

**Generic Manual  
on  
Updating and Adapting  
Guidelines for SPP**

**The Procurement Policy Office**

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## Table of Contents

List of Figures.....	ii
List of Tables.....	iii
List of Boxes.....	iv
Abbreviations.....	v
1.0 Introduction and Methodology .....	1
1.1 Methodology .....	1
2.0 Scoping SPP for the Product.....	1
3.0 Review of Mauritian Procurement Process .....	2
4.0 Identification of Key Environmental Impacts .....	4
5.0 Key Social Considerations.....	8
6.0 Review of Mauritius Regulations .....	9
7.0 Development of Sustainability Criteria .....	11
7.1 Procurement Planning .....	11
7.2 Process of Developing Sustainability Criteria.....	11
8.0 Life Cycle Costing .....	17
8.1 Applying LCC in procurement .....	18
9.0 Ecolabels.....	21
10.0 Sources for Guidance in Developing SPP Guidelines.....	22

## List of Figures

Figure 1- Sections of the Mauritius Public Procurement Act 2006 .....	3
Figure 2- Stages at which sustainability interventions can be incorporated in the Mauritian bidding process.....	4
Figure 3: Process of Impact Identification leading to Sustainability Approach .....	6
Figure 4: Key Environmental Impacts across the Life Cycle of Cleaning Products .....	7
Figure 5: Key Environmental Impacts and Risks of Cleaning Products .....	7
Figure 6: Process of Developing Criteria for SPP .....	12

## List of Tables

Table 1- Key environmental impacts of cleaning products for office use..... 8

## List of Boxes

Box 1- Examples of Scope of Product .....	2
Box 2- Example of SPP Instruments in the Public Procurement Act 2006 .....	3
Box 3- Key Environmental Impacts and Sustainability Approach for Cleaning Chemicals and Cleaning Services .....	6
Box 4- Key Social Considerations .....	8
Box 5- Environmental Regulations in Mauritius .....	10
Box 6- Environmental Regulations – Product Specific.....	10
Box 7- Social Regulations in Mauritius .....	11
Box 8- Process of Developing Sustainability Criteria .....	12
Box 9- List of Tools for Life Cycle Costing.....	18
Box 10- Using LCC in Procurement of Products.....	19
Box 11- Indicative List of Ecolabels for Furniture.....	21
Box 12- List of Sources for SPP Guidelines .....	22

## Abbreviations

<b>EU</b>	European Union
<b>FSC</b>	Forest Stewardship Council
<b>GPNI</b>	Green Purchasing Network of India
<b>LCA</b>	Life Cycle Assessment
<b>LCC</b>	Life Cycle Cost
<b>MID</b>	Maurice Ile Durable
<b>NPV</b>	Net Present Value
<b>OAP</b>	Open Advertised Bidding
<b>PEFC</b>	Programme for the Endorsement of Forest Certification
<b>PPA</b>	Public Procurement Act
<b>PPO</b>	Procurement Policy Office
<b>SCP</b>	Sustainable Consumption and Production
<b>SIDS</b>	Small Island Developing State
<b>SPP</b>	Sustainable Public Procurement
<b>UNCED</b>	United Nations conference on Environment and Development
<b>UNEP</b>	United Nations Environment Program
<b>USEPA</b>	United States Environmental Protection Agency
<b>VOC</b>	Volatile Organic Compounds

## 1.0 Introduction and Methodology

The '**Generic Manual on Updating and Adapting Guidelines for SPP**' has been developed to provide a comprehensive methodology to adapt the SPP guidelines prepared for the five products in the pilot phase to a wider set of products. It outlines the process of developing the rationale behind the sustainable procurement recommendations as well as method of presenting the sustainability criteria that can be used for Sustainable Public Procurement (SPP).

This Manual is intended to assist whosoever will prepare product guidelines on Sustainable Public Procurement (SPP) for Mauritius. SPP Guidelines for five products viz. paper for office use; passenger cars; cleaning chemicals and cleaning services; ICT equipment - computers, laptops and printers; and furniture have been developed in the pilot phase which could be used for reference. The SPP guidelines for the five products were developed based on UNEP/EU SPP Guidelines and expanding and contextualizing to the Mauritian context.

### 1.1 Methodology

The guidance manual is organized on the lines of the five product guidelines that have been developed in the pilot phase. The manual follows an instructional mode citing examples from the five product guidelines. Under each section actions to be taken for adapting the guidelines have been provided.

The sections of the product SPP guidelines are as follows:

- 1.0 Introduction, Scope and Methodology
- 2.0 Incorporating Sustainability into the Mauritian Procurement Process
- 3.0 Institutional Enablers for Sustainable Public Procurement (SPP) in Mauritius
- 4.0 Key Environmental Impacts
- 5.0 Key Social Considerations
- 6.0 Legislations Impacting Procurement of Passenger Cars
- 7.0 Framework for developing Sustainability Criteria
- 8.0 Passenger Cars – Key Sustainability Criteria
- 9.0 Life Cycle Costing
- 10.0 Relevant Ecolabels
- 11.0 Information Sources
- 12.0 Additional Guidance

The detailed table of contents of sample product guideline viz. passenger cars is given in **Annex 1**. Based on the above listed contents, instructions for adaptation are given in the subsequent sections.

## 2.0 Scoping SPP for the Product

Before embarking upon the task of preparing guidelines for sustainable public procurement (SPP) of a product, the scope should be defined. Any product has a number of varieties based

on the purpose for which it has been designed. A further understanding of the scoping activity can be gained from the illustrations given in **Box 1** for which SPP guidelines have been developed for Mauritius in the pilot phase.

#### Box 1- Examples of Scope of Product

##### **Scoping of SPP guidelines – Paper for General Office Use**

The sustainable procurement guidelines for office stationery prepared by UNEP include (i) paper consumables - Paper (for writing, printing and copying purposes – up to 170g/m<sup>2</sup>), envelopes, post-it notes and notepads; (ii) toner cartridges; and (iii) writing implements - pens and markers.

During adaptation of the UNEP guideline to Mauritius, the scope of the guideline has been limited to purchase of plain (unprinted) paper for general office use (writing, printing and copying purposes) (up to 170g/m<sup>2</sup>) sold in sheets or reels.

##### **Scoping of SPP guidelines – Passenger Cars**

The sustainable procurement guidelines for vehicles prepared by UNEP include sedans, pick-ups, sport utility vehicles, light duty vehicles and heavy duty transporters.

The UNEP guideline has been adapted to Mauritius to include only passenger cars.

Decisions regarding the variety of product the scope should focus on could be taken based on the intensity of usage. Such decisions may need internal discussions among procurement officials in each public agency.

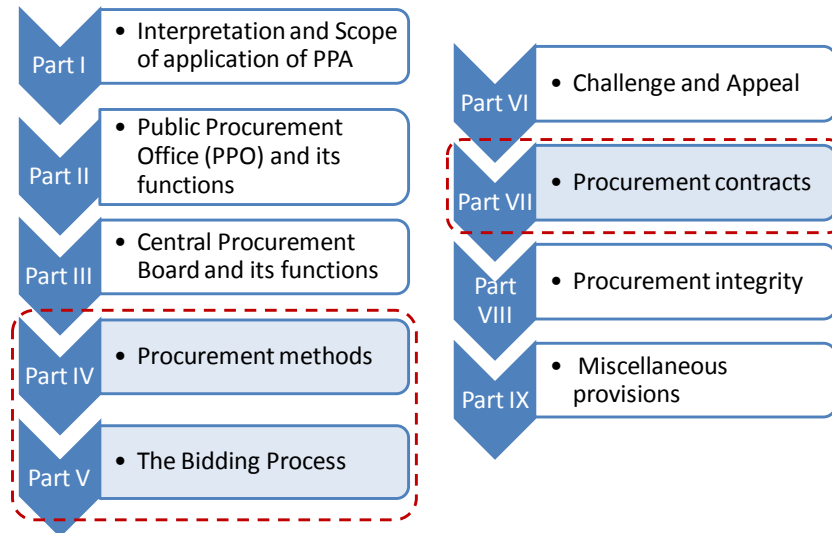
### **3.0 Review of Mauritian Procurement Process**

A review of the existing procurement procedures in Mauritius is imperative to understand the stages at which sustainability aspects can be introduced and the method of integration.

The Public Procurement Act (PPA) 2006 of Mauritius details the basic principles and procedures to be applied during public procurement of goods, public works and services. The Act is amended on a periodic basis to meet emerging requirements. Hence a review of the Act during adaptation is most important.

At a broad level, the sections of the Act found to be appropriate for featuring sustainability considerations, are highlighted in **Figure 1**.





**Figure 1- Sections of the Mauritius Public Procurement Act 2006**

The Act has been amended every year since 2008, and certain amendments like the Framework Agreement (refer **Box 2**) have been found to be useful for SPP. In the SPP Product Guidelines, it has been recommended that Framework Agreements be used for SPP of Furniture and Paper, as these products are standard products<sup>1</sup> used by all organizations.

The sections in the PPA 2006 which describe the types of bidding, procurement planning, requirement definitions and prequalification criteria should necessarily be reviewed for amendments.

**Box 2- Example of SPP Instruments in the Public Procurement Act 2006**

**Procurement under Framework Agreements<sup>2</sup> (Amendment 2012 and 2013)**

When the need for a product in a public body is expected to arise on a repeated basis over a period of time, then framework agreements may be drawn up between the public body (or lead organization) and a supplier. According to this arrangement, the lead organization will consolidate the requirements of the public bodies as and when they arise over time, so that delivery can be done in large volumes and directly to one institution.

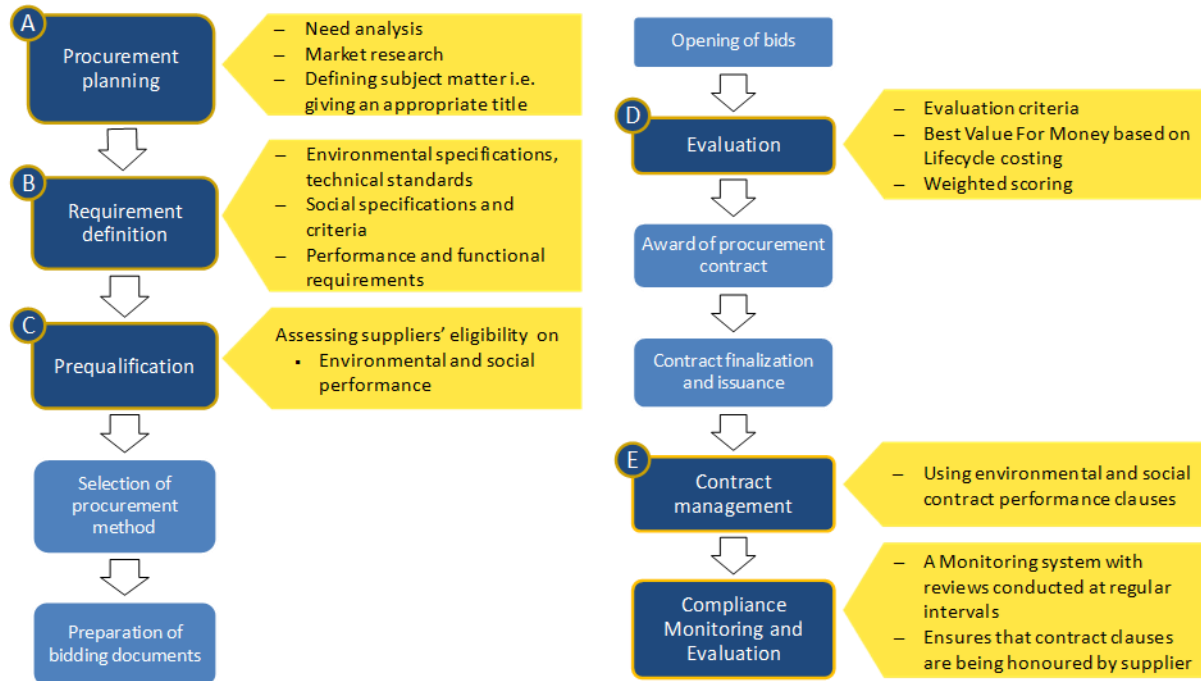
This tool is important for SPP as the promise of large volumes would attract more bidders, thereby increasing the chances of procuring sustainable products at the best available price. Other benefits include savings on time, money and avoidance of the bureaucratic hassle eminent when multiple agencies procure smaller volumes multiple times.

At the implementation level, i.e. during the Mauritian bidding process, the manner in which sustainability should be integrated is illustrated in the SPP guidelines for the five pilot products

<sup>1</sup> “Standard products” is intended to refer to simple products that have common functionality across agencies and for which vastly different specifications and designs/ features are not usually required or demanded by different agencies.

<sup>2</sup> Refer PPA 2006, Part V- The Bidding Process, clause 29A “Procurement under framework agreement”

(Figure 1). Any changes or new opportunities for sustainability that may arise owing to amendment in the procurement process should be incorporated in the new product guidelines.



**Figure 2- Stages at which sustainability interventions can be incorporated in the Mauritian bidding process**

Source: Diagram adapted from UNEP SPP Guidelines<sup>3</sup>

## 4.0 Identification of Key Environmental Impacts

Mauritius being a SIDS country, its remote geographic location and small physical size makes it ecologically fragile and limits its capacity to respond effectively to natural and environmental disasters. Consequently, it is more sensitive to certain environmental impacts than non-SIDS nations. Sustainable Products are those that have fewer negative environmental impacts throughout their life cycle, as compared to their conventional counterparts.

Life Cycle Assessment (LCA) is a global tool used to identify a product's environmental impacts at each stage from raw material extraction to disposal. While identifying impacts, it is important to note which stages in the product's life cycle are pertinent in the Mauritian context. A few questions that should be answered in the process are:

1. What are the various categories within the product that could lead to environmental impacts?
2. Is the product and its allied components is produced indigenously including source of raw material or imported?
3. If part of the product is supplied through indigenous production, what is the proportion of market demand served?

<sup>3</sup> Buying for a Better World: A Guide on Sustainable Procurement for the UN System. UNEP. 2011.

4. Does the product require use phase servicing and spare parts? How well is the Mauritian market developed to meet this requirement?
5. How are the product and its allied components disposed? Within Mauritius or exported?

If entire or part of the market demand for the product is met through imports, transportation will account for a significant proportion of the life cycle impacts, when evaluated in the Mauritian context. However, the geographical location of the country leaves no choice but to import at the cost of high air and sea transport emissions, unlike the multiple options that the non-island nations of the world can consider in similar situations. Therefore, transportation impacts should be excluded from the scope of the guidelines.

For identification of environmental impacts using LCA, the nature of activities required for the product, effluent or emission released as an effect, the environmental media through which the impact is manifested and the receptors impacted in the process should be explicitly mentioned to appreciate the severity.

Different stages in the life cycle have potential impacts on the environment and these impacts pose various environmental risks. Environmental risk is the probability of an undesirable event arising from human action that is transmitted through the environment. Impacts are concerned with events that are reasonably certain to occur, while risk assessment is concerned with events that may possibly occur.

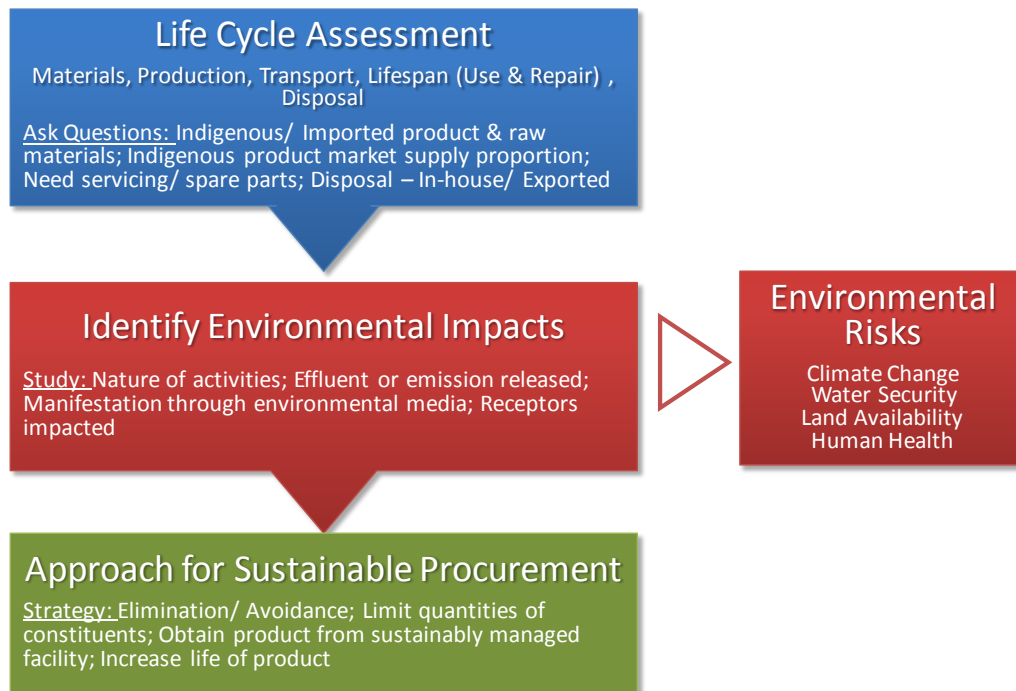
The approach used for reducing the environmental impacts will assist in developing sustainable criteria for the product. Through introduction of sustainability in the product, the environmental risks occurring at a national and global level are also impacted towards the positive. Refer **Figure 3** for a representation of the process of impacts identification leading to sustainability approach.

The process of identifying impacts across the lifecycle to addressing environmental risks and developing the approach to sustainability is illustrated through the guideline developed for 'Cleaning Chemicals and Cleaning Services' in the pilot phase in **Box 3**.

Resource materials like UNEP SPP Guidelines, the European Commission's GPP Training Toolkit and ICLEI's Procura+ Manual<sup>4</sup> are useful sources for identification of key environmental impacts.

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<sup>4</sup> Indicative sources. See **Section 11** of this report for Additional Sources



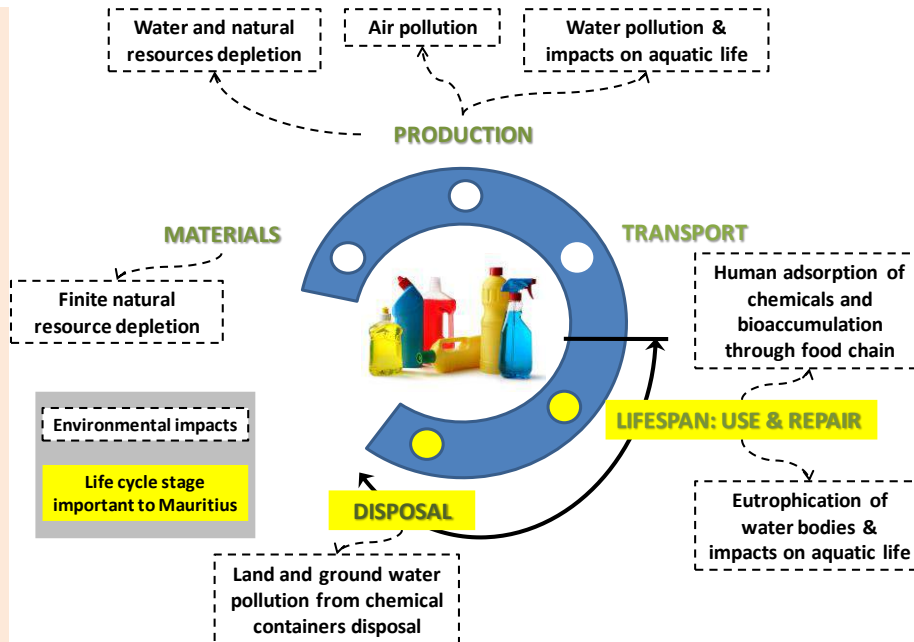
**Figure 3: Process of Impact Identification leading to Sustainability Approach**

### **Box 3- Key Environmental Impacts and Sustainability Approach for Cleaning Chemicals and Cleaning Services**

The chemicals used for cleaning may have a number of adverse health and environmental impacts:

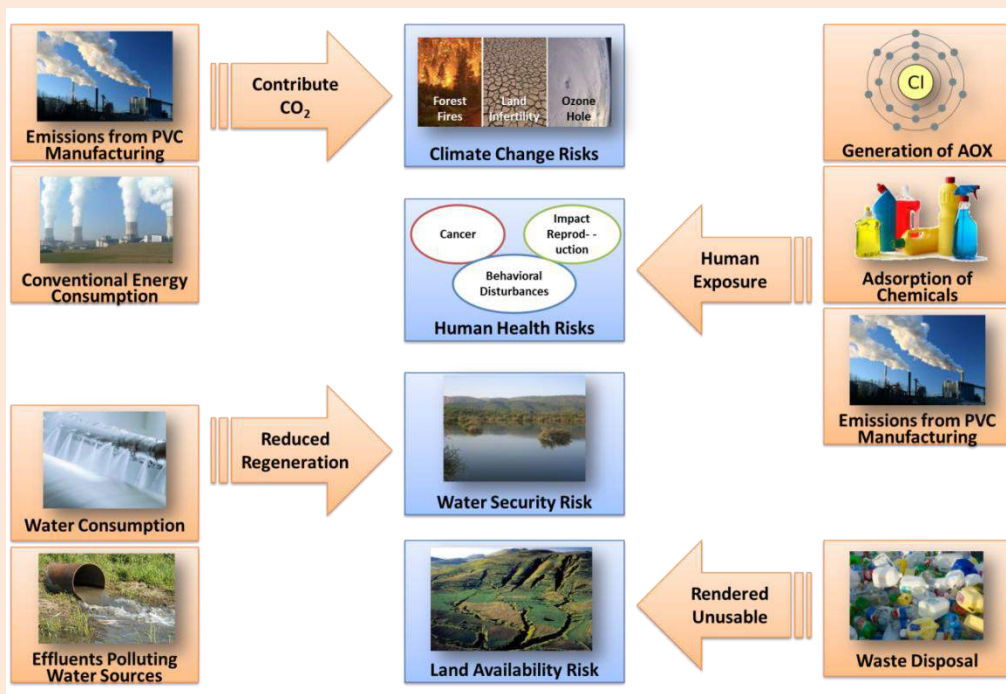
- Eutrophication of water bodies due to release of hazardous chemicals through sewerage systems during production, use and disposal.
- Environmental pollution due to generation of toxic compounds like AOX from use of chlorine based cleaning products
- Bioaccumulation of chemicals impacting aquatic life which move up the food chain
- Health impacts on cleaning staff (allergic reactions, burns etc) due to exposure to various cleaning products
- Depletion of finite natural resources and environmental pollution due to production, use and disposal of PVC containers
- Land pollution due to leaching of hazardous chemicals from unscientific disposal of cleaning products containers

A schematic of key environmental impacts across the life cycle of cleaning products and cleaning services is presented in the **Figure 4**.



**Figure 4: Key Environmental Impacts across the Life Cycle of Cleaning Products**

A number of impacts such as air pollution due to conventional energy generation, forest depletion etc could lead to the same risk namely climate change. Similarly a number of activities and their impacts during production of cleaning chemicals and its allied components pose a risk to human health (See Figure 5).



**Figure 5: Key Environmental Impacts and Risks of Cleaning Products**

**Table 1** summarizes the main environmental impacts related to cleaning products and indicates the focus of measures to address these impacts.

**Table 1- Key environmental impacts of cleaning products for office use**

#	Impact	Sustainable Procurement Approach
1.	Eutrophication of water bodies due to release of hazardous chemicals through sewerage systems during production, use and disposal.	Avoid the use of certain cleaning chemicals containing hazardous chemicals Limit the quantity of hazardous chemicals in cleaning chemicals
2.	Environmental pollution due to generation of toxic compounds like AOX from use of chlorine based cleaning chemicals	Use biodegradable cleaning chemicals
3.	Bioaccumulation of chemicals impacting aquatic life which move up the food chain	
4.	Health impacts on cleaning staff (allergic reactions, burns etc) due to exposure to various cleaning chemicals	
5.	Depletion of finite natural resources and environmental pollution due to production, use and disposal of PVC containers	Decrease the quantity of packaging used; ensure recyclability; increase use of recycled packaging; and avoid packaging material containing PVC
6.	Land pollution due to leaching of hazardous chemicals from unscientific disposal of cleaning chemicals containers	

## 5.0 Key Social Considerations

SPP encompasses two aspects – environmental and social. The social considerations are related to the ethical treatment of workers engaged in the business and the communities impacted by raw material sourcing. The social considerations applied to any business activity or process originate from international conventions and instruments developed mainly by International Labour Organization and United Nations. The practices that should be incorporated in social considerations for workers and the community are given in **Box 4**.

### Box 4- Key Social Considerations

The following practices are included under social considerations for workers:

1. Promoting fair treatment, non-discrimination, and equal opportunity of workers<sup>5</sup>
2. Establishing, maintaining and improving worker-management relationship
3. Promoting compliance with national employment and labor laws
4. Protecting workers - including vulnerable categories such as children, migrant workers, workers engaged by third parties, and workers in the client's supply chain
5. Promoting safe and healthy working conditions, and the health of workers.
6. Avoiding use of forced labor and child labor

<sup>5</sup> Non-discrimination and equal opportunity refer to avoid basing employment decisions on parameters such as gender, race, nationality, ethnic, social and indigenous origin, religion or belief, disability, age, or sexual orientation.

7. Allowing worker's organizations and collective bargaining to protect worker's rights regarding working conditions and terms of employment
8. Carrying out collective dismissals and retrenchment in a planned manner
9. Providing grievance mechanism to workers to raise workplace concerns

The above social considerations in a procurement process would be applicable to the producer and supplier of a product.

From the perspective of sustainability, impact of business activities on Indigenous People<sup>6</sup> is also included. These are social groups with identities that are distinct from mainstream groups in national societies. In many cases, their economic, social, and legal status limits their capacity to defend their rights to, and interests in, lands and natural and cultural resources, and may restrict their ability to participate in and benefit from development. The path towards sustainability promotes avoidance of adverse impacts on Indigenous Peoples and sharing benefits of business activities where they are adversely impacted.

The aspect of ethical trading is also incorporated in sustainability. Ethical trading, as defined by the Ethical Trade Initiative<sup>7</sup>, refers to retailers, brands and their suppliers assuming responsibility for improving the conditions of the people who work for them. Most workers employed by supplier firms are based in developing or underdeveloped countries where there are inadequate legal provisions protecting workers' rights of even if such laws exist, they are rarely enforced. Firms that are committed to supporting ethical trade adopt a code of labour conduct that covers social elements like minimum wages, work hours, occupational health and safety, no child labour or gender discrimination etc.

## **6.0 Review of Mauritius Regulations**

The environmental legislations of a country typically address the environmental issues that are a priority. The environmental legislations in Mauritius that regulate products, activities, emissions and effluents should be reviewed and addressed through the sustainability criteria.

Environmental regulations at two levels should be reviewed – (i) those regulating a particular media such as air, water, waste etc; and (ii) those regulating particular aspects of a product or process. The process of reviewing Mauritian legislations will be important for bidding of products manufactured within the country. For products imported, compliance to host country regulations would be basic criterion.

While developing new product guidelines, there should be a review of national environmental and social regulations applicable to the product being procured, as well as any broad sustainable development policies which may be useful for SPP. This process would be more effective if conducted through interviews with procurement officials and/ or department officials, as desk research may not reveal recently introduced regulations.

The key regulations in Mauritius for overall environmental management are given in **Box 5**. The regulations specifically applicable to a product are illustrated in **Box 6** for passenger cars

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<sup>6</sup> As described by International Finance Corporation's Performance Standard 7. There is no universally accepted definition of "Indigenous Peoples." Indigenous Peoples may be referred to in different countries by such terms as "Indigenous ethnic minorities," "aboriginals," "hill tribes," "minority nationalities," "scheduled tribes," "first nations," or "tribal groups."

<sup>7</sup> <http://www.ethicaltrade.org/about-eti>

and cleaning chemicals and cleaning services. The legal framework in Mauritius for social considerations to be complied by local manufacturers is listed in **Box 7**.

### **Box 5- Environmental Regulations in Mauritius**

The Environment Protection Act (EPA) 2002 is the main legislative framework to support environmental management in Mauritius. The act has been amended from time to time to be in line with new and emerging challenges, with regard to environmental protection strategies and tools for effective environmental protection and sustainable development.

Environmental concerns surrounding economic development have been given greater significance by bringing in Environmental Impact Assessments and Environmental Monitoring tools.

Industrial waste audit regulations have also been introduced to encourage industries to self-regulate and adopt cleaner technologies.

Since 2010, sustainable development has been included in the portfolio of the Ministry of Environment which empowers the Ministry to make regulations in relation to Sustainable consumption and Production.

Mauritius has been actively pursuing the path of Sustainable Development, with the Maurice Ile Durable (MID) Policy and Strategy Action Plan having been recently approved. Of the four MID Priority Programmes, three are expected to have a direct or indirect impact on product sustainability: (i) Energy Conservation and Renewables; (ii) Cleaner, Greener and Pollution Free Mauritius; and (iii) Green Economy.

### **Box 6- Environmental Regulations – Product Specific**

#### **Cleaning Chemicals and Cleaning Services**

The Dangerous Chemicals Control Act, 2004 addresses the prevention of damage to health and to the environment caused by dangerous chemicals and for better protection of the workers, members of the public and the environment against dangerous chemicals. The Act has identified certain chemicals the use of which are regulated and also provides for substitution of dangerous chemicals. The manufacturers of cleaning products in Mauritius have to comply with this regulation.

#### **Passenger Cars**

For import of passenger cars (and other vehicles) as well as for their use there are two regulations with environmental considerations. These are presented below:

##### **The Road Traffic (Control of Vehicle Emissions) Regulations, 2002**

The regulation mandates that every motor vehicle will have to be constructed and maintained in such a manner that smoke and noise emitted from it does not exceed the prescribed limits. The standards are applicable for new, second hand imported and in-use petrol and diesel driven motor vehicles.

##### **CO<sub>2</sub> Bill**

There is a new excise duty/rebate system for Mauritius, based on CO<sub>2</sub> emission for vehicles and in effect since July 2011. The Excise (Amendment) Bill of 2011, popularly known as 'CO<sub>2</sub> bill', provides for both levy and rebate based on the CO<sub>2</sub> emission from the vehicle. A CO<sub>2</sub> levy or CO<sub>2</sub> rebate has been introduced around a dynamic CO<sub>2</sub> threshold currently set at 158 grams per km, which is the average CO<sub>2</sub> emission of new motor vehicles classified as motor cars imported into Mauritius in 2010. The CO<sub>2</sub> threshold will be reviewed in subsequent years to reflect the average pattern of import of



new motor cars. The CO<sub>2</sub> levy will be payable if the CO<sub>2</sub> gram per Km of a motor car exceeds the CO<sub>2</sub> threshold of 158 CO<sub>2</sub> grams per Km. Both the levy and rebate are provided on a graduated scale.

### Box 7- Social Regulations in Mauritius

Mauritius has three legal provisions on social considerations, which may be applicable if the products sourced are manufactured within the country.

- Employment Relations Act 2008 and Employment Rights Act 2008
- Occupational Safety and Health Act 2005
- Sex discrimination Act 2002

## 7.0 Development of Sustainability Criteria

### 7.1 Procurement Planning

Procurement planning should form an integral part of the procurement process. For procurement of any product, an analysis should be carried out to identify need for the product. The need assessment could include the types of product varieties required, purpose for procuring each type and quantity of product to be procured. During the assessment explore possibilities of procuring a product variety that is more sustainable than its counterparts in its life cycle. kinds of furniture required, purpose for procuring each kind, and volumes required. Enquire whether similar product requirements across various public bodies can be consolidated such that product can be procured under the Framework Agreement (PPA 2006). The market readiness to deliver the product and technical aspects to be considered should also be surveyed by engaging with product suppliers in a transparent dialogue.

### 7.2 Process of Developing Sustainability Criteria

The sustainability approach derived by identifying the key environmental impacts and review of environmental and social regulations in Mauritius contribute to developing the criteria for SPP.

The basic approach for developing the sustainability criteria stems from the 'Common Core Criteria' developed by Green Purchasing Network of India (GPNI)<sup>8</sup>. Among the eight common core criteria developed, three are applicable to the production stage which forms the pre-qualification criteria and the remaining five are the sustainable criteria applicable through the other stages of the life cycle.

The UNEP Sustainable Procurement Guidelines for the product along with the Product Sheets, European Commission Guidelines and relevant ecolabels which are independent sources of

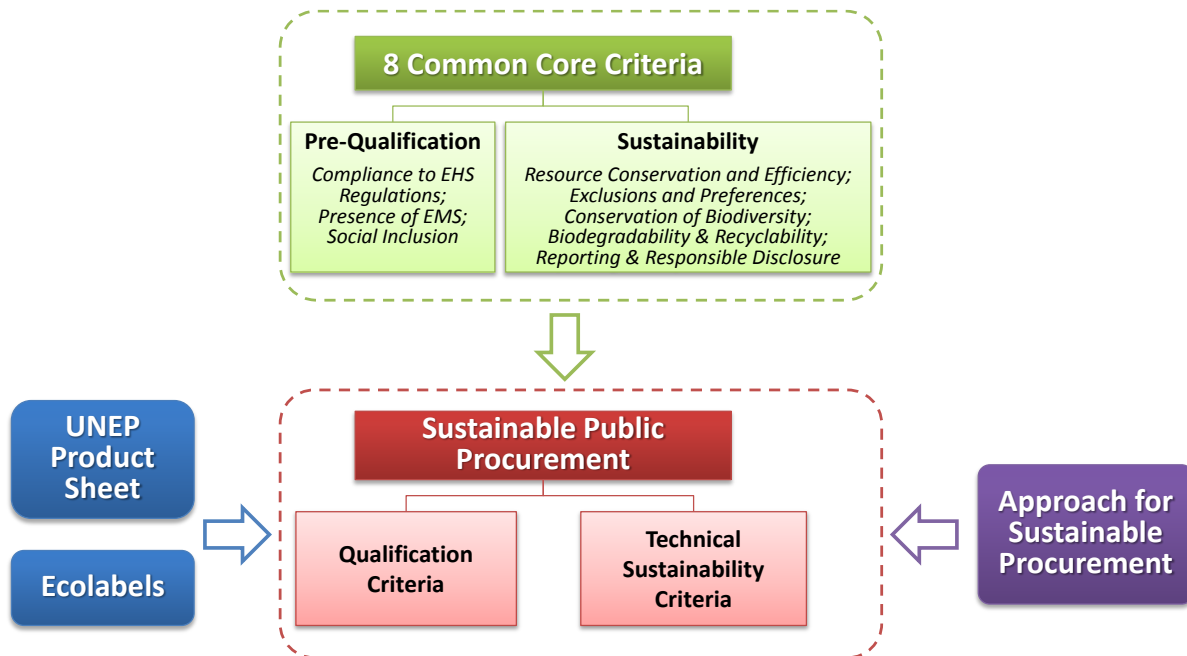
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<sup>8</sup> The Common Core Criteria of GPNI is a harmonized approach of developing sustainability criteria which ensures consistency across products and services; and completeness of the process.

environmental performance criteria (refer **Section 10**) should be reviewed for developing the sustainability criteria.

The criteria identified from the various sources should be adapted in a manner to include those that are important in the Mauritian context based on the lifecycle. For each criteria a verification method should also be identified in terms of manufacturer’s certificate, supplier declaration etc.

Refer **Figure 6** for a representation of the above process. The process is further illustrated in **Box 8** through the criteria developed for furniture in the pilot phase.



**Figure 6: Process of Developing Criteria for SPP**

**Box 8- Process of Developing Sustainability Criteria**

**A. Approach for Sustainable Procurement**

#	Key Environmental Impacts	SPP Approach
1.	Depletion of forests, soil erosion, loss of biodiversity due to illegal logging, unsustainable forest management	Procure legal timber and timber from sustainably managed forests
2.	Impact on human health due to formaldehyde emissions used for wood products pressing	Avoid certain hazardous substances in materials production
3.	Air pollution from emissions released during metal manufacturing	
4.	Destruction of forest cover, soil erosion, loss of biodiversity due to bauxite, iron ore mining	Obtain raw materials from sustainably managed mines
5.	Depletion of finite natural resources due to extraction and energy consumption during production of metals and plastics	Use materials made partly or totally from recycled materials and/or renewable materials (such as wood)

6.	High water consumption in the production phase of materials	
7.	Air pollution due to release of hazardous substances used during production, use or disposal	Avoid certain hazardous substances in materials production and surface treatment
8.	Impact on human health due to adsorption of chemicals used as additives, stabilizers and flame retardants in plastics, residues in foams	
9.	Impact on water bodies and aquatic life due to effluents from leather tanning, textile dyeing and production of other materials	Obtain materials for furniture from sustainably managed industries
10.	Indoor air pollution due to emission of VOCs and hazardous substances such as heavy metals used in coatings, glues, adhesives	Limit the organic solvent content and VOC emissions in products, adhesives and surface treatment substances
11.	Generation of furniture waste due to a lack of reparability options, low durability, ergonomics or furniture not fit for purpose	Procure durable, fit for use, ergonomic, easy to disassemble, repairable and recyclable furniture
12.	Land pollution due to generation of high quantity of packaging waste	Ensure recyclability and separability of packaging materials and furniture parts

**B. GPNI's Common Core Criteria w.r.t. Furniture**

#	GPNI's Common Core Criteria	Pre-qualification Criteria (examples)
1.	<b>Compliance to Environmental, Health and Safety Regulations</b>	Compliance with environmental legislations
2.	<b>Presence of Environmental Management System</b>	Written corporate environmental policy
3.	<b>Social Inclusions</b>	Production of the product according to international labour standards (self-declaration) and local legislations

Sustainability Criteria - Office Furniture	GPNI's Common Core Criteria					
	Resource Conservation and Efficiency	Exclusions and Preferences	Conservation of Biodiversity	Biodegradability and Recyclability	Reporting and Responsible Disclosure	
Wood and wood-based materials – Legally logged wood			✓			
<i>Wood and wood-based materials - Sustainably logged wood</i>	✓					
Metal content	✓					
Plastic parts				✓		
Foams and padding materials		✓				
Adhesives and glues		✓				
Surface coating of wood, plastic and/or metal parts		✓				

Textiles used in furniture		✓			
Warranty and Durability	✓				
Quality, reparability, fitness for use and ergonomics	✓				
Maintenance	✓				
Packaging		✓			

**C. Pre-Qualification Criteria for Furniture**

#	Sustainability Criteria - Prequalification	Verification Guidance
1.	<p><b>Compliance with environmental legislation</b>                      Bidders shall not be permitted to take part in a contract if they:                      Have been found guilty of grave professional misconduct, including non-compliance with environmental legislation, proven by any means which the contracting authorities can demonstrate; or have not fulfilled obligations relating to the payment of social security contributions in accordance with the legal provisions of the country in which s/he is established or with those of Mauritius</p>	<p>Bidders must provide a declaration that they meet this criterion.                      Upon request, they may be asked to provide documentary proof to support this declaration</p>
2.	<p><b>Production of the product according to international labour standards (self-declaration) and local legislations</b>                      The bidder shall provide proof that they and their supply chain (at least to the first level) comply with the international working standards (ILO Core Conventions) listed below. Furthermore it includes contracted labour (contract manufacturers) that may market, manufacture and/or provide goods and services that are used to manufacture and supply the final product</p> <ul style="list-style-type: none"> <li>• Freedom of Association and Protection of the Right to Organise (No. 87)</li> <li>• Right to Organise and Collective Bargaining (No. 98)</li> <li>• Forced Labour (No. 29)</li> <li>• Abolition of Forced Labour (No. 105)</li> <li>• Discrimination (Employment and Occupation) (No. 111)</li> <li>• Equal Remuneration (No. 100)</li> <li>• Minimum Age (No. 138)</li> <li>• Worst Forms of Child Labour (No. 182)</li> </ul> <p>Adherence to national social regulations in Mauritius needs to be confirmed. The following are the basic requirements:</p> <ul style="list-style-type: none"> <li>• Employment Relations Act 2008 and Employment Rights Act 2008</li> <li>• Occupational Safety and Health Act 2005</li> <li>• Sex discrimination Act 2002</li> </ul>	<p>The bidder is required to submit appropriate proof that these requirements have been met, such as a written self-commitment / declaration (such as a current industry code of conduct declaration) that the requirements are met, together with documented support of the implementation and monitoring of measures</p>
3.	<p><b>Written corporate environmental policy</b>                      The bidder and the manufacturer of the final product(s) are required to demonstrate the existence and public availability of a written corporate environmental policy, consistent with ISO 14001 (International Organisation for Standardisation), or equivalent.</p>	<p>Proof of compliance is the written corporate environmental policy, consistent with ISO 14001 (International Organisation for Standardisation), or</p>

		equivalent. Any other appropriate means of proof will also be accepted
4.	<p><b>Operational, third-party certified, environmental management system</b></p> <p>The bidder shall provide certificates from the manufacturer(s) that they and all companies throughout the whole product supply chain engaged in the design or manufacture of the product have an operational, third - party certified, environmental management system that meets one of three recognised systems: ISO 14001, European EMAS, U.S. EPA Performance Track, or equivalent</p>	<p>The bidder is required to provide certificates for all the companies in the supply chain of the third-party certified environmental management system, such as ISO 14001, European EMAS, U.S. EPA Performance Track, or equivalent.</p>

**D. Sustainability Criteria for Furniture**

#	Sustainability Criteria	Verification Guidance
<i>Sustainability criteria below are related to the <b>materials</b> used to produce the products</i>		
1.	<p><b>Wood and wood-based materials – Legally logged wood</b></p> <p>All wood and wood-based materials (including solid, laminated, veneer and wood used for the production of plywood) shall come from legally sourced timber.</p>	<p>The legal origin of wood can be demonstrated with a tracing system being in place. These voluntary systems may be 3<sup>rd</sup> party certified, often as part of ISO 9000 and/or ISO 14000 or EMAS management system.</p> <p>For products which do not carry one of these labels verification must be provided by a credible third party that the claimed percentage of timber meets the standards. Certificates of chain of custody for the wood fibres certified as FSC<sup>9</sup>, PEFC<sup>10</sup> or any other sustainable forest management standard where the percentage of certified wood is indicated, will be accepted as proof of compliance for that percentage. Products carrying the Blaue Engel (German ecolabel), the Nordic Swan or any other equivalent type 1 ecolabel will be deemed to comply.</p>
2.	<p><b>Wood and wood-based materials - Sustainably logged wood</b></p> <p>At least 70% of the virgin wood or wood-based materials (including solid, laminated, veneer and wood used for the production of plywood) shall come from forests that are certified as being managed so as to implement the principles and measures aimed at ensuring legal and sustainable forest management.</p> <p>[Corresponding to the UNCED Forest Principles (Rio de Janeiro, June 1992) and, where applicable, to the criteria or guidelines for sustainable forest</p>	<p>Certificates of chain of custody for the wood fibres certified as FSC, PEFC or any other sustainable forest management standard will be accepted as proof of compliance. Any other appropriate means of proof, such as a technical dossier of the manufacturer or a test report from a recognised body will also be accepted.</p>

<sup>9</sup> FSC (Forest Stewardship Council): <http://www.fsc.org/en/>

<sup>10</sup> PEFC (Programme for the Endorsement of Forest Certification): <http://www.pefc.org/internet/html>

	management as adopted under the respective international and regional initiatives (ITTO, Montreal Process, UNEP/FAO Dry-Zone Africa Initiative, etc.).	
3.	<b>Metal content</b> At least 20% of the aluminium and/or steel used for the production of the aluminium and/or steel shall be recycled (second fusion)	Any appropriate means of proof demonstrating that the criteria are met will be accepted, such as a technical dossier from the manufacturer, or a declaration from the manufacturer of aluminium and/or steel.
4.	<b>Plastic parts</b> All plastic parts $\geq$ 50g shall be marked for recycling according to ISO 11469 or equivalent and must not contain additions of other materials that may hinder their recycling	Bidders must provide a description of the plastic materials that are present and the quantities used, the way in which they are labelled and how they are attached to one another or to other materials. Products carrying a Type I ecolabel fulfilling the selected criteria will be deemed to comply
5.	<b>Foams and padding materials</b> The padding material used for the furniture meet the ecological criteria related to the product itself and production processes as stated in the European Ecolabel or equivalent	Any appropriate means of proof demonstrating that the criteria are met will be accepted, such as a technical dossier from the manufacturer, or a declaration from the manufacturer of foams and padding materials.
6.	<b>Adhesives and glues</b> VOC content of adhesives used in the assembly of furniture shall not exceed 10% by weight	Bidders must present a list with all adhesives used in the assembly of furniture and their Material Safety Data Sheet, or equivalent documentation, where the amount of VOCs is displayed, demonstrating compliance with the criteria. Any other appropriate means of proof demonstrating that the criteria are met will also be accepted, such as a technical dossier from the manufacturer, a test report from a recognised body showing compliance, or a declaration from the manufacturer.
7.	<b>Surface coating of wood, plastic and/or metal parts</b> The products used for the surface coating shall: Not contain hazardous substances that are classified as carcinogenic, harmful to the reproductive system, mutagenic, allergenic when inhaled or harmful to the environment according to national or international classification standards Not contain halogenated organic flame retardants, phthalates, aziridine and polyaziridines or lead, cadmium, chrome, mercury and their compounds Not contain heavy metals Not contain more than 5% by weight of VOCs	Bidders must present a list with all surface treatment substances used for each Material Safety Data Sheet, or equivalent documentation, through which compliance with the criteria can be established. Products carrying the Nordic Swan (if they comply with the criteria R17 of the ecolabel) or the Blaue Engel (German ecolabel) will be deemed to comply. Any other appropriate means of proof demonstrating that the criteria are met will also be accepted, such as a technical dossier from the manufacturer, a test report from a recognised body showing compliance, or a declaration from the manufacturer.
8.	<b>Textiles used in furniture</b> The textile materials used for the furniture meet the ecological criteria relating to the	Any appropriate means of proof demonstrating that the criteria are met will also be accepted, such as a technical

	product itself and production processes as defined by the Oeko-Tex Standard 100 or equivalent	dossier from the manufacturer, a test report from a recognised body showing compliance, or a declaration from the manufacturer
<i>Sustainability criteria below are related to the <b>functional aspects</b> of furniture products and how products are <b>supplied</b></i>		
9.	<b>Warranty and Durability</b> Minimum 3 years of warranty and availability of replacement parts / pieces	Bidders must provide appropriate documentation to indicate period the complete furniture is under warranty; further guarantee on availability of parts / pieces need be stated.
10.	<b>Quality, reparability, fitness for use and ergonomics</b> Furniture pieces must meet ISO or equivalent standards regarding serviceability (e.g. safety, abrasion resistance, tensile strength, light fastness, rub fastness, deformation by compression, ergonomics).	Bidders must provide the appropriate documentation to demonstrate compliance with these standards
11.	<b>Maintenance</b> Cleaning furniture pieces must be possible without the use of products containing organic solvents. For this reason, the product should be made of materials that can be easily separated for recycling purposes	Bidders must provide information regarding cleaning for maintenance purpose
12.	<b>Packaging</b> The packaging paper (for product and consumables) does not contain PVC or other chlorinated plastics. The packaging materials are separable into mono-material parts, and at least 80 percent of the packaging by weight consists of materials that are readily recyclable (with locally available recycling systems) or can be composted. The cardboard packaging consists of 80% recycled material.	Bidders must provide a list of the different packaging materials used for the product, their weight and a declaration by the packaging producer/s where the percentage of recycled content for cardboard in their packaging is specified.

## 8.0 Life Cycle Costing

For the price bid, life cycle costing (LCC) approach should be used to evaluate bidders instead of the conventionally used “lowest cost” (or “lowest purchase price”) parameter. The concept of LCC looks at the cost of a product incurred throughout the life cycle. A sustainable product may have a higher purchase price than a conventional product, however, it is cost-effective when one compares the overall costs incurred – purchase as well as during its use, maintenance and disposal phases. This especially holds true for products that are resource-intensive in their use phase, like ICT equipment (laptops, computers and printers) and passenger cars.

For more information on LCC refer UNEP Background reports on the product, EC Europa Buying Green handbook and ESMAP's Public Procurement of Energy Efficient Products: Lessons from Around the world (2012). Refer UNEP Product Sheets for details on product specific LCC. A number of tools have been developed for LCC by various institutions which are listed in **Box 9**.

#### **Box 9- List of Tools for Life Cycle Costing**

- The European Commission's calculator for LCC for vehicle procurement <http://www.cleanvehicle.eu/?id=427>
- The DEEP Toolkit – Supporting Public Authorities in Energy Efficient Procurement - Developed by ICLEI – Local Governments for Sustainability, this toolkit includes an LCC analysis tool (excel based spreadsheet) and covers issues such as: energy and water consumption, maintenance and replacements. For more information or to download the tool visit: <http://www.iclei-europe.org/index.php?id=4650>
- A tool for assessing both LCC and CO2 emissions in procurement, developed within the SMART-SPP project: <http://tool.smart-spp.eu/smartspp-tool/registration/login.php>
- An LCC tool developed within the BUY SMART project: <http://www.buy-smart.info>

## **8.1 Applying LCC in procurement**

In order to conduct LCC in procurement, certain issues require consideration:

- Product lifespan: A cheaper product that requires frequent replacement might cost more in the long run than an expensive but long lasting product. Therefore, when deciding the number of years over which life cycle cost comparisons are done, this point must be kept in mind.
- Discount rate: Takes into account the time value of money i.e. an amount of money available today is worth more than the same amount of money available in future as it can earn interest over time. The discount rate is usually taken to be the national interest rate<sup>11</sup>. By applying it to future costs, it helps determine the present value of those future costs – Net Present Value (NPV). In this way, a comparison of present and future costs can be done which is important in life cycle cost comparisons.
- Data availability and reliability: As lifecycle costing needs inputs on costs to be incurred in future (E.g. for maintenance, energy consumption, the product's actual lifespan), there exists an aspect of unpredictability. Hence, bidders must be asked to produce detailed information on cost estimations. For those future costs within control of the supplier (E.g. if they handle maintenance or disposal), maximum limits of the future prices can be laid out. By this, greater certainty can be factored into LCC calculations.

Illustrations of using LCC in procurement of products are given in **Box 10**.

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<sup>11</sup> Adapted from Investopedia – Definition of Discount Rate



**Box 10- Using LCC in Procurement of Products**

**PASSENGER CARS**

The method for computing LCC of a car described below shall be used by the Purchaser for evaluating bids. This method has been developed considering the phases of the life cycle during the ownership of the car with the Purchaser.

The method for evaluation of LCC of a car described below shall be applied for passenger cars with identical specifications. For cars with different specification, the method shall be applied for each different type and added to derive the total LCC of the fleet to be purchased.

<b>1. Acquisition Cost</b> (as submitted by Bidder)	_____MUR/car -----(I)				
<b>2. Life of Car</b> (as defined by Purchaser for LCC purpose)	5 years or				
<b>3. Inflation Rate (i)</b>	[insert rate as defined for Mauritius]				
<b>4. Cost of Insurance</b>					
The cost of insurance for the car for a period of 5 years shall be computed					
The cost of insurance for Year 1 (as submitted by Bidder)=_____MUR					
<b>Items</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
Cost of insurance	$C_1$	$C_2=C_1(1+i)$	$C_3=C_2(1+i)$	$C_4=C_3(1+i)$	$C_5=C_4(1+i)$
Total cost of insurance for 5 years = $\sum C_n$ -----(II)					
<b>5. Cost of Spare Parts</b>					
The cost of spare parts shall be computed for 5 years.					
Method given below for computation of life cycle cost is applicable to each spare part listed in Section IV; Schedule for Life Cycle Costing					
<b>Items</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Year 4</b>	<b>Year 5</b>
Numbers of one Spare part required in a year (as submitted by Bidder)	$N_1$	$N_2$	$N_3$	$N_4$	$N_5$
Cost of one spare part	$C_1$	$C_2=C_1(1+i)$	$C_3=C_2(1+i)$	$C_4=C_3(1+i)$	$C_5=C_4(1+i)$
Cost of each spare part per year	$N_1 C_1$	$N_2 C_2$	$N_3 C_3$	$N_4 C_4$	$N_5 C_5$
<b>Total Cost of Spare Parts</b>					
= $\sum N_n C_n$ (Spare Part 1) + $\sum N_n C_n$ (Spare Part 2) +----- + $\sum N_n C_n$ (Spare Part n) ----- (III)					
<b>6. Cost of Fuel Consumption</b>					

The cost of fuel consumption over 5 years shall be computed assuming standard driving conditions.

Assumption of 175000 km driven in 5 years (35000 km per year)

Fuel type as submitted by Bidder in Section IV: Schedule for Life Cycle Costing is \_\_\_\_\_

The mileage of the car is assumed to depreciate by 10% after the first two years and then remains constant for the next three years.

Items	Year 1	Year 2	Year 3	Year 4	Year 5
Mileage (km/litre) <i>[written down method]</i>	$M_1$	$M_2 = M_1$	$M_3 = M_2 - (M_2 \times 0.1)$	$M_4 = M_3$	$M_5 = M_3$
Fuel consumed per year	$F_1 = 35000/M_1$	$F_2 = 35000/M_2$	$F_3 = 35000/M_3$	$F_4 = 35000/M_4$	$F_5 = 35000/M_5$
Cost of 1 litre fuel	$C_1$	$C_2 = C_1(1+i)$	$C_3 = C_2(1+i)$	$C_4 = C_3(1+i)$	$C_5 = C_4(1+i)$
Cost of fuel consumed per year	$F_1 C_1$	$F_2 C_2$	$F_3 C_3$	$F_4 C_4$	$F_5 C_5$

**Total Cost of Fuel Consumed =  $\sum F_n C_n$  -----(IV)**

**7. Cost of Maintenance**

Total maintenance required for 5 years as submitted by the Bidder in Section IV: Schedule for Life Cycle Costing = \_\_\_\_\_ (no.)

Items	Year 1	Year 2	Year 3	Year 4	Year 5
Maintenance (as submitted by Bidder)	$N_1$	$N_2$	$N_3$	$N_4$	$N_5$
Cost of one Maintenance	$C_1$	$C_2 = C_1(1+i)$	$C_3 = C_2(1+i)$	$C_4 = C_3(1+i)$	$C_5 = C_4(1+i)$
Cost of maintenance per year	$N_1 C_1$	$N_2 C_2$	$N_3 C_3$	$N_4 C_4$	$N_5 C_5$

**Total Cost of Maintenance =  $\sum N_n C_n$  -----(V)**

**8. Life Cycle Cost (of a car for 5 years)**      **I + II + III + IV + V**

## 9.0 Ecolabels

The Procurement Officers could refer to ecolabels as one of the means of verification of compliance to sustainability criteria. Ecolabels may not be available for all types of products and in all countries from where products are imported. In some cases ecolabels may not be available for the product in its complete form, but would be available for its different components. For example, ecolabels are not available for passenger cars as a whole, but they exist for fuel efficiency, tyres and for products used in vehicle maintenance such as lubricants. As an illustration, ecolabels for furniture which have been used as a means of verification while developing the sustainability criteria in the product guidelines is listed in **Box 11**.

**Box 11- Indicative List of Ecolabels for Furniture**

Name and Website	Region
<b>TYPE I LABELS</b>	
Ecologo <a href="http://www.ecologo.org">http://www.ecologo.org</a>	North America
StichtingMilieukeur <a href="http://www.smk.nl/">http://www.smk.nl/</a>	Europe (Netherlands)
NF Environment <a href="http://www.marque-nf.com/">http://www.marque-nf.com/</a>	Europe (France)
Nordic Swan <a href="http://www.svanen.se">http://www.svanen.se</a>	Europe (mainly Scandinavia)
Austrian Ecolabel (Umweltzeichen) <a href="http://www.umweltzeichen.at/cms/home233/content.html">http://www.umweltzeichen.at/cms/home233/content.html</a>	Europe (Austria)
Blaue Engel <a href="http://www.blauer-engel.de">http://www.blauer-engel.de</a>	Europe (Germany)
EcoMark <a href="http://www.ecomark.jp/english/">http://www.ecomark.jp/english/</a>	Japan
Good Environmental Choice Australia (GECA) <a href="http://www.geca.org.au/">http://www.geca.org.au/</a>	Australia
Thai Green Label <a href="http://www.tei.or.th/greenlabel/">http://www.tei.or.th/greenlabel/</a>	Thailand
<b>“TYPE I LIKE” LABELS</b>	
Oeko Tex <a href="http://www.oeko-tex.com/">http://www.oeko-tex.com/</a>	Europe. For textiles only
CertiPUR label of EuroPUR <a href="http://www.europur.com/">http://www.europur.com/</a>	Europe. For Polyurethane (PU) foams
Forest Stewardship Council (FSC) <a href="https://ic.fsc.org/">https://ic.fsc.org/</a>	International. For wood fibres
Programme for the Endorsement of Forest Certification (PEFC) <a href="http://www.pefc.org/">http://www.pefc.org/</a>	International. For wood fibres
Sustainable Forestry Initiative (SFI) <a href="http://www.sfiprogram.org/">http://www.sfiprogram.org/</a>	North America. For wood fibres
Certfor (PEFC label accredited) <a href="http://www.certfor.org/">http://www.certfor.org/</a>	Chile (Latin America). For wood only

## 10.0 Sources for Guidance in Developing SPP Guidelines

A list of sources that should be referred while developing SPP guidelines for a new product is given in **Box 12**. These organizations' websites contains generic SPP related resource material as well as product specific guidelines<sup>12</sup>

### Box 12- List of Sources for SPP Guidelines

- UNEP - <http://www.unep.fr/scp/procurement/>
- EC Europa GPP - [http://ec.europa.eu/environment/gpp/index\\_en.htm](http://ec.europa.eu/environment/gpp/index_en.htm)
- Procura+ Manual 2<sup>nd</sup> edition: A Guide to Cost-effective Sustainable Public Procurement. ICLEI-Local Governments for Sustainability, Freiburg, Germany. 2007
- Blue Angel ecolabel (Germany) - <http://www.blauer-engel.de>
- Nordic Swan (Scandinavian ecolabel): <http://www.svanen.nu>

#### Additional Guidance

- ICLEI - Local Governments for Sustainability & Ecoinstitut Barcelona: European Commission Green Public Procurement (GPP) Training Toolkit – Module 3: Purchasing Recommendations. Copying and Graphic Paper. Background Product Report. (2008), Brussels, Belgium
- Swedish Environmental Management Council's (MSR) procurement criteria [www.msr.se](http://www.msr.se). Provides concrete purchasing criteria which can be used directly by public authorities or other major purchasers

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<sup>12</sup> Please refer to "Information Sources" section of the individual product guidelines for details on the names of the product specific reports (or criteria sets in case of ecolabels) used.

## **Annex 1: Table of Contents of SPP Guidelines for a Sample Product (Furniture)**

### **1.0 Introduction, Scope and Methodology**

- 1.1 Scope
- 1.2 Methodology of Developing SPP Guidelines for Mauritius
- 1.3 Structure

### **2.0 Incorporating Sustainability into the Mauritian Procurement Process**

- 2.1 Public Procurement Act (PPA) 2006
- 2.2 Mode of Integrating Sustainability in the Procurement Process
- 2.3 Framework Agreements

### **3.0 Institutional Enablers for Sustainable Public Procurement (SPP) in Mauritius**

- 3.1 “Maurice Ile Durable” (MID) Policy, Strategy and Action Plan
- 3.2 National Programme on Sustainable Consumption and Production (2008 - 2013)
- 3.3 National Action Plan on SPP for Mauritius (2011-2015)
- 3.4 Solid Waste Management
- 3.5 Facilitation of End-of-Life Disposal of Procured Items in Public Bodies

### **4.0 Key Environmental Impacts**

- 4.1 Potential environmental impacts of materials used in office furniture
- 4.2 Reducing the key environmental impacts

### **5.0 Key Social Considerations**

### **6.0 Legislations Impacting Procurement of Passenger Cars**

- 6.1 Environmental Regulations
- 6.2 Social regulations

### **7.0 Framework for developing Sustainability Criteria**

- 7.1 Background
- 7.2 GPNI’s Common Core Criteria
- 7.3 Relevance and Applicability
- 7.4 Pre-qualification Criteria
- 7.5 Sustainability Criteria

### **8.0 Passenger Cars – Key Sustainability Criteria**

- 8.1 Procurement Planning
- 8.2 Developing the criteria – Sources and rationale
- 8.3 Verification methods
- 8.4 Sustainability criteria and verification guidance
- 8.5 Implementation notes

### **9.0 Life Cycle Costing**

- 9.1 LCC and environmental considerations
- 9.2 Applying LCC in procurement
- 9.3 LCC for Passenger Cars in Mauritius

**10.0 Relevant Ecolabels**

**11.0 Information Sources**

**12.0 Additional Guidance**