Nordic Ecolabelling of

Solid fuels



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Consultation proposal

Nordic Ecolabelling

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This document is a translation of an original in Danish. 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 Ecolabel. These organisations/companies operate the Nordic ecolabelling system on behalf of their own country's government. For more information, see the websites:

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It may be quoted from provided that Nordic Ecolabelling is stated as the source.

What is a Nordic Ecolabelled solid fuel?

Nordic Ecolabelled solid fuels – pellets, briquettes, wood chips, firewood, barbecue charcoal/briquettes and firelighting products - consist of renewable material from sustainably produced, controlled sources. The energy consumption during the production is limited in order to ensure energy efficiency and reduce climate impact. The energy requirement thus includes stringent requirements concerning the use of fossil fuels, as these are highly significant for emissions of greenhouse gases in a life cycle perspective for solid fuels. Stringent requirements for quality properties ensure good combustion properties.

Nordic Ecolabelled solid fuels:

- consist of renewable materials – e.g. wood, herbaceous crops and fruit biomass
- consist of sustainably produced raw materials – to conserve the earth's resources
- meet stringent requirements for energy consumption – to reduce climate impact
- meet stringent quality requirements – to ensure good combustion properties

Why choose the Nordic Ecolabel?

- Solid fuels may use the Nordic Ecolabel trademark for marketing. The Nordic Ecolabel is a very well-known and well-reputed trademark in the Nordic region.
- The Nordic Ecolabel is a simple way of communicating environmental work and commitment to customers.
- The Nordic Ecolabel clarifies the most important environmental impacts and thus shows how a company can cut emissions, resource consumption and waste management.
- Environmentally suitable operations prepare solid fuels for future environmental legislation.
- Nordic Ecolabelling can be seen as providing a business with guidance on the work of environmental improvements.
- The Nordic Ecolabel not only covers environmental issues but also quality require¬ments, since the environment and quality often go hand in hand. This means that a Nordic Ecolabel licence can also be seen as a mark of quality.

What can carry the Nordic Ecolabel?

The product group comprises the following solid fuels for domestic and industrial use: pellets, briquettes, wood chips, firewood, charcoal/briquettes and firelighting products. The material in the products is made from 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 firelighting product). However, these products must demonstrate that they comply with all of the Nordic 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 Ecolabelled according to these criteria, but may be Nordic Ecolabelled according to the criteria for biofuels. Nor does the product group include liquid and gel firelighting products defined by the EN 1860:3:2003 standard, matches, smoking wood chips and disposable barbecue grills.

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 first in this document.

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

🔑 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 first in this documentfor addresses. Further information and assistance (such as calculation sheets or electronic application help) may be available. Visit the relevant national website for further information.

1 Production and product description

O1 Description of the product

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

- Brand/trading name(s).
- Description of the product(s) (volume/weight/number per package) in the application. Primary packaging and any use of individual packaging must also be included in the description.
- 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.

Individual packaging: refers to packaging around each individual solid fuel, e.g. plastic cover around each separate firelighting 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 points above. Appendix 1 may be used. A flow chart is recommended to explain the production process.

2 Resources

O2 Material composition

Pellets, briquettes, wood chips and firewood must satisfy the definition to comply with the EN ISO 17225:2014 standard.

Barbecue charcoal and briquettes must satisfy the definition to comply with the EN 1860-2:2005 standard.

Firelighting products must satisfy the definition to comply with the EN 1860-3:2003 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 firelighting products. Small quantities of any non-renewable impurities/additives are permitted, however, as stipulated in EN ISO 17225:2014, EN 1860-2:2005 and EN1860-3:2003. The requirement does not cover individual, primary and transport packaging.

Palm oil, palm kernel oil and their derivatives may be used with a maximum quantity of 50% by weight in the firelighting products.

Renewable raw materials in pellets, briquettes, wood chips, firewood, barbecue charcoal/briquettes and firelighting products must comply with requirements for class and 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.

Table 1: Requirements for class and types of raw materials

	Pellets and briquettes	Wood chips and firewood	Barbecue charcoal/briquettes	Firelighting products
Class	A1*	Wood chips: A1/A2** Firewood: A1/A2***	-	-
Type of renewable raw material according to EN ISO 17225:2014	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 3.2.1 Chemically untreated fruit residues	1.1.1 Whole trees without roots 1.1.3 Stemwood 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)

**According to EN ISO 17225, Solid biofuels, Part 2 Graded wood pellets and Part 3 Graded wood briquettes.*

***According to EN ISO 17225, Part 4 Graded wood chips.*

****According to EN ISO 17225, Part 5 Graded firewood.*

*****Negligible levels of glue, grease and other additives used in sawmills during production of timber and similar products from virgin wood are permitted in the raw material provided that the quantities of impurities/additives meet the limit values stipulated in requirements O12, O13, O14 and O15.*

☒ Description of the renewable materials and declaration from the manufacturer of pellets, briquettes, wood chips, firewood, barbecue charcoal/briquettes and firelighting products, specifying the amount of raw material, as a percentage, contained in the product. Appendix 1 may be used.

☒ Declaration from the manufacturer of pellets, briquettes, wood chips, firewood, barbecue charcoal/briquettes and firelighting products that the requirement for definition, class and type of raw materials has been met. Appendix 2 may be used.

2.1 Wood

The requirement for wood applies to all types of solid fuels that contain wood, including wood boards in firelighting products. Wood in paper, cardboard and pulp has to comply with requirement O7.

O3 Tree species that may not be used in Nordic Ecolabelled solid fuels

Species of trees on the Nordic Ecolabel list of protected tree species* may not be used in Nordic Ecolabelled solid fuels.

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

✉ Declaration from applicant/manufacturer that the requirement to tree species not permitted to be used in Nordic Ecolabelled solid fuels are met. Appendix 3 may be used.

O4 Wood raw material

The applicant must state the name (species name) of the wood raw material used in the Nordic Ecolabelled solid fuel.

Chain of Custody certification

Pellets, briquettes, wood chips, firewood and firelighting products:

Suppliers of wood raw materials must have Chain of Custody certification under the FSC/PEFC schemes.

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;

Pellets and briquettes:

A minimum of 95% of the wood raw material used in Nordic Ecolabelled pellets or briquettes must be recycled material. The definition of recycled material, see glossary/below*.

Wood chips, firewood and firelighting products:

A minimum of 70% of wood raw materials used in the Nordic Ecolabelled solid fuel (virgin and/or recycled material) must be certified as sustainably forested under the FSC or PEFC schemes or be recycled material*.

The remaining percentage of wood raw materials must be covered by the FSC/PEFC compliance schemes or be recycled material.

Barbecue charcoal/briquettes:

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

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

* *Recycled material defined according to ISO 14021 in the following two categories:*

"Pre-consumer" is defined as material that is reclaimed from the waste stream during a manufacturing process. Re-use of materials, that are processed or crushed, or waste, that has been produced in a process and can be reclaimed in the same manufacturing process that generated it, is not considered to be pre-consumer reclaimed material.

"Post-consumer" is defined as material generated by households or commercial, industrial or institutional facilities in their role as end-users of a product, which can no longer be used for its intended purpose. This includes materials from the distribution chain.

Nordic Ecolabelling includes by-products from primary wood processing industries (sawdust, wood chips, shavings, bark etc.) or residues from forestry operations (bark, branches, roots, etc.) in its definition of recycled material.

- ☒ Name (species name) of the wood raw materials that are used in Nordic Ecolabelled solid fuel.
- ☒ 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 Ecolabelled pellets, briquettes, wood chips, firewood or firelighting products.
- ☒ 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 Ecolabelled barbecue charcoal/briquettes.
- ☒ Applicants/manufacturers of pellets, briquettes, wood chips, firewood and firelighting products: Declaration of compliance with the requirement for the percentage of certified material or recycled material.
- ☒ Manufacturers of barbecue charcoal and manufacturers of barbecue briquettes: Enclose documentation e.g. a third party controlled balance sheet from CoC bookkeeping system or rolling average of the certification percentage on a production line showing that the quantity of certified wood raw material and recycled material in barbecue charcoal and barbecue briquettes is met.

2.2 Solid and liquid renewable raw materials other than wood in barbecue charcoal/briquettes and firelighting products

The requirements apply to solid and liquid renewable raw materials other than wood in barbecue charcoal/briquettes and firelighting products, for example, palm oil, bio oil, coir and paper.

O5 Renewable raw materials from palm oil, palm kernel oil and and their derivatives

Certified traceability

Suppliers of palm oil, palm kernel oil and their derivatives must have Chain of Custody certification under the RSPO scheme.

Certified raw materials from palm oil

100% of raw materials from palm oil, palm kernel oil and their derivatives used in the Nordic Ecolabelled firelighting products must be RSPO certified as sustainable palm oil, using the physical separation method, i.e. full traceability.

✉ Suppliers of palm oil are required to present a valid RSPO Chain of Custody certificate that covers all raw materials from palm oil used in the Nordic Ecolabelled firelighting product.

✉ Declaration of compliance with the requirement for the percentage of certified material and traceability. Invoices or delivery notes may be used as documentation.

O6 Traceability and verification of renewable raw materials in barbecue charcoal/briquettes and firelighting products

Renewable raw materials other than palm oil and wood raw materials must meet the following requirements:

1. State name (Latin and a Nordic language) and geographical origin (country/state and region/province/municipality) and suppliers of the vegetable raw material used. Appendix 4 may be used.
2. There must also be a written procedure in place for the purchase of solid vegetable raw materials to also ensure that all vegetable 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 material's origin.

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

See "Terms and definitions" at the end of the criteria for a definition of waste and residual products.

✉ Name (Latin and a Nordic language) and geographical origin (country/state and region/province/municipality) of the vegetable raw materials used. Appendix 4 can be used for documentation purposes.

✉ Description of the system for traceability of vegetable raw materials.

✉ A written procedure from the producer/supplier of the vegetable raw material or the manufacturer of the charcoal/briquettes and firelighting products, describing how the requirement is fulfilled. A requirement for a certificate of traceability from subcontractors may be used as part of the procedure.

O7 Paper, cardboard and pulp in firelighting products

The requirement covers paper, cardboard or pulp used in firelighting product. The requirement also covers individual packaging, but not primary packaging.

Paper, cardboard and pulp, which are covered by the Basic Module for "Nordic Ecolabelling of Paper Products" Version 2, must comply with the following requirements of the Basic Module:

- Chapter 1 Information on production, R3
- Chapter 4 Fibre raw materials, R7

- Chapter 5 Chemicals, R8 which refers to requirements R1-R14 of the Chemical Module, Version 2. The requirements may be documented by means of a list of all the chemicals used, giving their trade names and classification and a declaration that the requirements contained in R2-R14 have been fulfilled. Forms 1d and 1e may be used for documentation purposes. Nordic Ecolabelling reserves the right to demand further documentation for the chemicals to verify that they comply with the requirements.
- Chapter 6 Energy and CO2, R9-R10
- Chapter 7 Emissions to water and air, R12-R16
- If the paper or cardboard is already Nordic- or EU Ecolabelled in accordance with the criteria for Copy and Printing Paper, the requirement will be considered to have been fulfilled and can be documented by means of a licence certificate.

✉ Documentation as described in the Basic Module for the Nordic Ecolabelling of Paper Products or a valit licence certificate from Nordic- or EU Ecolabelling. If documentation for the paper pulp has already been sent to Nordic Ecolabelling, state which office administered the documentation.

2.3 Chemicals

The chemical requirements cover all constituent substances, chemicals and chemical products that are added to the solid fuels or used in the production of solid fuels. 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 apply to all constituent substances in the chemical product, but not impurities (compare with the definition below) unless otherwise stated in specific requirements.

Constituent substances are taken to be any substances in the chemical product, including additives in the ingredients (e.g. preservatives and stabilisers), but not impurities. Substances known to be degradation products from the constituent substances (such as formaldehyde and arylamine) are also considered to be constituent substances.

Impurities are defined as residual products from the production, including the raw material production, that can be found in the final chemical product in concentrations below 100 ppm (0.01% by weight, 100 mg/kg). Impurities in the raw material at concentrations of more than 1% are always regarded as constituent substances.

Examples of impurities are residual reagents, residual monomers, catalysts, bi-products and residual cleaning products from the production equipment and carry-overs from other production lines.

O8 Chemical products

Chemical products that are used in the production of solid fuels may not be classified in accordance with Table 2 below.

Exception:

- Fatty acids (methyl ester) are exempted from the requirement for classifications H400 and H411

Table 2: List of non-permitted classifications of chemical products used in the manufacture of solid fuels, in accordance with the CLP Regulation No. 1272/2008, or later.

CLP Regulation 1272/2008			
Hazard classification	Code for hazard classification and category	Hazard statement	Signal word
Harmful to aquatic organisms: Acute hazard and may cause long-lasting harmful effects	Aquatic Acute 1 Aquatic Chronic 1 Aquatic Chronic 2 Aquatic Chronic 3 Aquatic Chronic 4	H400 H410 H411 H412 H413	Warning Warning - - -
Hazardous to the ozone layer	Ozone	H420	Warning
Carcinogenic	Carc. 1A or 1B Carc. 2	H350* H351*	Hazard Warning
Germ cell mutagenicity	Muta. 1A or 1B Muta. 2	H340* H341*	Hazard Warning
Reproductive toxicity	Repr. 1A or 1B Repr. 2 Lact.	H360** H361** H362	Hazard Warning -
Acute toxicity	Acute tox. 1 or 2 Acute tox. 1 or 2 Acute tox. 1 or 2 Acute tox. 3 Acute tox. 3 Acute tox. 3 Acute tox. 4 Acute tox. 4 Acute tox. 4	H300 H310 H330 H301 H311 H331 H302 H312 H332	Hazard Hazard Hazard Hazard Hazard Hazard Warning Warning Warning

* Including all combinations of specified exposure route.

** Including all combinations of stated specific effect.

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

O9 CMR classification of constituent substances

Chemical products used in the manufacture of solid fuels must not contain substances that are classified with any of the following hazard codes and hazard designations or combinations thereof, as set out in Table 3 below.

Table 3: List of non-permitted classifications for the constituent substances in the chemical products used in the manufacture of solid fuels, in accordance with CLP Regulation (EC) No 1272/2008, or later.

CLP Regulation 1272/2008		
Hazard class	Code for hazard class and category	Hazard designation
Carcinogenic*	Danger, Carc. 1A or 1B Warning, Carc. 2	H350 H351
Mutagenic*	Danger, Muta. 1A or 1B Warning, Muta. 2	H340 H341
Reprotoxic*	Danger, Repr. 1A or 1B Warning, Repr. 2 -, Lact	H360 H361 H362

* Including all combinations of specified exposure route.

✉ Declaration from the chemical manufacturer/supplier that the requirement has been fulfilled. Appendix 6 may be used.

3 Energy consumption

The requirement for use of fossil energy sources in the drying/boiling/distillation process of raw materials in solid fuel production covers pellets, briquettes, wood chips, firewood and barbecue charcoal and briquettes. It only covers the energy used for drying/boiling/distillation raw materials. It does not cover any electricity used to power machinery in the drying/boiling/distillation process.

The requirement for energy consumption includes energy (kWh/tonne) used for drying/boiling/distilling raw materials in the production of pellets, wood briquettes and barbecue charcoal and briquettes. It only covers the energy used for drying/boiling/distilling raw materials. It does not cover the electricity used to power machinery in the drying/boiling/distillation process.

O10 Fossil energy sources

Energy produced by fossil fuels may not exceed 5% of the total annual energy consumption for drying/boiling raw materials for the production of 1 tonne (pellets, wood briquettes, wood chips, firewood and barbecue charcoal/briquettes) per year. The requirement includes any use of fossil energy sources for starting up drying processes.

For barbecue charcoal/briquettes, the requirement applies to both the drying and distillation process.

Electricity may not be used as a source of energy for drying/boiling/distillation unless the manufacturer generates the electricity itself.

This means that the manufacturer is the actual owner of the electricity generation facility.

If using district heating, the calculations are based on the percentage of fossil fuels used for production of heating in the local heating network.

Fossil fuels are stored solar energy that has been in the ground for millions of years. The fuels were formed from plant and animal matter that has been subjected to massive pressure. Fossil fuels include oil, coal and natural gas. Nordic Ecolabelling categorises peat as a fossil fuel in these criteria due to the high emission factor for carbon dioxide when peat is burned.

✉ Calculation and documentation showing compliance with the requirement.

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

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: Energy consumption 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):

Table 5: Energy consumption kWh/tonne barbecue charcoal or barbecue briquettes

Product type	kWh/tonne
Barbecue charcoal	4000
Barbecue briquettes	4600

Reference values for the energy content of fuels specified in Appendix 7 must be used.

✉ Calculation and documentation showing that the requirement is met.

4 Use and quality requirements

This chapter covers the requirements relating to quality and information for pellets, briquettes, wood chips, firewood, barbecue charcoal and briquettes and firelighting products.

O12 Quality specifications for pellets, briquettes and wood chips

Pellets, 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.

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

		Pellets	Briquettes	Wood chips	
Property	Unit	A1	A1	A1/A2	Method of analysis
Diameter	mm	6 ± 1 or 8 ± 1	In accordance with Figure 1, ISO 17225-3	-	ISO 17829
Length	mm	Maximum 4*D (D=diameter)	According to Figure 1, ISO 17225-3	-	Pellets: SS187120 Briquettes: ISO 17829
Width W and Height H	mm	-	According to Figure 1, ISO 17225-3	-	ISO 17225-3
Particle density, DE	g/cm3 as received	-	≥ 1,0	-	ISO 18847
Particle size distribution, P	mm	-	-	Either (P16S, P31S, P45S), in accordance with Table 1 in ISO 17225-4	ISO 17225-4
Moisture content, M	w % as received	≤ 8,0	≤ 12,0	M10 ≤ 10 M25 ≤ 25 M35 ≤ 35	ISO 18134
Ash content, A	w % dry	≤ 0,5	≤ 1,0	A1.0 ≤ 1,0 A1.5 ≤ 1,5	ISO 18122
Mechanical durability	w % as received	>98,0*	-	-	ISO 17831-1
Fines	w % as received	Bulk ≤ 1,0** Small bags 0,2%** Big bags 0,5%**	-	-	ISO 18846
Additives	w % as received	≤ 2 type and quantities must be specified***	≤ 2 type and quantities must be specified***	-	ISO 18846
Lower calorific value (energy content)	MJ/kg or kWh/kg as received	≥17,3 or ≥ 4,8	≥15,5 or ≥ 4,3	Minimum value must be specified****	ISO 18125

Bulk density, BD	Kg/m3 as received	≥ 650 ±30	-	BD150 ≥ 150 BD200 ≥ 200 BD250 ≥ 250 BD300 ≥ 300	ISO 17828
Ash melting point temperature	C°	>1400*****	-	-	CEN/TC 15370-1
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

* Wood pellets: Mechanical durability: at factory gate or when loading truck for deliveries to end-users. Not valid for briquettes.

** 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.

*** The amount 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.

Limit for the temperature of pellets at the loading point for end-user deliveries: 40°C.

**** See Appendix D, ISO EN 17225-1 for calculation.

***** All characteristic temperatures (shrinkage starting temperature (SST), deformation temperature (DT), hemisphere temperature (HT) and flow temperature (FT)) in oxidising conditions should be stated. Pre-ashing temperature other than 550°C should be stated.

The requirements concerning test laboratories and test instructions are stated in Appendix 8.

✉ 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	
Diameter, D	cm	8 – 12*
Moisture content	%, at time of delivery	≤ 18,0**
Lower calorific value (energy content)	MJ/kg or kWh/kg as received	Must be indicated
Rot, mould and dust		No visible rot, mould or dust

* At least 95% of the firewood must have a diameter of 8-12 cm

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

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

✉ Declaration from the manufacturer/distributor of the firewood showing that the requirement has been met. Appendix 9 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

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:

- 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).
- The distillation process must take place in an automatic closed-loop production system, where the flue gasses from the distillation processes is collected and reused in the drying/distillation processes, before they are released into the air.
- All defined production facilities must be inspected at least once a year by an independent competent third party to ensure compliance with requirements O3, O4 and O6 for raw materials, requirements O9 and O10 for energy consumption and production facilities.

Requirements for quality specifications for barbeque charcoal/-briquettes:

- Barbecue charcoal and barbecue briquettes must be tested in accordance with the EN 1860-2:2005 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	Barbecue charcoal	Barbecue 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. 70% > 20 mm Max. 20% between 10-20 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 come into contact with 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. 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 8.

✉ Declaration from the manufacturer of barbeque charcoal/-briquettes showing that the requirement to production facilities has been met. Appendix 10 may be used.

✉ Complete test report.

Annual reporting:

✉ A report issued by an independent competent third party verifying compliance with the Nordic Ecolabel's requirements O3, O4 and O6 for raw materials, and O9 and O10 for energy consumption. All reports must be available to Nordic Ecolabelling. If the annual report shows that the requirement is not met, the licensee should contact Nordic Ecolabelling.

✉ 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. If the annual report shows that the requirement is not met, the licensee should contact Nordic Ecolabelling.

O15 Quality specifications for firelighting products

Firelighting products must be tested and comply with EN 1860-03:2003, including the requirements below for radiation intensity according to article 4.4.2 in the standard.

- The average time (test 3) from lighting a firelighting product to the point where a radiation intensity of 500 W/m2 is reached must not exceed 9 minutes.

The requirements concerning test laboratories and test instructions are stated in Appendix 8.

✉ Complete test report.

O16 Information to consumers about pellets, briquettes, wood chips and firewood

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

- Information about the manufacturer
- Tree species (species name)/names of renewable raw materials
- That the product complies with Classification A1 according to ISO 17255:2014 part 2/3 or 4 (does not apply to firewood)
- Solid fuel dimensions
- The volume/weight of the sold/delivered Nordic Ecolabelled solid fuel
- Moisture content
- Ash content (does not apply to firewood)
- Calorific value in MJ/kg, kWh/kg or Kcal/kg

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

O17 Information to consumers about barbecue charcoal and barbecue briquettes

The following information must appear on the labels or packaging of barbecue charcoal and barbecue briquettes:

- Information about the manufacturer of both barbecue charcoal and barbecue briquettes.
- Tree species (species name)/names of renewable raw materials
- Weight of unit in kg
- Fixed carbon content
- Ash content
- Moisture/water content
- Calorific value in KJ/kg

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

O18 Information to consumers about firelighting products

The following information must be included on the firelighting product's labels or packaging:

- Information about the manufacturer
- Tree species (species name)/names of renewable raw materials
- Burning time
- Recommended number of firelighting units for lighting

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

5 Quality and official requirements

The following procedures must be implemented to ensure that the Nordic Ecolabel requirements are met.

If the manufacturer has a certified environmental management system in accordance with ISO 14 001 or EMAS in which the following procedures are implemented, it is sufficient for the accredited auditor to confirm that the requirements are being implemented.

O19 Person responsible for the Nordic Ecolabel

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

✉ Organisational chart showing who is responsible for the above.

O20 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 subcontractors and such like).

🔑 To be checked on site.

O21 Product quality

The licensee must guarantee that the quality of the Nordic Ecolabelled solid fuel is maintained throughout the validity period of the licence.

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

O22 Planned changes

Written notice of planned product and marketing changes that affect the Nordic Ecolabelling requirements must be given to Nordic Ecolabelling.

✉ Procedures detailing how planned product and marketing changes are dealt with.

O23 Unforeseen non-conformities

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

✉ Procedures showing how unforeseen non-conformities are handled.

O24 Traceability

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

✉ Description/procedures for how the requirement is to be met.

O25 Take-back system

Relevant national regulations, legislation and/or agreements within the sector regarding take-back systems for products and packaging shall be complied with in all the Nordic countries where the Nordic Ecolabelled solid fuels are marketed.

✉ Inserts from applying for membership of existing agreements on recycling/disposal.

O26 Laws and regulations

The licensee must ensure compliance with the applicable legislation on health and safety, environmental legislation and installation-specific terms/permits at all the production sites for the Nordic Ecolabelled product.

✉ Signed application form.

Marketing

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

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

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

Design of the Nordic Ecolabel

Design of the Nordic Ecolabel:



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

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

Follow-up inspections

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

The licence may be revoked if it is evident that solid fuels 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.

History of the criteria

Nordic Ecolabelling adopted version 3.0 of the criteria for solid fuels on DAY MONTH YEAR. The criteria are valid until DAY MONTH YEAR.

New criteria

As part of any future evaluation of the criteria, it will be relevant to consider the following:

- Requirements concerning renewable raw materials
- Requirements for energy consumption in the production of solid fuels
- Requirements for quality aspects

Terms and definitions

Term	Explanation or definition
CMR substances	CMR substances are substances that are known to be Carcinogenic, Mutagenic and/or Reprotoxic.
CO	Carbon monoxide.
Individual packaging	Individual packaging refers to packaging around each individual solid fuel, e.g. plastic cover around each separate firelighting 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 CO2 that is 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.

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 firelighting 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.

_____

_____

_____

Manufacturer of the solid fuels signature

Place and date:	Company name/stamp:
Responsible person:	Signature of responsible person:

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

The following requirements are met: ___ Yes ___ No

Renewable raw materials in pellets, briquettes, wood chips, firewood, barbecue charcoal/briquettes and firelighting products comply with the requirements for class and type of raw material stipulated in the table 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 briquettes	Wood chips and firewood	Barbecue charcoal/briquettes	Firelighting products
Class	A1*	Wood chips: A1/A2** Firewood: A1/A2***	-	-
Type of renewable raw material according to EN ISO 17225:2014	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 3.2.1 Chemically untreated fruit residues	1.1.1 Whole trees without roots 1.1.3 Stemwood 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)

**According to EN ISO 17225, Solid biofuels, Part 2 Graded wood pellets and Part 3 Graded wood briquettes.*

***According to EN ISO 17225, Part 4 Graded wood chips*

****According to EN ISO 17225, Part 5 Graded firewood*

*****Negligible levels of glue, grease and other additives used in sawmills during production of timber and similar products from virgin wood are permitted in the raw material provided that the quantities of impurities/additives meet the limit values stipulated in requirements O12, O13, O14 and O15.*

Manufacturer of the solid fuels signature

Place and date:	Company name/stamp:
Responsible person:	Signature of responsible person:

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

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

It is hereby declared that tree species listed in the list of prohibited tree species (Nordic Ecolabelling - Prohibited Wood) is not used in the Swan-labelled product.

The list of prohibited tree species is located on the website: 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:

Appendix 4 Traceability and verification of renewable raw materials (other than wood) in barbecue charcoal/-briquettes and firelighting products

Product (revewable raw material):
Manutacturer:
Supplier:

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

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

Renewable raw material (name)	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 or the manufacturer of the solid fuel:

Date:	Company name:
Person responsible:	Responible persons signature:

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

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 chemical and its classification:

_____

CLP Regulation 1272/2008			
Hazard classification	Code for hazard classification and category	Hazard statement	Signal word
Harmful to aquatic organisms: Acute hazard and may cause long-lasting harmful effects	Aquatic Acute 1 Aquatic Chronic 1 Aquatic Chronic 2 Aquatic Chronic 3 Aquatic Chronic 4	H400 H410 H411 H412 H413	Warning Warning - - -
Hazardous to the ozone layer	Ozone	H420	Warning
Carcinogenic	Carc. 1A or 1B Carc. 2	H350* H351*	Hazard Warning
Germ cell mutagenicity	Muta. 1A or 1B Muta. 2	H340* H341*	Hazard Warning
Reproductive toxicity	Repr. 1A or 1B Repr. 2 Lact.	H360** H361** H362	Hazard Warning -
Acute toxicity	Acute tox. 1 or 2 Acute tox. 1 or 2 Acute tox. 1 or 2 Acute tox. 3 Acute tox. 3 Acute tox. 3 Acute tox. 4 Acute tox. 4 Acute tox. 4	H300 H310 H330 H301 H311 H331 H302 H312 H332	Hazard Hazard Hazard Hazard Hazard Hazard Warning Warning Warning

* *Including all combinations of specified exposure route.*

** *Including all combinations of stated specific effect.*

- Fatty acids (methyl ester) are exempted from the requirement for classifications H400 and H411

The declaration is made to the best of the signatory's knowledge and according to the knowledge held at the time, based on tests and/or declarations from raw material producers/suppliers. Reservation is made for new developments and knowledge. If such new knowledge should come to light, the signatory is obliged to submit an updated declaration to Nordic Ecolabelling.

Signature of producer/supplier of the chemical product:

Date:	Company name:
Person responsible:	Responible persons signature:

Appendix 6 Declaration for constituent substances in chemical products

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

Constituent substances are taken to be any substances in the chemical product, including additives in the ingredients (e.g. preservatives and stabilisers), but not impurities. Substances known to be degradation products from the constituent substances (such as formaldehyde and arylamine) are also considered to be constituent substances.

Impurities are defined as residual products from the production, including the raw material production, that can be found in the final chemical product in concentrations below 100 ppm (0.01% by weight, 100 mg/kg). Impurities in the raw material at concentrations of more than 1% are always regarded as constituent substances.

Examples of impurities are residual reagents, residual monomers, catalysts, bi-products and residual cleaning products from the production equipment and carry-overs from other production lines.

The declaration is made to the best of the signatory's knowledge and according to the knowledge held at the time, based on tests and/or declarations from raw material producers/suppliers. Reservation is made for new developments and knowledge. If such new knowledge should become known, the signatory is obliged to submit an updated declaration to Nordic Ecolabelling.

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 constituent substances

Are the constituent substances classified in accordance with the table below?

___ Yes ___ No

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

_____

CLP Regulation 1272/2008		
Hazard class	Code for hazard class and category	Hazard designation
Carcinogenic*	Danger, Carc. 1A or 1B Warning, Carc. 2	H350 H351
Mutagenic*	Danger, Muta. 1A or 1B Warning, Muta. 2	H340 H341
Reprotoxic*	Danger, Repr. 1A or 1B Warning, Repr. 2 -, Lact	H360 H361 H362

* Including all combinations of specified exposure route.

Signature of producer/supplier of the chemical product:

Date:	Company name:
Person responsible:	Responible persons signature:

Appendix 7 Reference values for the energy content of fuels

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

	Densitet	LHV (dry matter)	
	Kg/m3	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

Appendix 8 Analysis and test laboratories

Test of quality specifications must be performed by laboratories that 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 is 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 9 Declaration of compliance with quality specifications for firewood

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

Property	**Unit**	
Diameter, D	cm	8 – 12*
Moisture content	%, at time of delivery	≤ 18.0**
Lower calorific value (energy content)	MJ/kg or kWh/kg as received	Must be indicated
Rot, mould and dust		No visible rot, mould or dust

* At least 95% of the firewood must have a diameter of 8-12 cm

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

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

Manufacturer's/supplier's signature

Place and date:	Company name/stamp:
Responsible person:	Responible persons signature:

Appendix 10 Declaration of compliance with the requirement to barbeque charcoal/-briquettes production facilities

It is hereby declared that the production facilities for the production of Swan labeled barbecue charcoal and barbeque briquettes meet the following requirements for production facilities:

Requirements for production facilities:

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). ___ Yes ___ No

The distillation process must take place in an automatic closed-loop production system, where the flue gasses from the distillation processes is collected and reused in the drying/distillation processes, before they are released into the air.

___ Yes ___ No

Manufacturer's signature

Place and date:	Company name/stamp:
Responsible person:	Responible persons signature: