

Nordic Swan Ecolabelling of Solid fuels, and fire lighting products



Version 4.0 • 31 October 2025 – 31 October 2030

Contents

1	Environmental communication guideline for Nordic Swan Ecolabel Solid fuels	4
2	What can carry the Nordic Swan Ecolabel?	5
3	How to read this criteria document	5
4	Definitions	5
5	Requirements	8
5.1	Production and product description	8
5.2	Resources	8
5.2.1	Wood	10
5.2.2	Solid and liquid renewable raw materials other than wood in barbecue charcoal/briquettes and fire lighting products and the tree species (salix/poplar/hybrid asp) grown as energy forest on arable land	12
5.2.3	Requirements for working conditions in the production of barbecue charcoal/briquettes	14
5.3	Chemicals	14
5.4	Energy	17
5.5	Use and quality requirements	19
5.6	Licence maintenance	25
6	Criteria version history	26
7	How to apply and regulations for the Nordic Ecolabelling	26
Appendix 1 Description of the solid fuel, material composition and production		
Appendix 2 Definition, class and type of raw materials		
Appendix 3 Declaration of tree species not permitted to be used in Nordic Swan Ecolabelled products		
Appendix 4 Traceability/verification of renewable raw materials in barbecue charcoal/-briquettes and fire lighting products and the tree species (salix/poplar/hybrid asp) grown as energy forest on arable land		
Appendix 5 Declaration for chemical products used in the manufacture of solid fuels or fire lighting products		
Appendix 6 Reference values for the energy content of fuels		
Appendix 7 Analysis and test laboratories		
Appendix 8 Declaration of compliance with quality specifications for firewood		

Contact information

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

Denmark

Ecolabelling Denmark
info@ecolabel.dk
www.svanemaerket.dk

Finland

Ecolabelling Finland
joutsen@ecolabel.fi
<https://joutsenmerkki.fi/>

Sweden

Ecolabelling Sweden
info@svanen.se
www.svanen.se

Iceland

Ecolabelling Iceland
svanurinn@uos.is
www.svanurinn.is

Norway

Ecolabelling Norway
hei@svanemarket.no
www.svanemarket.no

This document may only be copied in its entirety and without any type of change. It may be quoted from provided that Nordic Ecolabelling is stated as the source.

1 Environmental communication guideline for Nordic Swan Ecolabel Solid fuels

Nordic Swan Ecolabel solid fuels- pellets, wood briquettes, wood chips, firewood, barbecue charcoal/briquettes and fire lighting products - have a reduced environmental and climate impact throughout their lifecycle.

Barbeque charcoal and briquettes:

- Are made of responsibly sourced raw materials. For example, wood is legally harvested, traceable (including country of origin stated on the packaging) and sourced from certified forestry.
- Have a reduced climate impact which is achieved by meeting strict requirements for energy use during the production process.
- Have good combustion properties

Fire lighting products

- Have good combustion properties
- Meet strict chemical requirements for chemicals used in the production process
- Are made of responsibly sourced raw materials

Firewood

- Is made of responsibly sourced raw materials. For example, wood is legally harvested and traceable (including country of origin stated on the packaging) - and at least 70% of the wood is sourced from certified forestry.
- Has a reduced climate impact which is achieved by meeting strict requirements for energy use during the production process.
- Is dried through natural drying processes or through energy efficient industrial drying processes
- Has good combustion properties

Pellets and wood briquettes

- Have good combustion properties
- Have a reduced climate impact which is achieved by meeting strict requirements for energy use during the production process.
- Are made of responsibly sourced raw materials. A minimum of 95% of the wood raw material must be wood residues from the wood processing industry.

2 What can carry the Nordic Swan Ecolabel?

Product group definition

The product group comprises the following solid fuels for consumer and industrial use: pellets, wood briquettes, wood chips, firewood, barbeque charcoal/briquettes and fire lighting products. The products are made of renewable raw materials.

The product group also includes composite products that combine functions of the above-mentioned product types (e.g. products that serve both as a solid fuel and fire lighting product). However, these products must demonstrate that they comply with all Nordic Swan Ecolabel's requirements within the different product types that the product has combined.

Liquid fuels for transport, heating and industrial production may not be Nordic Swan Ecolabelled according to these criteria but may be Nordic Swan Ecolabelled according to the criteria for biofuels. Nor does the product group include liquid fire lighting products defined by the EN 1860-3:2023 standard, matches, electric fire lighting products, smoking wood chips and disposable barbecue grills.

3 How to read this criteria document

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:

-  Upload
-  Checked on site

4 Definitions

Terms	Definition and/or explanation
Wood residues	Wood residues from the wood processing industry classified as 1.2.1 (chemically untreated wood residues) according to EN ISO 17225-1:2021. For example, residues from debarking, sawing, size reduction, shaping and pressing.
CMR substances	CMR substances are substances that are known to be Carcinogenic, Mutagenic and/or Reprotoxic.
CO	Carbon monoxide.
Heat recovery	An installation that collects and re-use heat that would otherwise be wasted.
Individual packaging	Individual packaging refers to packaging around each individual solid fuel, e.g. plastic cover around each separate fire lighting product. The individual packaging and the solid fuel constitute a unit.
Renewable oil material	Renewable raw materials are biological materials that are constantly replenished by natural processes. This includes the degradable part of products, waste and residues from agriculture (both vegetable and animal), sustainable forestry operations and similar industries and the biodegradable fraction of industrial waste and municipal waste.
Fossil raw materials	Fossil raw materials were originally organic matter (primarily plants) that has been buried under the ground or beneath the ocean for many millions of years. They therefore contain large amounts of CO ₂ released when burned.
Nox	Nitrogen oxides.
OGC	Organic gaseous carbon.

PAH	Polycyclic aromatic hydrocarbons.
Primary packaging	Cardboard, paper and plastic foil are typical examples of primary packaging. Its purpose is to protect the products, display them (visual design) and provide space for consumer information.
PVC	Polyvinyl chloride.
Residual products/waste	Residues are products that do not constitute the main product and which the manufacturer is not intentionally trying to produce. Waste is any substance or object which the holder discards or intends or is required to discard. Raw materials that have been intentionally changed to enable them to be counted as waste (e.g. a waste material mixed with a non-waste material) do not comply with the requirement.
RPS	Relevance, Potential and Steerability: Tool used by Nordic Ecolabelling to analyse whether environmental problems are relevant, whether there is potential for improvement, and whether the licensee has the steerability to be able to achieve these environmental improvements.
VOC	Volatile organic compounds.
Transport packaging	Transport packaging refers to packaging for the handling and transport of a number of sales units or multipack consignments, e.g. pallets, boxes and bags made from paperboard and corrugated board.

Classification of origin and sources of raw materials that can be used I Nordic Swan Ecolabelled solid fuels and fire lighting products (from EN ISO 17225-1:2021)

1. Woody biomass	1.1 Forest, plantations and other virgin wood	1.1.1 Whole trees without roots	1.1.1.1 Broadleaf
			1.1.1.2 Coniferous
			1.1.1.3 Short rotation coppice
			1.1.1.4 Bushes
			1.1.1.5 Blends and mixtures
		1.1.3 Stem wood	1.1.3.1 Broadleaf with bark
			1.1.3.2 Coniferous with bark
			1.1.3.3 Broadleaf without bark
			1.1.3.4 Coniferous without bark
			1.1.3.5 Blends and mixtures
		1.1.4 Logging residues	1.1.4.1 Fresh/Green, Broadleaf (including leaves)
			1.1.4.2 Fresh/green, Coniferous (including needles)
			1.1.4.3 Stored, Broadleaf
			1.1.4.4 Stored, Coniferous
			1.1.4.5 Blends and mixtures
	1.2 By-products and residues from wood processing industries	1.2.1 Chemically untreated wood by-products and residues	1.2.1.1 Broadleaf with bark
			1.2.1.2 Coniferous with bark
			1.2.1.3 Broadleaf without bark
			1.2.1.4 Coniferous without bark
			1.2.1.5 Blends and mixtures
2. Herbaceous biomass	2.1 Herbaceous biomass from agriculture and horticulture	2.1.1 Cereal crops	2.1.1.1 Whole plants
			2.1.1.2 Straw parts
			2.1.1.3 Grains or seeds
			2.1.1.4 Husks or shells
			2.1.1.5 Blends and mixtures
		2.1.2 Grasses	2.1.2.1 Whole plant
			2.1.2.2 Straw parts

			2.1.2.3 Seeds
			2.1.2.4 Shells
			2.1.2.5 Bamboo
			2.1.2.6 Blends and mixtures
		2.1.3 Oil seed crops	2.1.3.1 Whole plant
			2.1.3.2 Stalks and leaved
			2.1.3.3 Seeds
			2.1.3.4 Husks and shells
			2.1.3.5 Blends and mixtures
		2.1.4 Root crops	2.1.4.1 Whole plant
			2.1.4.2 Stalks and leaves
			2.1.4.3 Root
			2.1.4.4 Blends and mixtures
		2.1.5 Legume crops	2.1.5.1 Whole plant
			2.1.5.2 Stalks and leaves
			2.1.5.3 Fruit
			2.1.5.4 Pods
			2.1.5.5 Blends and mixtures
		2.1.6 Flowers	2.1.6.1 Whole plant
			2.1.6.2 Stalks and leaves
			2.1.6.3 Seeds
			2.1.6.4 Blends and mixtures
		2.1.7 Segregated herbaceous biomass from gardens, parks, roadside maintenance, vineyards and fruit orchards	
		2.1.8 Blends and mixtures	
	2.2 By-products and residues from food and herbaceous processing industry	2.2.1 Chemically untreated herbaceous residues	2.2.1.1 Cereal crops and grasses
			2.2.1.2 Oil seed crops
			2.2.1.3 Root crops
			2.2.1.4 Legume crops
			2.2.1.5 Flowers
			2.2.1.6 Blends and mixtures
3. Fruit biomass	3.1 Orchard and horticulture fruit	3.1.1 Berries	3.1.1.1 Whole berries
			3.1.1.2 Flesh
			3.1.1.3 Seeds
			3.1.1.4 Blends and mixtures
		3.1.2 Stone/kernel fruits	3.1.2.1 Whole fruit
			3.1.2.2 Flesh
			3.1.2.3 Stone/kernel/fruit fibre
			3.1.2.4 Blends and mixtures
		3.1.3 Nuts and acorns	3.1.3.1 Whole nuts
			3.1.3.2 Shells/husks
			3.1.3.3 Kernels
			3.1.3.4 Blends and mixtures
		3.1.4 Blends and mixtures	
			3.2.1.1 Berries
			3.2.1.2 Stone/kernel fruit/fruit fibre

	3.2 By-products and residues from food and fruit processing industry	3.2.1 Chemically untreated fruit residues	3.2.1.3 Crude olive cake
			Blends and mixtures

5 Requirements

5.1 Production and product description

O1 Description of the product

The applicant must submit the following information about the product(s) in the application:

- Brand/trading name(s).
- Description of the product(s) volume/weight/number per package/bulk. Primary packaging and any use of individual packaging must also be included in the description.
- Raw materials must be described (tree species, name/species for other raw materials, oil, wax, stearin, adhesives, binders/fillers or other raw materials), type of raw material (virgin or chemically untreated wood residues), origin of the raw materials and the percentage contained in the product.
- Description of manufacturing process of the product.
- Description of any subcontractor(s): company name, production location, contact person and the production processes used.

Individual packaging: refers to packaging around each individual solid fuel, e.g. plastic cover around each separate fire lighting product. The individual packaging and the solid fuel constitute a unit.

Primary packaging: refers to the purchase packaging for the consumer, e.g. the packaging that holds 15 kg of pellets or 5 kg barbecue charcoal, and what the consumer encounters in sales.

† Description of the bullets above. Appendix 1 may be used. A flow chart is recommended to explain the production process.

5.2 Resources

O2 Material composition

Pellets, wood briquettes, wood chips and firewood must comply with the definition in accordance with the EN ISO 17225 part 1-5:2021 standard.

Barbecue charcoal and briquettes must comply with the definition in accordance with the EN 1860-2:2023 standard.

Fire lighting products must comply with the definition in accordance with the EN 1860-3:2023 standard.

100% by weight of the material composition of solid fuels must be produced from renewable raw materials. The requirement covers all use of binding agents/fillers and oils, wax and stearin in barbecue charcoal/-briquettes and fire lighting products. Small quantities of any

non-renewable impurities/additives are permitted, however, as stipulated in EN ISO 17225 part 1-5:2021, EN 1860-2:2023 and EN1860-3:2023.

Renewable raw materials in pellets, wood briquettes, wood chips, firewood, barbecue charcoal/briquettes and fire lighting products must comply with the requirements for type of raw material stipulated in Table 1 below.

Renewable raw materials are defined as biological materials that are constantly replenished by natural processes. This includes the degradable part of products, waste and residues from agriculture (both vegetable and animal), sustainable forestry operations and similar industries and the biodegradable fraction of industrial waste and municipal waste.

Peat is defined as a non-renewable material.

The requirement does not cover individual, primary and transport packaging.

Table 1 Requirements for class and types of raw materials

	Pellets and wood briquettes	Wood chips and firewood	Barbecue charcoal/briquettes	Fire lighting products
Class	A1 according to EN ISO 17225 part 2 and 3:2021	A1/A2 according to EN ISO 17225 part 4 and 5:2021	-	-
Type of renewable raw material according to EN ISO 17225 part 1:2021	Pellets 1.1.3 Stem wood 1.2.1 Chemically untreated wood residues Wood briquettes 1.1 Forest, plantation and other virgin wood 1.2.1 Chemically untreated wood residues	1.1.1 Whole trees without roots 1.1.3 Stem wood 1.1.4 Logging residues 1.2.1 Chemically untreated wood residues	1.1.1 Whole trees without roots 1.1.3 Stem wood 1.2.1 Chemically untreated wood residues 3.1.2 Stone/kernel fruits 3.2.1 Chemically untreated fruit residues	1.1.1 Whole trees without roots 1.1.3 Stem wood 1.2.1 Chemically untreated wood by-products and residues 2.1 Herbaceous biomass from agriculture and horticulture 2.2.1 Chemically untreated herbaceous residues 3.1 Orchard and horticulture fruit 3.2.1 Chemically untreated fruit residues
Type of renewable raw material in bio-oil				Renewable raw material (compare with the definition above)

For specification of the classification and types of renewable raw materials permitted in Nordic Swan Ecolabelled solid fuels and fire lighting products, see Glossary and definitions.

- † Description of the renewable materials and declaration from the manufacturer of the products applying for Nordic Swan Ecolabel, specifying the amount of raw material, as a percentage, contained in the product. Appendix 1 may be used.
- † Declaration from the manufacturer of the products applying for Nordic Swan Ecolabel, that the requirement for definition, class and type of raw materials has been met. Appendix 2 may be used.

5.2.1 Wood

The requirement for wood applies to all types of solid fuels and fire lighting products that contain wood, including wood boards and paper/pulp in fire lighting products.

Wood raw materials from the tree species salix, poplar and hybrid asp grown as energy forest on arable land are exempted from requirement O4 but must meet the requirements O3 and O6.

O3 Prohibited and restricted tree species

The requirement only applies to virgin tree species and not species defined as recycled material according to ISO 14021.

Nordic Ecolabelling's list of tree species* consists of virgin woods listed on:

- a) CITES (Appendices I, II and III)
- b) IUCN Red List, categorised as CR, EN and VU
- c) Rainforest Foundation Norway's tree list:
- d) Siberian larch (from forests outside the EU)

Use of tree species listed on a) CITES (Appendices I, II and III) is not permitted.

Tree species listed on either b), c) or d) may be used if they meet all the following requirements:

- the tree species does not originate from an area/region where it is on the IUCN Red List, categorised as CR, EN or VU
- the tree species does not originate from an Intact Forest Landscape (IFL), as defined in 2002 <http://www.intactforests.org/world.map.html>.
- the tree species shall originate from FSC or PEFC certified forests/plantations and shall be covered by a valid FSC/PEFC Chain of Custody (CoC) certificate documented/controlled as FSC or PEFC 100% through the FSC transfer method or PEFC physical separation method.
- tree species grown in plantations shall in addition not originate from plantations established on areas converted from forest after 1994.

* https://www.nordic-swan-ecolabel.org/pulp-paper-declaration-portal/what-can-be-declared/forestry-requirements/forestry_requirements_2020/

- † Enter the names of the tree species included in the product.
- † Declaration from the applicant/manufacture/supplier that tree species listed on a)–d) are not used in the product.
- † If species from the lists b), c) or d) are used:
- † Valid FSC/PEFC Chain of Custody certificate from supplier/applicant/manufacture covering the specific tree species and documenting that the wood is controlled as FSC or PEFC 100% through the FSC transfer method or PEFC physical separation method.
- † The applicant/manufacture/supplier shall document full traceability back to the certified forest unit and document the following:
 - the wood does not originate from an area/region where it is on the IUCN Red List, categorised as CR, EN or VU.

- the tree species does not originate from an Intact Forest Landscape (IFL), as defined in 2002: <http://www.intactforests.org/world.webmap.html>
- for plantations, the applicant/manufacturer/supplier must document that the tree species does not originate from plantations established on areas converted from forest after 1994.

O4 Wood raw material

Species name

The applicant must state the name (species name in Latin, Scandinavian or English language) of the wood raw material used in the Nordic Swan Ecolabelled solid fuel or fire lighting product.

Chain of Custody certification

Pellets, briquettes, wood chips, firewood and fire lighting products:

- Suppliers of wood raw materials must have Chain of Custody certification under the FSC/PEFC schemes.
- Subcontractors (e.g. a local sawmill carpenter) who does not have a chain of custody certification can in certain cases be exempted from the above requirement. The premise is that the subcontractor can guarantee that the specific wood raw material is purchased from an FSC/PEFC Chain for Custody certified supplier, and that the wood material fulfils the Swan requirements.

Barbecue charcoal/briquettes:

- Manufacturers of barbecue charcoal and manufacturers of barbecue briquettes must have Chain of Custody certification under the FSC/PEFC schemes.

Certified wood raw material

On an annual basis the following must be met:

Pellets and briquettes

- A minimum of 95% of the wood raw material used in Nordic Swan Ecolabelled pellets or briquettes must be wood residues from the wood processing industry classified as 1.2.1 (chemically untreated wood residues) according to EN ISO 17225-1:2021.
- A minimum of 70% of wood raw materials used in the Nordic Swan Ecolabelled pellets or briquettes must be certified as sustainably forested under the FSC or PEFC schemes.
- The remaining percentage of wood raw materials must be FSC Controlled Wood or wood from PEFC Controlled Sources.

Wood chips, firewood and fire lighting products:

- A minimum of 70% of wood raw materials used in the Nordic Swan Ecolabelled solid fuel (virgin and/or recycled material) must be certified as sustainably forested under the FSC or PEFC schemes.
- The remaining percentage of wood raw materials must be FSC Controlled Wood or wood from PEFC Controlled Sources.

Barbecue charcoal/briquettes:

- 100% of wood raw materials that are used in Nordic Swan Ecolabelled barbecue charcoal/briquettes must be certified as sustainably forested under the FSC or PEFC schemes. Wood raw materials must be traceable through FSC transfer method or PEFC physical separation method.

Certified wood raw materials (FSC and PEFC) must be accounted/recorded from the manufacturer's Chain of Custody account to the Nordic Swan Ecolabelled product/production line.

- † Name (species name in Latin, Scandinavian or English language) of the wood raw materials that are used in Nordic Swan Ecolabelled solid fuel or fire lighting product.

Pellets, wood briquettes, wood chips, firewood and fire lighting products:

- † Suppliers of wood raw materials are required to present a valid FSC/PEFC Chain of Custody certificate that covers all wood raw materials used in Nordic Swan Ecolabelled pellets, briquettes, wood chips, firewood or fire lighting products.
- † Applicants/manufacturers of pellets, wood briquettes, wood chips, firewood and fire lighting products are required to document that the requirement to the quantity of certified wood raw material in pellets, wood briquettes, wood chips, firewood and fire lighting products is met.
- † In cases where the applicant does not have FSC/PEFC Chain of Custody certified supplier, the supplier must present; an invoice for the specific wood, documentation showing that the supplier is FSC/PEFC Chain of Custody certified together with the suppliers Chain of Custody certificated. The Chain of Custody certificate must comply with the data on the invoice. The volume of purchased certified wood raw material must appear on the invoice. The applicants must have an agreement with the wood supplier, which describes how the supplier guarantees that the delivered certified wood matches the information on the invoice. The agreement shall also specify that the wood supplier is required to notify the applicant if the wood supplier is replaced. Nordic Ecolabelling may request further information.

Barbecue charcoal and barbecue briquettes:

- † Manufacturers of barbecue charcoal and manufacturers of barbecue briquettes are required to present a valid FSC/PEFC Chain of Custody certificate that covers all wood raw materials used in Nordic Swan Ecolabelled barbecue charcoal/briquettes.
- † Manufacturers of barbecue charcoal and manufacturers of barbecue briquettes are required to document that the quantity of certified wood raw material is met by the applicant's/manufacture's Chain of Custody bookkeeping balance sheet.

5.2.2 Solid and liquid renewable raw materials other than wood in barbecue charcoal/briquettes and fire lighting products and the tree species (salix/poplar/hybrid asp) grown as energy forest on arable land

The requirements apply to solid and liquid renewable raw materials other than wood in barbecue charcoal/briquettes and fire lighting products, for example, soy oil, palm oil, sugar cane, bio-oil, coir and pulp. The requirement also includes wood materials from the tree species (salix/poplar/hybrid asp) grown as energy forest on arable land, that can be used for example wood chips.

O5 Renewable raw materials from soy- and palm oil, palm kernel oil and their derivatives and sugar cane

Renewable raw materials from soy- and palm oil, palm kernel oil and their derivatives and sugar cane must not be used in Nordic Swan Ecolabelled barbecue charcoal/briquettes and fire lighting products.

- ↑ Confirmation from the licensee that the requirement is fulfilled (reference can be made to O1).

O6 Traceability and verification of renewable raw materials in barbecue charcoal/briquettes and fire lighting products and the tree species (salix/poplar/hybrid asp) grown as energy forest on arable land

Renewable raw materials other than soy- and palm oil, sugar cane and wood raw materials must meet the requirements stated in bullet 1 and 2 below.

The requirement also includes the tree species salix, poplar and hybrid asp grown as energy forest on arable land, that can be used for example wood chips.

1. State name (in Latin and a Nordic language) and geographical origin (country/state and region/province/municipality) and suppliers of the renewable raw material used. Appendix 4 may be used.
2. A documented procedure in place for the purchasing of renewable raw materials to ensure that all renewable raw materials come from legal sources. The raw materials must not be sourced from:
 - protected areas or areas under preparation as protected areas
 - areas where ownership or usage rights are unclear
 - illegally harvested crops

Nordic Ecolabelling may require further documentation in the event of uncertainty about the raw materials origin.

If the renewable raw material comprises of waste or residual products, there must be traceability to the production/process from which the waste or residue derived.

See Definitions for a definition of waste and residual products.

Nordic Ecolabelling consider that all raw materials grown within EU borders meet the requirement.

- ↑ Name (in Latin and a Nordic language) and geographical origin (country/state and region/province/municipality) of the renewable raw materials used. Appendix 4 can be used for documentation purposes.
- ↑ Description of the system for traceability of renewable raw materials.
- ↑ A written procedure from the producer/supplier of the renewable raw material and the manufacturer of the charcoal/-briquettes and fire lighting products, describing how the requirement is fulfilled. A requirement for a certificate of traceability from subcontractors may be used as part of the procedure.

5.2.3 Requirements for working conditions in the production of barbecue charcoal/briquettes

07 Code of conduct

The licensee must have a written procedure and set of rules and principles (a code of conduct) that shows how the licensee works to ensure that the following UN conventions and the UN Global Compact are complied with by all producers/suppliers of barbecue charcoal and briquettes:

- UN Children's Convention, Article 32.
- UN Convention (61/295) concerning the rights of indigenous peoples.

UN:s Global Compact¹ and its 10 principles.

Principle 1: Businesses should support and respect the protection of internationally proclaimed human rights.

Principle 2: Make sure that they are not complicit in human rights abuses.

Principle 3: Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining (ILO-convention 87 and 98).

Principle 4: The elimination of all forms of forced and compulsory labour (IL convention 29 and 105).

Principle 5: The effective abolition of child labour (ILO-convention 138 and 182).

Principle 6: The elimination of discrimination in respect of employment and occupation (ILO-convention 100 and 111).

Principle 7: Businesses should support a precautionary approach to environmental challenges.

Principle 8: Undertake initiatives to promote greater environmental responsibility.

Principle 9: Encourage the development and diffusion of environmentally friendly technologies.

Principle 10: Businesses should work against corruption in all its forms, including extortion and bribery.

The licensee shall ensure that all producers/suppliers of charcoal and briquettes are aware of the code of conduct and urging that these apply the code of conduct.

- † The licensee must submit a written procedure (a code of conduct) that shows how the license holder works to ensure that the following UN conventions and the UN Global Compact are complied with by all producers/suppliers of barbecue charcoal and briquettes in the supply chain.
- † Description of how the licensee's procedure (code of conduct) is communicated to all producers/suppliers of barbecue charcoal and briquettes in the supply chain.

5.3 Chemicals

The chemical requirements cover all ingoing substances, chemicals and chemical products that are added to the solid fuels or used in the production of solid fuels.

¹ <http://www.unglobalcompact.org>

Here, manufacture is defined as all manufacturing/processing activities conducted by the manufacturer of solid fuels or by its subcontractors.

The requirements relate to oil, grease, wax, stearin, adhesives, binders, dyes, etc.

The requirements do not cover:

- Auxiliary chemicals used during manufacture, such as lubricants, cleaning chemicals and so on.
- Refining processes, i.e. refining of vegetable oils.
- Production of paper and paper products.
- Individual, product and transport packaging.

The requirements in the criteria document and accompanying appendices apply to all ingoing substances in the Nordic Swan Ecolabelled product. Impurities are not regarded as ingoing substances and are exempt from the requirements. Ingoing substances and impurities are defined as below/in the definitions section, unless stated otherwise in the requirements.

Ingoing substances: All substances* in the Nordic Swan Ecolabelled/chemical product regardless of amount, including additives (e.g. preservatives and stabilizers) from the raw materials. Substances released from ingoing substances (e.g. biocidal active substances generated by preservatives, such as formaldehyde) are also regarded as ingoing substances.

** N.B. the difference from the definition of substances in the REACH Regulation (EC) No 1907/2006. Whereas a REACH substance encompasses a chemical element or compound as well as its stabilising additives and process impurities, a substance here refers to each of the constituents separately. The constituents of a UVCB substance (Unknown or Variable composition, Complex reaction products or of biological materials) are also regarded separately, and all known constituents must be regarded.*

Impurities: Trace levels of pollutants, contaminants and residues from production, incl. production of raw materials, that remain in the Nordic Swan Ecolabelled product in concentrations $\leq 1\,000$ ppm (≤ 0.1000 w%). For formaldehyde other than as a biocidal active substance and for arylamine, the corresponding concentration is ≤ 25 ppm (≤ 0.0025 w%).

Examples of impurities: Background environmental pollutants from feedstock, as well as contaminants and residues from production such as reactants (incl. monomers), reagents, catalysts, by-products, scavengers, detergents for production equipment, carry-over from other or previous production lines.

Impurities in the raw materials in concentrations $\geq 10\,000$ ppm (≥ 1.0000 w%) are always regarded as ingoing substances, regardless of the concentration in the Nordic Swan Ecolabelled product.

O8 Classification of chemical products used in the production

Chemical products used in the manufacture of solid fuels and fire lighting products must not be classified with any of the hazards listed below, in accordance with CLP Regulation (EC) 1272/2008.

Exemptions:

- Fatty acids (methyl ester) are exempted from the requirement for classifications H400 and H411.
- Auxiliary chemicals used for activation of thickeners classified with H412 must be combined with maximum 0.5% by weight in the finished fire lighting product.

Table 2 Excluded hazards.

CLP Regulation 1272/2008		
Hazard classification	Code for hazard classification and category	Hazard statement
Hazardous to the aquatic environment	Aquatic Acute 1	H400
	Aquatic Chronic 1	H410
	Aquatic Chronic 2	H411
	Aquatic Chronic 3	H412
	Aquatic Chronic 4	H413
Hazardous to the ozone layer	Ozone	H420
Carcinogenicity*	Carc. 1A or 1B	H350
	Carc. 2	H351
Germ cell mutagenicity*	Muta. 1A or 1B	H340
	Muta. 2	H341
Reproductive toxicity*	Repr. 1A or 1B	H360
	Repr. 2	H361
	Lact.	H362
Acute toxicity	Acute tox. 1 or 2	H300
	Acute tox. 1 or 2	H310
	Acute tox. 1 or 2	H330
	Acute tox. 3	H301
	Acute tox. 3	H311
	Acute tox. 3	H331
Specific target organ toxicity: single or repeated exposure	STOT SE 1 or 2	H370
	STOT SE 1 or 2	H371
	STOT RE 1 or 2	H372
	STOT RE 1 or 2	H373
Endocrine disruption for human health	ED HH 1	EUH380
	ED HH 2	EUH381
Endocrine disruption for the environment	ED ENV 1	EUH430
	ED ENV 2	EUH431
Persistent, Bioaccumulative and Toxic properties	PBT	EUH440
Very Persistent, Very Bioaccumulative properties	vPvB	EUH441
Persistent, Mobile and Toxic properties	PMT	EUH450
	vPvM	EUH451

* Including all classification variants (e.g. H350 also covers H350i).

- † Safety data sheet (SDS), prepared in accordance with Annex II of REACH Regulation (EC) No. 1907/2006) for each chemical product in the application.
- † Declaration from the manufacturer/supplier of the chemical product that the requirement has been fulfilled. Appendix 5 may be used.

O9 Classification of ingoing substances

Chemical products used in the manufacture of solid fuels and firefighting products must not contain ingoing substances that are classified with the hazard codes listed in the table below, in accordance with CLP Regulation 1272/2008.

Table 3 Classification of ingoing substances.

CLP Regulation 1272/2008		
Hazard class	Hazard class and category	Hazard code
Carcinogenicity*	Carc. 1A or 1B Carc. 2	H350 H351
Germ cell mutagenicity*	Muta. 1A or 1B Muta. 2	H340 H341
Reproductive toxicity*	Repr. 1A or 1B Repr. 2 Lact	H360 H361 H362
Endocrine disruption for human health	ED HH 1 ED HH 2	EUH380 EUH381
Endocrine disruption for the environment	ED ENV 1 ED ENV 2	EUH430 EUH431
Persistent, Bioaccumulative and Toxic properties	PBT	EUH440
Very Persistent, Very Bioaccumulative properties	vPvB	EUH441
Persistent, Mobile and Toxic properties	PMT	EUH450
Very Persistent, Very Mobile properties	vPvM	EUH451

* Including all classification variants (e.g. H350 also covers H350i).

† Declaration from the chemical manufacturer/supplier of the chemical product that the requirement has been fulfilled. Appendix 5 may be used.

5.4 Energy

The requirement for energy consumption includes the manufacturer's own production of pellets, wood briquettes, wood chips, firewood and barbeque charcoal/briquettes and possible energy used for drying/cooking/distilling of raw materials at external suppliers.

In production of various products, allocation can be used if the energy flows cannot be separated. This should generally be based on weight, for example, per. tonnes of product. Any allocation method used must be approved by Nordic Swan Ecolabel.

O10 Fossil energy sources

Energy from fossil sources (e.g. coal, oil, natural gas and peat) must only be used for starting the process of drying/boiling/distilling of raw materials to produce pellets, wood briquettes, wood chips, firewood and barbeque charcoal/briquettes.

The fossil share must not exceed 3% of the total annual energy consumption for the process of drying/boiling/distilling of raw materials to produce pellets, wood briquettes, wood chips, firewood and barbeque charcoal/briquettes.

The amount of fossil fuel used must be documented by measurements, invoices or similar.

- † Confirmation from the applicant that fossil energy sources are only used for the start-up process.
- † Calculation of the annual share of fossil fuels showing compliance with the requirement.
- † Documentation for amount of fossil energy used (invoice, measurements or similar).

O11 Energy consumption in the production of firewood, pellets, wood briquettes and barbecue charcoal and briquettes

Requirements for energy consumption for drying/boiling/distillation of raw materials in the production of pellets, wood briquettes and barbecue charcoal or barbecue briquettes are listed below in Table 4 and Table 5. The requirement only covers consumption of renewable energy. Any consumption of fossil energy is restricted in O10 and therefore not included in the calculations.

The requirement does not include the electricity used to drive machines in the drying/cooking/distillation process, for example, pressing and packaging.

Electricity cannot be used as an energy source for drying/cooking/distillation unless the producer produces electricity from renewable sources by its own power generation unit on-site.

If using external produced excess heat/waste heat: The fossil share may not exceed 3% of the annually energy mix.

If excess heat is sold to external parties and subtracted in the calculations the sold amounts must be verified.

Pellets and wood briquettes:

Energy consumption for drying/boiling raw materials in the production of pellets or wood briquettes must not exceed the figures in the table below (kWh/tonne pellets/wood briquettes).

If raw materials with varying moisture content are used, the energy requirement must be calculated as a weighted annual average of the raw materials used.

Table 4 Maximum energy consumption for drying/boiling raw materials (kWh/tonnes of pellets or wood briquettes).

Moisture content of raw materials	>55%	50%	40%	30%	20%	10%
	kWh/tonne	kWh/tonne	kWh/tonne	kWh/tonne	kWh/tonne	kWh/tonne
Direct dryers	1100	900	600	386	225	113
Steam dryers	825	675	450	289	169	84

Barbecue charcoal and briquettes:

Energy consumption for drying and distillation of raw materials in the production of barbecue charcoal or barbecue briquettes (moisture content max. 8%) must not exceed the figures in the table below (kWh/tonne barbecue charcoal or barbecue briquettes):

The amount of wood needed to produce 1 tonne of barbecue charcoal may not exceed 3 tonnes (density oven dry wood).

Table 5 Maximum energy consumption drying and distillation of raw materials (kWh/tonne barbecue charcoal or barbecue briquettes). Moisture content max. 8%.

Product type	kWh/tonne
Barbecue charcoal	4000
Barbecue briquettes	4600

Reference values for the energy content of fuels specified in Appendix 6 must be used.

Firewood

Drying of firewood must only be conducted by one of the alternatives below:

1. Natural drying processes with no heat consumption.
 2. Industrial drying with an annual energy consumption for the drying process of maximum 225 kWh/tonne firewood on a yearly basis.
- † Energy calculation and documentation showing that the requirement is met.
- † Documentation for externally supplied heat or produced excess heat that is either purchased or sold by the producer respectively.
- † Barbecue charcoal and briquettes: Documentation that amount of wood needed to produce 1 tonne of barbecue charcoal does not exceed 3 tonnes (density oven dry wood).

5.5 Use and quality requirements

012 Quality specifications for pellets, wood briquettes and wood chips

Pellets, wood briquettes and wood chips must comply with the quality specifications and requirement limits listed in the table below. Products for testing taken from the manufacturer's warehouse, in compliance with the methodology specified in EN 14778; EN 14780; EN ISO 18135.

Table 6 Quality specifications for pellets, wood briquettes and wood chips

		Pellets	Wood briquettes	Wood chips	
Property	Unit	A1	A1	A1/A2	Method of analysis
Diameter	mm	6 ± 1 or 8 ± 1		-	ISO 17829
Length	mm	3,15 < L ≤ 40 ¹⁾	According to Figure 1, ISO 17225-3	-	Pellets: ISO 17829 Briquettes: EN ISO 17225-3
Width W and Height H	mm	-	According to Figure 1, ISO 17225-3	-	ISO 17225-3
Particle density, DE	g/cm ³ as received	-	≥ 1.0	-	ISO 18847
Particle size distribution, P	mm	-	-	Either (P16S, P31S, P45S), in accordance with Table 1 in ISO 17827-1	ISO 17827-1

Moisture content, M	w% as received	≤ 10	$M12 \leq 12^{2)}$	$M10 \leq 10$ $M25 \leq 25$ $M35 \leq 35$	ISO 18134
Ash content, A	w% dry	≤ 0.7	≤ 1.0	$A1.0 \leq 1.0$ $A1.5 \leq 1.5$	ISO 18122
Mechanical durability	w % as received	$> 98.0^{3)}$	-	-	ISO 17831-1
Fines	w% as received	Bulk $\leq 1.0^{4)}$ Big bags 0.5% ⁴⁾	-	-	ISO 5370 (ISO 18846)
Additives	w% as received	≤ 2 type and quantities must be specified ⁵⁾	≤ 2 type and quantities must be specified ⁵⁾	-	
Lower calorific value (energy content)	MJ/kg or kWh/kg as received	$\geq 16,5$ or ≥ 4.6	$\geq 15,5$ or $\geq 4,3$	Minimum value must be specified ⁶⁾	ISO 18125
Bulk density, BD	Kg/m ³ as received	$600 \leq BD$ ≥ 750	-	$BD150 \geq 150$ $BD200 \geq 200$ $BD250 \geq 250$ $BD300 \geq 300$	ISO 17828
Ash melting point temperature ⁷⁾	C°	DT > 1200	-	-	ISO 21404
Temperature	C°	$\leq 40^{8)}$	-	-	
Nitrogen, N	w% dry	≤ 0.3	≤ 0.3	-	ISO 16948
Sulphur, S	w% dry	≤ 0.04	≤ 0.04	-	ISO 16994
Chlorine, Cl	w% dry	≤ 0.02	≤ 0.02	-	ISO 16994
Arsenic, As	mg/kg dry	≤ 1	≤ 1	-	ISO 16968
Cadmium, Cd	mg/kg dry	≤ 0.5	≤ 0.5	-	ISO 16968
Chromium, Cr	mg/kg dry	≤ 10	≤ 10	-	ISO 16968
Copper, Cu	mg/kg dry	≤ 10	≤ 10	-	ISO 16968
Lead, Pb	mg/kg dry	≤ 10	≤ 10	-	ISO 16968
Mercury, Hg	mg/kg dry	≤ 0.1	≤ 0.1	-	ISO 16968
Nickel, Ni	mg/kg dry	≤ 10	≤ 10	-	ISO 16968
Zinc, Zn	mg/kg dry	≤ 100	≤ 100	-	ISO 16968

1. Number of pellets longer than 40 mm can be 1 w-%. Maximum length shall be < 45 mm.
2. Nordic Ecolabelling accepts an uncertainty of $\pm 2\%$.
3. Wood pellets: Mechanical durability: at factory gate or when loading truck for deliveries to end-users. Not valid for briquettes.

4. Wood pellets: Fines: at factory gate in bulk transport (at the time of loading) and in small (up to 20 kg) and big bags (at time of packing) or sealed Big Bags or when delivering to end-user. Not valid for briquettes.
5. The number of additives in production shall be limited to 1.8% by weight, the amount of post-production additives (e.g. coating oils) shall be limited to 0.2% by weight of the pellets.
6. See Appendix D, ISO EN 17225-1 for calculation.
7. Ash is produced at 815 °C.
8. At the last loading point for truck deliveries to end-user.

The requirements concerning test laboratories and test instructions are stated in Appendix 7.

† Full test report.

O13 Quality specifications for firewood

Firewood must comply with the quality specifications and requirement limits listed in the table below.

Table 7 Quality specifications for firewood

Property	Unit	
Wood species		Must be indicated
Cross measure, D ¹⁾	Cm	D2 ≤ 2 D5 2 < D ≤ 5 D15 5 < D ≤ 15 D15+ > 15 (actual value to be stated)
Moisture content ²⁾	%, at time of delivery	≤ 20,0
Lower calorific value (energy content)	MJ/m ³ or kWh/m ³ as received or stacked	Must be indicated
Rot, mould and dust		No visible rot, mould fungus or dust

1) At least 85% of the wood must be within the specific diameter class. For stoves, it is recommended to use firewood with a diameter less than 15 cm.

2) The moisture content must be determined using the weighing/drying method:

$$\text{Water content (M)} = \frac{\text{wet weight of wood (Ww)} - \text{oven-dry weight of wood (Wo)}}{\text{wet weight of wood (Ww)}} \times 100\%$$

Continuous production control can be done using insertion moisture meter. It must be defined that the measurements are performed systematically and at representative points in the dried firewood stacks to ensure the quality.

† Declaration from the manufacturer/distributor of the firewood showing that the requirement has been met. Appendix 8 may be used.

† A quality procedure to show how the requirement for quality specifications is routinely checked.

O14 Quality specifications for barbecue charcoal and barbecue briquettes

Requirements for quality specifications for barbecue charcoal/-briquettes:

- Barbecue charcoal and barbecue briquettes must be tested in accordance with the EN 1860-2:2023 and must meet the quality specifications listed in the table below.
- All quality specifications stated in the table below must be tested once a year by an independent testing laboratory. The samples must be taken from the manufacturer's warehouse.

Table 8 Quality specifications for barbecue charcoal and barbecue briquettes

Property	Barbeque charcoal	Barbeque briquettes
Fixed carbon	≥ 83%	≥ 68%
Ash content	Max. 4%	Max. 15%
Moisture content	Max. 8%	Max. 8%
Volatile components (dry barbecue briquettes)	-	Max. 20%
Granulation	Max. 10% > 80 mm Min. 80% > 20 mm Max. 7% between 0-10 mm	< 20 mm max. 10%
Binder	-	See*
Foreign substances	-	See**

* *The gases that are emitted from binding agents when burned must not pose any risk to health when they encounter food. The binder must meet food quality standards.*

** *Tests conducted in accordance with 6.5 (EN1860-2:2005) must show that a maximum of 0.4% of the volume is a substance that does not normally occur after the distillation process in the production of barbecue charcoal. The total of all detected inadmissible additions should not exceed 1% by volume, when tested in accordance with 6.5.*

Barbecue briquettes must not contain:

Organic fossil material, e.g. stone coal, brown coal and petroleum coke, and inorganic materials, e.g. stone, sand, glass, slag and metal splinters.

The requirements concerning test laboratories and test instructions are stated in Appendix 7.

- † Complete test report, issued by independent test laboratory showing that the requirements for quality specifications listed in Table 8 are met.
- † Annual reporting: Test Report, issued by independent test laboratory showing that the requirements for quality specifications listed in Table 8 are met. All reports must be available to Nordic Ecolabelling upon request.

O15 Production facilities for barbecue charcoal and barbecue briquettes

If the applicant is a manufacturer of barbecue briquettes only, all the following requirements for production facilities (both barbecue charcoal manufacturer and/or barbecue briquette manufacturer) must also be fulfilled and documented.

Requirements for production facilities:

- a) The production of barbecue charcoal and briquettes must take place at a permanent production facility with the infrastructure to support the operations (defined raw

material warehouse, drying facility, distillation facility, packing facility and storage space).

- b) Production of charcoal must be in a continuous and not periodic production system (charcoal piles, transportable retorts, oil drums or similar are to be considered as a periodic production system).
- c) The distillation process must take place in an automatic closed-loop production system, where the flue gasses from the distillation processes are collected and reused in the drying/distillation processes, before they are released into the air.

† Description of manufacturing process (documented in O1) and confirmation that the requirement is met.

O16 Quality specifications for fire lighting products

Fire lighting products must be tested and comply with EN 1860-3:2023.

The requirements concerning test laboratories and test instructions are stated in Appendix 7.

† Complete test report.

O17 Information to consumers - pellets, wood briquettes, wood chips and firewood

The following information must be clearly stated on the labels/packaging/delivery note of pellets, wood briquettes, wood chips or firewood:

- Tree species (species name)/names of renewable raw materials
- Country of origin of the wood raw material
- That the product complies with Class A1/A2 according to ISO 17225:2021 part 2, 3, 4 or 5
- Solid fuel dimensions
- The volume/weight/number of the sold/delivered Nordic Swan Ecolabelled solid fuel
- Moisture content
- Ash content (does not apply to firewood)
- Calorific value (as received) in MJ/kg or kWh/kg

† Copy of the text on labels/packaging/delivery note.

O18 Information to consumers - barbecue charcoal and barbecue briquettes

The following information must be clearly stated on the labels or packaging of barbecue charcoal and barbecue briquettes:

- Tree species (species name)/names of renewable raw materials
- Country of origin of the wood raw material
- Country of production site
- Weight of unit in kg
- Fixed carbon content
- Ash content
- Moisture/water content

† Copy of the text on labels/packaging/delivery note.

O19 Information to consumers - fire lighting products

The following information must be clearly stated on the fire lighting product's labels or packaging:

- Tree species (species name)/names of renewable raw materials
- Burning time
- Recommended number of fire lighting units for lighting

† Copy of the text on labels/packaging/delivery note.

O20 Yearly audit of barbeque charcoal and barbeque charcoal briquettes production sites

All production facilities must be audited at least once a year by an independent third party. The independent competent third party must have minimum three years' experience in supply chain audits and have knowledge within the field of industrial energy systems.

The inspection report must be submitted to Nordic Ecolabelling no later than 1 April and cover the previous year's production of Nordic Swan Ecolabelled products.

The report must as a minimum verify compliance with part A and B:

Part A: Wood raw materials

For all three bullets below the records and/or invoices controlled must be documented by copy or by a traceable number/name of the document in the report.

O3 Tree species that may not be used

It must be verified that the tree species not permitted to be used according to O3, have not been used during the previous year. The auditor must perform and document random spot checks of records/invoices of incoming wood during the previous year, as well as ocular control of current raw materials.

O4 Certified raw material

It must be verified that 100% of wood raw materials used in Nordic Ecolabelled barbecue charcoal/briquettes were certified as sustainably forested under the FSC or PEFC schemes.

The independent third party must verify and document that certified wood raw materials (FSC and PEFC) were accounted/recorded from the manufacturer's Chain of Custody account to the Nordic Swan Ecolabelled product/production line.

O23 Traceability system

It must be verified that the total amount of charcoal sold as Nordic Swan Ecolabelled, is produced at the factory covered by the Nordic Swan Ecolabelling licence. This is done by comparing records of ingoing amounts of wood and sold amounts of charcoal respectively.

Part B: Energy

O10 Fossil energy sources

It must be verified that the limit of fossil energy has been fulfilled. The amount of fossil fuel used must be documented by measurements, invoices or similar.

O11 Energy consumption

The third party must verify that the threshold limit for energy consumption and the use of wood per produced kg of charcoal has been fulfilled. It must be confirmed that the energy report has been checked for the following if relevant for the calculation performed:

- Reference values for the energy content of fuels must comply with Appendix 6.
 - Efficiency of heat recovery systems
 - Content of volatile gasses in the wood
 - Yield of charcoal
 - Moisture content of the raw materials
 - If excess heat is sold to external parties and subtracted in the calculations the sold amounts must be verified.
- † CV or similar documenting the auditor's competence and independence
- † Annual report demonstrating compliance with the requirements O3, O4 and O233, O100 and O111 submitted to Nordic Ecolabelling no later than 1 April of the following year for review.
- † Calculation and documentation showing compliance with O10 and O11.

O21 Control of wood species in barbeque charcoal and briquettes

If there is suspicion of false claims, Nordic Ecolabelling has the right to perform tests of species of origin. It will be done by sending randomly picked Nordic Swan Ecolabelled charcoal bags from retail to laboratory analysis. The cost of the test must be covered by the licensee if the result shows, that false claims have been made.

- † Confirmation from applicant that the requirement as a condition for the license.

5.6 Licence maintenance

The purpose of the licence maintenance is to ensure that fundamental quality assurance is dealt with appropriately.

O22 Customer complaints

The licensee must guarantee that the quality of the Nordic Swan Ecolabel product or service does not deteriorate during the validity period of the licence. Therefore, the licensee must keep an archive over customer complaints.

Note that the original routine must be in one Nordic language or in English.

- † Upload your company's routine for handling and archiving customer complaints.

O23 Traceability

The licensee must be able to trace the Nordic Swan Ecolabel products in the production. A manufactured/sold product should be able to trace back to the occasion (time and date) and the location (specific factory) and, in relevant cases, also which machine/production line where it was produced. In addition, it should be possible to connect the product with the actual raw material used.

You can upload your company's routine or a description of the actions to ensure traceability in your company.

↑ Please upload your routine or a description.

6 Criteria version history

On the 13th of October 2025 Nordic Ecolabelling adopted version 4.0 of the criteria for Nordic Swan Ecolabelling of Solid fuels, and fire lighting products. The criteria are valid from 31 October 2025 until 31 October 2030.

7 How to apply and regulations for the Nordic Ecolabelling

Application and costs

For information about the application process and fees for this product group, please refer to the respective national website. For contact information see the beginning of this document.

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

Licence validity

The Nordic Swan Ecolabel licence is valid providing the criteria are fulfilled and until the criteria expire. The validity period of the criteria may be prolonged or adjusted, in which case the licence is automatically prolonged, 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.

Responsibility for Compliance with Applicable Legislation

When applying for the Nordic Swan Ecolabel, the applicant/licensee confirms compliance with all current regulatory requirements related to both the exterior and interior environment in connection with the production and handling of the product(s) covered by the application. Furthermore, the applicant declares that all applicable regulatory requirements within the Nordic region are met for the product(s). Compliance with these regulations is a prerequisite for obtaining a license.

On-site inspection

In connection with handling of the application, Nordic Ecolabelling normally performs on-site inspection visit/-s 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 contact info in the beginning of this document. Further information and assistance (such as calculation sheets or electronic application help) is available. Visit the relevant national website for further information.

Follow-up inspections: Nordic Ecolabelling may decide to check whether the licensee 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 it does not meet the requirements.

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

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.nordic-swan-ecolabel.org/regulations

Appendix 1 Description of the solid fuel, material composition and production

Product: Brand/trading name(s):	Volume/weight/number per package	Individual packaging: Materials:	Primary packaging: Materials:	Share of renewable materials (% by weight) in the solid fuel

Individual packaging: refers to packaging around each individual solid fuel, e.g. plastic cover around each separate fire lighting product. The individual packaging and the solid fuel constitute a unit.

Primary packaging: refers to the purchase packaging for the consumer, e.g. the packaging that holds 15 kg of pellets or 5 kg barbecue charcoal, and what the consumer encounters in sales.

Raw materials used in the solid fuel must be described (tree species, name/species for other raw materials, oil, wax, stearin, adhesives, binders/fillers or other raw materials), type of raw material (virgin or recycled material), origin of the raw materials and the percentage contained in the product:

Description of manufacturing process of the product:

Subcontractors must be described with company name, production location, contact person and the production processes used.

Appendix 2 Definition, class and type of raw materials

Product:
Brand/trading name(s):
Manufacturer:

Material composition (O2)

The following requirements are met: ☐ **Yes** ☐ **No**

- Pellets, wood briquettes, wood chips and firewood comply with the definition in accordance with the EN ISO 17225-1:2014 standard.
- Barbecue charcoal and briquettes must with the definition in accordance with the EN 1860-2:2005 standard.
- Fire lighting products comply with the definition in accordance with the EN 1860-3:2003 standard.

The following requirements are met: ☐ **Yes** ☐ **No**

100% by weight of the material composition of solid fuels must be produced from renewable raw materials. The requirement covers all use of binding agents/fillers and oils, wax and stearin in barbecue charcoal/-briquettes and fire lighting products.

Small quantities of any non-renewable impurities/additives are permitted, however, as stipulated in EN ISO 17225 part 1-5:2014, EN 1860-2:2005 and EN1860-3:2003. The requirement does not cover individual, primary and transport packaging.

The following requirements are met: ☐ **Yes** ☐ **No**

Renewable raw materials in pellets, wood briquettes, wood chips, firewood, barbecue charcoal/briquettes and fire lighting products must comply with the requirements for type of raw material stipulated in Table 1 below.

Renewable raw materials are defined as biological materials that are constantly replenished by natural processes. This includes the degradable part of products, waste and residues from agriculture (both vegetable and animal), sustainable forestry operations and similar industries and the biodegradable fraction of industrial waste and municipal waste.

Peat is defined as a non-renewable material.

	Pellets and wood briquettes	Wood chips and firewood	Barbecue charcoal/briquettes	Firelighting products
Class	A1 according to EN ISO 17225 part 2 and 3:2014	A1/A2 according to EN ISO 17225 part 4 and 5:2014	-	-
Type of renewable raw material according to EN ISO 17225 part 1:2014	1.1.3 Stemwood 1.2.1 Chemically untreated wood residues	1.1.1 Whole trees without roots 1.1.3 Stemwood 1.1.4 Logging residues 1.2.1 Chemically untreated wood residues	1.1.1 Whole trees without roots 1.1.3 Stemwood 1.2.1 Chemically untreated wood residues 3.1.2 Stone/kernel fruits	1.1.1 Whole trees without roots 1.1.3 Stemwood 1.2.1 Chemically untreated wood by-products and residues

			3.2.1 Chemically untreated fruit residues	2.1 Herbaceous biomass from agriculture and horticulture 2.2.1 Chemically untreated herbaceous residues 3.1 Orchard and horticulture fruit 3.2.1 Chemically untreated fruit residues
Type of renewable raw material in bio-oil				Renewable raw material (compare with the definition above)

For specification of the classification and types of renewable raw materials permitted in Nordic Swan Ecolabelled solid fuels and fire lighting products, see Glossary and definitions.

Manufacturer of the solid fuels or firelighting products signature

Place and date:	Company name/stamp:
Responsible person:	Signature of responsible person:
E-mail:	Phone no.

Appendix 3 Declaration of tree species not permitted to be used in Nordic Swan Ecolabelled products

Name of The Nordic Swan Ecolabel applicant:
Product group/-type:
Version and date of the list of prohibited tree species used:

It is hereby declared that species of trees on The Nordic Swan Ecolabel list of protected tree species* is not used in Nordic Ecolabelled solid fuels and fire lighting products. The requirement only applies to virgin wood species and not tree species defined as wood residues from the wood processing industry classified as 1.2.1 (chemically untreated wood residues) according to EN ISO 17225-1:2014.

* *The complete list of protected tree species is available for viewing at: www.nordic-ecolabel.org/wood/*

Nordic Ecolabelling may request further information if in doubt about specific tree species.

Applicant/Manufacturer of the solid fuels signature

Place and date:	Company name/stamp:
Responsible person:	Signature of responsible person:
E-mail:	Phone no.

Appendix 4 Traceability/verification of renewable raw materials in barbecue charcoal/-briquettes and fire lighting products and the tree species (salix/poplar/hybrid asp) grown as energy forest on arable land

Product (renewable raw material):
Manufacturer:
Supplier:

The requirement also includes the tree species (salix/poplar/hybrid asp) grown as energy forest on arable land, that can be used for example wood chips.

For documentation of renewable raw materials, provide the following in the table below:

- Name (Latin, Nordic or a English language) and geographical origin (country/state and region/province) of the renewable raw materials used

Renewable raw material (name)	Volume	Geographical origin (country/state and region/province/municipality)	Possibly traceability system on the raw material

Signature of the producer/supplier of the renewable raw materials:

Date:	Company name:
Person responsible:	Responsible person signature:
E-mail:	Phone no.

Signature of the producer of the barbecue charcoal/briquettes:

Date:	Company name:
Person responsible:	Responsible person signature:
E-mail:	Phone no.

Appendix 5 Declaration for chemical products used in the manufacture of solid fuels or fire lighting products

The product's name and area of use:
Producer/importer of the chemical product:

Classification of chemical products used in the manufacture of solid fuels at the factory/production centre or by suppliers (such as: oil, grease, wax, stearin, adhesives, binders, dyes, etc.).

Are the chemical products classified in accordance with

the table below?

☐ Yes ☐ No

If yes, state which classification(s):

--

CLP Regulation 1272/2008		
Hazard classification	Hazard class and category	Hazard code
Hazardous to the aquatic environment	Aquatic Acute 1	H400
	Aquatic Chronic 1	H410
	Aquatic Chronic 2	H411
	Aquatic Chronic 3	H412
	Aquatic Chronic 4	H413
Hazardous to the ozone layer	Ozone	H420
Carcinogenicity*	Carc. 1A or 1B	H350
	Carc. 2	H351
Germ cell mutagenicity*	Muta. 1A or 1B	H340
	Muta. 2	H341
Reproductive toxicity*	Repr. 1A or 1B	H360
	Repr. 2	H361
	Lact.	H362
Acute toxicity	Acute tox. 1 or 2	H300
	Acute tox. 1 or 2	H310
	Acute tox. 1 or 2	H330
	Acute tox. 3	H301
	Acute tox. 3	H311
	Acute tox. 3	H331
Specific target organ toxicity: single or repeated exposure	STOT SE 1 or 2	H370
	STOT SE 1 or 2	H371
	STOT RE 1 or 2	H372
	STOT RE 1 or 2	H373

Endocrine disruption for human health	ED HH 1 ED HH 2	EUH380 EUH381
Endocrine disruption for the environment	ED ENV 1 ED ENV 2	EUH430 EUH431
Persistent, Bioaccumulative and Toxic properties Very Persistent, Very Bioaccumulative properties	PBT vPvB	EUH440 EUH441
Persistent, Mobile and Toxic properties Very Persistent, Very Mobile properties	PMT vPvM	EUH450 EUH451

* Including all classification variants (e.g. H350 also covers H350i).

Exceptions:

- Fatty acids (methyl ester) are exempted from the requirement for classifications H400 and H411
- Auxiliary chemicals used for activation of thickeners classified with H412 must be combined with maximum 0.5% by weight in the finished firefighting product.

Ingoing substances

Ingoing substances: all substances in the chemical product regardless of amount, including additives (e.g., preservatives and stabilizers) in the raw materials. Substances known to be released from ingoing substances (e.g., formaldehyde, arylamine, in situ-generated preservatives) are also regarded as ingoing substances.

Impurities: residuals, pollutants, contaminants etc. from production, incl. production of raw materials, that remain in the chemical product in concentrations less than 1 000 ppm (0.1000 w%).

Impurities in the raw materials exceeding concentrations of 10 000 ppm (1.0000 w%) are always regarded as ingoing substances, regardless of the concentration in chemical product.

Examples of impurities are residues of the following: residues or reagents incl. residues of monomers, catalysts, by-products, scavengers, and detergents for production equipment and carry-over from other or previous production lines.

If the information concerning the composition of the raw materials is confidential, the information can be sent directly to the environmental labelling organisation.

Classification of ingoing substances

Are any of the ingoing substances classified in accordance with the table below?

___ Yes ___ No

If yes, state which ingoing substances, which classification and the ingoing amount:

--

CLP Regulation 1272/2008		
Hazard class	Hazard class and category	Hazard code
Carcinogenicity*	Carc. 1A or 1B	H350
	Carc. 2	H351
Germ cell mutagenicity*	Muta. 1A or 1B	H340
	Muta. 2	H341
Reproductive toxicity*	Repr. 1A or 1B	H360
	Repr. 2	H361
	Lact	H362
Endocrine disruption for human health	ED HH 1	EUH380
	ED HH 2	EUH381
Endocrine disruption for the environment	ED ENV 1	EUH430
	ED ENV 2	EUH431
Persistent, Bio accumulative and Toxic properties	PBT	EUH440
	vPvB	EUH441
Persistent, Mobile and Toxic properties	PMT	EUH450
	vPvM	EUH451

* Including all classification variants (e.g. H350 also covers H350i).

In the event of any change to the composition of the chemical product, a new declaration of fulfilment of the requirements is to be submitted to Nordic Ecolabelling.

Signature of producer/supplier of the chemical product:

Date:	Company name:
Person responsible:	Responsible person signature:
E-mail:	Phone no.

Appendix 6 Reference values for the energy content of fuels

The reference values listed below must be used for calculating the energy consumption:

	Density	LHV (dry matter)	
	Kg/m ³	MJ/kg	kWh/kg
Natural gas		45,1	12,5
Diesel	832	43,1	12,0
Hard coal		26,5	7,4
Heating oil	970	40,5	11,3
Wood (oven dry)	300-680	19,2	5,3
Wood 30%	450-750	18,5	5,1

Ref: JEC (2014): Well-to-wheels Analysis of Future Automotive Fuels and Powertrains in the European Context WTT APPENDIX 1 Conversion factors and fuel properties

FAO (2015): Wood fuels handbook

Density of the most common tree species specified as kg per m³ (this may vary from 10 - 20% on each side)

Tree species	Density in kg per m ³ (dry wood)
Hornbeam	640
Beech	580
Ash	570
Oak	570
Birch	540
Alder	440
Scots pine	430
Spruce	370
Coconut shell	430

Appendix 7 Analysis and test laboratories

Test of quality specifications must be performed by laboratories, accredited to the current standard and fulfil the general requirements in standard EN ISO/IEC 17025 or have official GLP status. A non-accredited laboratory may perform tests if the laboratory has applied for accreditation according to the current testing method, but has not yet been granted approval, or if accreditation is not available for the technical specification or proposed standard. In such case, the laboratory must prove that it is an independent, competent laboratory.

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

- sampling and analysis are monitored by the authorities, or
- the manufacturer's quality assurance system covers analyses and sampling and is certified to ISO 9001 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 institute, and the manufacturer takes samples in accordance with a fixed sampling schedule.

Appendix 8 Declaration of compliance with quality specifications for firewood

It is hereby declared that the Swan-labelled firewood complies with the quality specifications and requirement limits listed in the table below:

Property	Unit	
Wood species		Must be indicated
Diameter, D ¹⁾	cm	D2 ≤ 2 D5 2 < D ≤ 5 D15 5 < D ≤ 15 D15+ > 15 (actual value to be stated)
Moisture content ²⁾	%, at time of delivery	≤ 20,0
Lower calorific value (energy content)	MJ/m ³ or kWh/m ³ as received or stacked	Must be indicated
Rot, mould and dust		No visible rot, mould fungus or dust

At least 85% of the wood must be within the specific diameter class. For stoves, it is recommended to use firewood with a diameter less than 15 cm.

The moisture content must be determined using the weighing/drying method:

$$\text{Water content (M)} = \frac{\text{wet weight of wood (Ww)} - \text{oven-dry weight of wood (Wo)}}{\text{oven-dry weight of wood (Wo)}} \times 100\%$$

Manufacturer's/supplier's signature

Place and date:	Company name/stamp:
Responsible person:	Responsible person's signature:
E-mail:	Phone no.