria will depend on its size and location. In many countries, national or inter-regional legislation, i.e., European Union, already stipulate that products not contain hazardous materials, use resources efficiently and provide end-of-life, take-back or recycling options. Products that are sold in these countries must therefore meet these requirements. The difficulty arises when sourcing products from countries where regulation is weak. Here the presence of ISO 14001 can demonstrate a commitment to environmental stewardship. However being ISO 14001 certified does not automatically mean that the company supplies sustainable products and services. Reference to an international voluntary initiative, e.g. the Global Compact, or certification by a particular eco-label can also be used as proxies of commitment.

How can criticism about unfair advantage best be managed?

To avoid concerns about unfair competition, e.g., because of defined sustainability criteria or geographical focus, it is important that a request for proposal (RFP) clearly outlines ALL the criteria that will be used to assess a bid. These criteria must also then be weighted so that bidding organizations can clearly see where they may bring added value. Sustainability criteria should be defined as ideals not as absolutes, the latter which limits competition. Phrases such as: “*XXX is committed to supporting local suppliers, small and medium-sized enterprises and ethnic minority-owned-businesses*”, outlines the organization’s priorities but does not prevent a business not fitting that description from submitting a bid. Procurement criteria that cover a broad set of issues—technical, financial, environmental, social and

ethical—not only support sustainable procurement principles but provide opportunities to a wider range of potential suppliers.

Is sustainable procurement more expensive than “business as usual” procurement?

Efficient procurement means ensuring value for money, which is the optimum combination of entire-life cost and product quality to meet the identified need.

First it is important to consider whether a new product is really required at all or whether an alternative solution can be found.

Second, all too frequently the only financial factor considered is the purchase price of a product. In reality the cost of maintaining the product over its useful life and the cost of its disposal must also be factored into the purchasing decision—particularly if the product contains toxic elements as the disposal of toxic products may also involve substantial financial costs. For example, in the case of buildings the largest costs over the life-time of the building are operational costs. High, energy-efficiency standards in renovation and new construction make considerable financial sense, as do the use of energy efficient products such as computers and light bulbs.

Why should UN agencies engaged in sustainable procurement?

United Nations, including its many affiliated agencies represents a strategic global market for suppliers of virtually all types of goods and services.¹² As the associated activities can have considerable environmental, social and economic impacts, the UN has a moral responsibility to reduce consumption of resources, related products or services and harmful and/or toxic substances and promote responsible business.¹³ Both the Secretary General’s and the Chief Executives Board for Coordination’s commitments to a carbon neutral UN further underscores the need for sustainable procurement practices.^{14,15}

¹² Environmentally Responsible Procurement Working Group, available on www.sustainableprocurement.net

¹³ Ibid

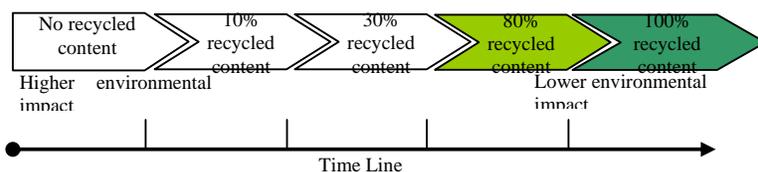
¹⁴ Message on World Environment Day. UN Secretary General, 5 June, 2007

¹⁵ UN Chief Executives Board for Coordination, Second regular session of 2007, CEB/2007/2

SECTION III: HOW TO TRANSITION TO SUSTAINABLE PROCUREMENT¹⁶

The best strategy to effectively achieve sustainable procurement within the UN is incrementally. This means that offices should be encouraged to move along the ‘sustainability product continuum’ to procure a ‘greener’ or more ‘socially appropriate’ product than is currently being used. The product doesn’t have to be ‘greenest’, i.e. lowest environmental impact, but an improvement on the previously procured product. Eventually, over a relatively short period of time the products procured will be more sustainable and the practice of sustainable procurement will be the norm rather than something new.

Office copy paper is a good example of how the product continuum can be applied.



The rationale underpinning this strategy is that it more practical for procurement officers new to sustainable procurement practices to choose a product based on simple criteria rather than to attempt a comparison of the environmental characteristics of various products. This task can be technically difficult, even for experts.

Facilitating the implementation of environmental procurement across an entire Agency, Fund or Programme naturally brings some challenges especially given the diverse market environment in which the UN operates. The sustainability continuum can be applied to commonly used products and services. For each of these categories a preferred sustainability specification should be developed as well as minimum sustainability specifications.

There is some help in the form of eco-labels which can assist in making a comparison between competing products and guide the purchaser's choice, e.g. Energy Star Program, Nordic Swan, European ECO-flower, Fairtrade etc. There are however numerous products and services for which convenient and trustworthy labelling systems do not yet exist. In such situations existing international agreements and

Moving Along the Continuum: recycled paper

Scenario

In the financial year 2004-05 your office purchased 1000 reams of paper which has 30% recycled content. This financial year can you aim to purchase 1000 reams at 50% recycled content with the ultimate goal of purchasing all 1000 reams with 100% recycled within 5 years.

Questions to ask:

- What type of office copy paper does your office use?
- Can you move to the next step on the recycle continuum?

Your office most likely has a paper arrangement. Check that your arrangement has recycled paper options where you can choose a higher recycled content.

- Can you set a goal of improving your recycled content and then measure the improvement?

The most effective way to demonstrate environmental responsibility with regards to paper—and one of the easiest ways to measure it—is to reduce consumption. Set your printers to duplex and always ask yourself—and your colleagues—“Do I really need to print that document?”

Example: IT equipment

For IT equipment the preferred specification is that of the EPEAT system which takes a multi-criteria approach entailing all stages of the product life cycle. A minimum specification would that offered by Energy Star system—a single issue approach addressing energy efficiency.

Both of these specifications have obvious environmental and cost advantages; however it is up to the procurer to decide which to procure given the availability of products meeting the specifications outlined within the sustainability continuum.

¹⁶ This section has been adapted from Environment Procurement Practice Guide, UNDP Practice Series, February 2008.

standards can be used to guide and inform criteria development.¹⁷

Setting General Priorities for Sustainable Procurement

In principle it is relatively easy to make the political decision to procure in a sustainable manner. However, putting a policy into action requires some strategic planning, including appropriate training for procurement staff, ensuring access to information and setting priorities as to which product, service and civil works categories are most suitable for meeting sustainability criteria.

1. Adopt a step-by-step approach

As a starting point, select a small range of products and services where the environmental or social impact is clear or where alternatives are readily available on the market and not more expensive, e.g. recycled paper, energy efficient office equipment, local supplier or cooperative. Alternatively start by ensuring the bidding specifications do not have an unintended negative impact, e.g. excluding products that use recycled materials, or stipulating that a supplier be international.

2. Consider the environmental and social impacts

Select products, e.g. vehicles or services, e.g. cleaning services that have a low impact on the environment and/or support the local economy, e.g. a local cleaning firm verses a national chain.

3. Focus on a broad environmental problem such as climate change or waste reduction

By introducing general requirements on energy efficiency or recyclability to met the sustainability objective you will be able to include a broader array of products. As more specific product criteria are developed, you can begin differentiating between products and applying more specific social and environmental selection criteria.

4. Consider availability and cost of environmentally and socially superior alternatives

Are there green(er) products on the market? Will they meet your requirements? Can you justify the extra cost if any? Are there minority-owned businesses or businesses that use local staff that can meet your requirements?

5. Consider availability of data

Can you find the data you need to set criteria for this product? How complicated will it be to decide what you want technically, and to express this in bidding documents?

6. Look for visibility

How visible will the sustainable procurement policy be to other UN staff and external stakeholders? High-profile changes such as changing fuel consumption requirements of official vehicles or shifting to organic or locally produced food in the canteen will help build awareness of the policy around other sustainable projects such as carbon offsetting for travel, reducing energy consumption in buildings etc.

¹⁷ See Annex I for existing Conventions, Agreements and Standards that can be used in the design of criteria.

7. Consider the potential for technological development

Green or socially responsible purchasing can target and support products and services at an early stage in their development and marketing. Sometimes this is more successful than trying to change the environmental characteristics of more mature sectors.

8. Adopt a scientifically sound life-cycle approach

Avoid shifting environmental or social impacts from one phase of the life-cycle of a product from to another. Look for relevant information in underlying specification of eco-labels or in websites and databases aimed at informing buyers.

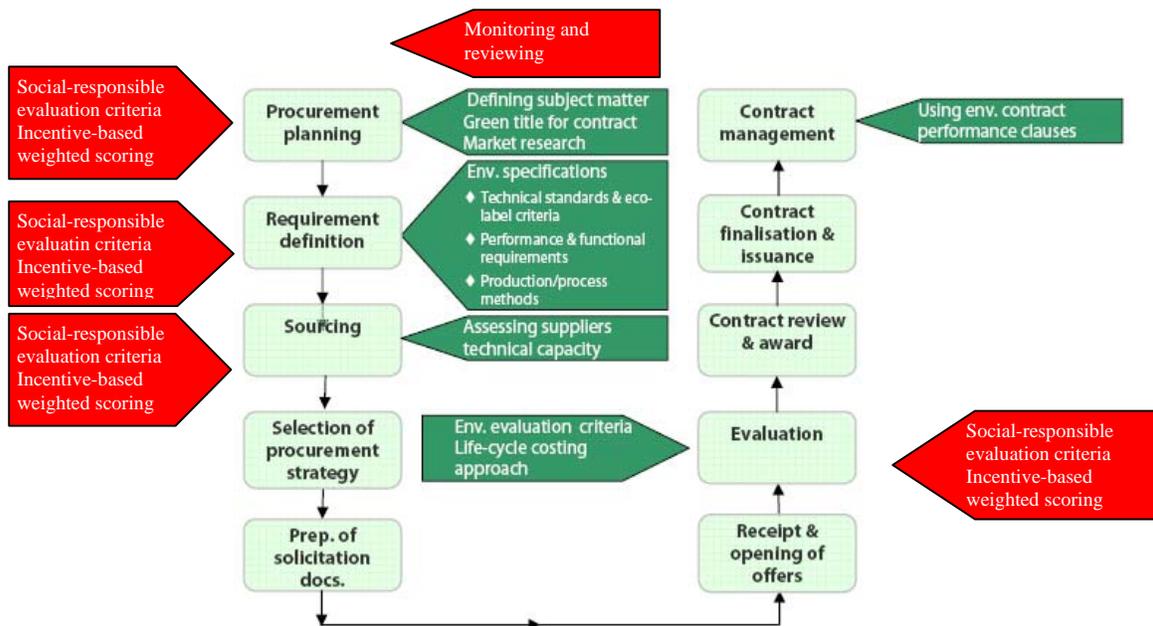
Implementing Sustainable Procurement

Stages of Sustainable Procurement

The preparatory stage of procurement process is crucial. As each stage builds on the preceding one, any mistake or oversight at this stage will adversely affect each successive stage and ultimately the end result. Therefore, before beginning a new procurement process enough time should be set aside in the planning phase to define the subject or content of the proposed Purchase Order or Contract and the instruments to be used to reach the set objective.

Remember:
The early stages of procurement process offer the best possibilities for incorporating sustainability considerations.

The follows diagram outlines the general procurement process and highlights at which stages sustainable procurement criteria should be integrated to ensure that sustainable procurement is achieved.



Procurement Planning

Apart from ensuring: the usual timely solicitation of quotations, bids or proposals; cost efficiency; and, the award of contracts and the delivery of inputs, there are a number of

procurement interventions that are essential to meeting the objectives of sustainable procurement. These are:

1. Defining the subject matter of the proposed contract;
2. Developing a title for the contract that embodies sustainability principles; and,
3. Conducting market analysis.

Defining the subject matter of the proposed contract

The subject matter of the proposed contract is a description of the product or service that the organisation wishes to procure. This process generally results in a basic description of the product or service; it can also take the form of a performance-based definition.

For sustainability considerations, a performance-based definition is usually preferable. Here the organisation does not need to meticulously stipulate all the characteristics that the product, service or works should possess but only the desired effect it should have.¹⁸ What is important is that the description of the to-be-procured product or service clearly states to potential bidders the intention of the organization to procure with sustainability considerations in mind.

Choosing a title for the contract

By clearly labelling the proposed contract with a sustainability title makes it easier for potential bidders to quickly identify what is required and conveys the message that the sustainability of the product or service will be an important part of the contract.

Conducting market analysis

In order to be able to determine what to procure, it is essential to have a good understanding of the market and the types of products and services offered, particularly as sustainable alternatives are not always available. The analysis needs to be conducted in an open and objective manner, focusing on what general solutions are available and not on a preferred or favoured contractor.¹⁹

Developing sustainability specifications

Once the subject matter of the contract is defined the information must be translated into measurable, technical specifications with which the product or service must comply. These requirements are compulsory: any non-compliance results in automatic disqualification. Technical specifications can be defined in terms of:

- o Environmental technical and/or social standards including eco-label criteria;
- o Performance and functional requirements; or,

Example: contract titles

Request for Proposal for cleaning services would be '*Environmental Cleaning Services including selective waste collection*'.

or

Request for Quotation for the supply of "*Recycled paper for writing, printing and copying purposes*".

or

Request for Proposal for the '*Design and construction of an energy efficient building*'.

You can state that you want to procure '*energy efficient computers*', but you can not state that you want to buy '*Energy Star Certified computers*'. By demanding specific, product certification, you would be discriminating against those bidders who did not have this particular eco-label certification.

¹⁸ An organisation is free to define the subject of the proposed contract in any way that meets its requirements. Procurement rules and regulations are not concerned so much with what is being procured but rather **how** it is being procured. Therefore the description of the procured good or service must be generic so as not to distort the level-playing field and infringe upon the principles of fairness, integrity, transparency and effective international competition.

¹⁹ For a detailed guide on how to conduct supply market analysis, see http://www.qgm.qld.gov.au/00_downloads/bpg_market.pdf

- Production and process methods.

Environmental technical, social standards including eco-label criteria

This is the most common and perhaps most practical approach to integrating environmental and social considerations into the procurement process. The Agency, Fund or Programme can use international or national technical standards or specifications such as the one developed by the International Standards Organisation (ISO) or European Committee for Standardisation (CEN).

Standards are useful in public procurement as they are clear, non-discriminatory and developed consensually.²⁰ Other criteria—that are more environmentally or socially ambitious than those outlined in international or national standards—may also be used.

Performance or functional requirements

A performance- or functional-based approach usually allows more scope for market creativity and in some cases will challenge the market into developing innovative, technical solutions. If this approach is used then technical specifications do not need to be precisely detailed as when defining environmental or social standards. However, when setting performance-based specifications the specifications must be clear enough to enable proper and justifiable evaluation.

For example, if the objective is to maintain the indoor climate of an office building within a certain range this can be achieved by setting very detailed specifications for a central heating system; alternatively a performance-based specification can be applied.

A performance-based specification could read:

The indoor climate must be maintained between 20– 25 degrees Celsius and a relative humidity of 50%

Here the bidders would be required to choose the best possible method for achieving the requirement. For example, bidders can opt for a more environmentally-benign heating and ventilation system instead of offering one that is based on burning fossil fuels. However as there is no specification that the system **not** use fossil fuels such a system using fossil fuels cannot be automatically discounted.

²⁰ The process of standardisation generally includes the participation of a wide range of stakeholders, including national authorities, environmental organisations, consumer associations as well as industry.

Example: using an eco-label to define environmental standard

Eco-label: Nordic Swan

The Swan is the official Nordic eco-label, introduced by the Nordic Council of Ministers and where all labelled products meet extremely high environmental standards. The *Nordic Swan* label takes into consideration the product's impact on the environment from the raw material to waste, i.e. throughout the product's lifecycle. The label also sets criteria with regard to quality and performance.

Although the procurer may want the solicited product to meet *Nordic Swan* standards, the procurer can not, for example, use '*certified Nordic Swan paper*' as a specification. This would be considered discriminatory and contravene the principles of fairness and effective international bidding.

However, the *Nordic Swan* criteria can be used to **define** the technical specifications.

For example:

“The paper must.....

1. Contain at least 80% post consumer waste
2. Be totally chlorine free (TCF)”

“the machine must....

1. Durability >100 years, according to ISO 9706, DIN 6738 or **equivalent**
2. Compatibility with machinery: meeting DIN 19309, AFNOR Q11-013 or **equivalent**.

“Products carrying the Nordic Swan label will be deemed to comply with these specifications, as will other acceptable means of proof.”

Production and process methods

When procuring products, criteria can also be based on specific materials that should or should not be included in them, as well as the process and production method of the products provided these criteria do not contravene UN principles of procurement.

Procurers can indicate preferable materials or alternatively specify that none of the materials or chemical substances should be detrimental to the environment. Social and labour standards can also be listed.

For example, a common approach for the environmental procurement of cleaning products is to provide an indicative list of hazardous substances harmful to the environment or public health and that should not be present in the procured product.²¹

Remember!

Where standards are applied the reference must be accompanied by the phrase '*or equivalent*', as a bidder **can not be rejected** if it can be demonstrated that the product or service meets the required standard in an equivalent manner.

Sourcing and Selecting Suppliers, Service Providers and Contractors

Selection criteria focus on a company's ability to fulfil the contract on which it is bidding. The selection criteria that are specified in an Expression of Interest are generally two-fold:

1. Technical capacity criteria; and,
2. Financial capacity criteria.

Only under *technical capacity criteria* is there room for the inclusion of environmental and social aspects.

Technical capacity criteria

Technical capacity criteria are used to select suppliers for a bidding exercise who have the capacity to carry out a particular contract. These criteria include:

- Evidence of similar previous contracts/projects carried out;
- Relevant experience of the bidder; and,
- Description of the technical facilities.

Environmental technical competence is particularly relevant in waste management contracts, construction, building maintenance or renovation contracts, and transport services where waste minimisation, containment of polluting products, reduction in fuel costs, minimal disruption of natural habitats, etc., have a positive effect.

Social competence is particularly relevant in the manufacturing of products and in the provision of services, e.g. cleaning, technical, grounds maintenance etc. Here the following questions can be asked:

²¹ See Annex I pages XX – XX for lists of hazardous substances covered under international agreements.

- Does the prospective bidder employ or have access to qualified staff/experts to deal with the environmental and social issues of the contract?
- Does the bidder have own or have access to the necessary technical equipment to carry out environmental protection relevant to the contract?
- Does the bidder have the relevant research and technical facilities available to cover the environmental aspects?
- Does the bidder have in place mechanisms for monitoring social standards and addressing abuses?

Example: contract design

Contract Description

The construction of a bridge in an environmentally-sensitive area will require the establishment of a series of specific management measures aimed at ensuring that effective protection of fauna and flora in area whilst building the bridge, e.g. control of noise levels, waste collection, replanting of sites used by the construction company, etc.

In this case the possession of an EMS for the construction sites—but not for other related sites—can be used as a means of proof that the bidder has the technical capacity to meet contract criteria.

A useful instrument for assessing the ability to integrate environmental and social criteria is the records of previous contracts carried out. When a contract outlines environmental and social criteria, the Agency, Fund or Programme, can—as part of the required supplier qualifications—request evidence of previous experience in similar contracts. **It is important however to detail the type of information that will be considered relevant and what means of proof will be required.**

Evidence of an environmental management system (EMS) can be required but only if this relevant for carrying out the proposed contract. If the specific management measures required are covered under the bidders' EMAS or ISO 140001 certification then this can be used as a simple form of proof. **However other forms of proof that demonstrate that equivalent management measures are in place must also be accepted by the Agency, Fund or Programme.**

Summary:

It is possible to apply environmental evaluation criteria, provided these:

- Are linked to the subject matter of the PO/contract;
- Are expressly mentioned in the procurement notice and bidding documentation; and,
- Comply with the procurement principles of UN.

Remember!

Adopting a 'life-cycle costing' approach reveals the actual costs of a PO/contract. The use of this approach in the preparation of the award criteria will improve both the environmental and social performance and reduce the financial burden in the long-term.

Evaluation of Quotations, Bids and Proposals

The core governing procurement principle of the UN is to obtain the best value for money. However, best value for money should not be equated with the lowest initial price option. Rather it means requiring an integrated assessment of technical, organisational and pricing factors in light of their relative importance, i.e. reliability, quality, experience, reputation, past performance, cost/fee and reasonableness. The Agency, Fund or Programme can also define social, environmental and other strategic objectives in its procurement plan. The principle of best value for money is applied to that offer which meets the stated requirements.

As outlined by the UN Procurement Manual the best value for money principle stipulates that:

*The best possible outcome has been achieved by taking into account all relevant costs and benefits over the entirety of the product or service life-cycle.*²²

Evaluation criteria

The best value for money principle allows for other award criteria to be taken into consideration along with price. These criteria may concern quality, functional characteristics, environmental and social characteristics, running costs and cost-effectiveness. In this case it is crucial the environmental and social evaluation criteria are:

- Related to the subject matter of the contract;
- Specific and objectively quantifiable;
- Weighted in relation to other award criteria; and,
- Clearly defined in the solicitation documents to ensure transparency.

Life-cycle costing

The financial component of the bid must also take into account the life-cycle cost of the product/service or works being procured rather than just the stated cost. At a minimum life-cycle costing should cover:

- Purchase and all associated costs, i.e. landed price including: delivery, installation, commissioning, etc.;
- Operating costs, including energy, other utilities, e.g. water, gas, etc., spares and maintenance, employee health/social coverage; and,
- End of life costs, such as decommissioning and removal.

These costs should be factored into the evaluation stage to ensure that they are taken into account when determining the best value for money offer. Life-cycle costing will enable the procurer to select a product or service with a better environmental and social performance as the process will reveal costs of resource use and disposal as well as relevant social costs.

Best Value for Money

The Best Value for Money Principle is applicable throughout the procurement process in:

- Defining requirement;
- Sourcing/identifying potential supplier sources;
- Development of source selection plan (including evaluation criteria and weighing);
- Evaluation and source selection;
- Risk assessment and management; and,
- Contract management.

How to apply life-cycle costing to promote environmental and social considerations

Savings on use of water and energy

The easiest step towards cost-effective and environmentally-friendly procurement is in the saving of water, electricity and fossil fuels. The advantage is that these savings clearly benefit both the finances of the contracting authority and the environment. Being easy to calculate and having a clear economical aspect, the costs of water and energy can be used as award criteria in public procurement procedures. From an environmental perspective the importance of water and energy conservation is undisputed. From a social perspective, processes that are energy and resource efficient usually have lower levels of emissions and waste meaning reduced worker exposure.

Savings on disposal costs

Disposal costs are easily forgotten when procuring a product or tendering for a construction project. Disposal costs will eventually have to be paid, although there may be time lag. Not taking these costs into account when a product is purchased can—in some cases—turn a bargain into an expensive purchase. Disposal costs range from the cost of physical removal to paying for secure disposal. Frequently, disposal is governed by strict regulations which are increasingly being applied as governments world-wide tighten their waste disposal regulations.

²² United Nations Procurement Manual, November 2007, Rev.04

Contract performance clause

Contract performance clauses are used to specify how a contract must be carried out. Environmental and social considerations can be included in contract performance clauses, provided they are published in the solicitation documents. Bidders should be made aware of all obligations detailed in the contract and should be able to reflect their ability to meet these obligations in their offer.

Contract performance clauses **should not have any bearing in the evaluation or consequently the contract award**, thus they can not be disguised as technical specifications, selection or evaluation criteria.

For example a contract clause **cannot be used to require a particular production process**—for products—or staff with particular expertise—for services. These are conditions that relate to the evaluation process and therefore must be dealt with within the relevant stages of the procurement process and not at the contract stage.

Contract clauses **can only be linked to the performance of the contract** and the selected supplier, service provider or contractor.

Examples of contract performance clauses that support sustainable procurement:

Supply of goods

- Having the product delivered in the appropriate quantity.

In general terms this means bulk delivery, which is usually more environmentally efficient in terms of transport impact per item than having smaller quantities delivered more often. Specifying a maximum number of deliveries per week or month is another way of achieving the same result.

- Requiring that goods be delivered outside peak traffic times to minimise the contribution of deliveries to traffic congestion.
- Requiring that the supplier takes back (and recycles or re-uses) any packaging that comes with the product.

This has the double advantage of centralising packaging prior to re-use or recycling and encouraging the supplier to cut down on any unnecessary packaging.

Services or works contracts

- Transport of products and tools to the site.
- Delivery of products to the site in concentrated form and then dilution on site.
- Use of re-usable containers to transport products to the site.
- How the service is performed.
- Use of dosage indicators to ensure that appropriate quantities of cleaning product are used.
- Disposal of used products or packaging from products.
- Products or packaging taken away for re-use, recycling or appropriate disposal by the contractor.
- Training of contractor staff.
- Staff trained in the environmental impact of their work.

In summary:

Contract performance clauses can:

- Be used to include environmental and social considerations at the performance stage.
- Specify the way the goods are to be supplied, including the method of transport.
- Enforce contractor compliance with performance clauses.

SECTION IV: CASE STUDIES

SECTION V: INTERNET SOURCES OF INFORMATION

The Internet provides a valuable source of information and guidance on sustainable procurement. Below is a listing of sites that offer information ranging from identifying priority products, and key environmental/social issues related to them, to databases of good practice and technical criteria to apply. This list is not exhaustive; new sites regularly appear as the topic of sustainable procurement evolves.

Sites are listed alphabetically.

The Center for a New American Dream

<http://www.newdream.org/procure/index.html>

The Center for a New American Dream has a number of resources available on Environmentally Preferable Purchasing, including links to concrete policies implemented by US local governments, information on a number of product groups, and well indexed links to other sources of information, guidance and criteria.

Environmentally Preferable Purchasing Guide

<http://www.swmcb.org/EPPG/default.asp>

This Guide is a reference tool for government and school purchasers who want to buy more wisely. With examples in over 30 product areas, the Guide aims to reduce workplace hazards, support energy efficiency and protect natural resources. In each category, the Guide surveys the latest field information and provides details on cost, performance, and vendors. An extensive up-to-date list of resources and contacts is also available.

European Commission - European Green Procurement

http://ec.europa.eu/environment/gpp/index_en.htm

This website provides a range of information concerning procurement within the EU. The site provides links to relevant legislation and legal frameworks and information sheets on products and service groups. Reference documents such *Buying Green!* Handbook, research guidelines and product specifications as well as information on events are also available.

Green Buyers Guide - UK Government, Sustainable Development

<http://www.sustainable-development.gov.uk/sdig/improving/partf/greenbuy/>

The guide produced provides guidance on best practice in implementing sustainable procurement, both with regard to procedural approaches, and product specific issues.

The Green Purchasing Network (GPN)

<http://eco.goo.ne.jp/gpn/files/gpne/>

The GPN promotes green purchasing among consumers, companies and governmental organisations in Japan. It has about 2,889 member organisations, including corporations, local autonomous bodies, consumer groups, environmental NGOs, and co-operative associations. The website presents the ideas and practices of green purchasing, and provides purchasing guidelines for a number of product groups.

ICLEI/Sustainable Procurement

<http://www.iclei-europe.org/index.php?id=procurement>

ICLEI has organised a wide range of products in the areas of sustainable public procurement in local authorities. ICLEI manages the European Sustainable Procurement Campaign, Procura+, an international movement that supports public authorities across Europe in

implementing sustainable procurement. They also partner on research and development projects geared towards public authorities, particularly local governments and develop training material on sustainable procurement for capacity building. The “Buy it Green” Network is a sustainability clearinghouse and network of local governments designed to foster the information exchange and co-operation among public authorities. A newsletter *Sustainable Procurement Update* is published regularly.

The International Green Procurement Network (IGPN)

<http://www.igpn.org>

The International Green Procurement Network (IGPN) is an organisation which promotes green procurement around the globe by coordinating those who are active in implementing green purchasing through their procurement practices. The network consists of international organizations, local authorities and NGOs. Specifically the network works globally to promote the spread of environmentally-friendly product and service development and green purchasing activities. It also shares information and know-how internationally on green purchasing and environmentally friendly products and services. IGPN works to harmonise the efforts of green purchasing and the development of environmentally-friendly products and services from a global viewpoint.

Swiss Federal Office of Environment: Integrated Product Policy: Green public purchasing

<http://www.bafu.admin.ch/produkte/02076/index.html?lang=en>

At a national and international level, the service works to develop framework conditions (law, finances, aids) that will favour environmental public purchasing. It cooperates with environmental, legal, financial, purchasing, usage and production specialists.

US Environmental Protection Agency (EPA) Database

<http://yosemite1.epa.gov/oppt/eppstand2.nsf>

The US EPA keeps a searchable database containing environmental information on over 600 products and services. The database informs the user how to buy greener products and services by providing links to contract language, specifications, policies created and used by US federal and state governments. Also available are environmental standards and guidelines for products, vendor lists of product brands which meet these standards and other useful sources of information on the environmental preference of products and services.

SECTION VI: GLOSSARY

Name	Definition
Acquisition cost	In the context of Economic Order Quantity EOQ analysis, the acquisition cost includes all costs associated with generating and processing an order and its related paperwork.
Added value	The increase in realisable value resulting from an alternation in form, location or availability of a product or service, excluding the costs of the purchased materials and services. Saying something gives added value, simply implies you think it is good
Advisory Committee on Procurement ACP	The Advisory Committee on Procurement is the new name of the Headquarters Contracts Committee HCC. Contracts of USD 100,000 or more must be submitted to the ACP for review and approval by the CPO.
Arbitration	A method to resolve a contract dispute by submission to one or more arbitrators for a binding judgement; arbitration is normally used to avoid litigation, ie. court procedures. Standard clause in all United Nations contracts (see UNDP General Conditions).
Award	The act of accepting a bid, thereby forming a contract between the state and a bidder.
Benchmarking	The practice of reviewing the performance of an organisation, department, function or activity, by assessing it against the performance of organisations, industry standards or internal departments.
Best available techniques	The most effective and advanced stage in the development of activities and their methods of operation which indicate the practical suitability of particular techniques for providing in principle the basis for release limitations designed to prevent and, where that is not practicable, generally to reduce releases of chemicals listed in Part I of Annex C and their impact on the environment as a whole.
Best practice	A process or methodology, which has been identified inside or outside the organisation and is recommended as a model. Also known by terms such as Better Practice.
Best value	The replacement for compulsory competitive tendering Best Value embodies the philosophy that lowest price is not necessarily the most important criterion in the procurement of goods and services.
Bid	A written offer in response to and Invitation to Bid (also see Invitation to Bid).
Bidder	An individual or entity that submits a bid. The term includes anyone acting on behalf of the individual or other entity that submits a bid, such as agents, employees, and representatives.
Biodegradable	Refers to any substance that decomposes through the action of micro-organisms.
Biological diversity	The variability among living organisms from all sources including, inter alia, terrestrial, marine and other aquatic ecosystems and the ecological complexes of which they are part; this includes diversity within species, between species and of ecosystems.
Biological resources	Includes genetic resources, organisms or parts thereof, populations, or any other biotic component of ecosystems with actual or potential use or value for humanity.
Biotechnology	Any technological application that uses biological systems, living organisms, or derivatives thereof, to make or modify products or processes for specific use.
Chemical	A substance whether by itself or in a mixture or preparation and whether manufactured or obtained from nature, but does not include any living organism. It consists of the following categories: pesticide (including severely hazardous pesticide formulations) and industrial applications.
Compliance labels	Standardized label formats used by trading partners usually containing bar codes. Compliance labels are used as shipping labels, container/pallet labels, carton

	labels, piece labels. Many bar code labelling software products now have the more common compliance label standards set up as templates.
Contract	An agreement, enforceable by law, between two or more parties/persons that creates an obligation to do or not to do a particulate thing. A purchase contract may be verbal or written, A purchase order, when accepted by a supplier, become a contract.
Coproduct	Used to describe multiple items that are produced simultaneously during a production run. Coproducts are often used to increase yields in cutting operations such as die cutting or sawing when it is found that scrap can be reduced by combining multiple sized products in a single production run. Coproducts are also used to reduce the frequency of machine setups required in these same types of operations. Coproducts, also known as byproducts are also common in process manufacturing such as in chemical plants. Although the concept of coproducts is fairly simple, the programming logic required plan and process coproducts is very complicated and most off-the-shelf manufacturing software will have problems with coproduct processing.
Cost	A broader term than simply 'price', including everything you might have to pay in association with an item, like training and maintenance.
Data mining	Software tools that allow users to examine large volumes of data to discover hidden patterns and cross-correlation.
Demand	The need for a specific item in a specific quantity.
Dumping	i) any deliberate disposal at sea or into the seabed of wastes or other matter from ships, other man-made structures at sea or aircraft; ii) any deliberate disposal at sea of ships, other man-made structures at sea or aircraft
Ecosystem	A dynamic complex of plant, animal and micro-organism communities and their non-living environment interacting as a functional unit.
Electronic Data Interchange (EDI)	A dedicated electronic connection between a buyer and a supplier used to transfer procurement-related information.
Enterprise Resource Planning (ERP)	Describes software systems designed to manage most or all aspects of a manufacturing or distribution enterprise (an expanded version of MRP systems). ERP systems are usually broken down into modules such as Financials, Sales, Purchasing, Inventory Management, Manufacturing, MRP, DRP. The modules are designed to work seamlessly with the rest of the system and should provide a consistent user interface between them. These systems usually have extensive set up options that allow you to customize their functionality to your specific business needs.
Environmental procurement	Environmental procurement is procuring with the goal of reducing the impact on the environment. Also often referred to as Green Procurement. Can be defined as building environmental considerations into the procurement policy and the day-to-day procurement decision-making and operations. Can include both procurement of products and services that reduce the use of all materials, energy, water, noise, protected natural resources such as rain forests etc.
E-procurement	Electronic Procurement involves the electronic acquisition through the Internet of goods and services, including all processes from the identification of a need, through the purchase and the receipt of goods and services to the payment for these purchases.
Greenhouse gases	Greenhouse gases (GHGs) are the gases present in the atmosphere which reduce the loss of heat into space and therefore contribute to global temperatures through the greenhouse effect. Greenhouse gases are essential to maintaining the temperature of the Earth; however an increase in GHGs can raise temperatures to a dangerous level. Carbon dioxide (CO ₂), methane (CH ₄), nitrous oxide (N ₂ O) and CFC12 are the most common GHGs.
Hazardous substance	Any harmful substance which due to its intrinsic properties is persistent, toxic or

	liable to bio-accumulate.
Human capital	The competence and capabilities of an organisation's employees.
Incineration	The deliberate combustion of wastes or other matter at sea for the purpose of their thermal destruction. Activities incidental to the normal operation of ships or other man-made structures are excluded from the scope of this definition.
Invitation to Bid ITB	A formal solicitation document, used especially for procurement of goods when clear specifications are available, Use for cases with an estimated procurement value of USD 100,000 or above.
Litigation	A law suit, legal action, including all proceedings therein. UNDP is immune from legal action in course. Disputes with contractors are resolved either by negotiation, conciliation or arbitration (See UNDP General Conditions).
Market focus	Pressures that affect prices through demand for goods and services. Market forces, include for example, changes in domestic habits and fashion, technological change and government initiatives.
Market place	A web site that offers electronic purchasing services including supplier catalogue hosting, buyer to supplier communications, supplier and buyer registration, auctions, and reverse auctions.
Ozone depleting substances	Chlorofluorocarbons (CFCs) and other industrial chemicals mix with ozone in the earth's stratosphere destroying ozone molecules.
Persistent organic pollutants (POPs)	Organic (carbon-based) substances that persist in the environment, bio-accumulate in living tissue, and pose a risk to human health and the environment.
Penalty clause	Reference to a sum to be paid by the supplier in the event of default on its part. However, it is not enforceable by law and not acceptable to suppliers.
Performance security	A written instrument normally issued by a bank or an insurance company in favour of Purchaser to assure fulfilment of the supplier's/Contractor's obligations.
Pesticide	A substance or a mixture of substances for destroying or repelling any type of pest, including fungi, insects, and termites.
Pollution	Introduction by humans, directly or indirectly, of substances or energy into the sea, including estuaries, which are liable to create hazards to human health, to harm living resources and marine ecosystems, to cause hindrance to legitimate uses of the sea including fishing, to impair the quality for use of sea water, and to lead to a reduction of amenities
Price	The sum of money paid for a purchase or the value of the commodity or service measure in terms of the standard monetary unit. Not to be confused with 'cost', which is a broader term including everything you might have to pay in association with an item, like training and maintenance.
Process manufacturing	Manufacturing where a product is produced or transformed through mixing, chemical reactions, etc. Examples of process manufacturing would be refining crude oil into gasoline, extracting copper from ore, combining materials to make paint.
Procurement	Technically, obtaining goods or services by various means such as loan, transfer and hire, as well as straightforward purchase.
Production	The amount of controlled substances produced, minus the amount destroyed by technologies to be approved by the Parties and minus the amount entirely used as feedstock in the manufacture of other chemicals. The amount recycled and reused is not to be considered as "production".
Profit	The financial gain resulting from a transaction or combination of transactions, or a set period of business activity being the excess sales revenue over related costs.
Proposal	A written offer in response to a Request for Proposal, notably for services and civil works (See also Request for Proposal)
Public procurement directives	Apply only to bodies in the public sector. There are three directives (works, supplies and services) designed to ensure a level playing field in the tendering process. A vital feature is the threshold values above which contracts need to be put out to European Union tender, which changes January 1 every other year.

Purchase	Differentiated from procurement in that it applies only to goods or services paid for with money or other consideration.
Quotation	Not to be confused with 'estimate'. Quotations are normally preferable because they should give an accurate price for goods or services offered, whereas an estimates gives merely an approximate calculation of the cost of the goods or services concerned.
Relationship Management	The relationship between buyer and seller is central to the whole business of supply management.
Remuneration	The term includes the ordinary, basic or minimum wage or salary and any additional emoluments whatsoever payable directly or indirectly, whether in cash or in kind, by the employer to the worker and arising out of the worker's employment.
Request for Proposal (RFP)	A formal solicitation document used especially for procurement of works or services, or when clear specifications are not available or not feasible.
Request for Quotation (RFQ)	A document or form that invites suppliers to specify their best prices, terms and conditions for the delivery of goods and services.
Risk analysis	Working out what the risks are and what the costs would be if they materialise. It applies to any undertaking.
Solicitation	The process of inviting bidders to submit offers (bid, proposals, quotations).
Sourcing	Activities involving searching markets for sources of goods and services. At the opposite end of the supply chain from marketing but not as a high profile. Strategic sourcing is the attempt to make sure everything is being sources as efficiently as possible.
Supply	The provisioning, administration, storage handling and distribution and all associated operations connected with supplies, services and materials management AND all goods, materials and services that come into the possession of an enterprise as the results of contracts for purchase, hire or procurement by other processes and for which the enterprise has responsibility.
Supply chain	The total sequence of business process, within a single or multiple enterprise environment, that enable customer demand for a product or service to be satisfied.
Sustainable development	A term coined in the Brundtland Report: Giving equal weight to economic development and the preservation of the environment to ensure that the actions of one generation do not compromise the ability of future generations to have an equal quality of life. Many businesses and governments at the local, national and international have adopted this concept in decision making.
Sustainable use	The use of components of biological diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations.
Tender	An offer to provide goods or services, in response to an invitation to tender for a specified price.
Terms (and conditions)	In the contractual context, terms may be either implied or express. Implied terms are those that have been implied by statutory provisions or by the clear intentions of the parties, whereas express terms are clear statements communication by the parties and by which they intend to be count.
Toxicity	The ability of a chemical to cause injury to humans or the environment. An acute toxic reaction occurs soon after exposure, while chronic reactions are experience long after the exposure.
Vertical marketplace	An electronic exchange providing a range of services that focuses on a specific industry such as steel, paper, electricity ore chemicals.
Wastes	Substances or objects which are disposed of or are intended to be disposed of or are required to be disposed of by the provisions of national law.

ANNEX I: OVERVIEW OF EXISTING FRAMEWORKS

Below is a table that lists examples of action plans, agreements and standards that are currently in place today. This list is not exhaustive; rather it has been compiled to demonstrate the breadth of mechanisms that currently exist and which procurers can use to assist in defining sustainable procurement criteria. Requisitioners should also consult this list to better understand what criteria should be included in requisitioning documents.

Each entry is summarised in the following pages. Where possible, references for obtaining more information are provided.

Plan of Action/ Implementation

- Agenda 21
- Millennium Development Goals (MDGs)
- Johannesburg Declaration and Plan of Implementation (WSSD)

Multilateral Environmental Agreements

- Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)
- Fundamental Labour Standards of the International Labour Organisation (ILO)
- Montreal Protocol on Substances that Deplete the Ozone Layer
- The Stockholm Convention on Persistent Organic Pollutants (POPs)
- The Convention for the Protection of the Marine Environment of the North-East Atlantic (OSPAR)
- Kyoto Protocol
- Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade (PIC)

Voluntary Agreements

- The Global Compact
- World Health Organisation Recommended Classification of Pesticides by Hazard

Standards/Ecolabel

- Ecolabels Type I, II, III
- ISO 14001 and Eco- Management and Audit Scheme (EMAS)
- Social Accountability (SA) 8000
- Fair Trade
- Occupational Health and Safety (OHSAS) 18001