

Nordic Ecolabelling of
Machines for Parks and Gardens



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040 Machines for Parks and Gardens, version 5.5, 19 December 2018

This document is a translation of an original in Swedish. In case of dispute, the original document should be taken as authoritative.

Addresses

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

Denmark

Ecolabelling Denmark
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Göteborg Plads 1, DK-2150 Nordhavn
Fischersgade 56, DK-9670 Løgstør
Tel: +45 72 300 450
info@ecolabel.dk
www.ecolabel.dk

Iceland

Ecolabelling Iceland
Umhverfisstofnun
Suðurlandsbraut 24
IS-108 Reykjavik
Tel: +354 591 20 00
ust@ust.is
www.svanurinn.is

Finland

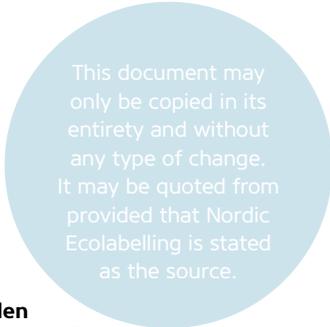
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FI-00100 Helsingfors
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Norway

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What is a Nordic Swan Ecolabelled machine for parks and gardens?

Nordic Swan Ecolabelling of Machines for parks and gardens includes requirements on manufacturing, operation and end-of-life. The purpose is to identify the most environmentally friendly options in this field. Both personal and professional machines can be Nordic Swan Ecolabelled.

A Nordic Swan Ecolabelled Machine for parks and gardens is energy efficient and generates only minimal emissions of substances that are harmful to health and the environment. It should also contribute less to the greenhouse effect and the spread of hazardous substances than a non-Nordic Swan Ecolabelled machine.

Why choose the Nordic Swan Ecolabel?

- Manufacturers and retailers may use the Nordic Swan Ecolabel trademark for marketing purposes. The Nordic Swan Ecolabel is a very well-known and well-reputed trademark in the Nordic region.
- Environmental issues are complex. It can take a long time to gain an understanding of a specific area. Nordic Ecolabelling can be seen as an aid in this work.
- The Nordic Swan Ecolabel not only covers environmental issues but also quality requirements, since the environment and quality often go hand in hand. This means that a Nordic Swan Ecolabel licence can also be seen as a mark of quality.
- The Nordic Swan Ecolabel is a cost-effective and simple way of communicating environmental work and commitment to customers and suppliers.
- A Nordic Swan Ecolabelled machine for parks and gardens is energy efficient and generates only minimal emissions of substances that are harmful to health and the environment. This helps mitigate climate effects and lessen the spread of hazardous substances.

What can carry the Nordic Swan Ecolabel?

Version 5 of Nordic Ecolabelling's criteria makes it possible to Nordic Swan Ecolabel machines for parks and gardens, for private and professional use. The following types of manually, electricity or combustion engine operated machines can be labelled:

- Lawnmowers
- Lawn trimmers and lawn edge trimmers
- Brush cutters
- Chainsaws
- Leaf collectors and leaf blowers (for professional use only)
- Hedge trimmers
- Garden shredders
- Cultivators
- Riding lawn tractors/Movers
- Snow blowers

Only machines with combustion engines with a nominal engine output of ≤ 19 kW can be Nordic Swan Ecolabelled. Engine operated machines must also be covered by the EU's Machinery Directive (2006/42/EC).

Combustion engine operated machines include air-cooled or liquid-cooled two-stroke or four-stroke engines. Petrol, diesel, ethanol or other renewable fuels may be used. The engine shall be new and adapted to the fuel type(s) for which it is intended.

Electrically powered machines may be corded or battery or solar cell operated. They may also be so called robots.

The product group Machines for parks and gardens does not include agricultural or forestry tractors, nor terrain vehicles, i.e. ATVs (All Terrain Vehicles).

How to apply

Application and costs

For information about the application process and fees for this productgroup, please refer to the respective national web site. For addresses see page 3.

What is required?

The application must consist of an application form/web form and documentation showing that the requirements are fulfilled.

Each requirement is marked with the letter O (obligatory requirement) and a number. All requirements must be fulfilled to be awarded a licence.

The text describes how the applicant shall demonstrate fulfilment of each requirement. There are also icons in the text to make this clearer. These icons are:

☒ Enclose

ℙ The requirement checked on site.

All information submitted to Nordic Ecolabelling is treated confidentially. Suppliers can send documentation directly to Nordic Ecolabelling, and this will also be treated confidentially.

License validity

The ecolabel licence is valid providing the criteria are fulfilled and until the criteria expire. The validity period of the criteria may be extended or adjusted, in which case the licence is automatically extended and the licensee informed.

Revised criteria shall be published at least one year prior to the expiry of the present criteria. The licensee is then offered the opportunity to renew their licence.

On-site inspection

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

Queries

Please contact Nordic Ecolabelling if you have any queries or require further information. See page 3 for addresses. Further information and assistance (such as calculation sheets or electronic application help) may be available. Visit the relevant national website for further information.

What is required in order to be Nordic Swan Ecolabelled?

All requirements marked "O" must be fulfilled in order to be awarded a Nordic Swan Ecolabel.

1 Manufacture

1.1 Product design

01 Fuel qualities

The combustion engine shall be constructed for use of one or several of the following fuel qualities, listed here in no particular order:

- lead-free petrol of the highest environmental class according to applicable European or national legislation;
- alkylate petrol;
- biofuel based fuel;
- diesel of the highest environmental class according to applicable European or national legislation.

☒ The User instructions should contain information about what fuel types can be used.

02 Spillage

The machine shall be constructed in such a way that refuelling and cleaning is possible without any risk of fuel spillages. There should be no oil spillage in connection with normal cleaning of the machine and the engine should be constructed in such a way that the oil can be changed without spillage.

☒ The User instructions should contain information about refuelling, cleaning and oil changes.

03 Evaporation losses

The fuel system should be constructed to ensure that evaporation losses (evaporative emissions) in terms of Reactive Organic Gases do not exceed the following limit values:

For fuel pipe/duct: 15 g ROG/m² per day.

For fuel tank: 1.5 g ROG/m² per day.

- ☒ Complete test report pursuant to test TP 901 showing that the limit value has been respected. Alternatively, a certificate showing that only pre-certified components have been used.

1.2 Materials

The requirements on materials in this section do not include the materials of the engine.

04 Marking of plastic parts

Plastic parts that weigh 50 grams or more must be marked in accordance with ISO 11469.

This requirement does not apply to rubber parts or cables. If the surface is smaller than 200 mm², the plastic part does not need to be marked.

- ☒ Manufacturer declaration. Appendix 1 can be used.

05 Heavy metals and flame retardants of very high concern

A Nordic Swan Ecolabelled machine for parks and gardens may not contain heavy metals cadmium (Cd), lead (Pb), mercury (Hg), hexavalent chromium (CrVI) or their compounds. Nor may it contain polybrominated biphenyls (PBB) and polybrominated diphenyl ethers (PBDE).

The maximum permissible pollutant concentration is 0.1 weight per cent in homogenous materials with exceptions for Cd where the maximum permissible heavy metal pollutant concentration is 0.01 weight per cent. This requirement does not apply to batteries. Please see O11-O13 for special requirements for batteries.

Note that unlike the RoHS Directive (2011/65/EU), Nordic Ecolabelling has only introduced maximum concentrations for pollutants. The maximum concentrations of the RoHS Directive apply even if the substance has been actively added. The requirement means that the addition of any of the above substances to Nordic Swan Ecolabelled professional machines is completely forbidden.

Surface treatments such as chrome plating are considered homogenous materials.

Note that, unlike the RoHS Directive, the Nordic Swan Ecolabel enforces these requirements also for machines for parks and gardens for professional use exclusively.

- ☒ Manufacturer declaration. Appendix 2 can be used.

06 Phthalates

The following phthalates must not be added to plastic or rubber materials:

- Diethylhexyl phthalate (DEHP)
- Dibutyl phthalate (DBP/DnBP)
- Benzyl butyl phthalate (BBP)
- Dicyclohexyl phthalate (DCHP)
- Diisobutyl phthalate (DIBP)
- Diisononyl phthalate (DINP)
- Diisodecyl phthalate (DIDP)
- Di-n-octylphthalate (DNOP)
- Dihexyl phthalate (DHP)
- Diethyl phthalate (DEP)
- Diisoheptyl phthalate (DIHP)
- Bis(2-methoxyethyl) phthalate
- Diisopentyl phthalate
- N-pentyl-isopentyl phthalate

Cables, hoses/pipes/ducts, circuit boards and electronic components weighing less than 25 grams are completely exempt from the requirements.

- ☒ Duly completed declaration from the manufacturer/supplier of the plastic and rubber parts. Appendix 2 can be used.

07 Flame retardants in plastic and rubber parts

Hexabromocyclododecane (HBCDD), tetrabromobisphenol-A (TBBP-A) and tri (2-chloroethyl) phosphate (TCEP) may not be actively added to the product. The same applies to highly-chlorinated short-chain and medium-chain chloroparaffins.

- ☒ Duly completed declaration from the manufacturer/supplier of the plastic and rubber parts. Appendix 2 can be used.

08 Other halogenated organic flame retardants

Other halogenated organic flame retardants which has been classified with some or combinations of these may not be added.

- H350 (May cause cancer)
- H350i (May cause cancer by inhalation)

- H340 (May cause genetic defects)
- H360F (May damage fertility)
- H360D (May damage unborn child)
- H360Fd (May damage fertility. Suspected of damaging unborn child)
- H360 Df (May damage unborn child. Suspected of damaging fertility)

Exceptions may be made in cases where these are required for electrical or fire safety reasons under the Low Voltage Directive 73/23/EEC or standard EN 603 35-1.

The exemption does not apply to the flame retardants regulated by O5 or O7 above.

Circuit boards and plastic and rubber parts in electronic components weighing less than 25 grams are completely exempt from the requirements.

- ☒ Duly completed declaration from the manufacturer/supplier of the plastic and rubber parts. Appendix 2 can be used.

09 Metal surface treatment

Metal may not be coated using lead, mercury, cadmium, chromium, nickel or their compounds.

Parts may be coated with chromium, nickel or compounds of these where this is necessary on the grounds of chemical or mechanical wear or another specific technical need. The chrome plating process shall be based on trivalent chromium.

Any chrome plating and nickel plating processes must be carried out with the help of process water treatment technology such as ion replacement, membrane technology or similar in order to ensure the greatest possible recovery of the metals. The process water shall be captured for recycling or destruction. The system must be without waste water.

Fastening components and similar small parts are excepted.

- ☒ Manufacturer declaration. Appendix 3 can be used. Specification of any need for metal plating and cleaning technology.

010 Surface treatment agent content

Surface treatment agents may not contain more than 5 per cent (w/w) organic solvents.

VOC is defined as organic components with vapour pressure 0.01 kPa at 293.15 K.

- ☒ Manufacturer declaration. Appendix 3 or 4 can be used.

1.3 Battery

011 Battery quality and performance

The individual cell in the operation battery must have undergone testing to EN 61951-2 for NiMH or to EN 61960 for lithium ion batteries. It must also have passed all tests applicable to the cell. The machine must be designed to switch off when the battery reaches a 'minimum power level' pre-established by the manufacturer.

- ☒ Test protocol pursuant to EN 61951-2 or EN 61960 and declaration from the machine manufacturer stating that the machine will switch off to prevent complete battery depletion. Appendix 5 can be used.

012 Safety

The operation battery must meet the safety requirements stipulated by standard IEC 62133.

- ☒ Declaration from the battery manufacturer stating that the requirement is fulfilled. Specification outlining how the safety requirements are fulfilled. Appendix 5 can be used.

013 Battery metal content

The metal content in the individual battery cell must not exceed the following levels:

Mercury	≤ 0.1 ppm
Cadmium	≤ 5.0 ppm
Lead	≤ 5.0 ppm
Arsenic	≤ 10.0 ppm

- ☒ Declaration stating that the requirement is fulfilled. Appendix 5 can be used.

1.4 Other

014 Packaging

Materials used in packaging must be recyclable or reusable. The licensee shall submit a description of the packaging stating how waste is handled in the Nordic countries where the Nordic Swan Ecolabelled machine for parks and gardens will be sold.

Chlorine based plastics and biocide treated/impregnated timber must not be used in the packaging.

- ☒ A description of packaging and how it should be handled shall be included in the User instructions, see O22.

2 Operation of the Nordic Swan Ecolabelled machine

015 Emission testing

Emission testing must be performed by a notified technical service that meets the requirements pursuant to EN-ISO/IEC 17 025 and the Emission Directive 1997/68/EC and that has an agreement with the national notifying body for type approval.

The engine shall be tested according to the requirements and specification stipulated in the EU directive relating to the emission of gaseous and particulate pollutants from internal combustion engines to be installed in off-road mobile machinery (97/68/EC). Appendix III and IV to the directive specify the testing process for engines with compression ignition and spark ignition respectively.

If the engine manufacturer performs tests, Nordic Ecolabelling may use the information on requirement fulfilment in applications from other companies wishing to Nordic Swan Ecolabel their professional machines, unless otherwise agreed.

If a catalyst and/or particle trap is used, the manufacturer must prove, by way of a durability test that it may conduct itself in accordance with good engineering practice and good laboratory practice and using a test protocol, that these mechanisms for exhaust treatment can be expected to function correctly for the duration of the engine's service life.

- ☒ Test report from a notified technical service that meets the requirements pursuant to Appendix 6.

016 Limit values for petrol engine emissions

Emissions in connection with engine testing may not exceed the limit values stated below. This requirement apply both to the testing of new machines and to durability testing, see O18.

Class*/ category	Cylinder volume (cm ³)	Carbon monoxide (CO) (g/kWh)	Sum of hydrocarbons and nitrogen oxides
			HC + NO _x (g/kWh)
<i>Hand-held engines (e.g. chain saws, brush cutters, hedge trimmers and leaf blowers)</i>			
SH1	<20	480	50
SH2	≥20 <50	480	40
SH3	≥50	480	15
<i>Non hand-held engines (e.g. lawnmowers, both walk-behind and ride-on, landscaping tractors, etc.)</i>			
SN1	<66	450	12
SN2	≥66 <100	450	12
SN3	≥100 <225	450	10
SN4	≥225	450	8

*"Class S: Small engines with netto output ≤ 19 kW. H: engines for hand-held machines. N: engines for non hand-held machines. "

NO_x emissions may not exceed 10 g/kWh for any engine class.

- Test report featuring results from complete emissions test.

017 Limit values for diesel engine emissions

Emissions must not exceed the limit values below at testing of new machines. The requirement applies regardless of whether the diesel engine uses fossil fuel or biofuel.

Maximum engine output, P (kW)	Carbon monoxide (CO) (g/kWh)	Sum of hydrocarbons and nitrogen oxides HC + NO _x (g/kWh)	Particles (g/kWh)
P<8	8.0	7.5	0.8
8 ≤ P ≤ 19	6.6	7.5	0.8

- Test report featuring results from complete emissions test.

018 Durability requirements

Emissions shall be measured following durability testing. The limit values stated in O16 and O17 must be met.

The same engine that was short-term tested shall be durability tested according to the specification stipulated by the EU's directive relating to the emission of gaseous and particulate pollutants from internal combustion engines to be installed in off-road mobile machinery (97/68/EC). The durability period category selected should be the one that best reflects the expected service life of the machine(s) for which the engine is intended.

- Test report featuring results from complete emissions test. The licensee shall verify that the stated service life is correct in the same way as to the notifying body.

019 Noise testing

The manufacturer of the professional machine can test noise itself if it is audited by a notified body appointed for the test method and product type in question pursuant to the Noise Directive 2000/14/EC and subsequent amendments. Other laboratories may be authorised if they are appointed a notified body for the test method and product type in question pursuant to the Noise Directive 2000/14/EC and subsequent amendments.

The EU's information system NANDO (New Approach Notified and Designated Organisations) contains a list of notified bodies:

<http://ec.europa.eu/enterprise/newapproach/nando/>

The weighted sound intensity level (LWA) shall be established. The sound intensity shall be established in accordance with general standard ISO 3744 as stipulated by the EU's Noise Directive 2000/14/EC.

Product specific standards stipulate the circumstances under which noise testing shall be performed. These standards are stated in the directive. If there are not such standards, the Noise Directive will stipulate the measurement conditions.

At least one randomly selected example of the relevant machine should be tested. At least two measurements are to be taken for the machine. The arithmetic average of the measurements shall represent the established emission level for the machine. A further two machines should be tested if the machine fails to meet the requirements.

The following limit values may not be exceeded.

Machine	Machine data	Sound intensity level dB(A)/picoW Private use/ professional use
Lawnmowers*	X ≤ 50 cm	90.0/94.0
	50 cm < X ≤ 70 cm	94.0/98.0
	70 cm < X ≤ 120 cm	98.0/98.0
	X > 120 cm	102.0/103.0
Lawn trimmers and lawn edge trimmers	combustion engine operated	100
	electrical engine operated	94
Brush cutters	<1.5 kW	107
	>1.5 kW	110
Chainsaws	<2.5 kW	105
	> 2.5	110
Leaf collectors and leaf blowers	for professional use	104
Hedge trimmers	combustion engine operated	98
	electrical engine operated	90
Garden shredders		92
Cultivators*		93

Machine	Machine data	Sound intensity level dB(A)/picoW
		Private use/ professional use
Riding lawn tractors/movers*		reported
Snow blowers		reported

Personal machines are defined as those where the engine's service life is given as ≤ 250 hours. Professional machines are defined as those where the engine's service life is given as >250 hours. The service life stated has been reported to the notified body for type approval pursuant to EU directive 97/68/EC.

*Covered by the limit values of the Noise Directive (2000/14/EC). Riding lawn tractors are covered to the extent that they fall under the directive's lawnmower definition. The limit value stated is the guaranteed limit value.

Complete test report.

020 Sound pressure level at the operator's ear

The weighted sound pressure level at the operator's ear shall be established under the same conditions as sound intensity. The result should be disclosed as customer information.

The method pursuant to standard EN 836 "Safety Standard for Powered Lawnmowers Noise and vibration" shall be used for lawnmowers and riding lawn tractors.

Complete test report. This information should also be available in the User instructions.

021 Vibrations

The limits below must not be exceeded. For lawn movers the requirement is only for machines for professional use.

Type of Vibration	(m/s ²)
Hand	5
Whole body	1.15

Complete test report.

3 Customer information

022 User instructions

Hardcopy User instructions containing the following information shall be included with the machine:

- a) assembly, operation and maintenance instructions;
- b) information about the maintenance required in order to ensure that the machine's emission values remain acceptable;
- c) if maintenance is required pursuant to b) a service manual shall accompany the machines. This manual shall contain space for notes relating to maintenance performed;
- d) what type of fuel the engine is intended for;
- e) information recommending the use of biodegradable motor oil and environmentally adapted fuels such as alkylate petrol for petrol engines and diesel of the highest environmental class for diesel engines;
- f) how to refill fuel in order to avoid fuel spillages;
- g) how to clean the cutting unit without risking fuel leakages or oil spillages;
- h) how to change the oil in order to avoid oil spillages;
- i) the machine's fuel consumption as an information;
- j) information stating that the fuel system has been designed so as to minimise evaporative emissions;
- k) that the customer should hand the end-of-life product in to a waste handling station in order to facilitate recycling or other correct waste handling in accordance with national and local regulations;
- l) that components that may be harmful to the environment, such as spilled oil (including Nordic Swan Ecolabelled products), batteries etc., shall be handed over for treatment as hazardous waste;
- m) what type of batteries are included in the machine;
- n) petrol canister characteristics or how petrol should be refilled in order to avoid spillages;
- o) the sound pressure level measured at the operator's ear;
- p) a recommendation relating to the use of ear protectors whenever the machine is in operation;
- q) the machine's highest guaranteed sound intensity level;
- r) vibrations stated in accordance with the Machinery and Machine Safety Directive (2006/42/EC);

- s) information on the length and dimension of the power supply cable for corded machines;
 - t) information on how to separate packaging for recycling.
- ☒ User instructions in the Nordic languages applicable to the markets in which the product is sold.

4 Quality and regulatory requirements

To ensure that the Nordic Ecolabelling's requirements are fulfilled, the following procedures must be implemented.

If the manufacturer has a quality management system that is certified to ISO 9001 and the following procedures are applied, it is sufficient if the accredited auditor certifies compliance with the requirements.

023 Legislation and regulations

The licensee shall ensure compliance with all applicable local laws and provisions at all production facilities for the Nordic Swan Ecolabelled product, e.g. with regard to safety, working environment, environmental legislation and site specific requirements/concessions.

Documentation is not required. However, Nordic Ecolabelling may revoke the licence if the requirement is not fulfilled.

024 Licence administrators

The company shall appoint an individual responsible for ensuring the fulfilment of Nordic Ecolabelling requirements, and a contact person for communications with Nordic Ecolabelling.

- ☒ Organisational chart showing who is responsible for the above.

025 Documentation

The licensee must be able to present a copy of the application and factual and calculation data supporting the documents submitted with the application (including test reports, documents from suppliers and suchlike).

- ⌘ On-site inspection.

026 Machine quality

The licensee must guarantee that the quality of the Nordic Swan Ecolabelled machine for parks and gardens 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 Swan Ecolabelled machines.

027 Planned changes

Written notice of planned changes in products and markets that affect the Nordic Ecolabelling requirements must be given to Nordic Ecolabelling.

- ☒ Procedures detailing how planned changes in products and markets are handled.

028 Unforeseen non-conformities

Unforeseen non-conformities that affect Nordic Ecolabelling requirements must be reported to Nordic Ecolabelling in writing and logged.

- ☒ Procedures detailing how unforeseen non-conformities are handled.

029 Traceability

The licensee must have a traceability system for the production of the Nordic Swan Ecolabelled machines.

- ☒ Description of/procedures for fulfilment of the requirement.

030 Recycling/Take-back system

The Nordic Ecolabelling's Criteria Group decided on the 9 October 2017 to remove this requirement.

031 Marketing

The requirement is removed as decided by the Board of Directors 17 November 2014.

Regulations for the Nordic Ecolabelling of products

When the Nordic Swan Ecolabel is used on products the licence number shall be included.

More information on graphical guidelines, regulations and fees can be found at www.svanen.se/regulations/ or at www.nordic-ecolabel.org/regulations/

Follow-up inspections

Nordic Ecolabelling may decide to check whether machine fulfils Nordic Ecolabelling 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 licensee does not meet the requirements.

History of the criteria

Nordic Ecolabelling adopted the criteria for Machines for parks and gardens on 13 March 2013. The criteria are valid until 31 March 2017.

The board of Directors decided on 10 June 2014 on a change in R5 Heavy metals and flame retardants of very high concern. It was made an adjustment of the maximum permissible pollutant concentration in homogenous material. The same adjustment where made in Appendix 2. The new version is 5.1.

The Nordic criteria managers decided on 6 May 2015 to adjust the requirement section 1.2 – Materials, so that materials in the engine are exempted. On 17 November 2014 the Board of Directors decided to remove requirement O31 Marketing. The new version is 5.2.

The Nordic Ecolabelling's Criteria Group decided on 19 April 2016 to prolong the criteria until 31 March 2019. The new version is 5.3.

On the 9 October 2017 Nordic Ecolabelling's Criteria Group decided to remove 030 Recycling / Take-back system. Further on Nordic Ecolabelling's Criteria Group decided on 7 February 2018 to prolong the criteria with 19 months to the 31 October 2020. The new version is called 5.4.

Nordic Ecolabelling decided on 19 December 2018 to prolong the criteria with 5 months to the 31 March 2021. The new version is called 5.5.

New criteria

An assessment will be made to determine whether future criteria should include:

- required share of recycled materials or raw materials in the machine;
- requirement for machines to be constructed to enable reuse or material recycling of a certain material share;
- analysis of the mass/weight of various materials used in the product;
- limit values for substances that represent a health hazard on combustion of biofuels;
- possible tightening of noise limit values;
- possible tightening of limit values for emissions from diesel engine machines;
- analysis of the occurrence and risk associated with nano materials and perfluorinated materials;
- the possibility of imposing material requirements for electrical machinery accessories, e.g. battery chargers.
- Requirements on other oils such as hydraulic oil and gear box oil.

Appendix 1 Marking of plastic parts

We hereby certify that parts weighing more than 50 grams are marked in accordance with ISO 11 469 or similar.

This requirement does not apply to rubber parts or cables. If the surface is smaller than 200 mm², the part does not need to be marked.

Machine manufacturer: _____

Machine type: _____

Subcontractor: _____

Date	Company name (manufacturer)
Responsible	Phone
Name (BLOCK CAPITALS)	E-mail

Appendix 2 Hazardous substances declaration

We hereby certify that the machine does not contain materials containing the following:

1. cadmium (Cd), lead (Pb), mercury (Hg), hexavalent chromium (Cr^{VI}) or their compounds;
2. polybrominated biphenyls (PBB) and polybrominated diphenylethers (PBDE);
3. hexabromocyclododecane (HBCDD), tetrabromobisphenol A (TBBP-A) and tris(2-carboxyethyl)phosphine (TCEP);
4. highly-chlorinated short-chain chloroparaffins or highly-chlorinated medium-chain chloroparaffins;
5. other halogenated organic flame retardants with any of or combination of following riskphrases:
 - H350 (May cause cancer)
 - H350i (May cause cancer by inhalation)
 - H340 (May cause genetic defects)
 - H360F (May damage fertility)
 - H360D (May damage unborn child)
 - H360Fd (May damage fertility. Suspected of damaging unborn child)
 - H360 Df (May damage unborn child. Suspected of damaging fertility)

Exceptions may be made in cases where these are required for electrical or fire safety reasons under the Low Voltage Directive 73/23/EEC or standard EN 603 35-1. Attach an explanation a case an exception is needed.

6. Phthalates:
 - Diethylhexyl phthalate (DEHP)
 - Dibutyl phthalate (DBP/DnBP)
 - Benzyl butyl phthalate (BBP)
 - Dicyclohexyl phthalate (DCHP)
 - Diisobutyl phthalate (DIBP)
 - Diisononyl phthalate (DINP)
 - Diisodecyl phthalate (DIDP)
 - Di-n-octylphthalate (DNOP)
 - Dihexyl phthalate (DHP)
 - Diethyl phthalate (DEP)
 - Diisoheptyl phthalate (DIHP)

- Bis(2-methoxyethyl) phthalate
- Diisopentyl phthalate
- N-pentyl-isopentyl phthalate

The maximum permissible pollutant concentration is 0.1 weight per cent in homogenous materials with exceptions for Cd where the maximum permissible heavy metal pollutant concentration is 0.01 weight per cent.

Date	Company name (manufacturer)
Responsible	Phone
Name (BLOCK CAPITALS)	E-mail

Appendix 3 Metal Surface treatment declaration

Declaration for following parts:

The following requirement is fulfilled:

Yes No

- Metal plating agents do not contain pigments or additives based on lead, mercury, cadmium, chromium6+, nickel or their compounds.

Fastening components and similar small parts are excepted.

Parts may be coated with trivalent chromium, nickel or compounds of these where this is necessary on the grounds of chemical or mechanical wear or another specific technical need. In cases where parts are plated with trivalent chromium or nickel, please document the reason for this.

The chrome plating process shall be based on trivalent chromium. It must be possible to recycle or reuse parts surface treated with nickel and/or chromium. Any chrome plating and nickel plating processes must be carried out with the help of process water treatment technology such as ion replacement, membrane technology or similar in order to ensure the greatest possible recovery of the metals. The process water shall be captured for recycling or destruction. The system must be without waste water.

- The solvent does not contain more than 5 per cent (w/w) organic solvents.

Yes No

Date	Company name (manufacturer)
Responsible	Phone
Name (BLOCK CAPITALS)	E-mail

Appendix 4 Subcontractor surface treatment declaration

The following parts (type) have been delivered for machine:

The following requirement is fulfilled:

Yes No

- Metal plating agents used on parts do not contain pigments or additives based on lead, mercury, cadmium, chromium6+, nickel or their compounds.

Fastening components and similar small parts are excepted.

Parts may be coated with trivalent chromium, nickel or compounds of these where this is necessary on the grounds of chemical or mechanical wear or another specific technical need. In cases where parts are plated with trivalent chromium or nickel, please document the reason for this.

The chrome plating process shall be based on trivalent chromium. It must be possible to recycle or reuse parts surface treated with nickel and/or chromium. Any chrome plating and nickel plating processes must be carried out with the help of process water treatment technology such as ion replacement, membrane technology or similar in order to ensure the greatest possible recovery of the metals. The process water shall be captured for recycling or destruction. The system must be without waste water.

- The solvent does not contain more than 5 per cent (w/w) organic solvents.

Yes No

Date	Company name (Surface coating subcontractor)
Responsible	Phone
Name (BLOCK CAPITALS)	E-mail

Appendix 5 Battery safety, quality and metal content declaration

We hereby certify that the machine has been constructed to switch off to prevent complete battery depletion.

We hereby certify that the batteries meet the safety requirements pursuant to standard IEC 62133.

Enclose specification outlining how the safety requirements are fulfilled:

We hereby certify that the metal content of the individual battery cells does not exceed:

Mercury ≤ 0.1 ppm
Cadmium ≤ 5.0 ppm
Lead ≤ 5.0 ppm
Arsenic ≤ 10.0 ppm

Date	Company name (manufacturer)
Responsible	Phone
Name (BLOCK CAPITALS)	E-mail

Appendix 6 Analysis and test laboratories

Requirement for analysis laboratory

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

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

- the authorities monitor the sampling and analysis process, or if
- the manufacturer has a quality management system encompassing sampling and analysis and has been certified to ISO 9001 or ISO 9002, or if
- 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 institute based on an established testing plan.

Appendix 7 Marketing of Nordic Ecolabelled Machines for parks and gardens – removed appendix

The appendix is removed as decided by the Board of Directors 17 November 2014.