



Sustainable Procurement Guidelines

IT EQUIPMENT

Computers & Monitors

PRODUCT SHEET

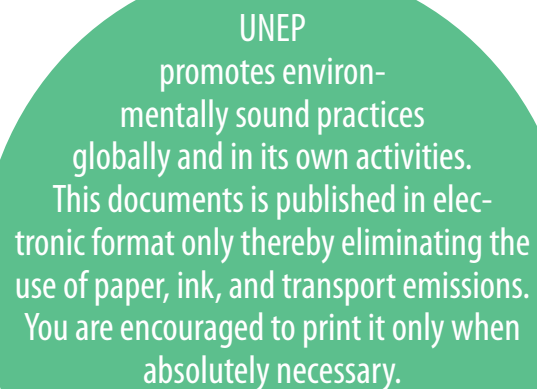
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Section 1: Introduction and Scope

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 optimising costs.”¹

Scope

This Product Sheet can be used both by UN procurers and requisitioners for either identifying the most sustainable office IT equipment available on the market or for developing competitive tender documents.

Office IT equipment as dealt with in this document covers computers (covering both PCs and notebooks) and monitors.

Structure

The criteria are divided into the typical steps in a procurement action: tender subject matter, technical specifications, supplier qualification requirements, evaluation criteria, and contract clauses. For each criterion guidance is also provided on verifying compliance.

An example weighting matrix is provided in the Section 4.

¹ Definition adopted by the High Level Committee on Management Procurement Network.

Level of Ambition and Regional applicability

To reflect the market availability of certain office IT equipment in different regions of the world, the advanced sustainability criteria have been adapted and divided into cluster regions, which helps UN procurers and requisitioners find the most appropriate criteria for their region. However, as the ICT sector is highly globalized, certain frontrunner legislation or verification schemes such as the WEEE Directive² and RoHS Directive³ of the European Union or the EPEAT, ENERGY STAR®, TCO and Blue Angel eco-labeling schemes have a great impact on the overall production and availability of office IT equipment on the global market that meet these requirements⁴. This means that UN procurers should be able to use the advanced criteria sets outlined below, regardless of whether the supplier location.

Basic criteria (globally)

The Basic sustainability criteria for office IT equipment have been developed to address the most significant environmental and social impacts, and are designed to be used with minimum additional verification effort or cost increases. They have been developed on the basis of the indicative market availability of office IT products, the existing verification schemes and recommended environmental criteria analyzed in the Background Report “Sustainable procurement guidelines for office IT equipment”. Products that meet the below criteria are available on all global and regional markets (see further information in the Background Report).

Advanced criteria – Region 1 (Europe, North America, Latin America)

The following set of criteria represent the most Advanced and ambitious approach that can be undertaken to achieve high sustainability performance for office IT equipment in Europe, North America and Latin America. These Advanced sustainability criteria are intended for use by procurers who seek to purchase the best environmental products available on the market, and may require additional administrative effort as compared to other products fulfilling the same function. The products fulfilling these criteria will have less environmental impacts and foster further implementation of socially-responsible procurement within the UN. Products that meet the below criteria are available on the market (see further information in the Background Report).

Advanced criteria – Region 2 (South-east Asia, East Africa, Middle-East)

The following set of criteria represent a more Advanced and ambitious approach than in the Basic criteria section that can be undertaken to achieve a certain sustainability performance for office IT equipment for South-east Asia, East Africa and the Middle-East. These Advanced sustainability criteria are intended for use by procurers who seek to purchase the best environmental products available on the (regional) market, and may require additional administrative effort as compared to other products fulfilling the same function. The products fulfilling these criteria will have a certain but limited environmental relief potential. Products that meet the below criteria are available on the market (see further information in the Background Report).

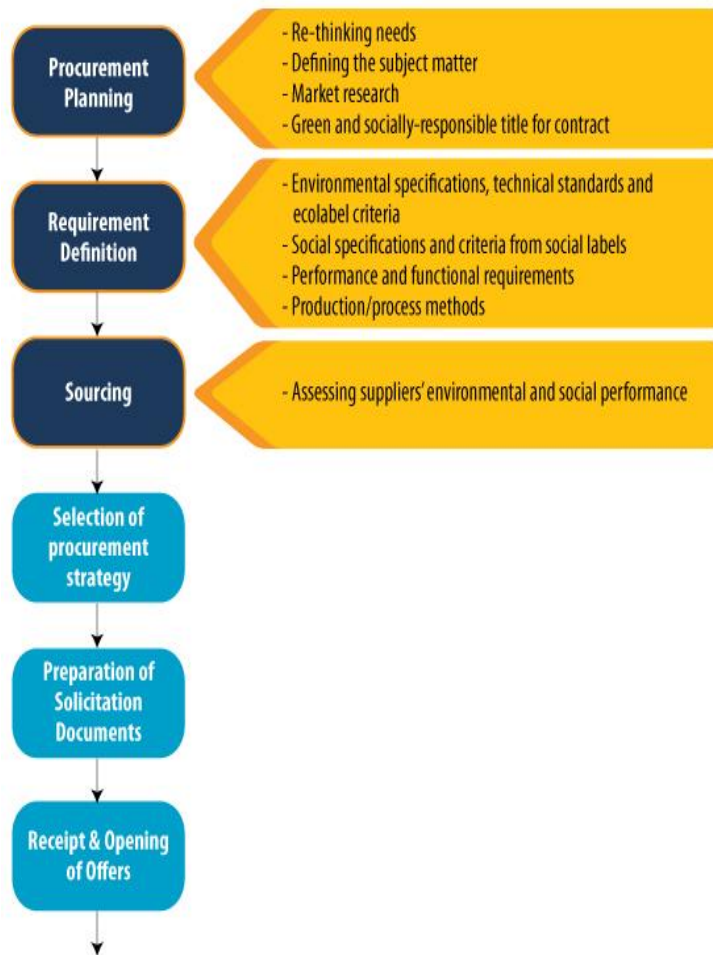
² Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE)

³ Directive 2002/95/EC on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS Directive)

⁴ See Background Report “Sustainable procurement guidelines for office IT equipment” for further information on legislation and verification schemes.

Section 2: Incorporating Sustainability into the UN Procurement Process

This diagram highlights the stages at which sustainable procurement interventions should be integrated.



A - Procurement planning

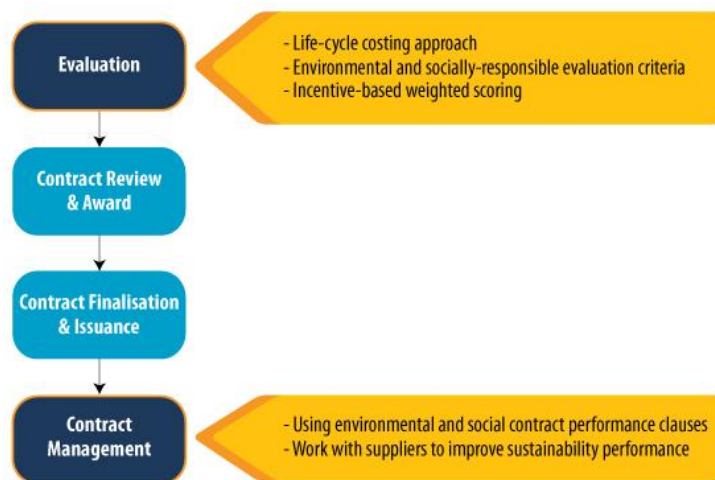
Procurement planning is essential to assess needs, define an appropriate budget and analyse the market to have a better idea of available products meeting sustainability criteria. The subject matter of the contract defines and, more importantly, communicates what the purchasing authority intends to purchase. Explicitly phrasing the subject matter of the contract in such a way that it integrates the sustainability goal to be achieved is an important first step to take in the tendering process. As all conditions stipulated in the other steps of the tendering process need to maintain a clear link to the subject matter of the contract, **clear and explicit wording of the subject matter is an effective way to ensure a sustainable purchase.**

B - Requirement definition

The tender specifications (or technical specifications) provide detailed information on the functionality, quality and other characteristics (e.g. packaging, disposal, etc.) of the product to be purchased. They provide the **opportunity to set minimum environmental and/or social requirements** which all bidders must meet.

C - Sourcing

Criteria for sourcing (or pre-selecting) suppliers, vendors and manufacturers assess the technical and professional qualifications of vendors to produce and/or supply the requested products. **Sourcing criteria can be included that assess the sustainability performance of bidders** to ensure that only bids from 'eligible' companies are considered in the evaluation stage. They can assess the bidding company's operations (and the companies it subcontracts or uses) as a whole, rather than only the end products purchased. The criteria included in this stage can address issues such as the availability of information on products, (sustainability) experience of the bidder, and security of supply. This can be a useful approach to improve the general environmental management and corporate social responsibility of companies contracted by the UN.



Source: Adapted from UNDP Environmental Procurement Practice Guide, 2008

D - Evaluation

Evaluation criteria are used to evaluate and compare the bids received which meet the minimum specifications (i.e. compliant bids). In sustainable procurement, it is essential to indicate that the contract will be awarded to the offer that provides “**best value for money**” – the term used if criteria other than just the price will be assessed when comparing bids. Evaluation criteria evaluate the performance of a bid both in terms of price and other criteria, such as environmental performance.

As with all phases of the tendering process, the tender documents published by the purchasing authority must clearly set out the various evaluation criteria that will be used to evaluate bids (such as price, technical quality, environmental quality, social performance, etc.) as well as the weight in percentage terms allocated to each aspect. **In sustainable procurement, evaluation criteria can be used to encourage higher levels of sustainability performance than those demanded in the specifications, without risking significant increases in cost.**

E - Contract management

Contract clauses are binding on any company winning the bid, and should therefore be possible for any company to comply with. **It makes sense to include sustainability criteria in the contract clauses only if they are not included in other sections of the tender.** Contract clauses also include reference to penalties for non-compliance with the specifications or for cases where a supplier has provided a false written guarantee.

Section 3: Sustainability and verification criteria

SUSTAINABILITY CRITERIA	VERIFICATION	PC, notebooks, monitors		
		Basic Criteria	Advanced criteria I (Europe, North America, Latin America)	Advanced criteria II (South-east Asia, East Africa, Middle-East)
A – Procurement planning				
A1 – <i>[Purchase/ lease]</i> of energy efficient and socially-responsible produced <i>[PCs, notebooks and monitors]</i> with a reduced content of hazardous substances		•		
A2 – <i>[Purchase/ lease]</i> of energy efficient and socially-responsible produced <i>[PCs, notebooks and monitors]</i> with low environmental and social impacts throughout the lifecycle			•	•
B – Requirement definition				
B1 – Product lifetime/ resource efficiency				
B1.1 – <i>Guarantee/ warranty</i> <i>[Only for purchase]</i> The vendor of the product must provide a guarantee for a period of at least two years. An option to extend the guarantee period to five years must be given. The contractor must offer an on-the-spot support service for five years. <i>[Only for leasing]</i> The equipment shall be leased for [X] years. During this time the vendor must guarantee an on-the-spot support service including repair and removal of the equipment.	The offer of the vendor has to include the required guarantee/ warranty in the bid.	•	•	•

SUSTAINABILITY CRITERIA	VERIFICATION	PC, notebooks, monitors		
		Basic Criteria	Advanced criteria I (Europe, North America, Latin America)	Advanced criteria II (South-east Asia, East Africa, Middle-East)
B1.2 – Upgradability Desktop PCs and notebooks must be designed so that: <ul style="list-style-type: none"> • The memory is readily accessible and can be changed • The hard disk and, if available, the CD drive and/or DVD drive, can be changed 	All products carrying the European Ecolabel, Nordic Swan, Blue Angel, the EPEAT label, the TCO label or the ECO DECLARATION (ECMA-370) (version 2006 or later, with point P7.7 & P7.8 marked “yes”) will be deemed to comply. Other appropriate means of proof will also be accepted.	•	•	•
B1.3 – Resource Efficiency: Guarantee of availability of parts and components For notebooks the availability of compatible batteries and power supplies and of the keyboard and its parts shall be guaranteed for at least 3 years from the time that production ceases.	All products carrying the European Ecolabel, Nordic Swan, Blue Angel, the EPEAT label, the TCO label or the ECO DECLARATION (ECMA-370) (version 2006 or later, with point P7.7& P7.8 marked “yes” and P7.9 (min. 3 years) and P7.10 filled out) will be deemed to comply. Alternatively the bidder must provide a written guarantee that this criterion will be met.	•	•	•
B2 – End of life, disassembly, recycling: take-back guarantee and recycling⁵ The vendor must provide an end-of-life take-back guarantee	For monitors, all products carrying the TCO’03 label will be deemed to comply. For PCs, notebooks and monitors, all products	•	•	•

⁵ In some regions where such end-of-life requirements are legally compulsory for the producer and vendor this criterion need not be included. This includes e.g. parts of Europe where the WEEE Directive has been implemented in full, parts of the US (e.g. California) and Latin America – see background report.

SUSTAINABILITY CRITERIA	VERIFICATION	PC, notebooks, monitors		
		Basic Criteria	Advanced criteria I (Europe, North America, Latin America)	Advanced criteria II (South-east Asia, East Africa, Middle-East)
and must provide appropriate proof of its capacity to secure the environmentally-friendly and social-responsible ⁶ re-use, recycling and/or disposal of waste. ⁷	carrying an EPEAT certificate (which meets criterion 4.6.1.1 “Provision of product take-back service” and criterion 4.6.1.2 “Auditing of recycling services”) will be deemed to comply. Other appropriate means of proof will also be accepted.			
B3 – Energy consumption				
B3.1 – Maximum values All products must meet the latest ENERGY STAR [®] criteria for energy performance. (in May 2008: ENERGY STAR [®] 4.0 Tier 1 as of July 2007) available at www.energystar.gov . ⁸	All products carrying the latest ENERGY STAR [®] label will be deemed to comply. Other appropriate means of proof will also be accepted.	•	•	•
B3.2 – Power Safe Mode The product has to support the advanced configuration and power interface (ACPI) specifications (or equivalent), available at www.acpi.info .	Appropriate means of proof must be provided, such as a technical dossier of the manufacturer or a test report from a recognized body.	•	•	•

⁶ With social-responsible it is referred to the ILO Core Conventions used in the sourcing section.

⁷ It is recommended to include a clause referring to this also in the contract clauses.

⁸ The Computer specification V5.0 is in the process of being revised with an estimated effective date July 2009. US EPA are also revising the Computer Monitor specification (V5.0) also with an estimated effective date July 2009. Finally, they are in the process of revising the energy efficiency criteria levels for imaging equipment (V1.1) with an effective date of April 2009.

SUSTAINABILITY CRITERIA	VERIFICATION	PC, notebooks, monitors		
		Basic Criteria	Advanced criteria I (Europe, North America, Latin America)	Advanced criteria II (South-east Asia, East Africa, Middle-East)
B4 – Hazardous substances				
<p>B4.1 – exclusion⁹</p> <p>The product must not contain the following hazardous substances:</p> <ul style="list-style-type: none"> • Lead • Mercury • Cadmium • Hexavalent Chromium • Polybrominated Biphenyl (PBB) • Polybrominated Diphenyl Ether (PBDE) <p><u>Major exceptions:</u></p> <ul style="list-style-type: none"> • Lead in solders for servers, storage and storage array systems (exemption until 2010) • Lead oxide in glass used for bonding front and rear substrates of flat fluorescent lamps used for Liquid Crystal Displays (LCD) • Lead in solders consisting of more than two elements for the connection between the pins and the package of microprocessors with a lead content of more than 80 % and less than .85 % by weight. 	Appropriate proof that these substances are not contained, such as a technical report, or certification that it meets the legal requirements of the European RoHS Directive (2002/95/EC) or equivalent must be provided.	•	•	•

⁹ In some regions where these substances are already legally restricted this criterion need not be included. This includes e.g. Europe, through the RoHS Directive (2002/95/EC), parts of the US (e.g. California where legislation follows the RoHS Directive (see background report)).

SUSTAINABILITY CRITERIA	VERIFICATION	PC, notebooks, monitors		
		Basic Criteria	Advanced criteria I (Europe, North America, Latin America)	Advanced criteria II (South-east Asia, East Africa, Middle-East)
<p>B4.2 – Hazardous substances: <i>reduced mercury in background lighting of LCD monitors</i></p> <p>The background lighting of LCD monitors shall not contain more than 3 mg of mercury on average per lamp. The number of lamps shall be lower than 8.</p>	<p>All products carrying the European Ecolabel, the TCO (version '03 and later) or Blue Angel will be deemed to comply as well as an EPEAT certificate that indicates compliance with criterion 4.1.3.2 “Low threshold for amount of mercury used in light sources” or the ECO DECLARATION (ECMA-370) (version 2006 or later) with point P7.20 meeting the above mentioned limit values. Other appropriate means of proof will also be accepted.</p>		•	•
<p>B5 – Noise: <i>limit values for a ‘declared A-weighted Sound Power Level’</i></p> <p>The ‘Declared A-weighted Sound Power Level’ (re 1 pW) of PCs or notebooks, according to paragraph 3.2.5 of ISO 9296, measured in accordance with ISO 7779, shall not exceed:</p> <p><u>For PCs:</u></p> <ul style="list-style-type: none"> • 4.0 B(A) in the idle operating mode • 4.5 B(A) when accessing a hard-disk drive <p><u>For notebooks:</u></p> <ul style="list-style-type: none"> • 3.5 B(A) in the idle operating mode • 4.0 B(A) when accessing a hard-disk drive 	<p><u>For PCs:</u></p> <p>All products carrying the European Ecolabel, Nordic Swan or Blue Angel will be deemed to comply. Other appropriate means of proof will also be accepted.</p> <p><u>For notebooks:</u></p> <p>All products carrying the European Ecolabel, Nordic Swan or the ECO DECLARATION (ECMA-370) (version 2006 or later) with relevant fields filled out will be deemed to comply. Other appropriate means of proof will also be accepted..</p>		•	○ ¹⁰

¹⁰ Limited market availability: Comprehensive market research is necessary for inclusion of this criterion.

SUSTAINABILITY CRITERIA	VERIFICATION	PC, notebooks, monitors		
		Basic Criteria	Advanced criteria I (Europe, North America, Latin America)	Advanced criteria II (South-east Asia, East Africa, Middle-East)
C – Sourcing				
<p>C1a – Social criteria: <i>Production of the product according to international labor standards, self-declaration</i>¹¹</p> <p>The vendor has to provide proof that the manufacturer of the product complies with the international working standards (ILO Basic Conventions) throughout the whole supply chain listed below. The supply chain includes Original Equipment Manufacturers (OEMs), Electronic Manufacturing Services (EMS) firms and Original Design Manufacturers (ODMs). Furthermore it includes contracted labour (contract manufacturers) that may design, market, manufacture and/or provide goods and services that are used to manufacture and supply the final product.</p> <ul style="list-style-type: none"> • Freedom of Association and Protection of the Right to Organise (No. 87) • Right to Organise and Collective Bargaining (No. 98) • Forced Labour (No. 29) • Abolition of Forced Labour (No. 105) • Discrimination (Employment and Occupation) (No. 111) 	<p>The vendor is required to submit appropriate proof that these requirements have been met. A <u>self-commitment/declaration</u> (such as an up-to-date Electronic Industry Code of Conduct (EICC) declaration) that the requirements are met, together with documentary support of the implementation and monitoring of measures deems to comply.</p>	•	•	•

¹¹ D1.1a and D1.1b present options with different ambition level. The procurer must select one of these according to policies and market availability of vendors meeting these criteria.

SUSTAINABILITY CRITERIA	VERIFICATION	PC, notebooks, monitors		
		Basic Criteria	Advanced criteria I (Europe, North America, Latin America)	Advanced criteria II (South-east Asia, East Africa, Middle-East)
<ul style="list-style-type: none"> • Equal Remuneration (No. 100) • Minimum Age (No. 138) • Worst Forms of Child Labour (No. 182) 				
<p>C1b – Social criteria: <i>Production of the product according to international labor standards, independent third party certified, declaration of Honor</i>¹²</p> <p>The vendor has to provide proof</p> <ul style="list-style-type: none"> • from an independent third party certification body or • by a declaration of Honour <p>that the manufacturer of the product complies with the international working standards (ILO Basic Conventions) throughout the whole supply chain listed below. The supply chain includes Original Equipment Manufacturers (OEMs), Electronic Manufacturing Services (EMS) firms and Original Design Manufacturers (ODMs). Furthermore it includes contracted labour (contract manufacturers) that may design,</p>	Compliance of proof of this criterion is a duly signed declaration of Honor or an independent third-party verified certificate. ¹³		•	•

¹² D1.1a and D1.1b present options with different ambition level. The procurer must select one of these according to policies and market availability of vendors meeting these criteria.

¹³ Please note that as of May 2008 for office IT equipment no independent third-party verified certificate exists guaranteeing the production of the product according to international labor standards. Nevertheless it is recommended to ask for this certificate when applying a bonus point system in the award/evaluation phase of the procurement management to increase awareness of, and demand for, such a certification. Organizations around the world are currently working on a suitable certification scheme. Organizations around the world currently work on a suitable certification scheme, taking into account experiences e.g. from the textiles and clothing sector. See the background report for further information.

SUSTAINABILITY CRITERIA	VERIFICATION	PC, notebooks, monitors		
		Basic Criteria	Advanced criteria I (Europe, North America, Latin America)	Advanced criteria II (South-east Asia, East Africa, Middle-East)
<p>market, manufacture and/or provide goods and services that are used to manufacture and supply the final product.</p> <ul style="list-style-type: none"> • Freedom of Association and Protection of the Right to Organise (No. 87) • Right to Organise and Collective Bargaining (No. 98) • Forced Labour (No. 29) • Abolition of Forced Labour (No. 105) • Discrimination (Employment and Occupation) (No. 111) • Equal Remuneration (No. 100) • Minimum Age (No. 138) • Worst Forms of Child Labour (No. 182) 				
<p>C2a – Corporate performance: <i>written corporate environmental policy</i>¹⁴</p> <p>The vendor and the manufacturer of the final product are required to demonstrate the existence and public availability of a written corporate environmental policy, consistent with ISO 14001 (International Organisation for Standardisation), or equivalent.</p>	Proof of compliance is the written corporate environmental policy, consistent with ISO 14001 (International Organisation for Standardisation), or equivalent..		•	○ 15

¹⁴ D1.2a and D1.2b present options with different ambition level. The procurer must select one of these according to policies and market availability of vendors meeting these criteria.

¹⁵ Limited market availability: Comprehensive market research is necessary for inclusion of this criterion.

SUSTAINABILITY CRITERIA	VERIFICATION	PC, notebooks, monitors		
		Basic Criteria	Advanced criteria I (Europe, North America, Latin America)	Advanced criteria II (South-east Asia, East Africa, Middle-East)
<p>C2b – Corporate performance: operational, third-party certified, environmental management system¹⁶</p> <p>The vendor has to provide certificates from the manufacturer that they and all companies throughout the whole supply chain engaged in the design or manufacture of the product have an operational, third-party certified, environmental management system that meets one of three recognised systems: ISO 14001, European EMAS or U.S. EPA Performance Track.</p> <p>The supply chain includes Original Equipment Manufacturers (OEMs), Electronic Manufacturing Services (EMS) firms and Original Design Manufacturers (ODMs). Furthermore it including contracted labour (contract manufacturers) that may design, market, manufacture and/or provide goods and services that are used to manufacture and supply the final product.</p>	A certificate of the third-party certified, environmental management system that meets one of three recognised systems: ISO 14001, European EMAS or U.S. EPA Performance Track. Deems to comply.		•	○ ¹⁷
<p>C3 – Corporate performance regarding hazardous substances: set timeline for the phaseout of brominated flame retardants (BFRs) and plastics containing polyvinylchloride (PVC)</p> <p>The vendor must provide proof that the manufacturer of the</p>	The vendor is required to submit a self-declaration issued by the manufacturer that this criterion is met.		•	•

¹⁶ D1.2a and D1.2b present options with different ambition level. The procurer has to select one of them according to policies and market availability of vendors meeting these criteria.

¹⁷ It is recommended to carry out market research regarding SMEs in the region that have a certified management system in place before including this criterion.

SUSTAINABILITY CRITERIA	VERIFICATION	PC, notebooks, monitors		
		Basic Criteria	Advanced criteria I (Europe, North America, Latin America)	Advanced criteria II (South-east Asia, East Africa, Middle-East)
products has set a timeline for the phaseout (by latest 2010) of brominated flame retardants (BFRs) and plastics containing polyvinylchlorid (PVC) in all product components and packaging.				
C4 – Emissions from transport of the product The transport of the product must have a low environmental impacts, measured in CO ₂ emissions.	The vendor has to provide a self-declaration that declares the CO ₂ emissions (kg/offer) spend for the delivery of the products from final production location to the end user.		•	•
D – Evaluation				
D1 – Energy consumption: <i>lower than ENERGY STAR</i> <u>Additional points will be awarded:</u> If the product is more energy efficient than specified in the latest ENERGY STAR [®] standards for energy performance (in May 2008: ENERGY STAR [®] 4.0 Tier 1 as of July 2007) available at www.energystar.gov . ¹⁸ SBasics will be given using a weighting matrix system. See example matrix in the annex.	Appropriate means of proof must be provided, such as a technical dossier of the manufacturer or a test report from a recognized body.		•	•

¹⁸ The Computer specification V5.0 is in the process of being revised with an estimated effective date July 2009. US EPA are also revising the Computer Monitor specification (V5.0) also with an estimated effective date July 2009. Finally, they are in the process of revising the energy efficiency criteria levels for imaging equipment (V1.1) with an effective date of April 2009.

SUSTAINABILITY CRITERIA	VERIFICATION	PC, notebooks, monitors		
		Basic Criteria	Advanced criteria I (Europe, North America, Latin America)	Advanced criteria II (South-east Asia, East Africa, Middle-East)
<p>D2 – Ease of disassembly</p> <p><u>Additional points will be awarded:</u></p> <ul style="list-style-type: none"> • If one qualified person alone shall be able to dismantle it. • If connections are easy to find, accessible with commonly available tools, and as standardised as possible. • If plastic parts heavier than 25g have a permanent marking identifying the material, in conformity with ISO 11469: 2000. Excluded from this criterion are extruded plastic materials and the light-guide of flat panel displays. • If plastic parts are made of one polymer or compatible polymers, except for the cover, which shall consist of no more than two types of polymer, which are separable <p>SBasics will be given using a weighting matrix system.</p>	<p>All products carrying the European Ecolabel, Nordic Swan or Blue Angel will be deemed to comply as well as an EPEAT certificate that indicates compliance with the criteria 4.3.1.1 - 4.3.1.5 and 4.3.2.2 or the ECO DECLARATION (version 2006 or later) with points 7.1, 7.2, 7.3, 7.4 & 7.6 in the category P7 (design, disassembly and re-cycling) marked “yes”. Alternatively the bidder must provide a written guarantee that this criterion will be met.</p>		•	•
<p>D3 – Ergonomics: <i>work load ergonomics, visual ergonomics/image quality</i></p> <p><u>Additional points will be awarded:</u></p> <p>If the work load ergonomics, visual ergonomics and image quality meet the criteria of the latest TCO label.</p> <p>SBasics will be given using a weighting matrix system, giving extra points.</p>	<p>All products carrying the latest TCO label or the latest TCO label will be deemed to comply. Other appropriate means of proof will also be accepted.</p>		•	•

SUSTAINABILITY CRITERIA	VERIFICATION	PC, notebooks, monitors		
		Basic Criteria	Advanced criteria I (Europe, North America, Latin America)	Advanced criteria II (South-east Asia, East Africa, Middle-East)
D4 – Hazardous Substances				
<p>D4.1 –Background lighting of LCD monitors does not contain mercury</p> <p><u>Additional points will be awarded:</u></p> <p>If the background lighting of LCD monitors does not contain mercury (e.g. by using software-based solutions). SBasics will be given using a weighting matrix system, giving extra points. See example matrix in the annex.</p>	The vendor is required to submit independent certification or a self-declaration that this criterion is met, such as an EPEAT certificate that indicates compliance with the criterion 4.1.3.3 “Elimination of intentionally added lead in certain applications”, or the ECO DECLARATION (version 2006 or later) with point P7.20 marked “yes”.		•	○ ¹⁹
<p>D4.2 –Product components do not contain brominated flame retardants (BFRs)</p> <p><u>Additional points will be awarded:</u></p> <p>If no product components contain any (or only traces of) brominated flame retardants (BFRs), whether in printed circuit boards or in cover/housing plastic parts or any other components. SBasics will be given using a weighting matrix system, giving extra points. See example matrix in the annex.</p>	The vendor is required to submit a Advanced self-declaration issued by the manufacturer that this criterion is met. Products with the Blue Angel label deem to comply partly regarding the criterion on the cover/housing plastic parts (50% of available extra points).		•	
D4.3 – Hazardous substances: electric cable insulation materials of power and signal cables as well as all cover/housing parts do not contain halogens (including	The vendor is required to submit independent certification or a self-declaration issued by the manufacturer that this criterion is met, such as		•	

¹⁹ Limited market availability: Comprehensive market research is necessary for inclusion of this criterion.

SUSTAINABILITY CRITERIA	VERIFICATION	PC, notebooks, monitors		
		Basic Criteria	Advanced criteria I (Europe, North America, Latin America)	Advanced criteria II (South-east Asia, East Africa, Middle-East)
<p>PVC) <u>Additional points will be awarded:</u> If no halogens (including PVC) are contained in electric cable insulation materials of power and signal cables as well as all cover/housing parts. SBasics will be given using a weighting matrix system, giving extra points.</p>	<p>the ECO DECLARATION (ECMA-370) (version 2006 or later) with points P7.12, P7.13 and P7.14 marked “yes”. Products with the Blue Angel label deem to comply too.</p>			
E – Contract Management				
<p>E1 – Packaging: exclusion of PVC, identification of plastic parts, recycled content, exclusion of heavy metals</p> <ul style="list-style-type: none"> • The packaging of the product shall not contain PVC • All plastic parts heavier than 25g must be identified according to ISO11469 by material type • At least 80 percent of the packaging by weight shall consist of materials that are readily recyclable (with available recycling options), can be composted, or can be disposed of in a municipal waste system. • Heavy metals (e.g. used in colours) shall not be intentionally added to any packaging or packaging component. Those heavy metals present in recycled content are accepted. 	<p>All products carrying the European Ecolabel, Nordic Swan, Blue Angel or EPEAT label (with criterion 4.8.2.2 met) will be deemed to comply. Alternatively the bidder must provide a written guarantee that this criterion will be met.</p>	•	•	•
<p>E2 – Advanced configuration and power interface ACPI mode (or equivalent) The vendor has to ensure that PCs and notebooks are all</p>	<p>The ACPI is enabled at delivery of the product.</p>	•	•	•

SUSTAINABILITY CRITERIA	VERIFICATION	PC, notebooks, monitors		
		Basic Criteria	Advanced criteria I (Europe, North America, Latin America)	Advanced criteria II (South-east Asia, East Africa, Middle-East)
shipped with the ACPI power-save mode (or equivalent) enabled.				
<p>E3 – Fundamental Labour Standards (FLS)</p> <p>The vendor has to ensure compliance with the Fundamental Labour Standards (ILO Basic Conventions) as:</p> <ul style="list-style-type: none"> • Freedom of Association and Protection of the Right to Organise (No. 87) • Right to Organise and Collective Bargaining (No. 98) • Forced Labour (No. 29) • Abolition of Forced Labour (No. 105) • Discrimination (Employment and Occupation) (No. 111) • Equal Remuneration (No. 100) • Minimum Age (No. 138) • Worst Forms of Child Labour (No. 182) 	<p>Upon demand the vendor is required to submit appropriate proof that these requirements have been met. A <u>self-commitment/declaration</u> that the requirements are met, together with documentary support of the implementation and monitoring of measures deems to comply.</p> <p>Implementation note: The procurer has to set up a system for monitoring of compliance during the contract.</p>	•	•	•

Section 5: Information sources

Ecolabels and other criteria sources

- Agreement between the Government of the United States of America and the European Community on the co-ordination of energy-efficiency labelling programs for office equipment (ENERGY STAR® criteria), http://eur-lex.europa.eu/LexUriServ/site/en/oj/2006/l_381/l_38120061228en00260104.pdf
- ENERGY STAR®, www.energystar.gov
- Blue Angel - Computers RAL-UZ 78, http://www.blauer-engel.de/englisch/navigation/body_blauer_engel.htm
- Blue Angel - Office Printing Devices RAL-UZ 122, http://www.blauer-engel.de/englisch/navigation/body_blauer_engel.htm
- Blue Angel - Reprocessed Toner Modules RAL-UZ 55, http://www.blauer-engel.de/englisch/navigation/body_blauer_engel.htm
- Preparatory studies for Eco-design Requirements of EuPs (Contract TREN/D1/40-2005/LOT3/S07.56313): Lot 3 - Personal Computers (desktops and laptops) and Computer Monitors. Final Report (Task 1-8). IVF Industrial Research and Development Corporation, <http://extra.ivf.se/ecocomputer/downloads/Eup%20Lot%203%20Final%20Report%20070913%20published.pdf>
- EcoDesign of EuP Products: Preparatory Studies LOT 4: Imaging Equipment: Copiers, Faxes, Printers, Scanners, MFD, <http://www.ecoimaging.org>
- EPEAT, www.epeat.com
- Nordic Swan – Personal Computers, version 5.0, <http://www.svanen.nu/SISMABDesktopDefault.aspx?tabName=CriteriaDetailEng&menuItemID=7056&pgr=48>
- Nordic Swan – Imaging Equipment, version 5.0, <http://www.svanen.nu/SISMABDesktopDefault.aspx?tabName=CriteriaDetailEng&menuItemID=7056&pgr=15>
- Nordic Swan – Toner cartridges, <http://www.svanen.nu/SISMABDesktopDefault.aspx?tabName=CriteriaDetailEng&menuItemID=7056&pgr=8>
- TCO '05 – Desktops, http://www.tcodevelopment.com/tcodevelopment1200/Datorer/TCO05/TCO05_Desktopversion_1.0.pdf
- TCO '05 – Notebooks, http://www.tcodevelopment.com/tcodevelopment1200/Datorer/TCO05/TCO05_Notebook_computers_version_2.0.pdf
- TCO '03 – Displays, http://www.tcodevelopment.se/tcodevelopment1200/Datorer/TCO03_Displays/TCO03_FPD_version_3_0.pdf
- TCO '99 – Printers, http://www.tcodevelopment.com/tcodevelopment1200/Datorer/TCO99/TCO99_Printers_2_1.pdf
- THE ECO DECLARATION (ECMA-370), www.ecma-international.org

Studies and other information

- AEAT (2001): Revision of the EU ecolabel criteria for computers: A report produced for Department for the Environment, Food and Rural Affairs.
- Clement, S (2006): "The Procura+ Manual 2nd ed.: A guide to cost effective Sustainable Public Procurement". ICLEI, Freiburg, Germany.
- Edwards, R. (1995): "Leak links power lines to cancer". New Scientist, 7 October 1995, p 4.
- Kuehr, R.; and Williams, E. (2003): Computers and the Environment: Understanding and Managing their Impacts, Springer.

- Meyer and Schaltegger (1999): Bestimmung des Energieverbrauchs von Unterhaltungselektronikgeräten, Bürogeräten und Automaten in der Schweiz, St. Gallen
- Öko-Institut (2008): Results of the UFOPLAN-Research „National Implementation of the EU Procurement“. Presentations of 26 February 2008 at UBA Berlin, Germany
- Schmidt & Fryendal (2003): Methods for Calculating the Environmental Benefits of 'Green' Products in Erdmenger (ed.) Buying into the Environment – Experiences, Opportunities and Potential for Eco-Procurement, Greenleaf
- Scott, N. Rayner, M (2007): “Ok Computer?” Ethical Consumer
- SOMO (2005): Irene Shipper & Esther de Haan – CSR issues in the ICT hardware manufacturing sector. SOMO ICT Sector Report. Available at www.somo.nl.
- UK Market Transformation Programme (2006): BNICT13: Trends in the use of imaging equipment, Version 1.3.

Internet sources

- <http://www.ecocomputer.org>
- http://www.ecoimaging.org/underreview_documents.php
- www.somo.nl
- www.procuraplus.org
- www.iclei-europe.org/procurement
- www.epeat.com
- <http://www.greenpeace.org/international/campaigns/toxics/electronics/how-the-companies-line-up>. – indicative environmental performance by company

Section 6: Evaluation/Award criteria matrix

In the evaluation of bids complying with the technical specifications, the sustainability criteria outlined above should be given a weighting of at least 20%.

[This text should be included as an annex in tender documents]²⁰

Sustainability of the offered products and services (bonus points/ weighting of criteria)		
Sustainability evaluation criteria for PCs, notebooks, monitors and imaging equipment	Bonus points (max. 35)	Product Scoring Name:
1. Energy consumption – <i>is lower than the maximum levels of the latest ENERGY STAR® requirements (March 2008: version 4.0, Tier 1)</i>	Max. 10 points: over 75% lower: 10 points 50-75% lower: 7 points 25-49% lower: 5 points 10-24% lower: 2 points <10% lower: no points	
2. Ease of disassembly	Fulfillment of criteria = 5 points Non-fulfillment of criteria = no points	
3. Hazardous Substances – <i>low Volatile Organic Compound (VOC) emissions</i>	Fulfillment of criteria = 5 points Non-fulfillment of criteria = no points	

²⁰ The following evaluation criteria should be considered alongside other evaluation criteria such as price. It is not necessary to include additional calculations on the Lifecycle Costing (LCC) of the products as the main sustainability criteria reflect the LCC already. When evaluating the price the only factor to consider is the purchase price including freight.

4. Hazardous substances – <i>background lighting of LCD monitors does not contain mercury</i>	Fulfillment of criterion = 5 points Non-fulfillment of criterion = no points	
5. Hazardous substances – <i>product components do not contain brominated flame retardants (BFRs)</i>	Fulfillment of criterion = 5 points Non-fulfillment of criterion = no points	
6. Hazardous substances – <i>electric cable insulation materials of power and signal cables as well as all cover/housing parts do not contain halogens (including PVC)</i>	Fulfillment of criterion = 5 points Non-fulfillment of criterion = no points	
SUM		

Section 7: Checklist for selection of PCs, notebooks and monitors

The following checklist is designed to help UN requisitioners in the preparation of product or service criteria and UN procurers in the selection process to determine the most sustainable office IT equipment available on the market.

Sustainability criteria	Applicable for desktop PCs, notebooks, monitors	Product Scoring
B – Requirement Definition		
B1.1 – Product lifetime: guarantee/warranty	X	
B1.2 – Product lifetime: upgradability	X	
B1.3 – Product lifetime: guarantee of availability of parts and components	X	
B2 – End of life and disassembly: take-back guarantee and recycling	X	
B3.1 – Energy consumption: maximum values	X	
B3.2 – Energy consumption: Power Safe Mode	X	
B4.1 – Hazardous substances: exclusion	X	
B4.2 – Hazardous substances: reduced mercury in background lighting of LCD monitors	X	
B5 – Noise: limit values for a ‘declared A-weighted Sound Power Level’	X	
C – Sourcing		
C1a – Social criteria: Production of the product according to international labor standards, self-declaration	X	
C1b – Social criteria: Production of the product according to international labor standards, independent third party certified, declaration of Honor	X	

C2a – Corporate performance: written corporate environmental policy	X	
C2b – Corporate performance: operational, third-party certified, environmental management system	X	
C3 – Corporate performance regarding hazardous substances: set timeline for the phaseout of brominated flame retardants (BFRs) and plastics containing polyvinylchloride (PVC)	X	
C4 – Emissions from transport of the product	X	
D – Evaluation		
D1 – Energy consumption: lower than ENERGY STAR®	X	
D2 – Ease of disassembly	X	
D3 – Ergonomics: work load ergonomics, visual ergonomics/image quality	X	
D4.1 – Hazardous Substances: background lighting of LCD monitors does not contain mercury	X	
D4.2 – Hazardous substances: product components do not contain brominated flame retardants (BFRs)	X	
D4.3 – Hazardous substances: electric cable insulation materials of power and signal cables as well as all cover/housing parts do not contain halogens (including PVC)	X	
E – Contract Management		
E1 – Packaging: exclusion of PVC, identification of plastic parts, recycled content, exclusion of heavy metals	X	
E2 – Advanced configuration and power interface ACPI mode (or equivalent)	X	
E3 – Fundamental Labour Standards (FLS)	X	

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).

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Local
Governments
for Sustainability



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 and www.ungm.org

For more information

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