## Nordic Ecolabelling of

# **Imaging equipment**



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#### **Addresses**

In 1989, the Nordic Council of Ministers decided to introduce a voluntary official ecolabel, the Swan. These organisations/companies operate the Swan ecolabelling system on behalf of their own country's government. For more information, see the websites.

#### Denmark

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#### Sweden

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# What is Nordic Ecolabelled imaging equipment?

Nordic Ecolabelled imaging equipment products (copiers, digital duplicators, facsimile machines, multifunction devices (MFD), printers, scanners) are amongst the least environmental harmful products in their category, since they meet a number of environmental requirements.

The environmental problems associated with imaging equipment derive mainly from power consumption during use and from disposal of the products as waste. Furthermore they represent a source of pollution in the working environment through the generation of heat, emissions to air and noise.

The requirements that the appliances must fulfil before a Nordic Ecolabel can be granted focus on the following aspects:

- power consumption
- design
- plastic materials and additives, e.g. flame-retardants
- heavy metals
- recycling of discharged products
- emission of pollutants (also noise) in working areas
- performance properties e.g. duplex printing saving paper

#### **International cooperation**

Imaging equipment products are internationally distributed products that are widely exported and imported, thus the mutual recognition and harmonisation of criteria (common criteria) with overseas ecolabel-programs should be of extensive significance to environmental improvements, i.e. increasing the number of ecolabelled products on the local or regional markets.

In version 3 of the Nordic Ecolabel criteria for copying machines, printers, fax machines and multifunctional devices, the Nordic Ecolabelling Board and Japan Environmental Association decided to develop what were termed as core criteria. For the licence applicant this means that a product that has been approved by the Japan Environmental Association and awarded the Eco Mark does not need further documentation regarding the requirements covered by the cooperation agreement. In version 4 of the Nordic Ecolabel criteria, the harmonisation process continued with Eco Mark and with Blue Angel (the German national ecolabel).

In version 5 of the criteria, full harmonisation has been reached with the Eco Mark and Blue Angel criteria. Further explanations regarding the harmonisation are given in section 1 and appendices 2 and 3.

### Why choose the Nordic Ecolabel?

- The licence holder of Nordic Ecolabelled imaging equipment is able to use the Nordic Ecolabel trademark in marketing. The Nordic Ecolabel is a very well-known and well-reputed trademark in the Nordic region.
- The Nordic Ecolabel is a cost-effective and simple way of communicating environmental work and commitment to customers and suppliers.
- Reducing environmental impact often creates scope for lowering costs, such as by cutting the consumption of energy and reducing amounts of packaging and waste.
- Environmentally suitable operations prepare manufacturers for future environmental legislation.
- Environmental issues are complex. It can take a long time and extensive resources to gain an understanding of a specific area. Nordic Ecolabelling can be seen as aid in this work.
- The Nordic Ecolabel covers not only environmental issues but also quality requirements, since the environmental improvement and quality often go hand in hand. This means that a Nordic Ecolabel licence can also be seen as a mark of quality.

# What products are eligible for a Nordic Ecolabel?

Copiers, digital duplicators, facsimile machines, multifunction devices (MFD), printers and scanners are eligible for a Nordic Ecolabel. The machines may be equipped with external or internal scanners. In this document we collect all of these products under the name imaging equipment.

The criteria do not apply to computer equipment, for which separate criteria apply.

#### Copier

A commercially-available imaging product whose sole function is the production of hard copy duplicates from graphic hard copy originals. The unit must be capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as copiers or upgradeable digital copiers (UDCs).

#### **Digital duplicator**

A commercially-available imaging product that is sold in the market as a fully-automated duplicator system through the method of stencil duplicating with digital reproduction functionality. The unit must be capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as digital duplicators.

#### Facsimile machine (Fax machine)

A commercially-available imaging product whose primary functions are scanning hard copy originals for electronic transmission to remote units and receiving similar electronic transmissions to produce hard copy output. Electronic transmission is primarily over a public telephone system, but also may be via computer network or the Internet. The product also may be capable of producing hard copy duplicates. The unit must be capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as fax machines.

#### **Multifunction device (MFD)**

A commercially-available imaging product, which is a physically-integrated device or a combination of functionally-integrated components, that performs two or more of the core functions of copying, printing, scanning, or faxing. The copy functionality as addressed in this definition is considered to be distinct from single sheet convenience copying offered by fax machines. The unit must be capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as MFDs or multifunction products (MFPs).

Note: If the MFD is not a single integrated unit but a set of functionally integrated components, then the manufacturer must certify that when installed correctly in the field, the sum of all energy or power use for all MFD components comprising the base unit will achieve the energy or power levels provided in Section 3 to qualify as an Energy Star MFD.

#### **Printer**

A commercially-available imaging product that serves as a hard copy output device, and is capable of receiving information from single-user or networked computers, or other input devices (e.g., digital cameras). The unit must be capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as printers, including printers that can be upgraded into MFDs in the field.

#### Scanner

A commercially-available imaging product that functions as an electro-optical device for converting information into electronic images that can be stored, edited, converted, or transmitted, primarily in a personal computing environment. The unit must be capable of being powered from a wall outlet or from a data or network connection. This definition is intended to cover products that are marketed as scanners.

#### **Extra equipment**

The above products also include various consumer durables, such as OPC (Optical Photosensitive Conductor) kits, drums, toner powder and residual toner cartridges.

If extra equipment shall use the Nordic Ecolabel they must be listed in a valid licence and the extra equipment must belong to the ecolabelled imaging equipment.

If extra equipment such as desks, sorters, feeder and units for double-sided printing are to be included, the individual parts must meet the requirements as to design, materials, chemical requirements during production, requirements as to packaging and requirements as to recycling.

### How to apply

Each requirement is marked with the letter R (requirement) and a number. For a licence to be awarded, all relevant requirements must be fulfilled.

Appendices 1-10 may be used as a documentation aid when applying for a licence, but this is not mandatory.

#### Icons in the text

The text describes how the fulfilment of the individual requirement must be documented. There are icons in the text to make this clearer. These icons are:

P The requirement is checked on site

EM x-x-xx & BA x.x References to requirements in Eco Mark criteria

(117 Copiers, version 2.2 and 122 Printers, version 2.0) and Blue Angel criteria (RAL-UZ 122, June 2006).

#### **Application**

The applications must be sent to Nordic Ecolabelling in the country in which the imaging equipment is on sale. See page two for addresses. The application documents comprise an application form and documentation demonstrating fulfilment of the requirements (specified in the criteria).

Further information and assistance may be available. Visit the Web site of the national ecolabelling body for more information, see page 2.

#### **On-site inspection**

In connection with the processing of the application, Nordic Ecolabelling normally performs an on-site inspection to ensure adherence to the requirements. When such an inspection takes place, data used for calculations, original copies of submitted certificates, test records, purchase statistics, and similar documents in support of the application must be available for examination.

#### Costs

An application fee is charged to companies applying for a licence. There is an additional annual fee based on the turnover of the Nordic Ecolabelled product.

#### **Enquiries**

Please contact Nordic Ecolabelling if you have any queries or require further information. See page 2 for addresses.

#### Harmonisation with Eco Mark and Blue Angel П

Most product requirements are fully harmonised with Eco Mark and Blue Angel. Some requirements are not harmonised and are found only in version 5 of the Nordic Ecolabel criteria document. These requirements are mainly administrative and specific for the Nordic organisation of the company that applies for a license. See section 4.

If a product is approved under the Eco Mark criteria (117 Copiers, version 2.2 or later versions and 122 Printers, version 2.0 or later versions) or Blue Angel criteria (RAL-UZ 122, June 2006 or later versions) it is easier to apply for a Nordic Ecolabel licence. Such applicants may use appendices 2 and 3 that describe the additional documentation needed for a Nordic Ecolabel licence.

If the product does not have a valid Eco Mark or Blue Angel license, the product must fulfil the requirements in sections 2, 3 and 4.

In this document, Nordic Ecolabelling have changed the layout of the requirements from the original documents, Eco Mark criteria (117 Copiers, version 2.2 or later versions and 122 Printers, version 2.0 or later versions) or Blue Angel criteria (RAL-UZ 122, June 2006 or later versions). In case of any conflict the original always takes precedence. Each requirement contains a reference to the original requirement.

Further information about EcoMark and Blue Angel can be found at the following Internet addresses:

EcoMark: www.ecomark.jp/english/index.html

Blue Angel: www.blauer-engel.de/en/products brands/vergabegrundlage.php?id=147

#### **R** 1 Valid Eco Mark license.

If the product has a valid Eco Mark licence (117 Copiers, version 2.2 or later versions and 122 Printers, version 2.0 or later versions), send documentation according to Appendix 2 and Section 4 requirements R23-R33.

Description as specified above.  $\bowtie$ 

#### **R2** Valid Blue Angel license.

If the product has a valid Blue Angel licence (RAL-UZ 122, June 2006 or later versions), send the documentation specified in Appendix 3 and Section 4 requirements R23-R33.

Description as specified above.  $\bowtie$ 

#### 2 **Environmental requirements**

If the product does not hold a valid Eco Mark or Blue Angel license, the product must fulfil the requirements in sections 2, 3 and 4.

#### Requirements as to analysis laboratories

The analysis laboratory used must fulfil the general requirements of standard EN ISO 17025 or have official GLP status.

The applicant's analysis laboratory/test procedure may be approved for analysis and testing if:

- sampling and analysis is monitored by the authorities, or
- the manufacturer's quality assurance system covers analyses and sampling and is certified to ISO 9001 or ISO 9002, or
- the manufacturer can demonstrate agreement between a first-time test conducted at the manufacturer's own laboratory and testing carried out in parallel at an independent test institution, and the manufacturer takes samples in accordance with a fixed sampling schedule.

#### 2.1 **General description**

#### R3 **Description of the product**

Describe the product and how it fulfils the definition of a product eligible to carry the Nordic Eco label.

 $\bowtie$ Description as specified above.

#### 2.2 **Energy consumption**

#### R4 **Energy consumption**

The energy consumption of the product must fulfil the energy requirement in Blue Angel criteria for a corresponding product. Energy consumption must be measured in accordance with the requirements described in the criteria for Blue Angel: (RAL-UZ 122, June 2006 or later versions).

Or

The energy consumption of the product must fulfil the energy requirement in Energy Star criteria for imaging equipment. Energy consumption must be measured in accordance with the requirements described in the Energy Star criteria for imaging equipment version 1.1 (October 2008) or later versions.

Further information: www.energystar.gov/index.cfm?c=revisions.img\_equip\_spec EM 4-1-12 & BA 3.4

A test report containing the results of the measurement of energy consumption.  $\boxtimes$ 

#### 2.3 Design and materials

#### **R5** Reused plastic

At least one part heavier than 25 gram must contain reused plastic or postconsumer and pre-consumer recycled plastic.

EM 4-1-2

- A declaration for the applied product showing that the requirement is met (Appendix 5 may be used).
  - A list showing the plastic materials used (Appendix 6 may be used).

    Describe also all plastic part comprising of recycled or reused plastic parts.

#### R6 Labelling of plastic parts

Plastic parts must be marked at least in accordance with DIN/ISO 11469:2000. Exemptions from this requirement are plastic parts lighter than 25 g, parts with a flat area less than 200 mm<sup>2</sup> and any reused parts.

EM 4-1-2 & BA 3.1.3

⊠ See R5.

#### **R7** Subassemblies

Subassemblies (casing parts whose entire weight exceeds 10 g) made of mutually incompatible materials must be separable or connected by separation aids or all materials used must be easily separable by means of recycling technology.

EM 4-1-1 & BA 3.1.1

A declaration for the applied product showing that the requirement is met. (Appendix 5 may be used).

## R8 Special requirements as to products with combined toner cartridges.

Products with combined toner cartridge may be accepted if the cartridge is not designed to prevent reuse.

Products must accept remanufactured toner cartridges.

In order to ensure that the toner cartridges are returned for reuse, a return system must be offered for recycling combined toner cartridges and information to user about the return system must be provided.

Combined toner cartridge: Drum, developer and toner in one unit.

EM 4-1-5 & BA 3.2.1.2

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- A declaration for the applied product showing that the requirement is met (Appendix 5 may be used).
- The applicant must document the existence of a functional return system and describe the structure of this system.

#### 2.4 Plastics in casings and their components

#### R9 Single plastic casing parts

Single plastic casing parts heavier than 25 g must be made of a homopolymer or copolymer. Polymer blends (polymer alloy) are permitted.

EM 4-1-1 & BA 3.1.1

See R5.

#### R10 Combined plastic casing parts

Combined plastic casing parts heavier than 25 g must be made of four or fewer types of mutually separable polymers or polymer blends.

EM 4-1-1 & BA 3.1.1

⊠ See R5.

#### R11 Chlorine-based plastics

Plastic parts over 25 grams must not contain chlorinated polymers.

Exemptions from the requirement are:

Casing parts that are demonstrably reused in accordance with R5.

EM 4-1-2 & BA 3.1.2

 The applicant must submit a list of all plastic materials in plastic parts over 25 grams in casing and their components (Appendix 6 may be used).

• The manufacturer(s) of the individual plastic parts must declare that the requirement has been fulfilled (Appendix 7 may be used).

#### R12 Additives

Additives containing organohalogen compounds are not permitted. This includes flame retardants.

Flame retardants used in plastic components must be declared and characterized by their CAS numbers.

Plastics must not, at the time of application, contain additives which are assigned one or more of the following risk phrases:

- R 40 (possible risk of cancer)
- R 45 (may cause cancer)
- R 46 (may cause heritable genetic damage)
- R 48 (danger of serious damage to health by prolonged exposure)
- R 49 (may cause cancer by inhalation)
- R 60 (may impair fertility)
- R 61 (may cause harm to unborn child)
- R 62 (possible risk of impaired fertility)
- R 63 (possible risk of harm to unborn child)

Risk phrases in accordance with EU chemical legislation (Council Directive 67/548/EEC as last amended by Commission Directive 98/98/EEC).

#### Exemptions from the requirement are:

Plastic parts weighing less than 25g. These parts must not, however, contain any PBB (polybrominated biphenyls), PBDE (polybrominated diphenyl ethers), decaBDE or chlorinated paraffins.

Casing parts that are demonstrably reused and marked in accordance with requirement R5. These parts must not, however, contain any PBB (polybrominated biphenyls), PBDE (polybrominated diphenyl ethers), decaBDE or chlorinated paraffins.

Special plastic components installed in direct vicinity of heating and fusing units. These parts must not, however, contain any PBB (polybrominated biphenyls), PBDE (polybrominated diphenyl ethers), decaBDE or chlorinated paraffins.

Process-induced technologically unavoidable impurities. The maximum allowable concentrations are 0.1 w-% in homogenous material.

Flouroorganic additives which are used to improve the physical properties of plastic, provided they are not present in concentrations greater then 0.5 weight-%.

Fluorinated plastics like for example PTFE.

EM 4-1-2 & BA 3.1.2.1

The manufacturer of used plastic must declare that the requirement has been fulfilled. The manufacturer of plastic must submit a list of all used flame retardants. The list must contain complete chemical name, CAS number or according to "ISO1043-4:1998 (JIS K6899-4:2000)" and name of supplier (Appendix 7 may be used).

#### 2.5 Materials, other dangerous substances

#### R13 Batteries

Batteries used must not contain cadmium, mercury, lead, and their compounds, except for impurities which cannot be avoided technically. Such impurities must not exceed the limiting values as specified in the EU Directives 91/157/EEC and 98/101/EEC (Battery).

EM 4-1-3 & BA 3.1.4

The applicant or the manufacturer of the battery must declare that the battery fulfils the requirement (Appendix 8 may be used).

#### R14 Chemicals used during production

Chemicals containing the following substances regulated in the Montreal Protocol must not be used in the end production of the machines or in the production of circuit boards: CFCs, HCFCs, 1.1.1 trichloro-ethane or carbontetrachloride.

EM 4-1-16

The end-manufacturer and direct suppliers (suppliers during the final stages of the supplier chain) must declare that the requirement has been fulfilled (Appendix 9 may be used).

#### R15 Chlorine-based packaging materials

Plastics used for packaging the equipment (including toner powder containers) must not contain chlorinated polymers.

EM 4-1-11 & BA 3.1.11

The applicant must declare that the requirement has been fulfilled (Appendix 8 may be used).

#### R16 Labelling of plastic packaging materials

Plastics used must be marked in accordance with the currently applicable versions of the EU Directive 97/129/EEC (Packaging) or marked in accordance with ISO-11469.

EM 4-1-11 & BA 3.1.11

The applicant must declare that the requirements of the Packaging Directive have been fulfilled (Appendix 8 may be used).

#### 2.6 Other environmental requirements

#### R17 Supply of spare parts

The availability of spare parts must be guaranteed for at least five years after production of the specified ecolabelled machine comes to an end.

EM 4-1-8 & BA 3.1.8

The applicant must declare that spare part will be available for at least five years after the production date of the specified ecolabelled machine (Appendix 10 may be used).

#### R18 Double-sided copying

Appliances with a maximum operating speed of more than 45 sheets per minute for A4 size paper must be equipped with automatic double-side copying (a duplex-unit). Appliances with operating speeds of 20 to 44 sheets per minute must have a double-side copy unit (duplex) as extra equipment for subsequent upgrading if the user so wishes.

EM 4-1-14

The applicant must declare that the requirement is fulfilled (Appendix 10 may be used).

#### **R19** Traceability

The licence holder must have a traceability system for the production of the Nordic Ecolabelled product.

Description of/procedures for the fulfilment of the requirement.

#### **R20** Legislation and regulations

The licence holder must guarantee adherence to safety regulations in force, working environment legislation, environmental legislation and conditions/concessions specific to the operations at all sites where the Nordic Ecolabelled product is manufactured.

No documentation is required, but Nordic Ecolabelling may revoke the licence if the requirement is not fulfilled.

### 3 Performance properties

#### **R21** Emissions

The product must fulfil the requirement as stated in Blue Angel (RAL-UZ-122) version June 2006 or EcoMark No. 117 "Copier version 2.2" or EcoMArk No 122 "Printers Version 2.0".

Emission rates must be measured in accordance with the requirements described in Blue Angel: RAL-UZ 122 Version June 2006 or EcoMark No. 117 "Copier version 2.2" or EcoMark No 122 "Printers Version 2.0".

Substance	Emission rate		Emission rate	
	Print pha	se (mg/h)	Ready phase (mg/h).	
	Colour Print- ing Total in ready + print phase	Monochrome printing Total in ready + print phase	Desktop products	Floor-mounted equipment (Volume >250 litres)
TVOC	18	10	1	2
Benzene	< 0.05	< 0.05		
Styrene	1.8	1.0		
Ozone	3.0	1.5		
Dust	4.0	4.0		

Table with limited values of emission according to Blue Angel RAL-UZ 122 version June 2006. These limited values applies also to EcoMark No. 117 "Copier version 2.2" or EcoMark No 122 "Printers version 2.0".

The applicant must submit a report containing the results of the emission test according to the methods specified in RAL-UZ 122 version June 2006 (see Appendix 4) or EcoMark No. 117 "Copier version 2.2" or EcoMark No. 122 "Printers version 2.0".

#### R22 Noise

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The declared A-weighted sound effect  $L_{\text{WAd}}$  must not exceed the value determined in accordance with the following formula and additionally remain below a limited value: 7.5 (B).

The formula of the limited value:

Copiers:  $L_{WAd}$ : 0.035 x CPM + 5.9 (B) Printers:  $L_{WAd}$ : 0.035 x CPM + 5.9 (B) Fax and MFD:  $L_{WAd}$ : 0.035 x CPM + 5.9 (B)

The sound effect from the product must be measured in accordance with the method specified in ISO 7779 or RAL-UZ 122 and the A-weighted sound effect  $L_{\text{WAd}}$  must be declared in accordance with ISO 9296 in force at the time of application.

The requirement on sound effect of equipment with a CPM above 71 is exempted from the maximum limit of 7.5B, but the  $L_{\text{WAd}}$  of these machines should be submitted for reference.

For copiers using larger paper sizes (A2 and larger), the number of sheets copied may be counted on an A4 basis (by Energy Star).

EM 4-1-3 & BA 3.5

The applicant must submit a report containing the results of the sound effect test according to the methods as specified in ISO 7779 or RAL-UZ 122 and declared in accordance with ISO 9296.

### 4 Quality and regulatory requirements

To ensure that the Nordic Ecolabel requirements are fulfilled, the following procedures must be implemented. These requirements are mainly administrative and are specific to the Nordic organisation of the company that applies for a license.

If the applicant or the manufacturer of the ecolabelled product has an environmental management system certified to ISO 14 001 or EMAS, and the following procedures have been implemented, it is sufficient for the accredited auditor to certify that the requirements are observed.

#### **R23** Information to consumers

The following information must be specified in user information:

- Maximum power consumption during operation, stand by-, low energyand off-modes.
- Information on the function of the energy management system.
- Recommendation that the machine be turned off when not in use for a long time.
- Information on the use of double-sided copying, the presence of a duplex unit or its availability as an upgrade and information that double-sided copying will save the environment and money.
- Instructions on the positioning of the machine.
- Information about where used products and packaging can be deposited in accordance with local legislation.
- Information about the return system for recycling combined toner cartridges.
- Information on disposal of used OPC kit/photosensitive drums, toner containers and containers for used toner.
- Information that used batteries should be disposed of in accordance with local legislation.
- Print capacity (copies per minute and copying volume per year or month).
- Recommendation that ecolabelled paper be used.
- Maximum sound effect level during operation and stand by-modes. In the case of machines with a sound power level of more than 63 dB  $L_{\text{WAd}}$  during operation and 40 dB  $L_{\text{WAd}}$  in stand-by, the manufacturer should recommend that the machine be located in a room in which no employee has his/her regular work station.
- Maximum value of emission rate of TVOC in printing phase, benzene, styrene, ozone and dust. For colour printer the values must be shown for colour and monochrome printing.
- Warranty period. For products sold to private consumers. (For products only sold to companies conditions of guarantee should be stated in the contract.
- Information that offers supply of spare parts for 5 years.

The following technical information must be specified in the service manual:

• A specification of how frequently ozone filters (if such exists in current product) require replacement.

The applicant must submit copies of all relevant pages of the user manual/service manual with information as specified in the requirement.

#### R24 Recycling and reuse of consumer durables and parts that wear out

The licence applicant and/or the local representative of the licence applicant must have a system in place for ensuring that consumer durables and parts that wear out as far as possible are sorted and recovered/reused.

Consumer durables and parts that wear out are those parts that service personnel replace when the machine is serviced or that can be replaced by the consumer after reading the instructions for use.

Collected toner cartridges, drum kits, light-sensitive drums and residual toner containers collected by the licence applicant or the representative of the licence applicant must be reused or recycled.

The applicant must supply information to the service personnel and the users, informing about how consumer durables and spare parts shall be recycled or reused.

#### **R25** Nordic Ecolabel licence contact

The company must appoint a person responsible for ensuring that the Nordic Ecolabel requirements are fulfilled, and a contact person for communications with Nordic Ecolabelling.

A chart of the company's organizational structure detailing who is responsible for the above.

#### **R26** Documentation

The licence holder must be able to present a copy of the application, as well as the facts and calculation data on which the documents submitted in the application are based (including test reports, documents from suppliers and suchlike).

P Checked on site.

#### R27 The quality of the product

The licence holder must guarantee that the quality (at the time of application) of the Nordic Ecolabelled products leaving the production is maintained throughout the validity period of the licence.

Procedures for collating and, where necessary, dealing with claims and complaints regarding the quality of the Nordic Ecolabelled product.

Documentation to guarantee the above.

#### R28 Service and support

The licence holder must offer service and support in the official Nordic language in the country in which the Nordic Ecolabelled product is on sale.

Describe service and support organisation.

#### **R29** Planned changes

Written notice must be given to Nordic Ecolabelling of planned changes that have a bearing on the Nordic Ecolabel requirements.

Procedures detailing how planned changes are handled.

#### **R30** Unplanned nonconformities

Unplanned nonconformities that have a bearing on the Nordic Ecolabel requirements must be reported to Nordic Ecolabelling in writing and also journal led.

Procedures detailing how unplanned nonconformities are handled.

#### **R31** Traceability

The licence holder must have a traceability system for the production of the Nordic Ecolabelled product.

Description of/procedures for the fulfilment of the requirement.

#### **R32** Legislation and regulations

The licence holder must guarantee adherence to safety regulations in force, working environment legislation, environmental legislation and conditions / concessions specific to the operations at all sites where the Nordic Ecolabelled product is manufactured. In addition the licence holder must guarantee adherence to product specific regulations in all the Nordic countries where the product is on sale.

No documentation is required, but Nordic Ecolabelling may revoke the licence if the requirement is not fulfilled.

#### **R33** Marketing

Marketing of the Nordic Ecolabelled product must comply with "Regulations for the Nordic Ecolabelling of products" 22 June 2011 or later version.

Appendix 1 duly completed.

### **Marketing**

The Nordic Ecolabel is a well-known and well-reputed trademark in the Nordic region. Nordic Ecolabelled products and services may be marketed using the Nordic Ecolabel for as long as the associated licence is valid.

The label must be positioned so that there is no doubt as to what the label refers and so that it is clear that the appliance is ecolabelled.

More information on marketing can be found in "Regulations for the Nordic Ecolabelling of products" 22 June 2011 or later versions.

### **Design of the Nordic Ecolabel**

Design of the Nordic Ecolabel:



Each licence has a unique six-digit licence number that must be displayed along with the label.

More information on the design of the label can be found in "Regulations for the Nordic Ecolabelling of products" 22 June 2011 or later version.

### Sales in other Nordic countries

Registering a licence in another Nordic country allows the Nordic Ecolabel to be used on a larger market. The following must be submitted to Nordic Ecolabelling:

- Form for sales in other Nordic countries.
- Documentation demonstrating the fulfilment of national regulations.

Registration is free of charge but an annual fee is payable in accordance with the national regulations.

### Follow-up inspections

Nordic Ecolabelling may decide to check whether the imaging equipmment fulfils the Nordic Ecolabel requirements during the licence period. This may involve a site visit, random sampling or similar test.

The licence may be revoked if it is evident that the product does not meet the requirements.

Random samples may also be taken in-store and analyzed by an independent laboratory. If the requirements are not met, Nordic Ecolabelling may charge the analysis costs to the licence holder.

### How long is a licence valid?

Nordic Ecolabelling adopted version 5 of the criteria for imaging equipment on 14 June 2007. The criteria are valid until 31 December 2010.

On 25 June 2008 the Secretariats Manager's Meeting adopted a change in R8 in order to harmonize the requirement with the EcoMark. The new version is called 5.1 and is valid until 31 December 2010.

On 19 December 2009 the Nordic Ecolabelling Board adopted changes in the criteria. Furthermore the validity was prolonged with one year. The new version is called 5.2 and is valid until 31 December 2011.

The Secretariat Managers Meeting decided on 9 November 2010 to prolong the criteria with eighteen months. The new version is called 5.3 and it is valid until 30 June 2013.

The Secretariat Managers Meeting decided on 10 May 2012 to prolong the criteria with one year. The new version is called 5.4 and it is valid until 30 June 2014.

The ecolabel licence remains valid for as long as the criteria continue to be fulfilled and until the criteria expire. The validity period of the criteria may be extended or adjusted, in which case the licence will be extended automatically and the licence holder informed.

Revised criteria will be published at least one year prior to the expiry of the present criteria. The licence holder will then be offered the option of renewing the licence.

## New criteria

In the harmonisation process, Nordic Ecolabelling will be an active player in developing new requirements together with both Eco Mark, Blue Angel and Energy Star:

• Stricter environmental requirements for the Nordic organisation of the company that applies for a license, according to Section 4.

## Appendix 1 Marketing of Nordic Ecolabelled imaging equipment (R33)

We hereby certify that we are familiar with the regulations governing the use of the Nordic Ecolabel, as detailed in "Regulations for the Nordic Ecolabelling of products" 22 June 2011 or later versions. We agree to follow these regulations when marketing the Nordic Ecolabelled copying machines, printers, fax machines and multifunctional devices.

Further, we confirm that we are familiar with the criteria document regarding the Nordic Ecolabelling of copying machines, printers, fax machines and multifunctional devices.

We undertake to advise those individuals within the company involved in marketing the Nordic Ecolabelled product of the criteria for the Nordic Ecolabelling of copying machines, printer, fax machines and multifunctional devices and "Regulations for the Nordic Ecolabelling of products" 22 June 2011 or later versions.

Date and place	Company
Signature, contact person	
Name in block capitals	Tel.
Signature, marketing director	
Name in block capitals	Tel.
In the event of personnel changes, a	new declaration must be submitted to

Nordic Ecolabelling.

## Appendix 2 Guidelines for applicants already holding the Eco Mark (R1)

If a product is approved under the Eco Mark criteria (117 Copiers, version 2.2 or later versions and 122 Printers, version 2.0 or later versions) it is easier to apply for a Nordic Ecolabel licence. Such applicants may use appendix 2.

If the product does not have a valid Eco Mark, the product must fulfil the requirements in sections 2, 3 and 4.

In this document, Nordic Ecolabelling have translated and changed the layout of the requirements from the original documents, Eco Mark criteria (117 Copiers, version 2.2 or later versions and 122 Printers, version 2.0 or later versions). In case of any conflict the original always takes precedence. Each requirement contains a reference to the original requirement.

Further information about EcoMark can be found at the following Internet address:

EcoMark: www.ecomark.jp/english/index.html

#### Product already holding Eco Mark licence

Copying Machine		
Multifunctional Device/Printer		
Model/Type:	_	
Copy of a valid Eco Mark licence submitted in the application?	Yes 🔲	No 🔲
Date and place:	]	
Applicant's signature:	1	
Name in block capitals:	-	

#### **Supplementary documentation:**

Some requirements are not harmonised and are found only in version 5 of the Nordic Ecolabel criteria document. These requirements are mainly administrative and specific for the Nordic organisation of the company that applies for a license. See section 4 of the criteria.

## Appendix 3 Guidelines for applicants already holding the Blue Angel (R2)

If a product is approved under the Angel criteria (RAL-UZ 122, June 2006 or later versions) it is easier to apply for a Nordic Ecolabel licence. Such applicants may use appendix 3.

If the product does not have a valid Blue Angel license, the product must fulfil the requirements in sections 2, 3 and 4.

In this document, Nordic Ecolabelling have translated and changed the layout of the requirements from the original documents, Blue Angel criteria (RAL-UZ 122, June 2006 or later versions). In case of any conflict the original always takes precedence. Each requirement contains a reference to the original requirement.

Further information about Blue Angel can be found at the following Internet address:

Blue Angel: www.blauer-engel.de

Product already holding	ng Blue Angel licence		
Copying Machine	Printer		
Fax machine	Multifunctional Device		
Model/Type:			
Copy of a valid Blue Ang	el licence submitted in the application?	Yes	No 🔲
Date and place:			
Applicant's signature:			
Name in block capitals:			
1			

#### **Supplementary documentation:**

Some requirements are not harmonised and are found only in version 5 of the Nordic Ecolabel criteria document. These requirements are mainly administrative and specific for the Nordic organisation of the company that applies for a license. See section 4 of the criteria.

# Appendix 4 Links to criteria for RAL, ECO Mark and Energy Star

RAL (The Blue Angel): www.blauer-engel.de

Eco Mark: www.ecomark.jp/english/index.html

Energy Star: www.eu-energystar.org/

## Appendix 5 Declaration - Design and materials (R5-R10)

Type of	product to be eco-labe	elled:					
Сорі	er	Digital duplicator	Fax Machine				
■ Multi	-functional device	Printers	Scanners				
Model/1	Гуре:						
R5		vier than 25 gram must be re-consumer recycled plastic		Yes		No	
R6	11469:2000. Exemption	narked at least in accordance ons from this requirement ar area less than 200 mm2 ar	e plastic parts lighter than	Yes		No	
R7	mutually incompatible	parts whose entire weight materials must be separaberials used must be easily se	ole or connected by sepa-	Yes		No	
R8	If used – are combine	d toner cartridges designed	d for reuse?	Yes		No	
R8	If used – do products	accept remanufactured tor	ner cartridges?	Yes		No	
R9		oarts heavier than 25 g mu olymer blends (polymer allo		Yes		No	
R10		ng parts heavier than 25 g ly separable polymers or p		Yes		No	
	Attach a description of	of the recycling system		Арр	endix n	o	
Place a	nd date						
Applica	nt's signature						
Name i	n block capitals						

# Appendix 6 Declaration - Plastics in casing and their components (R11)

Type of product	to be eco-label	led:		
☐ Copier ☐ Multi-function	al device	<ul><li>Digital duplica</li><li>Printers</li></ul>	ator	<ul><li> □ Fax Machine</li><li> □ Scanners</li></ul>
Model/Type:				
List of plastic parts	over 25 g used in	casing and their comp	ponents in	
Component designation	Plastic manufacturer	Product name of plastic	Plastic marking	Shared of recycled material/weight%)
		•		_
	<u> </u>	+	-	
	<u>l</u>			
Place and date				
Applicant's signat	ture			
Name in block co	apitals			

# Appendix 7 Declaration from the manufacturer of plastics (R11 and R12)

Plastics and additives in plastics in casings and their components.

The manufacturer of the plastics declares that only flame-retardants listed in the table below will be used for ecolabelled products.

If new flame-retardants are to be introduced I/we will inform Nordic Ecolabelling and provide the necessary documentation.

Type of product to be eco-labelled:

	•				
Cop	pier	Digital duplicator	Fax Machine		
☐ Mul	ti-functional device	Printers	Scanners		
Model	/Type:				
R11	Do plastics parts ov chlorinated polyme	ver 25 g in casing and their ors?	components contain	Yes	No [
R12	Do additives in plast containing organoho	ic parts over 25 grams in casi llogen compounds?	ing and their components	Yes 🗌	No 🗆
R12		rams in casing and their comp one or more of the following ris		Yes	No 🗌
	R48 (danger of serio R49 (may cause can R60 (may impair fert R61 (may cause harr R62 (possible risk of	cer) table genetic damage) us damage to health by prolo cer by inhalation) ility) n to unborn child)	onged exposure)		
R12		hing less than 25 gram contair ybrominated diphenyl ethers), o		Yes	No 🗌

#### List of flame retardants

Trade name	Chemical name and CAS no.	Used in component	Supplied by

Location and date	Company
Signature of plastic manufacturer	
Name in block capitals	Phone

# Appendix 8 Declaration - Other dangerous substances (R13, R15, R16)

Type of	product to be eco-lab	pelled:			
Cop	ier i-functional device	☐ Digital duplicator☐ Printers	☐ Fax Machine☐ Scanners		
Model/					
R13	Exempted from this	contain cadmium, mercury, le requirement are impurities w urities must not exceed the li rectives.	hich cannot be avoided	Yes	No 🔲
	Manufacture declare	ation may be a supplement to	o this declaration.		
R15		for packaging the equipmen hlorinated polymers?	t (including toner powder	Yes 🔲	No 🔲
R16		for packaging marked in acco he Packaging Directive 97/12 9?		Yes	No 🗌
Place a	and date				
Applico	ant's signature				
Name	in block capitals				

#### Appendix 9 Declaration - Other dangerous substances (R14)

This certificate shall be filled in by the manufacturer and direct suppliers

(suppliers during the final stages of the supplier chain).

Type of product to be eco-labelled: Digital duplicator Fax Machine Copier ■ Multi-functional device Printers ■ Scanners Model/Type: Are any of the following solvents used in the end production of the devices **R14** Yes No 🔲 and the machine: CFC, HCFC, 1,1,1,-trichloro-ethane or carbon tetrachloride? **R14** Are any of the following solvents used in the production of circuit boards: Yes 🔲 No 🔲 CFC, HCFC, 1,1,1,- trichloro-ethane or carbon-tetrachloride? Place and date Applicant's signature Name in block capitals Company

# Appendix 10 Declaration - Other environmental requirements (R17 and R18)

Type of product to be eco-labe	lled:			
☐ Copier	Digital duplicator	Fax Machine		
☐ Multi-functional device	Printers	Scanners		
Model/Type:				
R17 Is the supply of spare duction of the product		st five years after the pro-	Yes	No 🔲
Requirements as to double-sided p not be filled in for fax machines.	orinting do not apply for fax	machines. This form shall thus		
Type of product to be eco-labe	lled:			
Copier	Digital duplicator			
■ Multi-functional device	Printers			
Model/Type:				
Printing-/Photocopying speed:	pages per	minute.		
R18 >45 copies/minute	Can the device make do	ouble-sided printing/copying?	Yes 🔲	No 🔲
R18 20-44 copies/minute	Can the device be equito permit double-sided	ipped with an extra module printing/copying?	Yes 🔲	No 🔲
Place and date				
Applicant's signature				
Name in block capitals				