



**Environmental criteria for sustainable public
procurement of**

Reproduction Equipment

Version 26 January 2016

1. Scope/definition

The Reproduction Equipment product group comprises equipment for use in an office environment. This product group comprises printers (black and white and colour equipment), photocopiers, faxes and multifunctional equipment, including electronic equipment, that combines at least two functions (printing, copying, faxing or scanning).

Large-format printers (that is to say, 40-100 cm printing width) also fall within the scope of this criteria document. It should, however, be stated that the criteria linked to double-sided printing do not apply to large format printers.

The following products (with their corresponding CPV codes) are part of the Reproduction Equipment product group. This list of products is non-exhaustive.

Products	CPV code
Photocopying and thermocopying equipment	30121000-3
Photocopiers	30121100-4
Photocopying equipment	30121200-5
Reproduction equipment	30121300-6
Parts and accessories of photocopying apparatus	30125000-1
Printers and plotters	30232100-5
Fax equipment	32581200-1

Excluded from the scope of this product group are:

- franking machines and scanners

2. Most significant environmental impacts

The following tables list the sustainability themes and describe the approach to each theme for the Reproduction Equipment product group. The 'Approach' column presents a statement indicating the influence of sustainable purchasing and its criteria on the 'sustainability' of the theme. This column also includes a reference to any requirements, award criteria or points of attention/suggestions that may be useful in implementing the approach. The product group can also have an impact on other environmental themes but, for now at least, these are less relevant, of a much less significant level of concern or do not as yet have a suitable set of standard criteria.

Themes:	Approach:	No. of requirement/ Criterion
<p>Energy and climate Energy consumption of reproduction equipment in the use phase, with corresponding CO₂ emissions</p>	<ul style="list-style-type: none"> • Use energy-efficient models 	ME1, GC1, GC3
	<ul style="list-style-type: none"> • Use equipment that allows energy-efficient printing 	ME4
	<ul style="list-style-type: none"> • Coordinate choice of equipment with copy and/or printing needs 	AS2, AS3, AS5

<p>Supplies and Raw materials Paper and ink consumption in use phase of the equipment</p> <p>Lifetime of the equipment</p> <p>Waste production in the use phase</p> <p>Critical materials in the equipment</p>	⇒	<ul style="list-style-type: none"> Use equipment that prints with the minimum possible material 	ME2, ME3, ME4, GC3
		<ul style="list-style-type: none"> Use equipment with long lifetime and guarantee period 	ME5
		<ul style="list-style-type: none"> Use equipment that allows local confirmation of print job before output 	ME6
		<ul style="list-style-type: none"> Use equipment without flame-retardant substances or preparations 	GC2
		<ul style="list-style-type: none"> Coordinate choice of equipment with copy and/or printing needs 	AS1, AS3, AS4
		<ul style="list-style-type: none"> Purchase used/refurbished equipment 	AS6
		<ul style="list-style-type: none"> Use equipment without flame-retardant substances or preparations 	GC2
<p>Health and welfare Use of hazardous substances in production of equipment</p>	⇒	<ul style="list-style-type: none"> Use equipment without flame-retardant substances or preparations 	GC2

3. Points of attention/suggestions

Devoting attention to the opportunities and possibilities for the most sustainable procurement possible in the preparation phase will lead to specifications that are more ambitious or which differ from the standard minimum requirements and award criteria set out in this document. The following table presents points for attention and suggestions for promoting sustainability in procurement within this product group.

No.	Points of attention/suggestions (AS)
AS1	<p>Analyse print and reproduction needs Complete a thorough analysis of the organisation's printing and copying needs ahead of time. This requires insight into the relevant figures, such as the use of paper and toner over a specific period of time. These figures can be collected within the context of internal environmental practices, for example, or collection can be outsourced to the supplier as part of maintenance.</p>
AS2	<p>Choose machine that best meets the copying and/or printing requirements The choice of the type of copier/printer in general is determined on the basis of the number of copies/prints made (the copy volume). Heavy equipment uses considerably more energy than a medium-volume machine. The installation of heavy equipment in areas with a relatively low copy volume therefore wastes energy. Equipment that is too light is not appropriate either. Using a machine to make more copies than it was designed for can result in greater wear and tear, increased repairs and premature replacement.</p>
AS3	<p>Choose central copying/printing By choosing a central copying/printing location, it is possible to reduce the number of machines. This reduces the raw materials and waste (including toner cartridges). A large machine that is used by various users in general uses less energy than many smaller machines combined.</p>

AS4	<p>Choose printers with different trays for different types of paper Printers with more than one tray make it possible to match the choice of paper to the purpose of the printed document (filing or not, thicker paper or not, etc.). This makes it possible to always make the most environmentally friendly choice. This also ensures that incorrect printing is avoided, for example, by having separate trays for blank paper and letterhead paper.</p>
AS5	<p>Choose multifunctional (digital) devices A multifunctional device (MFD) or an "all-in-one device" uses approximately 50% less energy than a separate printer, scanner, fax machine and copier. This can also result in cost savings.</p>
AS6	<p>Choose used equipment Check to see if it is possible to procure refurbished equipment (provided it meets the specified energy criteria). Actual practice shows that this type of equipment is not inferior in terms of quality and does not require more maintenance than new equipment.</p>

4. Selection criteria

Not defined for this product group.

5. Technical specifications

No.	Technical specifications (ME)
ME1	<p>'Energy Star' requirements for reproduction equipment All products meet the most recent Energy Star standards for energy performance. See: www.eu-energystar.org.</p> <p><i>Explanation</i> As from 7 May, the Energy Star standards 'Imaging Equipment specifications v2.0' apply to reproduction equipment .</p> <p>The energy consumption must be measured in accordance with the Test Method for Determining Imaging Equipment Energy Use Version 2.0 – Final May-2012 or equivalent method.</p> <p><i>Verification</i> The tenderer may be asked to submit documentation demonstrating compliance with the criteria above. Products in the Energy Star database (see http://www.eu-energystar.org/nl/database.shtml) are in compliance. Products with a relevant type 1 environmental label or environmental declaration answering to the listed criteria will also be assumed to be in compliance. Other appropriate forms of documentation will also be accepted, such as a technical file from the manufacturer or approval report of an accredited institution (for example, an ISO 17025-accredited institution authorised to issue approval reports) showing that the products answer to the criteria.</p> <p>For an explanation of type I environmental label, see: http://www.nen.nl/NEN-Shop/Norm/NENENISO-140242000-en.htm</p> <p>For information on ISO 17025 in reference to performance of trials and calibrations, see: http://www.nen.nl/NEN-Shop/Norm/NENENISOIEC-170252005-nl.htm</p>
ME2	<p><i>(Only applicable to image processing equipment that can achieve a print/copying speed of 25 images per minute (monochromatic) or more in A4 format)</i></p> <p>Double-sided printing The image processing equipment must be equipped with an automatic double-sided printing/copying unit. The duplex print/copy function must be configured as standard in the manufacturer's original, official software</p> <p><i>Verification</i> The tenderer may be asked to submit documentation demonstrating compliance with the criteria above. Products with a relevant type 1 environmental label or environmental declaration that meet the specified requirements, and products that have the Energy Star v.2.0 quality mark (or, if applicable, a more recent version) are assumed to be in compliance. A manufacturer declaration indicating that</p>

	<p>these requirements are met will also be accepted.</p> <p>For an explanation of type 1 environmental label, see: http://www.nen.nl/NEN-Shop/Norm/NENENISO-140242000-en.htm.</p> <p><i>Source EU GPP</i></p>
ME3	<p>Suitability for recycled paper Reproduction equipment is suitable for the use of recycled paper when it meets the European EN 12281:2002 standard.</p> <p><i>Verification</i> The tenderer may be requested to substantiate, with documentation, that the reproduction equipment is suitable.</p>
ME4	<p>User instructions for green management of performance A guideline with instructions for maximising the environmental performance of the image processing equipment in question (addressing the functions for paper management, energy efficiency and consumables such as ink/toner cartridges) must be provided, in written form, as a specific component of the user guide and/or in electronic form on the manufacturer website.</p> <p><i>Verification</i> The tenderer may be asked to submit documentation demonstrating compliance with the criteria above. Products with a relevant type 1 environmental label or environmental declaration answering to the listed criteria will be assumed to be in compliance. Other suitable forms of documentation will also be accepted, such as a written statement from the manufacturer that the clause set out above will be fulfilled.</p> <p>For an explanation of type I environmental label, see: http://www.nen.nl/NEN-Shop/Norm/NENENISO-140242000-en.htm.</p> <p><i>Source EU GPP</i></p>
ME5	<p><i>(Only applicable to purchase contracts excluding maintenance)</i></p> <p>Product lifetime and warranty Repair or replacement of the product must be covered under warranty for a minimum of five years. The tenderer must also ensure that for at least a period of five years after the date of purchase, original or equivalent replacement parts are available (either directly or through other designated intermediaries). This provision does not apply in unavoidable temporary circumstances beyond the control of the manufacturer such as natural disaster.</p> <p><i>Verification</i> The tenderer may be asked to submit documentation demonstrating compliance with the criteria above. Products with a relevant type 1 environmental label or environmental declaration answering to the listed criteria will be assumed to be in compliance. Other suitable forms of documentation will also be accepted, such as a declaration from the manufacturer of compliance with the provision above.</p> <p>For an explanation of type I environmental label, see: http://www.nen.nl/NEN-Shop/Norm/NENENISO-140242000-en.htm.</p> <p><i>Source EU GPP</i></p>
ME6	<p><i>(Only applicable to reproduction equipment connected to a network on which a group of users run print jobs)</i></p> <p>Local confirmation of the print job prior to execution Reproduction equipment offers the option to release or delete print jobs locally or remotely.</p> <p><i>Explanation</i> A distinction between 2 concepts can be made:</p> <ul style="list-style-type: none"> • "pull printing" (also referred to as "follow-me printing"), by which a print job is sent to a central print server. This server will retain the instruction until a user identifies himself or herself on any printer within the network and retrieves the print job. • PIN printing: A printing instruction is sent to a specific printer that supports PIN printing. The printing instruction will only be executed after the user has identified himself or herself. <p><i>Verification</i></p>

	The tenderer may be requested to substantiate, with documentation, that the reproduction equipment is suitable for pull printing and/or PIN printing.
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6. Award criteria

No.	Award criteria (GC)
GC1	<p>Energy efficiency and operating mode of reproduction equipment Points are awarded for every 5% of energy consumption lower than as specified for the operating mode in the technical specifications, as measured using the Test Method for Determining Imaging Equipment Energy Use Version 2.0 – Final May-2012 or equivalent method.</p> <p><i>Verification</i> The tenderer they be requested to submit a technical file from the manufacturer. A test report showing that the products meet these criteria will also be accepted.</p> <p><i>Source EU GPP</i></p>
GC2	<p>No flame-retardant substances or preparations The greater the extent to which plastic components heavier than 25 g do not contain any flame-retardant substances or preparations to which one of the following risk phrases has been allocated as determined in Directive 1272/2008, the higher the tender will be rated. These R-phrases are:</p> <ul style="list-style-type: none"> • R45 (may cause cancer) • R46 (may cause inheritable genetic damage) • R60 (may impair fertility) • R61 (may cause harm to the unborn child) <p>This criterion will have been met when no more than 0.1% (by weight) of the relevant substances is present because trace amounts may be present in relation to any practical test.</p> <p><i>Verification</i> The tenderer may be asked to submit documentation demonstrating compliance with the criteria above. Products with a relevant type 1 environmental label answering to the listed criteria will be assumed to be in compliance. Other appropriate documentation will also be accepted.</p>
GC3	<p><i>(Only applicable to image processing equipment that can achieve a print/copying speed of less than 25 images per minute (monochromatic) in A4 format)</i></p> <p>Double-sided printing Points will be assigned to image processing equipment equipped with an automatic unit for double-sided printing/copying (duplex unit). The duplex print/copy function must be configured as standard in the manufacturer's original, official software</p> <p><i>Verification</i> The tenderer may be asked to submit documentation demonstrating compliance with the criteria above. Products with a relevant type 1 environmental label or environmental declaration answering to the listed criteria will be assumed to be in compliance. A manufacturer declaration indicating that these requirements are met will also be accepted.</p> <p>For an explanation of type I environmental label, see: http://www.nen.nl/NEN-Shop/Norm/NENENISO-140242000-en.htm.</p> <p><i>Source EU GPP</i></p>

7. Contract provisions

Not defined for this product group.