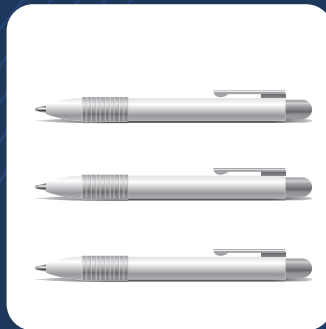
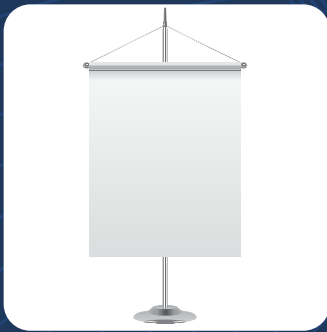




Sustainable  
United Nations

## Sustainable Procurement Guidelines

# STATIONERY BACKGROUND REPORT



**ICLEI**  
Local  
Governments  
for Sustainability

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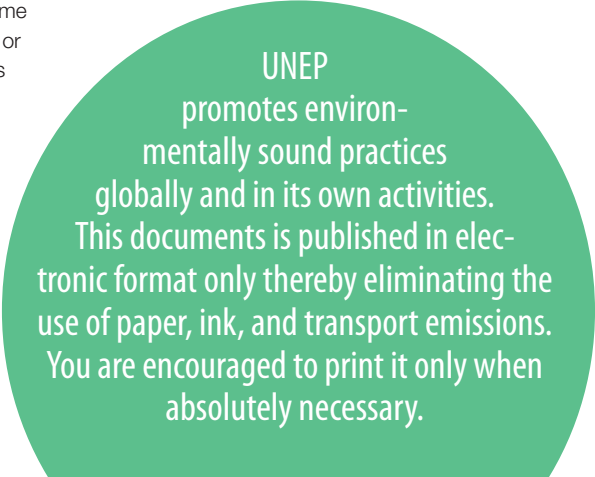
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## *Messages from the United Nations and UNEP*

"I would like to make a public commitment. We are already moving towards making our Headquarters in New York climate-neutral and environmentally sustainable. I would like to see our renovated headquarters complex eventually become a globally acclaimed model of efficient use of energy and resources. Beyond New York, the initiative should include the other UN headquarters and offices around the globe.

We need to work on our operations too, by using energy more efficiently and eliminating wasteful practices. That is why, today, I am asking the heads of all UN agencies, funds and programmes to join me in this effort. And I am asking all staff members throughout the UN family to make common cause with me."



**Ban Ki-moon**  
UN Secretary General  
New York, 5 June 2007  
World Environment Day



**Achim Steiner**  
Executive Director, UNEP  
Geneva, 8 October 2007  
117<sup>th</sup> Assembly of the Inter-Parliamentary Union

"Ban Ki-moon is determined to put global warming at the top of the global political agenda and determined to build the trust so urgently needed if we are to succeed in combating climate change. Under his leadership, the UN is also determined to demonstrate its 'sustainability credentials' by action on the ground and by good housekeeping at home.

Reviews are underway across all agencies and programmes to establish a strategy for a carbon neutral UN and to make the refurbishment of the UN headquarters in New York a model of eco-efficiency.

UNEP is committed to take part in the fight for climate change and in showing leadership. We are committed to become carbon neutral by reducing our energy consumption and carbon footprint and by offsetting emissions."

## *Acknowledgements*

The authors of the Sustainable Procurement Guidelines for Office Stationery wish to thank the following people and institutions for their valuable support and comments:

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## *Purpose of this guide*

### *What is Sustainable Procurement?*

“Sustainable Procurement practices integrate requirements, specifications and criteria that are compatible and in favour of the protection of the environment, of social progress and in support of economic development, namely by seeking resource efficiency, improving the quality of products and services and ultimately optimizing costs.”<sup>1</sup>

Sustainable Procurement practices should be introduced progressively and in full respect of the right of access to the UN market for suppliers from developing countries and countries with economies in transition.

### *How to use the Sustainable Procurement Guidelines?*

The main goal of the Guidelines is to facilitate the implementation of sustainable procurement by providing criteria that may be used by UN staff for the requisition and procurement of goods, civil works and services.

In practice, this means thinking carefully about what the true needs are, as a first step. Then, basing purchasing decisions (for products, services and works) on the lowest environmental impact and most positive social impact which make the most economic sense over the lifetime of the product. Therefore, the guidance covers the following: key environmental impacts, key social considerations, most appropriate means of verification and information on the availability of sustainable products and lifetime costs (where available).

As with local product availability, prices, costs and relevant legislation may vary considerably between regions. The way sustainable procurement is practiced should be adapted to local conditions and markets, and depends on how ambitious the purchasing organization is in terms of sustainable development.

For these reasons, the UN Sustainable Procurement Guidelines comprise of the following for each of the addressed products and services:

- a detailed **background report**, and
- a practical **product sheet**.

The main role of the **background report** is to provide staff involved in procurement with more comprehensive information on the rationale behind the sustainable procurement guidelines presented in the product sheets. The background reports cover various issues related to purchasing a product and service in an environmentally-friendly and socially-responsible way, such as: identifying the key environmental impacts and social considerations, listing the most appropriate schemes for verification, most relevant legislation regarding the environment and social considerations, and providing an indication of the availability on the market of sustainable products.

The **product sheets**, on the other hand, provide sustainability criteria designed specifically for the various phases or steps of the UN procurement cycle. These are: detailing the subject matter of tenders, technical specifications (or terms of reference, for services), sourcing suppliers evaluation criteria and contractual clauses. Guidance is also provided on how compliance with the criteria should be verified. The criteria are also presented in check-list form for use by requisitioners and a weighting matrix is provided.

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<sup>1</sup> Definition adopted by the High Level Committee on Management Procurement Network.

### *Regional differences*

As market conditions vary from region to region, the potential for sustainable procurement may also vary. Therefore, for certain product groups different product sheets may be produced for different regions. The region for which each product sheet is produced for will be clearly indicated on the document itself and also on the SUN Greening the Blue website and the UNGM SP knowledge centre where they can be downloaded.

### *Differences in ambition*

Additionally UN procurers must decide whether they wish to apply the “basic” or “advanced” criteria:

- **Basic sustainability criteria** address the most significant environmental and social impacts and require minimum effort in verification and minimal increases (if any) in price
- **Advanced sustainability criteria** are intended for use by procurers who seek to purchase the most advanced environmentally-friendly and socially-responsible products available on the market, and may require additional administrative effort or result in a price increase as compared to other products fulfilling the same function.

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## *Abbreviations and Acronyms*

<b>AOX</b>	Organic chlorine compounds
<b>APEO</b>	Alkylphenolethoxylate
<b>BREF</b>	Best Available Technique Reference Document
<b>CSA</b>	Canadian Standards Association
<b>ECF</b>	Elementary chlorine free
<b>EDTA</b>	Ethylenediaminetetraacetic acid
<b>EU</b>	European Union
<b>FLEGT</b>	Forest Law Enforcement, Governance and Trade Action Plan
<b>FSC</b>	Forest stewardship Council
<b>GPP</b>	Green public procurement
<b>IPPC</b>	Integrated Prevention and Pollution Control
<b>ISO</b>	International Standards Organisation
<b>OBA</b>	Optical brightening agent
<b>OEM</b>	Original equipment manufacturer
<b>PEFC</b>	Programme for the Endorsement of Forest Certification
<b>REACH</b>	Registration, Evaluation, Authorisation and Restriction of Chemicals
<b>SFI</b>	Sustainable Forestry Initiative
<b>TCF</b>	Totally chlorine free
<b>VPA</b>	Voluntary Partnership Agreement

## *Useful definitions*

**Wood pulp:** A dry fibrous material prepared by chemically or mechanically separating the fibres which make up wood.

**Pulping:** Adding water and applying mechanical action to separate fibres from each other.

**Post-consumer waste:** Produced by the end consumer. This is used paper generated by offices, homes, schools, e.g., old newspapers, publications, paper. Wood fibres from collected waste paper materials can be reused four or five times before the fibres become too worn out to bind together.

**Pre-consumer waste:** Is produced from the reintroduction of manufacturing scrap (such as trimmings from paper production, defective aluminium cans, etc.) back into the manufacturing process. Pre-consumer waste is commonly used in manufacturing industries, and is often not considered recycling in the traditional sense. Pre-consumer recycled paper comes from paper that has never reached the end-consumer.

**Totally chlorine free (TCF):** Paper that has been bleached without the use of chlorine or chlorine based chemicals. Virgin paper produced without chlorine or chlorine derivatives (the bleaching process uses oxygen-based compounds).

**Processed chlorine free (PCF):** Uses totally chlorine free processing and includes recycled content. Both the recycled fibre and any virgin fibre must be bleached without chlorine or chlorine compounds. The paper contains at least 30% post-consumer waste.

**Elemental chlorine free (ECF):** Paper that has been bleached using chlorine dioxide rather than elemental chlorine - a process that reduces the formation of many of the harmful chemicals. However, sometimes even some ECF processes release significant levels of chlorine compounds (AOX compounds – Adsorbable Organic Halogenated compounds).

**Recycled material:** This is post-consumer material and pre-consumer material. It does not include by-products of an industrial process that can be, and regularly are, used in either the same process, or in a different process, except that proportion that originated as post-consumer material and pre-consumer material.

## 1. Introduction

This background report, together with the practical Product Sheets (on Paper, Paper Consumables, Toner Cartridges and Ink, and Writing Implements), constitutes the Sustainable Procurement Guidelines for Office Stationery for the UN. The main objective of this background report is to give comprehensive information on the rationale behind the sustainable procurement recommendations made in the Product Sheet. This covers aspects such as: key environmental impacts; key social considerations; appropriate verification schemes; and indicative market availability of sustainable products, amongst others.

Sustainable procurement means thinking carefully about what to buy, buying only what you really need, purchasing products and services with high environmental performance and considering the social and economic impacts of purchasing decisions.

### 1.1 Scope

Office stationery includes numerous products and is usually considered to be a relatively straightforward product area for sustainable procurement that ensures high visibility within the office or public administration. Users of office stationery, that is staff, will immediately realise that their management are making an effort to improve the sustainability performance of the organisation's operations which in turn can help build awareness of the (new sustainable procurement) policy.

Office stationery encompasses writing instruments (pens, pencils, markers, for example), plain (unused) paper for writing, printing and copying purposes (up to 170g/m<sup>2</sup>) sold in sheets or reels, and also finished paper products, such as: writing pads, drawing books, folders, files, etc.

These guidelines cover a mix of the above products:

- Paper consumables: Paper (for writing, printing and copying purposes – up to 170g/m<sup>2</sup>), envelopes, post-it notes and notepads
- Toner cartridges and ink
- Writing implements: Pens and markers

## 2. Key environmental impacts

The most important environmental and social impacts relating to pulp and paper production for paper consumables are the following:

- i) Forest destruction and loss of biodiversity (e.g. illegal and sustainable logging of forests used to produce virgin paper fibres);
- ii) Water and energy consumption during production (of recycled paper as well as paper produced from virgin fibres);
- iii) Use of chemicals namely chlorine and chlorine substances;
- iv) Optical brightening agents (for whiteness, brightness and shade); and
- v) Use of other chemical substances (e.g. colorants and dyes).

The most important environmental aspects related to printing consumables and other office stationery are: waste from disposal (unless reprocessed or recycled), packaging (plastics), heavy metals (e.g. mercury, cadmium, lead, nickel) and hazardous substances used for the production of toner materials.

## 2.1 Paper and paper consumables

### *Forest destruction and loss of biodiversity*

In 2006, the total European paper and board consumption was close to 90 million tonnes. Office paper represented 4% of the volume, while all papers for printing and writing uses represented around one third of the total European paper and board consumption. The other two thirds included packaging, followed by newsprint and tissue and also other applications<sup>2</sup>.

Annually 500,000,000 m<sup>3</sup> of wood is used by the paper industry world-wide (15% of total logging) from which almost 40% is used for coated and uncoated paper. Paper consumption in Europe increased by 120% between 1983 and 2005 with an average yearly rise of 2.5% in the last 10 years<sup>3</sup>. The wood used for paper production can either come from tree plantations or forests with fully functioning ecosystems.

Industrial logging in virgin or primary forests (in Amazonia, Indonesia, Russia, Canada etc.) and the substitution of functioning ecosystems with tree plantations leads to a loss of biodiversity and makes it increasingly difficult to guarantee that wood derives from legal forestry activities.

Illegal logging takes place when timber is harvested in violation of national forestry laws. The clandestine nature of illegal logging makes its scale and value difficult to estimate in relation to the global trade in forest products, but strong evidence suggests that it is a substantial and growing problem. The World Bank's 1999 review of its global forest policy observed: "In many countries, illegal logging is similar in size to legal production. In others, it exceeds legal logging by a substantial margin."<sup>4</sup> Furthermore, global loss of forested areas amounts to approx. 13 million ha per year, almost half of which are primary forests in the tropics (FAO 2005)<sup>5</sup>. But it is not just a tropical country problem; countries of the former Soviet Union, for instance, are facing problems regulating their forests. Russia, for example, is thought to have rates of illegal logging at around 25%<sup>6</sup>.

Fast-wood plantations are neither inherently good nor inherently bad<sup>7</sup>. They can generate negative environmental impacts compared to natural, indigenous forests, such as a loss of biodiversity, disruption of local water cycles, loss of soil productivity and increased risk of pests and diseases, however such effects can be balanced if careful and intelligent assessment of the social, environmental and economic consequences is carried out and if they are well-designed and managed, and do not replace natural forests<sup>8</sup>. All the major sustainable forest management certification schemes allow the certification of plantations (provided they meet certain requirements, e.g. the FSC only allows certification of plantations in areas converted from natural forests before November 1994).

<sup>2</sup> CEPI (Confederation of European Paper Industries). Facts and figures. Paper consumption. <http://www.cepi.org/content/default.asp?pageid=101#>

<sup>3</sup> ibid

<sup>4</sup> Timber Trade Federation. <http://www.forestsforever.org.uk>

<sup>5</sup> The Global Forest Resources Assessment 2005. FAO. 2005.

<sup>6</sup> Timber Trade Federation. <http://www.forestsforever.org.uk>

<sup>7</sup> Christian Cossalter and Charlie Pye-Smith. *Fast-wood forestry. Myths and realities*. CIFOR, the Centre for international forestry research. 2003: [http://www.cifor.cgiar.org/Publications/pdf\\_files/books/forestperspective.pdf](http://www.cifor.cgiar.org/Publications/pdf_files/books/forestperspective.pdf).

<sup>8</sup> Arborvitae, the IUCN/WWF Forest Conservation Newsletter n°31. September 2006. Article: Forest plantations threatening or saving natural forests?

In order to reduce these impacts, there are two solutions:

- 1) Produce/use paper from virgin fibre stemming from legally harvested woods and from sustainably managed forests.

The certification of sustainable forest management (such as the FSC, PEFC, CSA, or SFI)<sup>9</sup> guarantees both legality and the respect of environmental and social standards in forest exploitation, although the standards and verification systems differ between the various certification schemes.

To guarantee that wood is legally harvested, the European Union has also established a licensing system in the framework of its Forest Law Enforcement, Governance and Trade (FLEGT) Action Plan designed to identify the legality of the production of imported products, the FLEGT license. In order to obtain the license, Voluntary Partnership Agreements (VPAs) have to be signed between timber-producing countries and the EU. Timber products, which have been legally produced in VPA partner countries, will be licensed with a FLEGT license for the legality of production by a third-party, and only licensed products from these partner countries will be allowed access to the EU<sup>10,11</sup>. As yet no FLEGT license exists as the voluntary partnership agreements are currently under negotiation<sup>12</sup>.

The legal origin of wood can also be demonstrated through 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.

The legality and sustainability of wood fibres is important as, in the EU, approximately 25% of pulpwood and 15% of market pulp is imported<sup>13</sup>.

- 2) Produce/use paper from recovered paper

In order to produce recycled paper, paper based on virgin fibre needs to be produced. Both types of paper are part of the same production chain. In fact, it is possible to recycle high-quality paper, such as graphic paper, several times for either the same, or lower quality uses, reducing the need for virgin fibre.

Both types of paper need to be purchased, as the amount of recycled paper cannot cover the total paper demand in Europe, and as there would not be recycled paper without having paper made from virgin fibres. The key issue is recyclability, not the recycled origin of fibres.

### *Water and energy consumption during production*

Detailed information on the Best Available Techniques in the Pulp and Paper industry and the associated emission and consumption levels during production are available in the above-mentioned BREF report for the Pulp and Paper industry. The water and energy consumption levels can vary widely depending on the grade/type of paper produced, the

<sup>9</sup> FSC (Forest Stewardship Council), PEFC (Programme for the Endorsement of Forest Certification schemes) CSA (Canadian Standards Association) and SFI (Sustainable Forestry Initiative).

<sup>10</sup> Article 4, paragraph 1 of the Council Regulation (EC) No 2173/2005 of 20 December 2005 on the establishment of a FLEGT licensing scheme for imports of timber into the European Community.

<sup>11</sup> This system is similar in effect to other systems already in place in several international agreements, including, amongst others, the Convention on International Trade in Endangered Species (CITES) and the Kimberley Process on conflict diamonds, which feature license or permit systems, and tracking mechanisms, designed to exclude particular categories of products from international markets. The regulation to implement the FLEGT licensing system was adopted by the EU Council in December 2005.

<sup>12</sup> More information at:

[http://ec.europa.eu/development/policies/9interventionareas/environment/forest/flegt\\_en.cfm](http://ec.europa.eu/development/policies/9interventionareas/environment/forest/flegt_en.cfm)

<sup>13</sup> Annual Statistics 2005. European Pulp and Paper Industry. Confederation of European Paper Industries (CEPI). 2005.

different techniques applied and depending on whether pulp and paper are produced in the same plant (integrated plant) or if the pulp for paper production is bought on the market (non-integrated plant). According to the BREF and other studies<sup>14</sup>, production processes for paper based (totally or mainly) on post-consumer recovered paper fibres (recycled paper) use much less energy and water than those for paper based (totally or mainly) on virgin fibre:

- The water consumption for the production of recycled or non-recycled graphic paper is about 10-15 m<sup>3</sup>/t in plants working with best available techniques according to the BREF. In addition to this, for paper made out of fresh pulp the water consumption for pulp production has to be included, which is about 15-55 m<sup>3</sup>/t depending on the kind of pulp produced and the bleaching technique used. Water consumption for the production of non-recycled paper therefore sums up to about: 25-70 m<sup>3</sup>/t, compared with recycled paper (including the preparation of recovered paper pulp): 10-15 m<sup>3</sup>/t.
- Energy consumption for the production of paper based (totally or mainly) on virgin fibre is 5,000-10,700 kWh/t, compared to a consumption for the production of recycled paper of 1,700-5,500 kWh/t.

Pulp and paper industries in the EU have substantially improved their technology, developing and using, in many cases, best available technologies in order to minimise their environmental impacts. For example, paper mills that produce paper based on virgin fibre produce almost half their primary energy consumption from biomass. These changes have been taking place both in wood fibre and recycled fibre mills. However, the production process of paper based (totally or mainly) on virgin fibre is still characterised by a higher water and energy consumption (in the pulp production phase), but in many cases a lower fossil CO<sub>2</sub> emission.

### *Chlorine and chlorine substances*

Chlorine or chlorine compounds as well as other chemicals (such as ozone or hydrogen peroxide) can be used in the bleaching process in order to, among other things, obtain a final product with a high whiteness level.

All papers, including paper based (totally or mainly) on virgin fibre, can be purchased with different whiteness levels. Traditionally when paper production allowed the use of elementary chlorine for bleaching, office paper used to be very white directly from the process and by the use of optical brighteners.

However, chlorine compounds used in the bleaching process can react with existing organic substances in water, creating organic chlorine compounds (AOX). These halogenated organic compounds (dioxins, chlorinated phenols) may be toxic and are poorly degradable in the aquatic environment.

In order to avoid the emission to the environment of such compounds, the bleaching process should be totally chlorine free (TCF) or elementary chlorine free (ECF) with the strict control of AOX levels after deperuration.

### *Optical brightening agents*

The choice for a certain paper type is often based on three characteristics: whiteness, brightness and shade.

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<sup>14</sup> Quantitative impacts are estimated based on different studies and related to average figures for craft and paper based (totally or mainly) on post-consumer recovered paper fibres (recycled paper) ("Ökobilanzen für graphische Papiere", UBA 2000, "Ökologischer Vergleich von Büropapieren in Abhängigkeit vom Faserrohstoff", IFEU 2006 and "Integrated Pollution Prevention and Control (IPPC) Reference Document on Best Available Techniques in the Pulp and Paper Industry", European Commission 2001.).

**Whiteness** is the measurement of light reflectance across all wavelengths of light comprising the full visible spectrum (outdoor daylight) and therefore it is the one that best correlates with your visual perception of the paper. CIE Whiteness (ISO Standard 11475) is the most commonly used whiteness index. Papers that reflect a higher percentage of blue light tend to measure the highest, while those reflecting a higher percentage of yellow light tend to yield lower values. The normal maximum whiteness level would be 100, but higher values can be obtained if papers have added optical brightening agents (OBAs). The function of an OBA is to reflect ultraviolet (UV) light from the light source as visible light in the blue spectral region giving measurements in excess of 100.

**Brightness** is a measurement of light reflectance of the specific wavelength of blue light. Simply put – brightness represents a more narrow measurement of light reflectance than whiteness. The beginning brightness range for a base paper pulp is from 0-100 calculated normally with the ISO Standard 2470: 1999. During the papermaking process, OBAs are frequently added to increase a paper's whiteness as well as brightness.

**Shade** is a measurement of the colour of paper. It is an important characteristic within the definition of a paper's whiteness and it is measured with the most universally accepted system of colour measurement, the CIE LAB model. It is commonly accepted that there are four groups of white shades: true white, cream white (yellowish), blue white (bluish) and red white (reddish).

If you want to ensure the reader's comfort it is better to select a true white or cream white paper to minimise eyestrain<sup>15</sup>. That is to say, papers that do not reflect more blue than normal in light – in other words papers with ISO brightness and CIE whiteness not exceeding the value 100 and therefore, papers with limited or no OBA content.

Lower brightness/whiteness levels might also represent a lower need for strong bleaching of pulp and paper surface treatment, reducing related environmental impacts in the paper production process. OBAs have impacts on human health and the environment, especially aquatic, as they are difficult to break down, both in water purification systems and biologically in aquatic systems. They may cause allergic reactions to people and are toxic to aquatic life as they are not biodegradable.

### *Other chemical substances*

Chemical substances that may be used in paper production can also have negative effects on health and the environment. For example:

Some of the synthetic polymers that could be used in pulp and paper production are classified as carcinogenic, mutagenic, teratogenic, or toxic and may cause adverse effects on the aquatic environment.

Colorants and dyes can contain heavy metals such as mercury, lead, cadmium or hexavalent chromium compounds as constituents. These may cause severe health problems by bioaccumulation and biomagnification<sup>16</sup>. Problems do not only occur during the handling of these substances but also when they are discharged into the environment with waste water, or in the form of incineration ashes, etc.

<sup>15</sup> "Three Key Paper Properties: Whiteness, Brightness and Shade". Xerox Corporation. 2005.

<sup>16</sup> Bioaccumulation occurs when an organism absorbs a toxic substance at a rate greater than that at which the substance is excreted or degraded biologically. Biomagnification is the increase in [concentration](#) of a substance that occurs in a [food chain](#) as a consequence of: food chain [energetics](#) and low (or non-existent) rate of excretion/degradation of the substance. Although sometimes used interchangeably with ['bioaccumulation'](#), an important distinction is drawn between the two: bioaccumulation occurs within an organism, and biomagnification occurs across trophic (food chain) levels.

EDTA (ethylenediaminetetraacetic acid) is a very strong complexing agent. Complexing agents are reactive compounds that can re-mobilise heavy metals in river sediments when they are discharged into the aquatic environment. While this is true for all complexing agents, EDTA is of particular concern because it is very poorly biodegradable and has stronger complexing properties than other substances.

APEOs (Alkylphenolethoxylates) are transformed in the environment into metabolites that are more toxic than the original surfactant, and both APEOs and metabolites are suspected to have hormone-mimicking, estrogenic effects affecting the reproductivity of male organisms, and have high bioaccumulation factors.

### *Reducing the key environmental impacts*

The table below summarises the main environmental impacts related to copying and graphic paper as described above, and indicates the focus of measures to address these impacts.

Table 1. Key environmental impacts – Copying and Graphic Paper		
Impact		Sustainable Procurement Approach
<ul style="list-style-type: none"> <li>• Forest destruction and potential loss of biodiversity</li> <li>• Emissions to air and water during pulp and paper production</li> <li>• Energy and water consumption during production</li> <li>• Chemical consumption during production</li> <li>• Waste generation during production such as rejects and sludge</li> </ul>	<p>→</p> <p>→</p>	<ul style="list-style-type: none"> <li>• Procurement of paper based on post-consumer recovered paper fibres (recycled paper) or paper from legally and sustainably harvested wood</li> <li>• Procurement of paper produced in factories with low energy consumption and emissions</li> <li>• Avoidance of certain substances in paper production and bleaching</li> </ul>

## 2.2 Writing implements

For the purposes of these Guidelines, writing implement addresses commonly used pens and markers. The environmental impacts of writing implements are notable considering the number of end users and thereby the quantities purchased globally. In the United States, it is estimated that around 1.6 million single-use pens are thrown away each year, ending up in landfills as solid waste<sup>17</sup>. The most significant impacts on the environment are associated with waste generation and the use of heavy metals and harmful substances. Substituting some materials with recycled material is one good alternative. These are described below.

### *Generation of waste*

Waste from the disposal of single-use pens and markers (usually made of plastic) can be substantially reduced if refillable pens and markers are purchased. This is because the ink is the only consumable part, while the barrels (usually made of plastic) are durable. Not only is less waste generated but the resources used in the manufacturing process are also spared.

### *Heavy metals and harmful substances*

Switching to purchasing water-based markers eliminates the sustainability impacts associated with petroleum-based solvents (SO 1,2), including the health impacts (SO 4);

<sup>17</sup> "Sustainable Purchasing Guide. Moving Towards Sustainable Procurement" (2006). Resort Municipality of Whistler, Canada.

most permanent markers are solvent-based. For most general office purposes, non-toxic, water-based markers can be substituted for permanent or waterproof ink.

Dyes in inks should not contain any heavy metals, such as antimony, arsenic, barium, cadmium, mercury, selenium, lead and/or hexavalent chromium. They should also not be based on volatile organic compound solvents. The criteria of the Nordic Swan ecolabel for Writing Instruments provide an exception for certain writing implements: overhead markers, white board markers and text markers (permanent fibre pens).

In general, it is recommended to purchase water-based markers.

### *Recycled material*

There are several elements of writing implements that can be made from recycled material, for instance, reducing the amount of virgin wood used for the production of pencils. Rainforest hardwoods and cedar are commonly used to make pencils. Pencils made from recycled materials also provide a good end-use for various kinds of waste newspaper, cardboard, and plastic materials, diverting them from landfills.

The ink tube from inside a pen can be made from recycled plastic, the ballpoint can be made from recycled metal and the barrel can be made from a variety of materials, such as unbleached recycled paper, recycled plastic or rubber.

### **2.3 Toner and ink cartridges**

Toner Cartridges are products that are generally used in various types of office appliances such as laser printers, photocopiers and fax machines. Toner cartridges for laser printers and multifunctional devices are replaced once the monochrome or colour toner powder therein is used up. The volume of use of the devices suggests a considerable waste amount of several million empty modules per year, unless they are reprocessed and recycled. It is estimated that in the United States alone over 350 million toner cartridges are disposed of on an annual basis<sup>18</sup>.

During usage and replacement processes, ink powder may disperse and irritate the human respiratory system and causes disease due to the hazardous constituents of the chemicals and heavy metals used.

Production of typical toner cartridges from original equipment manufacturers (OEMs) consume a significant amount of energy (production burns approximately 3 quarts of oil per cartridge) and are composed of various natural resources: approximately 40% plastic, 40% metal and 20% rubber, foam and paper.

Purchasing remanufactured toner cartridges<sup>19</sup> and recycling empty cartridges are the most effective ways to reduce the environmental impact of these products. Remanufactured toner cartridges are used toner cartridges refilled with toner whose expendable parts have been replaced as required.

Empty toner cartridges should also be managed appropriately at their end of life. That is to say, improperly discarding empty toner cartridges contributes to waste and can also contaminate the natural environment due to their hazardous contaminants. Cartridges can typically be remanufactured three to five times before disposal. When remanufacturing is no longer feasible, recycling should be carried out as 95% of the component weight is recyclable.

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<sup>18</sup> "Responsible Purchasing Guide –Toner Cartridges" (2008). Responsible Purchasing Network, U.S.

<sup>19</sup> There are over 10,000 remanufacturers worldwide. Source: European Toner and Inkjet Remanufacturers (ETIRA).

In Europe, both the Nordic Swan and Blue Angel have criteria for remanufactured toner cartridges themselves which cover a number of environmental impacts. These cover four areas (not all issues are covered by both labels):

Ecolabels covering toner cartridges tend to focus on the following environmental impacts:

Chemicals contained in the toner powder, which can be harmful to both human health and the environment, for example the use of heavy metals or aromatic amine residues.

Chlorinated plastics such as PVC used in the cartridge parts or packaging, together with the use of brominated flame retardants in the casing

Use of recycled materials, reuse and take-back systems

Release of VOCs (volatile organic compounds) during use

The Nordic Swan background report on Toners<sup>20</sup> notes that the greatest environmental problem with toner cartridges is resource consumption. As noted above, the energy which goes into the production of toner cartridges is significant. As such, the encouragement of reuse and recycling of toner cartridges is of most importance in reducing environmental impacts.

Currently two different approaches to reuse are common. Certain companies remanufacture cartridges for resale. Many manufacturers of cartridges also offer take-back services although these are then typically recycled rather than remanufactured. Such take-back services are likely to increase.

Comparing the environmental impacts of remanufacture rather than the purchase of original cartridges (with manufacturer take-back schemes) is not straightforward. Remanufactured cartridges, for example, may not offer as good quality as originals which may lead to early disposal. Depending on local waste policy remanufactured cartridges will also typically end up in landfill sites, rather than being returned to manufacturers for recycling<sup>21</sup>.

### 3. Key social considerations

The social dimension of sustainable procurement operations aims at ensuring that competition among bidders does not exert a downward pressure on the working conditions of the workers employed or, even worse, leads to practices such as the use of child or forced labour, discriminatory practices or denial of freedom of association and the right to collective bargaining. For the furniture industry the core ILO conventions should be binding over the whole supply chain – that is, production, manufacture and disposal of furniture items.

International labor standards adopted by the International Labour Organization (ILO) have an essential role to play in this respect as they provide clear rules on the “do’s” and “don’ts” for bidders and buyers. As will be explained below, a number of other international instruments also provide valuable guidelines on this matter.

#### 3.1 International labour standards

The International Labour Conference, which comprises tripartite delegations (from governments, employers and workers) of all ILO Member States, meets annually and adopts two types of international labour standards: Conventions, which are binding for Member States that ratify them, and Recommendations that often complete the Conventions and

<sup>20</sup> Available on request from [www.svanen.nu](http://www.svanen.nu)

<sup>21</sup> UK Market Transformation Programme: BNICT23: Waste considerations relating to printer cartridges: [http://www.mtprog.com/ApprovedBriefingNotes/PDF/MTP\\_BNICT23\\_2007September20.pdf](http://www.mtprog.com/ApprovedBriefingNotes/PDF/MTP_BNICT23_2007September20.pdf)

provide additional guidance. They are globally designated as international labour standards, which are the legal component of the ILO's strategy for governing globalization, promoting sustainable development, eradicating poverty, and ensuring that women and men worldwide enjoy decent work. Today, international labour standards have grown into a comprehensive system of instruments concerning work and social policy and cover a broad range of subjects, from working conditions to employment policy, and from occupational safety and health to social security to take only a few examples. They are backed by a supervisory system designed to address all sorts of problems in their application at the national level.

Mention will be made here only of a Convention and a Recommendation that deal explicitly with the social dimension of public procurement, and of the eight so-called core ILO Conventions, covering the four categories of fundamental principles and rights at work to which extensive reference is made in other instruments such as the Global Compact or codes of conduct.<sup>22</sup>

### *Labour clauses in public contracts*

The Labour Clauses (Public Contracts) Convention (No. 94) and Recommendation (No. 84), 1949 respond specifically to the concerns around the potentially negative social impact of public procurement operations.<sup>23</sup> Convention No. 94 is about good governance, it addresses socially responsible public procurement by requiring bidders/contractors to align themselves with the locally established prevailing pay and other working conditions as determined by law or collective bargaining. Its aim is to remove wages and working conditions from the price competition necessarily involved in public tendering.

Convention No. 94 requires bidders to be informed in advance, by means of standard labour clauses included in tender documents, that, if selected, they would have to observe in the performance of the contract wages and other labour conditions not less favorable than the highest minimum standards established locally by law, arbitration or collective bargaining. The same rules apply to their subcontractors as well as to assignees of the public procurement contract. Bidders should prepare their offers accordingly.

The Convention proposes a common level playing field – in terms of labour standards – for all economic actors, and thus promotes fair competition and socially responsible procurement. Most importantly, the Convention enables contracting authorities to evaluate bids based on objective criteria, such as the efficiency of production methods, the quality of materials, or long-term benefits including technology transfer, which ultimately leads to cost-effective public procurement operations and contributes to sound economic development.

Convention No. 94 provides for two specific types of measures in cases where the labour clauses are not fully respected (without prejudice to other available remedies such as judicial proceedings): first, contracting authorities must take measures, such as the withholding of payment due under the contract, so that the workers concerned can receive the wages to

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<sup>22</sup> Additional information on international labour standards may be found at: <http://www.ilo.org/global/standards/lang--en/index.htm>. The full text of all ILO Conventions and Recommendations, as well as their status of ratification, can be found at: <http://www.ilo.org/ilolex/english/index.htm>.

<sup>23</sup> For detailed information on the content of Convention No. 94 and Recommendation No. 84, as well as on national legislation and practice and the current trends in this area, see the General Survey on Labour clauses in public contracts prepared by the ILO Committee of Experts on Conventions and Recommendations, ILC, 97<sup>th</sup> session, Geneva, 2008, available at [www.ilo.org/ilc/ILCSessions/97thSession/reports/lang--en/docName--WCMS\\_091400/index.htm](http://www.ilo.org/ilc/ILCSessions/97thSession/reports/lang--en/docName--WCMS_091400/index.htm). In addition, the International Labour Office has published a practical guide on Convention No. 94, available at:

[www.ilo.org/wcmsp5/groups/public/@ed\\_norm/@normes/documents/publication/wcms\\_099699.pdf](http://www.ilo.org/wcmsp5/groups/public/@ed_norm/@normes/documents/publication/wcms_099699.pdf).

which they are entitled; second, contracting authorities must provide for adequate sanctions, such as the withholding of contracts.

### *Conventions on fundamental rights at work*

The ILO Conference has also adopted eight core Conventions, almost universally ratified, on freedom of association, forced labour, equality in employment, and the elimination of child labour. A brief summary is presented below.<sup>24</sup> One of the major challenges is to monitor the implementation of these Conventions at each level of the global supply chain, including in the context of public procurement operations.

#### *Freedom of association and collective bargaining*

The *Freedom of Association and Protection of the Right to Organize Convention, 1948 (No. 87)* provides that workers and employers must have the right to establish and join organizations of their own choosing without previous authorization. Their respective organizations must be free to organize themselves and their activities without undue interference from the public authorities. They must also have the right to establish and join federations and confederations, which themselves must be free to affiliate with international organizations of workers and employers.

The *Right to Organize and Collective Bargaining Convention, 1949 (No. 98)* provides that workers must enjoy adequate protection against acts of anti-union discrimination, including requirements that a worker not join a union or relinquish trade union membership for employment, or dismissal of a worker because of union membership or participation in union activities. Workers' and employers' organizations must also enjoy adequate protection against any acts of interference by each other. Finally, measures appropriate to national conditions must be taken, where necessary, to encourage and promote collective bargaining.<sup>25</sup>

#### *Forced labour*

The *Forced Labour Convention, 1930 (No. 29)* prohibits the use of forced or compulsory labour in all its forms, defined as “all work or service which is exacted from any person under the menace of any penalty and for which the said person has not offered himself voluntarily.”

The *Abolition of Forced Labour Convention, 1957 (No. 105)* prohibits forced or compulsory labour as a means of political coercion or education or as a punishment for holding or expressing political views or views ideologically opposed to the established political, social or economic system; as a method of mobilizing and using labour for purposes of economic development; as a means of labour discipline; as a punishment for having participated in strikes; and as a means of racial, social, national or religious discrimination.<sup>26</sup>

<sup>24</sup> For a more detailed presentation, see ILO, *Fundamental rights at work and international labour standards*, Geneva, 2003.

<sup>25</sup> To date, Convention Nos. 87 and 98 have been ratified by 150 and 160 States respectively. For more information, see the General Survey on freedom of association and collective bargaining, ILC, 81<sup>st</sup> session, 1994 : [http://www.ilo.org/public/libdoc/ilo/P/09661/09661\(1994-81-4B\).pdf](http://www.ilo.org/public/libdoc/ilo/P/09661/09661(1994-81-4B).pdf). See also the Digest of decisions and principles of the Committee on Freedom of Association, 5th (revised) edition, 2006: [http://www.ilo.org/wcmsp5/groups/public/@ed\\_norm/@normes/documents/publication/wcms\\_090632.pdf](http://www.ilo.org/wcmsp5/groups/public/@ed_norm/@normes/documents/publication/wcms_090632.pdf).

<sup>26</sup> To date, Convention Nos. 29 and 105 are ratified by 174 and 169 States respectively. For more information on the application of these Conventions, see the General Survey on forced labour, ILC, 96<sup>th</sup> session, 2007: [http://www.ilo.org/wcmsp5/groups/public/@ed\\_norm/@relconf/documents/meetingdocument/wcms\\_089199.pdf](http://www.ilo.org/wcmsp5/groups/public/@ed_norm/@relconf/documents/meetingdocument/wcms_089199.pdf). See also ILO, *Combating forced labour : a handbook for employers and business*, 2008, available at: [http://www.ilo.org/sapfi/Informationresources/ILOPublications/lang--en/docName--WCMS\\_101171/index.htm](http://www.ilo.org/sapfi/Informationresources/ILOPublications/lang--en/docName--WCMS_101171/index.htm).

### Equality in employment

The *Equal Remuneration Convention*, 1951 (No. 100) requires Member States that ratify it to promote the application to all workers of the principle of equal remuneration for men and women workers for work of equal value, and to ensure its application where the State is involved in wage fixing. The Equal Remuneration Recommendation, 1951 (No. 90), which complements Convention No. 100, makes express reference to the desirability of ensuring application of the principle of equal remuneration for men and women workers for work of equal value for work executed under the terms of public contracts.

The *Discrimination (Employment and Occupation) Convention*, 1958 (No. 111) requires ratifying States to declare and pursue a national policy designed to promote, by methods appropriate to national conditions and practice, equality of opportunity and treatment in respect of employment and occupation, with a view to eliminating any discrimination in these fields. Discrimination is defined as any distinction, exclusion or preference made on the basis of race, colour, sex, religion, political opinion, national extraction or social origin, which has the effect of nullifying or impairing equality of opportunity or treatment in employment or occupation. The Discrimination (Employment and Occupation) Recommendation, 1958 (No. 111), which complements Convention No. 111, provides that eligibility for contracts involving the expenditure of public funds should be made dependent on observance of the principles of non-discrimination.<sup>27</sup>

### Child labour

The *Minimum Age Convention*, 1973 (No. 138) provides that the general minimum age for admission to work or employment must not be less than the age of completion of compulsory schooling and, in any case, must not be less than 15 years. Where the economy and educational facilities are insufficiently developed, the minimum age can be initially set at 14 years. The minimum age for hazardous work is set at 18 (16 under certain strict conditions). For light work, the minimum age is 13 years (12 years if the general minimum age is set at 14 years).

The *Worst Forms of Child Labour Convention*, 1999 (No. 182) requires ratifying States to take immediate and effective measures to secure the prohibition and elimination of the worst forms of child labour as a matter of urgency. "Child" is defined as a person under 18 years of age. The worst forms of child labour include all forms of slavery or practices similar to slavery (such as the sale and trafficking of children, debt bondage and serfdom and forced or compulsory labour, including forced or compulsory recruitment of children for use in armed conflict); child prostitution and pornography; using children for illicit activities, in particular for the production and trafficking of drugs; and work which is likely to harm the health, safety or morals of children.<sup>28</sup>

### **Other relevant ILO instruments**

The *ILO Declaration on Fundamental Principles and Rights at Work*<sup>29</sup>, adopted in 1998, proclaims that all Member States, even if they have not ratified the eight core Conventions mentioned above, have an obligation arising from the very fact of membership in the Organization to respect, to promote and to realize, in good faith, the principles concerning the four corresponding categories of fundamental rights, namely:

- freedom of association and the effective recognition of the right to collective bargaining;

<sup>27</sup> To date, Conventions Nos. 100 and 111 have been ratified by 168 and 169 States respectively.

<sup>28</sup> To date, Conventions Nos. 138 and 182 have been ratified by 157 and 173 States respectively.

<sup>29</sup> For additional information on the 1998 Declaration, including its full text, see [www.ilo.org/declaration/lang-en/index.htm](http://www.ilo.org/declaration/lang-en/index.htm).

- the elimination of all forms of forced or compulsory labour;
- the effective abolition of child labour; and
- the elimination of discrimination in respect of employment and occupation.

The Declaration makes it clear that these rights are universal and must be respected in all States, regardless of their level of economic development. It stresses however that labour standards should not be used for protectionist trade purposes.

The *ILO Tripartite Declaration of principles concerning multinational enterprises and social policy*<sup>30</sup>, adopted in 1977 and last amended in 2006, recognizes that multinational enterprises play an important part in the economies of most countries and in international economic relations. Its aim is to encourage the positive contribution which multinational enterprises can make to economic and social progress and to minimize and resolve the difficulties to which their various operations may give rise. The Declaration sets out principles in the fields of employment, training, conditions of work and life and industrial relations which governments of host and home countries, employers' and workers' organizations and multinational enterprises are recommended to observe on a voluntary basis. Its provisions do not affect obligations arising out of ratification of ILO Conventions. It provides inter alia that all parties concerned should contribute to the realization of the ILO Declaration on Fundamental Principles and Rights and Work of 1998.

### 3.2 Other international instruments

#### *UN Global Compact*

The UN Global Compact<sup>31</sup> is an initiative launched in 1999 by the Secretary-General of the United Nations during the World Economic Forum meeting at Davos. It is both a policy platform and a practical framework offered to businesses for the development, implementation, and disclosure of sustainability policies and practices around 10 principles in the areas of human rights, labour, environment and anti-corruption. It is not a regulatory instrument but rather a voluntary initiative to which companies around the world are invited to participate through a formal commitment to support the Global Compact and its principles. The four principles related to labour issues are derived from the ILO Declaration on Fundamental Principles and Rights and Work of 1998.

The Global Compact asks companies to embrace, support and enact, within their sphere of influence, a set of core values in the areas of human rights, labour standards, environment, and anti-corruption. Businesses must respect (even if it is not a regulatory instrument) the following 10 principles:

- Support and respect the protection of internationally proclaimed human rights;
- Ensure that they are not accomplices in human rights abuses;
- Protect the freedom of association and the effective recognition of the right to collective bargaining;
- Elimination of all forms of forced and compulsory labour;
- Abolition of child labour;
- Discrimination-free employment and occupation;
- Support a precautionary approach to environmental challenges;

<sup>30</sup> The text of the 1977 Declaration is available at: [http://www.ilo.org/empent/Whatwedo/Publications/lang--en/docName--WCMS\\_094386/index.htm](http://www.ilo.org/empent/Whatwedo/Publications/lang--en/docName--WCMS_094386/index.htm).

In addition, the ILO has established a Helpdesk for Business that provides free and confidential assistance service and is available for company managers and workers, as well as government agencies, employers' and workers' organizations and other interested organizations. The Helpdesk can be contacted at : <http://www.ilo.org/empent/Areasofwork/business-helpdesk/lang--en/index.htm>.

<sup>31</sup> <http://www.unglobalcompact.org/>

- Undertake initiatives to promote environmental responsibility;
- Encourage the development and diffusion of environmentally friendly technologies;
- Fight against corruption in all its forms, including extortion and bribery.

Global Compact membership is still limited among UN suppliers in developing countries, with the large majority of orders from the UN placed with Global Compact members located in developed countries and especially in Europe. UN procurement from Global Compact members as a percentage of orders of USD 30,000 or more increased from 12.32 % in 2006 to 14.15 % in 2008.<sup>32</sup>

### *UN Supplier Code of Conduct*

The UN Code of Conduct<sup>33</sup> provides the minimum standards expected of suppliers to the UN. It is the expectation of the UN that suppliers adhere to all laws, rules and regulations, and strive to exceed both international and industry best practices. The Code of Conduct has been developed with recognition of the importance of the ILO Core Labor conventions and the ten principles of the UN Global Compact, and is viewed as an important means of integrating the Compact's principles into the operations of the UN.

The UN recognizes that reaching the standards established in this Code of Conduct is a dynamic rather than static process and encourages suppliers to continually improve their workplace conditions.

While a number of UN organizations have adopted the UN Supplier Code of Conduct (SCC), others, like ILO, are still to adopt a Code of Conduct. ILO intends to publish such a Code that will contain some provisions which differ from those of the UN SCC, particularly with respect to labour issues.

The United Nations Office at Nairobi (UNON) has developed a "Guaranteed Fair Employment Package" (or 'Fair Pack' policy) aimed at improving the working conditions of contractor's employees working at the UNON Gigiri Complex in Nairobi. Compliance with the "Fair Pack Policy" can form part of the conditions of contract. The policy states that contractors must provide a minimum wage, health insurance, maternity leave and assistance with transport amongst other work conditions. The policy is relevant for contracting services and can be used to ensure that contractor staff are fairly treated.

### *The OECD Guidelines for multinational enterprises*

The OECD Guidelines for multinational enterprises<sup>34</sup> pursue the same goal at the ILO Tripartite Declaration of 1977. They contain recommendations addressed to multinational enterprises operating in or from adhering countries (the 34 OECD countries plus 8 non-OECD countries: Argentina, Brazil, Egypt, Latvia, Lithuania, Morocco, Peru and Romania). These recommendations are directly addressed to multinational enterprises and not to workers' and employers' organizations, since the OECD is not a tripartite organization like the ILO. The recommendations on employment and industrial relations make reference in concise terms to freedom of association, the abolition of child labour and forced or compulsory labour, as well as non-discrimination with respect to employment or occupation. The commentaries that accompany these guidelines recognize that the ILO is the competent body to set and deal with international labour standards, and to promote fundamental rights at work as recognized in its 1998 Declaration on Fundamental Principles and Rights at Work. They stress that the provisions of the guidelines on employment and industrial relations echo relevant provisions of the 1998 Declaration, as well as the 1977 Tripartite Declaration.

<sup>32</sup> 2008 Annual Statistical Report on United Nations Procurement, UNOPS

<sup>33</sup> [http://www.un.org/depts/ptd/pdf/conduct\\_english.pdf](http://www.un.org/depts/ptd/pdf/conduct_english.pdf)

<sup>34</sup> <http://www.oecd.org/dataoecd/56/36/1922428.pdf>

### *Other Codes of Conduct*

In addition to the above-mentioned instruments that were adopted under the auspices of intergovernmental organizations, a number of codes of conduct were developed, either at the sectoral level or at a broader scale. Some of them are relevant for the social dimension of public procurement.

The NGO Social Accountability International (SAI)<sup>35</sup> developed the *SA8000 standard* that makes express reference to a number of ILO Conventions, including the eight core Conventions. Nonetheless, the ILO is not linked in any manner to the development and supervision of the implementation of the SA8000 standard. A voluntary certification procedure for companies has also been put in place.

In September 2010, the International Organization for Standardization (ISO) adopted the *International Standard ISO 26000:2010, Guidance on social responsibility*. *Contrary to other standards developed by the ISO, this standard cannot be used for certification purposes*. It is more comprehensive than the SA 8000 standard and provides guidance for organizations that voluntarily want to strengthen their social responsibility regarding in particular human rights (including fundamental rights at work) and working conditions. A Memorandum of Understanding was concluded between the ISO and the ILO to ensure consistency of the new standard with ILO standards.

## **4. Legislation impacting the procurement of office stationery**

Although UN procurement organisations are not always directly affected by the legislation it is important to be aware of it, as legislation may already sufficiently address some important environmental aspects, which need not therefore be addressed by procurers. For example, certain hazardous substances may be banned, or suppliers may be required to provide a take-back and disposal service.

Legislation may also, for example, require products to be labelled or indicate if they contain a certain amount of a hazardous substance. This may provide a useful information source for procurers to assess the environmental characteristics of products.

### **4.1 Forestry management**

#### *International Forest Principles*

The Statement of Forest Principles is the informal name given to the "Non-Legally Binding Authoritative Statement of Principles for a Global Consensus on the Management, Conservation and Sustainable Development of All Types of Forests," a document produced at the 1992 UNCED (Earth Summit). It is a non-legally binding document that makes several recommendations for forestry.

In 1995, both an Intergovernmental Panel on Forests (IPF) and an Intergovernmental Forum on Forests (IFF) were established under the UN Commission on Sustainable Development (UNCSD). In 2000, ECOSOC established the United Nations Forum on Forests (UNFF - <http://www.un.org/esa/forests/index.html>), to promote "... the management, conservation and sustainable development of all types of forests and to strengthen long-term political commitment to this end..." based on the Rio Declaration, the Forest Principles, Chapter 11 of Agenda 21 (<http://www.un.org/esa/sustdev/documents/agenda21/english/agenda21chapter11.htm>) and the outcome of the IPF/IFF Processes and other key forest policy milestones.

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<sup>35</sup> <http://www.sa-intl.org/>

The full text of the Forest Principles can be downloaded by visiting: <http://www.un.org/documents/ga/conf151/aconf15126-3annex3.htm>

### *Non-Legally Binding Instrument on All Types of Forests (NLBI)*

Following intense negotiations, the Seventh Session of the UNFF adopted the landmark Non-Legally Binding Instrument on All Types of Forests on 28 April 2007. The instrument is considered a milestone, as it is the first time Member States of the UN have agreed to an international instrument for sustainable forest management. The instrument is expected to have a major impact on international cooperation and national action to reduce deforestation, prevent forest degradation, promote sustainable livelihoods and reduce poverty for all forest-dependent peoples. The NLBI was adopted by the UN General Assembly on 17 December 2007.

The full text of the NLBI can be downloaded by visiting: <http://www.un.org/esa/forests/about.html>

### *Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES)*

CITES is an international agreement between governments. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival.

Because the trade in wild animals and plants crosses borders between countries, the effort to regulate it requires international cooperation to safeguard certain species from over-exploitation.

Over 30,000 species of plants and animals are listed in the appendices to the Convention on International Trade in Endangered Species of Flora and Fauna (CITES). The wide variety of species poses a formidable challenge to the application of the Convention since it requires identification of the specimens subject to international trade.

For more information visit: <http://www.cites.org>

### *European Union Forest Law Enforcement Governance and Trade (FLEGT)*

Again, for **wood and wood-based products**, reference should be made to the FLEGT (Forest Law Enforcement Governance and Trade) action plan adopted by the EU in 2003. The Action Plan outlines a series of measures to address illegal logging both in the countries concerned and within the EU as a timber importer. The Plan has defined a timber licensing system to warrant the legality of imported wood products. In order to obtain the FLEGT licence, Voluntary Partnership Agreements (VPA) have to be signed between timber-producing countries and the EU. Timber products, which have been legally produced in VPA partner countries, will be licensed for the legality of production by a third party.

A series of VPAs are currently under negotiation between the EU and timber-producing and -exporting countries. The first of these is with Ghana and was agreed in September 2008. It is hoped that Cameroon and Malaysia will also conclude negotiations soon, possibly before the end of 2008<sup>36</sup>.

In addition, wood treatment shall comply with the relevant provisions in Directive 79/117/EEC (and amendments) that prohibits the placing on the market and the use of plant protection products containing certain active substances which, even if applied in an approved manner,

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<sup>36</sup> The negotiations with Indonesia appear to be making much slower progress, while the negotiations with Republic of Congo are just starting. Informal discussions are proceeding in many other countries; Liberia and Vietnam seem likely to be the next two countries to start negotiations on VPAs. Source: <http://www.illegal-logging.info>

could give rise to harmful effects on human health or the environment.

For more information visit: <http://ec.europa.eu/environment/forests/flegt.htm>

### *United States*

The U.S. does not have a national procurement policy for wood but a number of progressive States have committed to purchasing only verified or, more often, certified wood and products. Certification is also recognised in national 'green' building standards.

The U.S. leads the world in legislation to make the import and sale of illegally produced timber illegal in its own jurisdiction, through the Lacey Act, which has recently been amended to include a wide range of commercial timber species. It has also increased its commitment to tackling the trade in illegal wood through bilateral agreements on the environment and trade with a number of Asian and Latin American countries.

For more information visit:

[http://www.fs.fed.us/global/topic/illegal\\_logging/welcome.htm](http://www.fs.fed.us/global/topic/illegal_logging/welcome.htm)<sup>37</sup>

### *Canada*

Provincial governments in Canada legislate forest practices on provincially owned land and grant licences for forest management.

The Canadian Council of Forest Ministers (CCFM) is focused on making more effective and efficient linkages between federal and sub-national entities. They are charged with setting up and revising the Canadian National Forest Strategy, which has been in place since the 1980s, however is reviewed regularly (every few years). The current strategy is in place until 2008. The preceding strategy – 'Canada's Next Forest Strategy: A Vision for Canada's Forests – 2008 and Beyond' is currently in the finalisation phase.

For more information visit: [http://nfsc.forest.ca/index\\_e.htm](http://nfsc.forest.ca/index_e.htm)

### *African FLEG (AFLEG)*

The Ministerial Conference on AFLEG was held in Yaoundé, Cameroon in October 2003. The meeting drew together ministers and stakeholders from Africa, Europe and North America to consider how partnerships between producers and consumers, donors, civil society and the private sector could potentially address illegal forest exploitation and associated trade in Africa.

The Conference was the second regional FLEG, following East Asia, and resulted in the endorsement of a Ministerial Declaration and Action Plan for AFLEG, as well as a broad range of informal implementation initiatives.

### *East Africa FLEG (EAFLEGT)*<sup>38</sup>

The first EAFLEGT event was held in Arusha, Tanzania in September 2006. The event identified trade in illegal timber where countries serves as recipient or transit points, illegal harvesting and trade in forest products at both national and trans-boundary levels, weak national institutions and weak capacity as some of the challenges facing sustainable forest management in the region.

<sup>37</sup> The relevant part of the United States Lacey Act regarding illegal timber is available from the Illegal Logging website at this link: <http://www.illegal-logging.info/uploads/FederalRegisterLacey.pdf>

<sup>38</sup> EAFLEGT sourced from an article on the 'Illegal Logging' website (<http://www.illegal-logging.info/index.php>) which was sourced from "Africa Science News Service": [http://africasciencenews.org/asns/index.php?option=com\\_content&task=view&id=786&Itemid=1](http://africasciencenews.org/asns/index.php?option=com_content&task=view&id=786&Itemid=1)

In Kenya, the national government put a draft forest policy in place in 2006 and a new Forests Act 2005 came into effect in February 2007.

Apparently, however, there is little implementation of forestry protection laws by East African countries.

### *Japan*

The issue of legally logged timber in Japan has been addressed in national policies by the Japanese national government through the national policy on green public procurement. The Japanese green purchasing law has been in place since 2000. The revision of the law took place in February 2006 and also included the inclusion of legal timber. The policy is compulsory for national government ministries and agencies, courts and independent administrative institutions.

The Japanese Forest Agency published the “Guideline for the verification on the legality and sustainability of wood and wood products” on a national and international basis in February 2006, for use in confirming the legality of wood. The Agency has subsequently worked to develop a supply system based on the Guideline since April 2006.

Japan’s Green Purchasing Policy – Tackling Illegal Logging (March 2007) is available from: [http://www.env.go.jp/en/earth/forest/pamph\\_jgpp.pdf](http://www.env.go.jp/en/earth/forest/pamph_jgpp.pdf)

### *Chile*

The Corporación Nacional Forestal (CONAF), the Chilean national government’s forestry agency, is responsible for overseeing issues regarding illegal timber logging in Chile.

The Native Forest Recovery and Forestry Development Act (Ley del Bosque Nativo) was approved by the Chilean Parliament in 2008 after it was initially proposed to parliament in 1992.

For more information visit: <http://www.conaf.cl>

### *Panama*

Panama is benefiting from a number of initiatives to combat deforestation. The US government signed a second agreement with Panama in 2004 to reduce Panamas debt and generate \$11 million for tropical forest conservation for the following 12 years. The Smithsonian Tropical Research Institute is working with an indigenous community to conserve forests and reforest degraded lands with native tree species through a carbon-offsetting scheme.

## **4.2 Chemicals and harmful substances**

### *Hazardous chemical labelling systems*

Many countries have a hazardous chemical labelling system which provides information to end users on the health and environmental impacts of the products they are using.

Several countries and regions have developed these systems independently meaning there are many different labelling requirements around the world. To align the requirements of these systems the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) was developed.

### *Globally Harmonised System of Classification and Labelling of Chemicals (GHS)*

The GHS is a non-legally binding international agreement established by the United Nations. The agreement provides international harmonised criteria for classifying substances and

mixtures according to their health, environmental and physical hazards. It also provides harmonised hazard communication symbols and statements, including requirements for labelling and safety data sheets.

The labelling requirements of this scheme are:

- Symbol – A pictogram must be displayed depending on the specific hazard category or class the substance belongs to under the scheme.
- Signal word - means a word used to indicate the relative level of severity of hazard and alert the reader to a potential hazard on the label. The signal words used in the GHS are “Danger” and “Warning”.
- Hazard statement - a phrase assigned to a hazard class and category that describes the nature of the hazards of a hazardous product (e.g. may be harmful if inhaled)
- A precautionary statement - a phrase (and/or pictogram) that describes recommended measures that should be taken to minimise or prevent adverse effects resulting from exposure to a hazardous product, or improper storage or handling of a hazardous product. (e.g. keep out of reach of children) Product identifier – this includes chemical identity of the substance, for mixtures the label should include the chemical identities of all the hazardous ingredients.
- Supplier identification – the name address and phone number of the supplier.

A safety data sheet (or Material Safety Data Sheet) must be provided. This document provides information on the hazards of the product and safe storage, handling and disposal techniques.

As of 2008 sixty-five countries are currently in the process of adopting legislation to implement this agreement. Once the GHS is in force in all countries common purchasing criteria that exclude certain categories of harmful substances will be able to be developed. The common labelling requirements will also make it easier for suppliers to demonstrate that their products meet the criteria.

Many of the UN offices are in countries where the GHS is being implemented. Therefore to ensure the procurement criteria is consistent across countries and relevant in the future the GHS categories and classifications have been used. Some countries have published comparisons between their current hazardous classification systems and the GHS.

### *European Union*

The European Union is currently moving to adopt the GHS system. A transitional period during which both the current legislation and the new Regulation will be in place stipulates that the deadline for substance reclassification is 30 November 2010 and for mixtures 31 May 2015. The current Directives on classification, labelling and packaging, i.e. Council Directive 67/48/EEC and Directive 1999/45/EC, will be repealed on 1 June 2015.

The current labelling requirements are that the label must contain (amongst other information);

- The danger symbol
- “Risk phrase” (or R-Phrase) which indicates the precise nature of the risk (such as R45: May cause cancer or R50: Very toxic to aquatic organisms),
- The “Safety phrase” (S-Phrase) which provides advice on safety practices relating to the substance (such as S17: Keep away from combustible material or S49: Keep only in the original container).

A comparison between the GHS system and the current European system is available at,

[http://ec.europa.eu/enterprise/reach/docs/ghs/ghs\\_comparison\\_classifications.pdf](http://ec.europa.eu/enterprise/reach/docs/ghs/ghs_comparison_classifications.pdf)

#### ***North America – Canada***

Canada is conducting consultation, economic analysis and drafting recommendations on the implementation of the GHS.

A comparison between the GHS system and the current Canadian system is available at <http://www.hc-sc.gc.ca/ahc-asc/pubs/ghs-sgh/analys/index-eng.php>

#### ***North America – United States***

In the United States the GHS is currently being compared and aligned with the current hazardous goods labelling system.

The current labelling requirements for hazardous substances are outlined in OSHA Hazard Communication Standard 29CFR1910.12001(HCS). A comparison between the two systems is available at <http://www.osha.gov/dsg/hazcom/GHSOSHAComparison.html>.

The US Environmental Protection Agency (EPA) provides a list of toxic/polluting substances on its website: <http://www.epa.gov/ebtpages/pollutants.html>

#### ***Latin America – Chile***

The Ministry of Health in Chile is currently leading the implementation of the GHS along with a number of other departments.

#### ***Asia – Japan***

Japan has made significant progress towards adopting the GHS. The Industrial Safety and Health Law has been amended in order to implement GHS labelling requirements and a national standard on labelling of chemicals based on the GHS has been published.

Further information and links to relevant documents are available on the GHS website [http://www.unece.org/trans/danger/publi/ghs/implementation\\_e.html#Japan](http://www.unece.org/trans/danger/publi/ghs/implementation_e.html#Japan)

#### ***Asia – Thailand***

Thailand has also made significant progress on implementing the GHS. It is expected that the Hazardous Substance Committee's Notification on GHS will enter into force in 2008. There are proposed transitional periods: 1 year for substances and 3 years for mixtures and products (by 2011) controlled under the Hazardous Substance Act.

Further information and links to relevant documents are available on the GHS website [http://www.unece.org/trans/danger/publi/ghs/implementation\\_e.html](http://www.unece.org/trans/danger/publi/ghs/implementation_e.html)

According to the GHS website the GHS is not currently being implemented in Panama, Kenya, Ethiopia or Lebanon. However, due to the international nature of the product group, suppliers tend to follow the legislative requirements of Europe and North America. Therefore it is possible that labelling of hazardous substances may be occurring in these countries.

### **4.3 Other relevant legislation**

#### ***European Union***

##### *Marketing and labelling chemical products*

For *marketing and labelling* of chemical products there are several relevant pieces of legislation. Some substances and preparations are not considered dangerous and circulate freely on the European market without any particular rules. Others are classified as dangerous and can circulate freely only when packaged and labelled in accordance with Directive 67/548/EEC (for dangerous substances) or Directive 1999/45/EC (for dangerous

preparations). In a relatively small number of cases the rules for classification, packaging and labelling are insufficient to reduce risks and are hence supplemented by rules to restrict marketing and use under the Limitations Directive, i.e. Directive 76/769/EEC.

*REACH Regulation (1907/2006)*<sup>39</sup>

The (new) Regulation provides a new regulatory framework for the collection of information on the properties of chemicals on the European market, and also for future restrictions on their use. The framework will provide not only a rigorous testing and restriction procedure for all chemicals on the European market, but also provide a highly valuable centralised information source which could be used by public purchasers. However, it will take some years before the system will be fully operational and comprehensive.

### ***North America - United States***

#### *Formaldehyde emissions from pressed wood products*

The U.S Environmental Protection Agency has initiated a proceeding (started in March 2008) to investigate whether and what type of regulatory or other action might be appropriate to protect against risks posed by formaldehyde emitted from pressed wood products. Through this process, the EPA will develop risk assessments on potential adverse health effects, evaluate the costs and benefits of possible control technologies and approaches, and determine whether EPA action is needed to address any identified risks.

For more updates visit: <http://www.epa.gov/opptintr/chemtest/formaldehyde/index.htm>

#### *Consolidated List of Products*

A useful source of information on banned products in different countries is the Consolidated List of Products Whose Consumption and/or Sale Have Been Banned, Withdrawn, Severely Restricted or not Approved by Governments. This list complements and consolidates other information on hazardous chemicals produced within the United Nations system, including the Prior Informed Consent (PIC) circulars issued by the secretariat, maintained jointly by the United Nations Environment Programme (UNEP) and the Food and Agriculture Organization of the United Nations (FAO), of the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade. The criteria excludes the use of any product on this list. In the current issue of the List, all the products covered under the Rotterdam Convention are marked by an asterisk (\*) to highlight their special status.

More information available at: <http://apps.who.int/medicinedocs/en/d/Js4902e/1.html>

## **5. Sustainable procurement guidelines – sources and rationale**

### **5.1 Environmental performance criteria sources**

There are a large number of criteria sources related to office stationery products, particularly for paper (for copying and printing purposes) with a lesser amount of environmental labels covering printing consumables (e.g. notepads) and other office stationery, such as writing instruments (e.g. pens and pencils). Most procurers are not experts on sustainable development issues concerning products and services, and often sustainability officers have little direct experience (in general) with sustainable procurement. Environmental labels are therefore useful tools for bridging this competency gap.

<sup>39</sup> REACH in Brief: [http://ec.europa.eu/environment/chemicals/reach/pdf/2007\\_02\\_reach\\_in\\_brief.pdf](http://ec.europa.eu/environment/chemicals/reach/pdf/2007_02_reach_in_brief.pdf)

There are a wide variety of labels available and also several classification schemes for labels, namely, Type I, II and III, as defined by the International Standards Organisation (ISO). In brief, labels classified as **Type I** labels are the most useful group for procurers. These labels are based on life-cycle environmental impacts and the criteria are set by an independent body and monitored through a certification or auditing process. Transparency and credibility is thus ensured by third-party certification. A number of Type I and “Type I like” labels are presented in the below subsection for office stationery products.

For more information on environmental labels and the use of environmental labels in the UN procurement process, please consult: “A Guide to Environmental Labels for procurement Practitioners of the United Nations system” published by UNOPS and UNEP (as part of the HLCM/SUN sustainable procurement initiative) (July 2009).

For more information regarding ecolabels available globally, please consult the website of the Global Ecolabelling Network (GEN): <http://www.globalecolabelling.net>

### *Environmental labels for office stationery*

A number of labels for office stationery exist in the different regions, although none could be identified in East Africa or the Middle East. The following table displays the labels identified.

Name & website	Region	Number of products/companies labelled
<b>Type I labels</b>		
European Ecolabel (Flower) <a href="http://ec.europa.eu/environment/ecolabel/index_en.htm">http://ec.europa.eu/environment/ecolabel/index_en.htm</a>	Europe	Copying and graphic paper: 121 companies certified
Nordic Swan <a href="http://www.svanen.nu">http://www.svanen.nu</a>	Europe (mainly Scandinavia)	Copy and printing paper: 7 companies certified. Paper envelopes: 5 companies certified. Toner cartridges: 13 companies certified. Writing instruments: 3 companies certified
Austrian Ecolabel (Umweltzeichen) <a href="http://www.umweltzeichen.at">http://www.umweltzeichen.at</a>	Austria	Need to check (info in German)
Blaue Engel <a href="http://www.blauer-engel.de">http://www.blauer-engel.de</a>	Europe (Germany)	Paper: 66 companies selling certified recycled paper (RAL-UZ 14) which includes over 170 different brands, products and services. Envelopes: 28 companies selling certified recycled envelopes (RAL-UZ 14). Reprocessed toner cartridges: 13 companies certified (RAL-UZ 55, ed Feb 2007).
NF Environnement <a href="http://www.marque-nf.com/">http://www.marque-nf.com/</a>	Europe (France)	Not known
Thai Green Label <a href="http://www.tei.or.th/greenlabel">http://www.tei.or.th/greenlabel</a>	Thailand	Writing instruments: 2 companies certified. Toner cartridges: 1 company certified
Ecologo <a href="http://www.ecologo.org">http://www.ecologo.org</a>	North America	Paper:
Green Seal (GS-7 for printing and	U.S.	8 companies labelled supplying paper and envelopes.

writing paper) <a href="http://www.greenpeace.org">http://www.greenpeace.org</a>		
EcoMark <a href="http://www.ecomark.jp/english">http://www.ecomark.jp/english</a>	Japan	Not known
<b>“Type I like” labels</b>		
Forest Stewardship Council (FSC) <a href="http://www.fsc.org">http://www.fsc.org</a>	International (wood fibres)	690 companies with labelled products for paper worldwide
Programme for the Endorsement of Forest Certification (PEFC) <a href="http://www.pefc.org">http://www.pefc.org</a>	International (wood fibres)	29 companies with labelled products for paper worldwide
Sustainable Forestry Initiative (SFI) – PEFC label accredited <a href="http://www.sfiprogram.org">http://www.sfiprogram.org</a>	North America (wood fibres)	71 companies with labelled products for paper from North America
Certfor (PEFC label accredited) <a href="http://www.certfor.cl">http://www.certfor.cl</a>	Chile (Latin America)	Certified paper products expected to be available on the Chilean market from 2009.
Cerflor Forest Certification Programme Brazil (PEFC label accredited) <a href="http://www.inmetro.gov.br/qualidade/cerflor.asp">http://www.inmetro.gov.br/qualidade/cerflor.asp</a>	Brazil (Latin America)	Not known

## 5.2 Other guidance on office stationery – from the United Nations

Guidance on the sustainable procurement of office stationery has been developed by some of the divisions in the UN are recommended for consideration. These are:

- “UNDP Environmental Procurement Practice Guide” (<http://www.undp.org/procurement>) and “Volume 2, Environmental Specifications”– The guide is designed to enable UNDP procurement practitioners to gain an overview of sustainable procurement and how to take the first steps to implement environmental consideration within UNDP’s procurement process. The Guide also provides recommendations specific for purchasing paper, printed paper and cardboard.
- UNON Supplier Sustainable Procurement Guidelines (Annex G) – The sustainable procurement guidelines form part of the contractual conditions in all contracts signed between UNON and companies providing goods and services, as part of the overall UNON effort towards sustainable procurement. The social aspect (issues such as poverty eradication, equity in the distribution of resources, labor conditions and human rights) is described separately in the “Fair Pack“. Factors considered in sustainable procurement are environmental impacts and the whole life-cycle of the products. Before any contract is awarded, the contractors will be required to submit evidence of compliance with the “UNON supplier sustainable procurement guidelines”.

## 5.3 Other guidance on office stationery

A number of other sources provide useful guidance on office stationery:

- European Commission GPP Training Toolkit. ([http://ec.europa.eu/environment/gpp/toolkit\\_en.htm](http://ec.europa.eu/environment/gpp/toolkit_en.htm)) – This provides public purchasing criteria for both copying and graphic paper, together with background information on the reasons for the development of the criteria. It has been used as the starting point for these guidelines
- City of Santa Monica (U.S.A) Green Office Buying Guide – Provide guidance on purchasing copying and printing paper. Regarding paper, it is specifically recommended to set the minimum standard at: 30% post-consumer recycled content (U.S. Federal standard) and is the most widely available recycled content paper on the market. However, 100% post consumer recycled content (processed chlorine free) whenever possible is preferred. Website includes tips on paper reduction strategies and also provides links to other useful websites that offer technical information and calculators to compare different recycled content percentages. For more information visit: <http://www.smgov.net/epd/SP/greenoffice/office/copy-paper.html>
- Swedish Environmental Management (MSR) Council's procurement criteria for “paper products” ([http://www.msr.se/en/green\\_procurement/criteria/Office/Paper-products/](http://www.msr.se/en/green_procurement/criteria/Office/Paper-products/))
- A+ Sustainability from the City of Barcelona (Spain). <http://www.bcn.cat/agenda21/ajuntamentsostenible>
- EcoBuy (Australia) Guide to Green Purchasing (restricted access for members only – <http://www.ecobuy.org.au>) – Provides concrete advice principally on different products including recommendations for purchasing paper and cardboard.
- Resort Municipality Whistler (Canada) Sustainable Purchasing Guide – Provides recommendations for purchasing sustainably produced writing instruments and printing inks. For more information visit: <http://www.whistler2020.ca/whistler/site/productAssessment.acds?context=2065129>
- Paper calculator from the Environmental Defense Fund (North America) – This tool can be used to help purchasing decision-makers quantify the benefits of environmentally friendly paper choices. The Paper Calculator shows the environmental impacts of different papers across their full life-cycle. The calculator is available from: <http://www.edf.org/papercalculator/>
- Stop Waste - The Alameda County Waste Management Authority and the Alameda County Source Reduction and Recycling Board (U.S.) have practical online information for all kinds of environmentally friendly purchasing of office and stationery supplies, e.g. paper, toner cartridges, pens and markets. For more information visit: <http://www.stopwaste.org>

## 6. Implementing the sustainable procurement guidelines

### 6.1 Verification of office stationery requirements

In several world regions, many paper companies have sought to reduce their environmental impacts by establishing environmental management systems in their factories and certifying their products with one or several ecolabels. This is particularly the case in Europe, North America and Japan. The market availability of certified paper based (totally or mainly) on virgin fibre and on recovered paper varies between countries but in countries where ecolabelled certified paper exists, both types of paper tend to be found at competitive

prices<sup>40</sup>.

Ecolabel criteria normally comprise, on the one hand, of product specific criteria and, on the other hand, the assessment or verification methods aimed at checking compliance with these criteria. Where procurement criteria are based on ecolabels, the easiest way to prove compliance will be through the possession of the relevant ecolabel. However, even if the product is not ecolabelled, the procurement/contracting authority must allow verification to be done via other means of proof, and this must be made explicit in the tender documents. Bidders must therefore be given the opportunity to present other means of proof (that the product meets the specifications), such as declarations by the producer or by the supplier, technical and/or product safety sheets; calculation formulas, laboratory tests results, etc.

## 6.2 Using a life-cycle costing approach

According to the EU study “Costs and Benefits of Green Public Procurement in Europe”<sup>41</sup>, if only procurement prices are taken into account the purchasing costs of green (including 100% recycled and eco-certified copying paper) and non-green copying paper are very similar. Out of the four countries subject of the study, in Germany, ‘green’ versions of copying paper are significantly cheaper (23%) than non-green copying paper. In Spain and Sweden ‘green’ copying paper is slightly more expensive with a relative price difference of 3.5 to 4%. In the Czech Republic the average prices are nearly the same (0.2% difference).

In the U.S, the results of a survey conducted by the Centre for a New American Dream of American state purchasing agencies, found that the average price for copy paper with 30% post-consumer waste was 8% higher (USD 25/case) than virgin paper (USD 23/case), and the average price paid for 100% post-consumer waste paper (USD 32/case) was 36% higher<sup>42</sup>.

Furthermore, cost differences (between recycled paper and paper from virgin fibres) have been found to be primarily the result of a difference in the economies of scale achieved from the production of the two paper sorts. The latter combined with imbalances caused by “newly capitalised and still-developing recycling systems versus a well-established and industrially integrated tree-pulping production system”, as well as government subsidies for timber production also add to the different prices<sup>43</sup>.

Some recommended tools for calculating the life-cycle cost of office stationery products:

- MSR (Swedish Environmental Council) General LCC Tool - has produced a general LCC tool for use in both needs analysis and tender assessment. For more information or to download the LCC tool (as an excel file) visit: [http://www.msr.se/en/green\\_procurement/LCC/](http://www.msr.se/en/green_procurement/LCC/)

Other tools that can be used to inform sustainable procurement decisions:

- New York City remanufactured toner cartridges measurement tool – The tool calculates the waste prevention benefits associated with establishing a toner-cartridge recycling programme (for laser printers only). For more information visit: [http://www.nyc.gov/html/nycwasteless/html/at\\_agencies/measurement\\_tools\\_toner.sh](http://www.nyc.gov/html/nycwasteless/html/at_agencies/measurement_tools_toner.sh)

<sup>40</sup> See a study on the different prices of paper based (totally or mainly) on post-consume recovered paper fibres (recycled paper) in several Member States [http://www.iclei-europe.org/fileadmin/user\\_upload/Procurement/LEAP2/Local\\_market\\_research\\_final\\_report.pdf.pdf](http://www.iclei-europe.org/fileadmin/user_upload/Procurement/LEAP2/Local_market_research_final_report.pdf.pdf)

<sup>41</sup> *Study on costs/benefits of Green public procurement in Europe*, Öko-Institut & ICLEI 2007, available at: [http://ec.europa.eu/environment/gpp/index\\_en.htm](http://ec.europa.eu/environment/gpp/index_en.htm)

<sup>42</sup> Snavely, MJ (2008): “Responsible Purchasing Guide – Copy Paper”. Responsible Purchasing Network.

<sup>43</sup> Kinsella, Susan (200): “Buy Recycled - Recycled Paper”, Recycled Paper Coalition, published by the Buy Recycled Business Alliance of the National Recycling Coalition. Download from: <http://www.conservatree.com/paper/PaperTypes/RPCrecypprFactSheet.pdf>

[tml](#)

### 6.3 Further aspects for consideration

- ✓ Purchasing green office equipment, for instance, multi-functional devices, printers that allow for double-sided printing to reduce paper consumption (training for staff also).
- ✓ Adopting new approaches which reduce the amount of paper consumed, e.g. sending e-christmas cards, reducing the amount of paper filing, reusing notebooks (for internal working purposes).
- ✓ Transferring the approach to purchasing office stationery to other activities, such as, in the organisation of events.
- ✓ Publications: Work with graphic designers so that designs take into account the use of recycled paper for publications purposes.
- ✓ Reuse single sided printed paper: This type of paper is good for internal reuse, for instance, in the form of notepads. This practice is already in place in some public administrations, such as the City of Barcelona (Spain), visit: <http://www.bcn.cat/agenda21/ajuntamentsostenible/english/documents/paper.pdf>
- ✓ Buying office stationery (e.g. paper) in larger quantities and planning ahead further reduces or eliminates price premiums on recycled paper. This approach also stimulates the sustainable products market, for example, regarding recycled paper.

## 7. Information sources

### 7.1 Ecolabels and other criteria sources

- Austrian ecolabel: <http://www.umweltzeichen.at/>
- Blauer Engel: <http://www.blauer-engel.de>
- Deni Green Consulting Services (2004). Eco-Buy Guide to Green Purchasing. ECO-Buy, Melbourne, Australia.
- Ecolabelling.org: <http://www.ecolabelling.org>
- Ecologo: <http://www.ecologo.org/>.
- Eco Mark Japan (Japanese national ecolabel): <http://www.ecomark.jp/english/>
- European Ecolabel: <http://ec.europa.eu/environment/ecolabel/>
- European Commission GPP Training Toolkit: [http://ec.europa.eu/environment/gpp/toolkit\\_en.htm](http://ec.europa.eu/environment/gpp/toolkit_en.htm)
- Forest Stewardship Council (FSC): <http://www.fsc.org>
- Green Seal: <http://www.greenseal.org>
- NF Environnement Mark: <http://www.marque-nf.com>
- Nordic Swan: <http://www.svanen.nu>
- Programme for the Endorsement of Forest Certification (PEFC): <http://www.pefc.org>
- Resort Municipality of Whistler (2006) Sustainable Purchasing Guide. Moving Towards Sustainable Procurement. Whistler, Canada.
- Swedish Environmental Management (MSR) Council's procurement criteria for "paper products": [http://www.msr.se/en/green\\_procurement/criteria/Office/Paper-products/](http://www.msr.se/en/green_procurement/criteria/Office/Paper-products/)
- Thai Green Label: <http://www.tei.or.th/greenlabel/>

## 7.2 Legislation

- Directive 2004/17/EC of the European Parliament and the Council of 31 March 2004 coordinating the procurement procedures of entities operating in the water, energy, transport and postal services sectors
- European Commission Environment Directorate Council, (October 2007), REACH in Brief available at [http://ec.europa.eu/environment/chemicals/reach/pdf/2007\\_02\\_reach\\_in\\_brief.pdf](http://ec.europa.eu/environment/chemicals/reach/pdf/2007_02_reach_in_brief.pdf)
- Globally Harmonised System of Classification and Labelling of Chemicals (GHS): [http://www.unece.org/trans/danger/publi/ghs/ghs\\_welcome\\_e.html](http://www.unece.org/trans/danger/publi/ghs/ghs_welcome_e.html)

## 7.3 Studies and other information

- Central Point of Expertise on Timber Procurement: <http://www.proforest.net>
- City of Santa Monica (U.S.A) Green Office Buying Guide: <http://www.smgov.net/epd/SP/greenoffice/office/copy-paper.html>
- Clement, S (2006): The Procura+ Manual 2<sup>nd</sup> edition: A guide to cost effective Sustainable Public Procurement. ICLEI – Local Governments for Sustainability, Freiburg, Germany.
- Conservatree: <http://www.conservatree.com>
- Environmental Paper Network: <http://www.environmentalpaper.org/>
- 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.
- European Toner and Inkjet Remanufacturers Association: <http://www.etira.org/>
- Illegal logging: <http://www.illegal-logging.info>
- Kinsella, Susan (2000): Buy Recycled - Recycled Paper, Recycled Paper Coalition, published by the Buy Recycled Business Alliance of the National Recycling Coalition (<http://www.conservatree.com/paper/PaperTypes/RPCrecypprFactSheet.pdf>)
- Kittel, M. and Page, K (2008): Responsible Purchasing Guide – Toner Cartridges. Peters, M and Puchir, K; Responsible Purchasing Network. Centre for a New American Dream.
- Öko-Institut & ICLEI (2007): Study on costs/benefits of Green public procurement in Europe, available at [http://ec.europa.eu/environment/gpp/index\\_en.htm](http://ec.europa.eu/environment/gpp/index_en.htm)
- Snaveley, MJ (2008): Responsible Purchasing Guide – Copy Paper. Responsible Purchasing Network. Centre for a New American Dream.
- Swedish Environmental Management (MSR) Council: <http://www.msr.se>
- UNDP Practice Series. Environmental Procurement Practice Guide. Volumes 1 and 2. UNDP Bureau of Management, Procurement Support Office (2008): <http://www.undp.org/procurement>
- UNOPS and UNEP (2009): “A Guide to Environmental Labels for procurement Practitioners of the United Nations system”.
- United Nations (2004): Consolidated List of Products Whose Consumption and/or Sale Have Been Banned, Withdrawn, Severely Restricted or not Approved by Governments. United Nations Publications.
- UNEP Division of Environmental Law & Conventions. Link to chemicals and wastes: [http://www.unep.org/DEC/links/chemicals\\_wastes.html](http://www.unep.org/DEC/links/chemicals_wastes.html)
- US Environmental Protection Authority: <http://www.epa.gov>

## **SUSTAINABLE UNITED NATIONS**

Sustainable United Nations (SUN) is a UNEP initiative that provides support to UN and other organisations to reduce their greenhouse gas emissions and improve their sustainability overall.

SUN was established in response to the call from UN Secretary General Ban Ki-Moon at the World Environment Day 2007 (5 June), to all UN agencies, funds and programmes to reduce their carbon footprints and “go green”. This call was echoed in October 2007 in a decision of the UN Chief Executives Board (CEB/2007/2, annex II) to adopt the UN Climate Neutral Strategy, which commits all UN organisations to move towards climate neutrality. Within this context, SUN is working with the UN Environment Management Group – the UN body coordinating common environmental work within UN – to provide guidance, and develop tools and models for emission reduction within organisations.



**Sustainable  
United Nations**

## **ICLEI - LOCAL GOVERNMENTS FOR SUSTAINABILITY**

ICLEI – Local Governments for Sustainability is an international association of local governments and national and regional local government organisations founded in 1990. ICLEI currently has 1,200 members worldwide and almost 200 in Europe. Since 1996, ICLEI’s Sustainable Procurement team has been providing professional information, advice, networking opportunities, training and tools to public authorities wanting to implement high quality, cost effective sustainable procurement practices ([www.iclei-europe.org/procurement](http://www.iclei-europe.org/procurement)).





**For more information**

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**About the Sustainable Procurement Guidelines**

The UN operates to achieve the goals of peace, equality, sustainable development and respect for human rights. The way the UN manages its operations and procures products and services should reflect these goals.

Ensuring lowest environmental and most positive social impact of procurement does not only build on the international community commitments. It also manages the reputational risks associated with labour exploitation or environmental damage in the supply chain; it gives a strong signal to the market and encourages the innovative production of cleaner and more ethical products enhancing an economy based on social and environmental responsibility.

These guidelines are designed to assist UN procurers and requisitioners in their choice to include sustainability considerations in their procurement work. They are built on the recognition that market situations are different from one country to another and thus provide advice based on research made about availability of more sustainable products in world regions. Overall, the guidelines provide a comprehensive overview of the specific factors affecting the sustainability of a given product category and suggest a language and specific criteria to include sustainability in tenders.

Guidelines are specifically provided for the areas of:

- IT equipment
- Cleaning
- Furniture
- Stationary
- Vehicles
- Cafeterias, Food and Kitchen equipment.
- Freight Forwarding
- Generators and Batteries
- Carbon Credits

They are available at: [www.greeningtheblue.org](http://www.greeningtheblue.org) and [www.ungm.org](http://www.ungm.org)