Swedish Society for Nature Conservation

Good Environmental Choice criteria Chemical products

Version 2006:4

Bra Miljöval

Good Environmental Choice. The world's toughest ecolabel.

The Swedish Society for Nature Conservation (SSNC) is a non-profit organisation that is independent of political and religious affiliations. We are driven by an ambition to preserve the environment and protect people's health. It is partially due to us that seals, seaeagles and peregrine falcons are no longer endangered species in Sweden. We promote biological diversity, and strive to prevent climate change, acidification, over-fertilization, the spread of dangerous chemicals and much more.

However, it is not enough to protect nature in reserves or stop individual polluters. We need to reduce our total environmental impact. Companies that adapt their production methods and products to reduce the burden on the environment play a vital role in this work.

Good Environmental Choice is SSNC's own ecolabel and one of the tools we use to drive development towards a sustainable society. Good Environmental Choice places high environmental requirements on the products that it approves for labelling.

Thanks to Good Environmental Choice, hundreds of products have been reformulated and environmentally adapted.

Ecolabelling has resulted in concrete results. For example, Good Environmental Choice labelling has almost completely eliminated the environmentally hazardous surfactant LAS from Swedish detergents.

Another example is that Good Environmental Choice labelling of electricity supplies has increased the water flow through hydroelectric plants and so improved biodiversity along those stretches of river. Where power plants run on biofuel, our requirement that ash is returned to the soil has led to a sustainable process.

Good Environmental Choice is part of SSNC's Green Consumerism initiative. Green Consumerism is a network of active members who, for example, run a Green Week campaign each year. Thanks to this campaign the range of products in most supermarkets is becoming increasingly environment friendly. In the eyes of consumers, the Good Environmental Choice label is a symbol they can trust. For licensees, the label brings competitive benefits.

Good Environmental Choice criteria currently exist for the following products and services:

- Heat energy
- Electrical energy
- Freight transport
- Passenger transport
- Grocery shops
- Paper
- Textiles
- Chemical products



Read more about Good Environmental Choice at www.bramiljoval.se The criteria can be ordered by email from: gbg@naturskyddsforeningen.se or downloaded from www.bramiljoval.se

For further information, contact the SSNC, Box 7005, SE-401 31 Göteborg, Sweden, tel: +46 (0)31-711 64 50, fax: +46 (0)31-711 64 30, e-mail: gbg@naturskyddsforeningen.se

Introduction

The Good Environmental Choice label for chemical products is one of the tools used by the Swedish Society for Nature Conservation to promote the development of a sustainable society.

Ecolabelling is intended to reduce the use of harmful chemical substances and the harm that products cause to the environment and our health. Our basic approach is that all ingredients of chemical products that carry the Good Environmental Choice label should be readily biodegradable, non-toxic to aquatic organisms and non-bioaccumulating. To reduce eutrophication, phosphate is not permitted in Good Environmental Choice labelled products.

The Swedish Society for Nature Conservation requires that companies that wish to use the Good Environmental Choice label have an environmental policy that also covers transport. The aim is to reduce climate impact. Requirements are also placed on product packaging.

The criteria for chemical products apply to all chemical products and make it possible to ecolabel everything from cosmetics to detergents and degreasing agents.

The criteria for Good Environmental Choice labelling of chemical products have been ratified by the secretary-general of the Swedish Society for Nature Conservation. The criteria are valid from 1 December 2006 until the next version is introduced, no earlier than 30 November 2009. Many licensees, individuals and companies have contributed valuable information and comments during their preparation, and we would like to thank them here.

Eva Eiderström

Head of Good Environmental Choice

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For further information on Good Environmental Choice labelling and the application procedure, visit the website: www.bramiljoval.se or contact the Swedish Society for Nature Conservation, Box 7005, SE-402 31 Göteborg, Sweden. tel: +46 (0)31-711 64 50, fax: +46 (0)31-711 64 30, e-mail: gbg@naturskyddsforeningen.se

Scope of the criteria

These Good Environmental Choice criteria apply to all types of chemical products. The criteria impose requirements on all ingredients. The requirements [20.1–20.14] apply to the environmental work of licensees and product manufacturers.

The general requirements, 1.1–1.15, apply to all ingredients and to the end product. Additional requirements are also given for each ingredient. Some ingredients have their own section in the criteria document. Others must meet the requirements for other additives, 15.1-15.9.

Product-specific requirements apply to some groups of products.

Definitions of product groups:

Laundry detergents: Products that are used for hand washing and machine washing of textiles.

Fabric softeners: Products that are added to textiles to make them softer and to reduce static.

Stain removers: Products that remove stains or discolouration from textiles.

Bleaching agents: Products that remove stains or discolouration by bleaching.

All-purpose cleaners: Products that are used for routine cleaning of floors, walls, interiors, bathrooms, kitchens, stairs, etc.

Toilet cleaners: Products that are used to clean toilets regularly.

Heavy-duty cleaning agents: Products that are used to clean heavily soiled surfaces.

Soft soaps: Products based on saponified vegetable oils.

Washing-up liquids: Products that are used for hand washing porcelain, glass, kitchen utensils and the like.

Dishwasher detergents: Products that are used in dishwashers for domestic use and for automatic dosing. Rinse aids that are used in dishwashers are not included in this definition, but are regarded as a separate product group.

Soaps: Products that are used for washing skin, and may take the form of solid or liquid soaps, shower gel, bath foam and wet wipes. They also include combined products such as soap and shampoo in one.

Shampoos: Products that are used for washing hair. They also include combined products such as soap and shampoo in one.

Hair conditioners: Products that are applied when washing hair to make the hair easier to comb out. They also include combined products such as shampoo and conditioner in one.

Car care products: Products that are used for washing cars and for general car care.

1 General requirements

- 1.1 All added ingredients must be listed in the recipe. This requirement also applies to synthetic residues and traces present in a higher degree than 0,01%. Where an ingredient consists of a mixture, all chemical substances in the mixture must be specified, with each substance meeting requirements 1.1-1.15.
- 1.2 Ingredients must not contain cadmium, lead, mercury, chrome, organically bound halogens or phthalates.
- 1.3 Ingredients that contain phosphorus must not be added to the product inten tionally.
- 1.4 The nitrogen content of the product must not exceed 1.0% by weight.
- Ingredients or their known breakdown products must not be carcinogenic or be suspected of being carcinogenic according to the following classifications:
 R45, May cause cancer
 R49, May cause cancer by inhalation
 R40, Suspected of causing cancer
- Ingredients or their known breakdown products must not be mutagenic or be suspected of being mutagenic according to the following classifications:
 R46, May cause heritable genetic damage
 R68, Possible risk of irreversible effects
- 1.7 Ingredients or their known breakdown products must not interfere with reproduction or be suspected of interfering with reproduction according to the following classifications:
 R60, May impair fertility
 R61, May cause harm to the unborn child
 R62, Possible risk of impaired fertility
 R63, Possible risk of harm to the unborn child or
 R64, May cause harm to breastfed babies
- Products must not be toxic after repeated exposure according to the following classifications:
 R48, Danger of serious damage to health by prolonged exposure
 R33, Danger of cumulative effects
- Products must not be sensitising according to the following classifications: R42, May cause sensitisation by inhalation R43, May cause sensitisation by skin contact
- 1.10 Products must not be very toxic according to the following classifications:
 R26, Very toxic by inhalation
 R27, Very toxic in contact with skin
 R28, Very toxic if swallowed
 R23, Toxic by inhalation
 R24, Toxic in contact with skin
 R25, Toxic if swallowed
 R39, Danger of very serious irreversible effects

Ingredient refers to a pure chemical substance, chemical compounds or a mixture of several chemical substances or compounds.

Classification refers to official classification or self-classification in accordance with the EU's classification system. Self-classification means that the manufacturing company determines if an ingredient should be assigned one or more risk phrases in accordance with the classification system.

- 1.11 Products that are not dispensed automatically must not cause irritation or burns according to the following classification: R35, Causes severe burns
- 1.12 The toxicity of chemical substances to aquatic organisms must be specified, giving results for fish, daphnia and algae (except for preservatives, for which data is only required for fish and daphnia).

Toxicity should, where possible, be specified using existing data in accordance with OECD 201–203. Otherwise, in vitro testing, (Q)SAR or other alternative test methods that have been validated by the European Center for Validation of Alternative Methods (ECVAM) or another international body may be used. If no such data is available, ingredients may be assessed using LC_{50} , EC_{50} and IC_{50} values for substances with similar structures.

- 1.13 Chemical substances that are not officially classified must be self-classified. Where possible, existing results from prior classification should be used. Otherwise, in vitro testing, (Q)SAR or other alternative test methods that have been validated by the European Center for Validation of Alternative Methods (ECVAM) or another international body may be used. If no such data is available, animal trials must be carried out.
- 1.14 Products that are covered by the cosmetics directive (76/768/EEC), and ingredients of such products, may not be tested on animals. Similarly, combinations of ingredients may not be tested on animals.
- 1.15 The directive on good laboratory practice (87/18/EEC) must be applied whenever chemicals are tested.

Reasons for requirements

[1.1] All chemical substances that are added to a product must meet the specified requirements in order to protect the environment and people's health. Even very small amounts of substances can have undesirable effects.

[1.2] Heavy metals and halogenated organic substances have many undesirable and serious effects on the environment and health.

[1.3] Phosphates contribute to eutrophication.

[1.4] Nitrogen contributes to eutrophication.

[1.5–1.7] Cancer, genetic damage and damage to the reproductive system are serious health effects. Because no safe levels can be established, these requirements apply regardless of the concentration in the product.

[1.8-1.10] Products must be safe to use and must not pose a health risk to the user.

[1.11] If products are dispensed automatically it is considered that there is little risk of the user suffering skin irritation.

[1.12-1.14] Chemical substances and products that are released must be adequately tested to prevent damage to the environment. At the same time testing on animals must be minimised. QSAR (Quantitative Structure-Activity Relationship) is a static model that analyses the relation-ship between chemical properties and biological activity in order to predict the effects of untested substances.

[1.15] In order to guarantee the quality of test results, any new tests must comply with good laboratory practice.

Products that are not dispensed automatically refer to products with which the user comes into contact.

Existing data and existing results refer to tests carried out by the manufacturing company, or by another company, authority or organisation.

Self-classification means that the manufacturing company determines if an ingredient should be assigned one or more risk phrases in accordance with the classification system.

2 Surfactants

- 2.1 Surfactants must be readily biodegradable according to OECD 301 or an equivalent test.
- 2.2 Surfactants must be 60% anaerobically biodegradable in accordance with ISO 11734 or an equivalent test.
- 2.3 Surfactants must have a very low residual content of organohalogen compounds below 100 mg/kg TOX.
- 2.4 Surfactants must not be very toxic to aquatic organisms (LC_{50} , EC_{50} and $IC_{50} > 1 mg/L$). Surfactants must not be classified as R50, Very toxic to aquatic organisms.
- 2.5 If palm oil is used as a raw material in surfactant production, the surfactant manufacturer or the palm oil supplier must be a member of the Roundtable on Sustainable Palm Oil (RSPO) or be able to show that the palm oil used to produce the surfactants comes from a plantation that is certified in accordance with RSPO's sustainable cultivation rules.
- Surfactants must not be toxic on repeated exposure according to the following classifications:
 R48, Danger of serious damage to health by prolonged exposure
 R33, Danger of cumulative effects
- Surfactants must not be sensitising according to the following classifications: R42, May cause sensitisation by inhalation R43, May cause sensitisation by skin contact or be associated with data that indicates sensitisation
- 2.8 Surfactants must not be very toxic according to the following classifications: R26, Very toxic by inhalation R27, Very toxic in contact with skin R28, Very toxic if swallowed R23, Toxic by inhalation R24, Toxic in contact with skin R25, Toxic if swallowed R39, Danger of very serious irreversible effects

Product-specific requirements

Soft soaps

2.9 Only surfactants made from saponified vegetable fatty acids may be used. These surfactants must meet requirements 2.1-2.8.

Reasons for requirements

[2.1] If a chemical substance breaks down easily, there is less risk of the substance causing environmental problems. Chemical substances that break down slowly accumulate in the environment and may pose a risk in the future. There is also a risk that these substances can spread over long distances. Palm oil is oil that is extracted from the fruit of the oil palm.

[2.2] The ability of a chemical substance to break down in an oxygen-free environment is an important property for a substance that will collect in sewage sludge or sediment, otherwise there is a risk that such substances could cause problems in the future.

[2.3] Halogenated organic substances have many undesirable and serious effects on the environment and health.

[2.4] If a chemical substance is very toxic to aquatic organisms, it has a negative impact on the aquatic ecosystem. This damages food chains.

[2.5] The growth of palm oil cultivation is leading to the irreversible loss of biodiversity and cultural diversity around the world. The criteria set by the Round Table on Sustainable Palm Oil ensure that palm oil production is environmentally acceptable, has positive social effects and is economically viable.

[2.6-2.8] Products must be safe to use and must not pose a health risk to the user.

[2.9] Soaps should contain traditional ingredients in order to prevent consumers from being misled.

3 Complexing agents

- 3.1 Organic complexing agents must be readily biodegradable according to OECD 301 or an equivalent test.
- 3.2 Complexing agents must not be very toxic to aquatic organisms (LC_{50} , EC_{50} and $IC_{50} > 1 \text{ mg/L}$).
- Complexing agents must not be toxic on repeated exposure according to the following classifications:
 R48, Danger of serious damage to health by prolonged exposure
 R33, Danger of cumulative effects
- Complexing agents must not be sensitising according to the following classifications:
 R42, May cause sensitisation by inhalation
 R43, May cause sensitisation by skin contact
 or be associated with data that indicates sensitisation
- 3.5 Complexing agents must not be very toxic according to the following classifications:
 R26, Very toxic by inhalation
 R27, Very toxic in contact with skin
 R28, Very toxic if swallowed
 R23, Toxic by inhalation
 R24, Toxic in contact with skin
 R25, Toxic if swallowed
 - R39, Danger of very serious irreversible effects

Laundry detergents and dishwasher detergents

3.6 The product may contain a maximum of 2,0% by weight of complexing agent that does not meet requirement 3.1, but is potentially biodegradable according to OECD 302.

All-purpose cleaners and toilet cleaners

3.7 Complexing agents must not be toxic to aquatic organisms (LC_{50} , EC_{50} and IC_{50} > 10 mg/L).

Soft soaps

3.8 Complexing agents are not permitted.

Hard soaps

3.9 Complexing agents that do not meet requirements 3.1-3.2 must not exceed 0,05% by weight.

Reasons for requirements

[3.1] If a chemical substance breaks down easily, there is less risk of the substance causing environmental problems. Substances that break down slowly accumulate in the environment and may pose a risk in the future. There is also a risk that these substances can spread over long distances.

[3.2] If a chemical substance is very toxic to aquatic organisms, it has a negative impact on the aquatic ecosystem. This damages food chains.

[3.3-3.5] Products must be safe to use and must not pose a health risk to the user.

[3.6] Complexing agents reduce the need for surfactants. To make mild complexing agents as effective as possible, they are often combined with a small amount of complexing agents that have poor degradability.

[3.7-3-8] There is less need for complexing agents in all-purpose cleaners, toilet cleaners and soft soaps.

[3.9] Hard soap has many advantages from the environmental point of view. Strong complexing agents are added to soap to prevent discolouration.

4 Solvents

- 4.1 Solvents must be readily biodegradable according to OECD 301 or an equivalent test.
- 4.2 Solvents must not be toxic to aquatic organisms (LC_{50} , EC_{50} and $IC_{50} > 10$ mg/L).
- 4.3 Solvents must have a bioconcentration factor (BCF) of less than 100 according to OECD 305. If no BCF data is available, $\log K_{OW} \le 3$ according to OECD 107 or 117.

Exceptions may be made if any of the following requirements are met:

a) the solvent must not be harmful to aquatic organisms $(LC_{50}, EC_{50} \text{ and } IC_{50} > 100 \text{ mg/L}).$

b) it can be shown that the solvent is quickly broken down into substances whose BCF or log K_{OW} satisfies the requirements.

- Solvents must not be toxic on repeated exposure according to the following classifications:
 R48, Danger of serious damage to health by prolonged exposure
 R33, Danger of cumulative effects
- Solvents must not be sensitising according to the following classifications:
 R42, May cause sensitisation by inhalation
 R43, May cause sensitisation by skin contact
 or be associated with data that indicates sensitisation
- 4.6 Solvents must not be very toxic according to the following classifications:
 R26, Very toxic by inhalation
 R27, Very toxic in contact with skin
 R28, Very toxic if swallowed
 R23, Toxic by inhalation
 R24, Toxic in contact with skin
 R25, Toxic if swallowed
 R39, Danger of very serious irreversible effects

Product-specific requirements

Laundry detergent, stain remover, bleach, washing-up liquid, household dishwasher detergent, all-purpose cleaners, toilet cleaner, soft soap, soap, shampoo and hair conditioner.

4.7 Included solvents must not be harmful to aquatic organisms (LC_{50} , EC_{50} and $IC_{50} > 100 \text{ mg/L}$).

Reasons for requirements

[4.1] If a chemical substance breaks down easily, there is less risk of the substance causing environmental problems. Substances that break down slowly accumulate in the environment and may pose a risk in the future. There is also a risk that these substances can spread over long distances.

[4.2] If a chemical substance is very toxic to aquatic organisms, it has a negative impact on the aquatic ecosystem. This damages food chains.

[4.3] Chemical substances that bioaccumulate in the environment have negative effects on animals and plants, and are stored in the food chain.

[4.4-4.6] Products must be safe to use and must not pose a health risk to the user.

[4.7] There is less need for toxic solvents in these products.

5 Preservatives

- 5.1 Preservatives may only be added to preserve a product during its storage period.
- 5.2 Preservatives must be readily biodegradable according to OECD 301 or an equivalent test.
- 5.3 Preservatives must not be very toxic to aquatic organisms $(LC_{50} \text{ and } EC_{50} > 1 \text{ mg/L}).$
- 5.4 Preservatives must have a bioconcentration factor (BCF) of less than 100 according to OECD 305. If no BCF data is available, log $K_{ow} \le 3$ according to OECD 107 or 117.

Exceptions may be made if any of the following requirements are met:

a) the preservative must not be harmful to a quatic organisms (LC₅₀ and EC₅₀ > 100 mg/L).

b) it can be shown that the preservative is quickly broken down into substances whose BCF or log K_{ow} satisfies the requirements.

- 5.5 Preservatives must be permitted under the cosmetics directive (76/768/EEC). The concentration of preservatives must not exceed the limits specified in the cosmetics directive for products that are left on the skin. Individual preservatives must not exceed a concentration of 0,50% by weight.
- 5.6 Preservatives must not be toxic on repeated exposure according to the following classifications:
 R48, Danger of serious damage to health by prolonged exposure
 R33, Danger of cumulative effects
- 5.7 Preservatives must not be sensitising according to the following classifications:
 R42, May cause sensitisation by inhalation
 R43, May cause sensitisation by skin contact
 or be associated with data that indicates sensitisation
- 5.8 Preservatives must not be very toxic according to the following classifications: R26, Very toxic by inhalation
 R27, Very toxic in contact with skin
 R28, Very toxic if swallowed
 R23, Toxic by inhalation
 R24, Toxic in contact with skin
 R25, Toxic if swallowed
 R39, Danger of very serious irreversible effects

Reasons for requirements

[5.1] In some cases preservatives are added in higher concentrations for purposes other than preserving the product. To minimise the risks associated with preservatives, addition for such reasons is not permitted.

[5.2] If a chemical substance breaks down easily, there is less risk of the substance causing environmental problems. Substances that break down slowly accumulate in the environment and may pose a risk in the future. There is also a risk that these substances can spread over long distances.

[5.3] If a chemical substance is very toxic to aquatic organisms, it has a negative impact on the aquatic ecosystem. This damages food chains.

[5.4] Chemical substances that bioaccumulate in the environment have negative effects on animals and plants, and are stored in the food chain.

[5.5] Preservatives that are used in cosmetic products have been assessed according to the cosmetics directive 76/78/EEC, which examines their sensitising effect.

[5.6-5.8] Products must be safe to use and must not pose a health risk to the user.

6 Thickening agents and dissolving agents

- 6.1 Thickening agents/dissolving agents must be readily biodegradable according to OECD 301 or an equivalent test.
- 6.2 Thickening agents/dissolving agents must not be toxic to aquatic organisms $(LC_{50}, EC_{50} \text{ and } IC_{50} > 10 \text{ mg/L}).$
- 6.3 Thickening agents/dissolving agents must have a bioconcentration factor (BCF) of less than 100 according to OECD 305. If no BCF data is available, $\log K_{ow} \leq 3$ according to OECD 107 or 117.

Exceptions may be made if any of the following requirements are met:

a) the thickening agent/dissolving agent must not be harmful to aquatic organisms (LC_{50} , EC_{50} and $IC_{50} > 100 \text{ mg/L}$).

b) it can be shown that the thickening agent/dissolving agent is quickly broken down into substances whose BCF or log K_{ow} satisfies the requirements.

- 6.4 Thickening agents/dissolving agents must not be toxic on repeated exposure according to the following classifications:
 R48, Danger of serious damage to health by prolonged exposure R33, Danger of cumulative effects
- 6.5 Thickening agents/dissolving agents must not be sensitising according to the following classifications:
 R42, May cause sensitisation by inhalation
 R43, May cause sensitisation by skin contact or be associated with data that indicates sensitisation
- 6.6 Thickening agents/dissolving agents must not be very toxic according to the following classifications:
 R26, Very toxic by inhalation
 R27, Very toxic in contact with skin
 R28, Very toxic if swallowed
 R23, Toxic by inhalation
 R24, Toxic in contact with skin
 R25, Toxic if swallowed
 R39, Danger of very serious irreversible effects

A dissolving agent is a substance that prevents an ingredient from precipitating out during cold conditions or long-term storage, for example.

Soft soaps

6.7 Dissolving agents are not permitted.

Toilet cleaner, soap, shampoo and hair conditioner

6.8 Thickening agents that do not meet requirement 6.1, but are completely biodegradable according to OECD 302, may be included up to a maximum concentration of 0,5% by weight.

Reasons for requirements

[6.1] If a chemical substance breaks down easily, there is less risk of the substance causing environmental problems. Substances that break down slowly accumulate in the environment and may pose a risk in the future. There is also a risk that these substances can spread over long distances.

[6.2] If a chemical substance is very toxic to aquatic organisms, it has a negative impact on the aquatic ecosystem. This damages food chains.

[6.3] Chemical substances that bioaccumulate in the environment have negative effects on animals and plants, and are stored in the food chain.

[6.4-6.6] Products must be safe to use and must not pose a health risk to the user.

[6.7] Soft soaps are traditionally based on saponified fatty acids and do not normally contain dissolving agents.

[6.8] To prevent overuse of products with a high water content, a small amount of thickening agent that does not meet requirement 6.1 is permitted.

7 Bleaching agents

- 7.1 Bleaching agents must be readily biodegradable according to OECD 301 or an equivalent test.
- 7.2 Bleaching agents must not be very toxic to aquatic organisms (LC_{50} , EC_{50} and $IC_{50} > 1 \text{ mg/L}$).
- 7.3 Bleaching agents must have a bioconcentration factor (BCF) of less than 100 according to OECD 305. If no BCF data is available, $\log K_{OW} \le 3$ according to OECD 107 or 117.

Exceptions may be made if any of the following requirements are met:

a) the bleaching agent must not be harmful to aquatic organisms $(LC_{50}, EC_{50} \text{ and } IC_{50} > 100 \text{ mg/L}).$

b) it can be shown that the bleaching agent is quickly broken down into substances whose BCF or log K_{ow} satisfies the requirements.

7.4 Hydrogen peroxide and percarbonate may be stabilised with no more than 0,1% by weight of complexing agents that do not meet the requirements of 7.1-7.3.

- 7.5 Bleaching agents must not be toxic on repeated exposure according to the following classifications:R48, Danger of serious damage to health by prolonged exposureR33, Danger of cumulative effects
- 7.6 Bleaching agents must not be sensitising according to the following classifications:
 R42, May cause sensitisation by inhalation
 R43, May cause sensitisation by skin contact
 or be associated with data that indicates sensitisation
- 7.7 Bleaching agents not be very toxic according to the following classifications:
 R26, Very toxic by inhalation
 R27, Very toxic in contact with skin
 R28, Very toxic if swallowed
 R23, Toxic by inhalation
 R24, Toxic in contact with skin
 R25, Toxic if swallowed
 R39, Danger of very serious irreversible effects

Liquid laundry detergents

7.8 Hydrogen peroxide and percarbonate may be stabilised with no more than 0,2% by weight of complexing agents that do not meet the requirements of 7.1-7.3.

Reasons for requirements

[7.1] If a chemical substance breaks down easily, there is less risk of the substance causing environmental problems. Substances that break down slowly accumulate in the environment and may pose a risk in the future. There is also a risk that these substances can spread over long distances.

[7.2] If a chemical substance is very toxic to aquatic organisms, it has a negative impact on the aquatic ecosystem. This damages food chains.

[7.3] Chemical substances that bioaccumulate in the environment have negative effects on animals and plants, and are stored in the food chain.

[7.4] Acid-based bleaching agents quickly lose effectiveness if they come into contact with metals. Small amounts of strong complexing agents are therefore needed to bind metals.

[7.5-7.7] Products must be safe to use and must not pose a health risk to the user.

[7.8] Acid-based bleaching agents quickly lose effectiveness if they come into contact with metals. Small amounts of strong complexing agents are therefore needed to bind metals.

8 Acids

- 8.1 Acids must be readily biodegradable according to OECD 301 or an equivalent test.
- 8.2 Acids must not be toxic to aquatic organisms $(LC_{50}, EC_{50} \text{ and } IC_{50} > 10 \text{ mg/L}).$
- 8.3 Acids must have a bioconcentration factor (BCF) of less than 100 according to OECD 305. If no BCF data is available, $\log K_{ow} \le 3$ according to OECD 107 or 117.

Exceptions may be made if any of the following requirements are met:

a) the acid must not be harmful to aquatic organisms $(LC_{50}, EC_{50} \text{ and } IC_{50} > 100 \text{ mg/L}).$

b) it can be shown that the acid is quickly broken down into substances whose BCF or log K_{ow} satisfies the requirements.

- 8.4 Acids must not be toxic on repeated exposure according to the following classifications:
 R48, Danger of serious damage to health by prolonged exposure
 R33, Danger of cumulative effects
- 8.5 Acids must not be sensitising according to the following classifications: R42, May cause sensitisation by inhalation
 R43, May cause sensitisation by skin contact or be associated with data that indicates sensitisation
- 8.6 Acids must not be very toxic according to the following classifications:
 R26, Very toxic by inhalation
 R27, Very toxic in contact with skin
 R28, Very toxic if swallowed
 R23, Toxic by inhalation
 R24, Toxic in contact with skin
 R25, Toxic if swallowed
 R39, Danger of very serious irreversible effects

Reasons for requirements

[8.1] If a chemical substance breaks down easily, there is less risk of the substance causing environmental problems. Substances that break down slowly accumulate in the environment and may pose a risk in the future. There is also a risk that these substances can spread over long distances.

[8.2] If a chemical substance is very toxic to aquatic organisms it has a negative impact on the aquatic ecosystem. This damages food chains.

[8.3] Chemical substances that bioaccumulate in the environment have negative effects on animals and plants, and are stored in the food chain.

[8.4-8.6] Products must be safe to use and must not pose a health risk to the user.

9 Colouring agents

- 9.1 Colouring agents must be approved as food colouring in accordance with the Swedish National Food Administration code (SLVFS) 1999:22, or be readily biodegradable according to OECD 301 and meet requirements 15.5-15.7 under the heading Other additives.
- 9.2 Food colouring that is approved in accordance with the Swedish National Food Administration code (SLVFS) 1999:22 must not be classified as R43, May cause sensitisation by skin contact.

Product-specific requirements

Laundry detergent, stain remover, bleaching agents, dishwasher detergent and products that are marketed to children under the age of three years

9.3 Colouring agents are not permitted.

Reasons for requirements

[9.1] Most colouring agents are difficult to break down and many have negative effects on health. Food colouring agents are approved by the Swedish National Food Administration.

[9.2] Many colouring agents can cause allergic reactions. To reduce the risk of allergies, substances that are classified as R43 are not permitted.

[9.3] To avoid allergies, these substances are not permitted in products or applications for people at particular risk.

10 Fragrances

- 10.1 A declaration of all ingredients present in concentrations of 1,0% by weight or more in fragrances must be included with the application. Concentrations are only required for those substances classified as R43, May cause sensitisation by skin contact, and fragrances listed in EU directive 2003/15/EC on amendment to annex III, part 1 of the cosmetics directive 76/768/EEC.
- 10.2 Those substances in fragrances that are not fragrances themselves must meet the requirements in these criteria that apply to their role.
- 10.3 Individual fragrances that are classified as R43, May cause sensitisation by skin contact, or fragrances listed in EU directive 2003/15/EC on amendment to annex III, part 1 of the cosmetics directive 76/768/EEC, must not exceed a concentration of 0,010% by weight in products that wash off after use and must not exceed 0,0010% by weight in products that do not wash off. The concentrations must be combined with any contribution from Biological substances, requirement 11.1

A fragrance is a chemical component of a perfume that is added for its fragrance properties.

- 10.4 Products must not contain more than 0,10% by weight of fragrance as defined in 10.3. The concentrations must be combined with any contribution from Biological substances, requirement 11.2
- 10.5 Fragrances must be used in accordance with the recommendations drawn up by the International Fragrance Association, IFRA.
- 10.6 Nitromusk compounds and polycyclic musk compounds are not permitted in fragrances.

Washing-up liquid, laundry detergent, soap, shampoo, all-purpose cleaners, toilet cleaner, heavy-duty detergent, soft soap, fabric softener and car care products

10.7 No more than 0.50% by weight fragrance content is permitted in the product. This limit also applies to concentrated products that are diluted before use.

Dishwasher detergent, stain remover, bleach, personal hygiene products and products that are marketed for children under the age of three years

10.8 Fragrances are not permitted.

Reasons for requirements

[10.1-10.2] All chemical substances that are added to a product must meet the specified requirements in order to protect the environment and people's health. Even very small amounts of substances can have undesirable effects.

[10.3-10.4] EU directive 2003/15/EC identifies the commonest allergenic fragrances. To reduce the risk of allergies, restrictions are placed on the concentration of these substances and other substances that are classified as R43, May cause sensitisation by skin contact.

[10.5] International Fragrance Association, IFRA, is a member organisation for trade organisations in the fragrance industry. IFRA recommends which fragrances are suitable and the concentrations in which they can be used.

[10.6] Nitromusk compounds and polycyclic musk compounds may pose a risk to health; they biodegrade slowly and bioaccumulate readily.

[10.7] The quantity of fragrance is restricted to avoid allergies. This requirement has been set in line with the lowest fragrance content in commonly occurring products on the market.

[10.8] To avoid allergies, these substances are not permitted in products or applications for people at particular risk.

11 Biological substances

- 11.1 Individual biological substances that are classified as R43, May cause sensitisation by skin contact, or biological substances listed in EU directive 2003/15/EC on amendment to annex III, part 1 of the cosmetics directive 76/768/EEC, must not exceed a concentration of 0,010% by weight in products that wash off after use and must not exceed 0,0010% by weight in products that do not wash off. The concentrations must be combined with any contribution from Fragrances, requirement 10.3
- 11.2 Products must not contain more than 0,10% by weight of biological substances as defined in requirement 11.1. The concentrations must be combined with any contribution from Fragrances, requirement 10.4
- 11.3 Biological substances must have been extracted using water or a solvent that meets the requirements for solvents, 4.1-4.6.

Product-specific requirements

Personal hygiene products and products that are marketed for children under the age of three years

Biological substances must not be toxic on repeated exposure according to the following classifications:
 R48, Danger of serious damage to health by prolonged exposure
 R33, Danger of cumulative effects

- Biological substances must not be sensitising according to the following classifications:
 R42, May cause sensitisation by inhalation
 R43, May cause sensitisation by skin contact
 - or be associated with data that indicates sensitisation

Reasons for requirements

[11.1-11.2] EU directive 2003/15/EC identifies the commonest allergenic fragrances. Many of these fragrances also occur naturally in biological substances. To reduce the risk of allergies, restrictions are placed on the content of these substances and substances that are classified as R43, May cause sensitisation by skin contact.

[11.3] There is a risk that traces of the extraction medium may be left in the biological substance.

[11.4-11.5] To avoid allergies, these substances are not permitted in products or applications for people at particular risk.

Biological substances are substances extracted with or without solvents from biological materials that may have been purified but are not otherwise modified. They may be of vegetable or animal origin.

12 Enzymes

12.1 Enzymes are approved in products that bear the Good Environmental Choice label.

Reasons for requirements

[12.1] Enzymes are used in laundry detergents to remove stubborn stains. They are readily biodegradable and reduce the need for bleaching agents and surfactants.

13 Fillers

- 13.1 Fillers must meet the requirements for Other additives, 15.1-15.7.
- 13.2 Filler content must not exceed 5,0% by weight.

Product-specific requirements

Laundry detergents

13.3 Filler content must not exceed 0,5% by weight.

Reasons for requirements

[13.1-13.3] High filler contents increase the need for transport and packaging.

14 Abrasives

- 14.1 Abrasives may only be added to products if their abrasive properties are essential to the performance of the product.
- 14.2 Only chalk, clay, steel wool, hard organic material and chemical substances that meet the requirements for Other additives, 15.1-15.7, may be added as abrasives. Where hard organic material is added, it must meet requirements 11.1-11.5

Hard organic material refers to renewable organic material with a hard consistency, such as ground walnut shells or apricot stones.

Reasons for requirements

[14.1] Abrasives can damage material if they are used in products that are not expected to be abrasive.

[14.2] Clay and chalk occur commonly in nature. Steel wool is permitted because it can be separated from the product and hence does not enter the sewage system.

A filler is a chemical substance that is used to prevent caking in powder products and may also be used to increase product bulk.

15 Other additives

- 15.1 Organic ingredients must be readily biodegradable in accordance with OECD 301 or an equivalent test. Ingredients that are fully biodegradable according to OECD 302 may be included in products to a total maximum concentration of 2% by weight, including any quantity from requirements 6.8 and 15.8.
- 15.2 Organic ingredients must be 60% anaerobically biodegradable in accordance with ISO 11734 or an equivalent test. Analogy-based reasoning may be accepted if no test results are available. Exceptions are made for substances for which there is no risk of accumulation in anaerobic environments, in which case adsorption must be less than 25% and desorption greater than 75%.
- 15.3 Ingredients must not be very toxic to aquatic organisms $(LC_{50}, EC_{50} \text{ and } IC_{50} > 1 \text{ mg/L})$. Ingredients must not be classified as R50, Very toxic to aquatic organisms.
- 15.4 Ingredients must have a bioconcentration factor (BCF) of less than 100 according to OECD 305. If no BCF data is available, $\log K_{ow} \le 3$ according to OECD 107 or 117.

Exceptions may be made if any of the following requirements are met:

a) the ingredient must not be harmful to aquatic organisms $(LC_{50}, EC_{50} \text{ and } IC_{50} > 100 \text{ mg/L}).$

b) it can be shown that the ingredient is quickly broken down into substances whose BCF or log K_{ow} satisfies the requirements.

- 15.5 Ingredients must not be toxic after repeated exposure according to the following classifications:
 R48, Danger of serious damage to health by prolonged exposure
 R33, Danger of cumulative effects
- 15.6 Ingredients must not be sensitising according to the following classifications:
 R42, May cause sensitisation by inhalation
 R43, May cause sensitisation by skin contact
 or be associated with data that indicates sensitisation
- 15.7 Ingredients must not be very toxic according to the following classifications:
 R26, Very toxic by inhalation
 R27, Very toxic in contact with skin
 R28, Very toxic if swallowed
 R23, Toxic by inhalation
 R24, Toxic in contact with skin
 R25, Toxic if swallowed
 R39, Danger of very serious irreversible effects

Laundry detergents and dishwater detergents for automatic dosing

15.8 Ingredients that are not fully biodegradable in accordance with OECD 302 must not exceed a total concentration of 2% by weight.

Liquid laundry detergents

15.9 Ingredients that can be broken down into substances that are classified according to R40 may not be used as stabilisers for enzymes in concentrations higher than 0,012%.

Reasons for requirements

[15.1] If a chemical substance breaks down easily, there is less risk of the substance causing environmental problems. Substances that break down slowly accumulate in the environment and may pose a risk in the future. There is also a risk that these substances can spread over long distances.

[15.2] The ability of a chemical substance to break down in an oxygen-free environment is an important property for a substance that will collect in sewage sludge or sediment, otherwise there is a risk that such substances could cause problems in the future.

[15.3] If a chemical substance is very toxic to aquatic organisms, it has a negative impact on the aquatic ecosystem. This damages food chains.

[15.4] Chemical substances that bioaccumulate in the environment have negative effects on animals and plants, and are stored in the food chain.

[15.5-15.7] Products must be safe to use and must not pose a health risk to the user.

[15.8] There are substances that do not biograde easily, but which make detergents more effective. The Swedish Society for Nature Conservation is assessing whether the benefit of these substances in low concentrations is good, from an overall environmental perspective.

[15.9] Enzymes are effective substances for treating stains. However, enzymes need to be stabilised in liquid products to prevent breakdown.

16 Water content

Product-specific requirements

Washing-up liquid, all-purpose cleaners, heavy-duty detergent and liquid laundry detergent

- 16.1 The water content must not exceed 75% by weight.
- 16.2 No requirement is set for water content for products that are sold in spray dispensers.

Soft soap, stain remover and bleach

- 16.3 The water content must not exceed 81% by weight.
- 16.4 No requirement is set for water content for products that are sold in spray dispensers.

The water content of a product is its total water content including the water content of added ingredients.

Fabric softeners

16.5 The water content must not exceed 85% by weight.

Reasons for requirements

[16.1–16.5] Concentrated products reduce the need for packaging, transport and preservatives. The requirements have been set in line with the lowest water contents in the most concentrated products on the market.

17 Dosage

- 17.1 The recommended dosage must be stated on the packaging. Products for bulk users may have the dosage information printed on a data sheet or the like.
- 17.2 The dosage for consumer products must be stated in litres, decilitres, millilitres or other measurement units. In cases where the dosage cannot be given in measurement units, a phrase of the type "try not to use more than needed" should be printed on the packaging.

Product-specific requirements

Powder laundry detergents

- 17.3 Products must give good washing results at a dosage not exceeding 40 g for soft water (0-6 °dH) in a washing machine that takes a 4-5 kg load.
- 17.4 The density must be at least 67 g/dL.
- 17.5 The recommended dosage for different water hardness levels must be clearly stated on the packaging. Information on which areas have hard water and which have soft water must be stated in words or shown on a map. Example: "Uppsala, Skåne and Gotland are examples of areas with hard water" or "in Sweden 80% of the population have soft water".
- 17.6 Advice on increasing the dosage must be stated to be a deviation from normal dosage.

Liquid laundry detergents

- 17.7 Products must give good washing results at a dosage not exceeding 50 ml and containing no more than 35 g of active laundry detergent for soft water (0-6 °dH) in a washing machine that takes a 4-5 kg load.
- 17.8 The recommended dosage for different water hardness levels must be clearly stated on the packaging. Information on which areas in the country have hard water and which have soft water must be stated in words or shown on a map. Example: "Uppsala, Skåne and Gotland are examples of areas with hard water" or "in Sweden 80% of the population have soft water".

17.9 Advice on increasing the dosage must be stated to be a deviation from normal dosage.

Stain removers and bleaching agents

- 17.10 Products must give good results at a dosage not exceeding 40 ml for soft water (0-6 °dH) in a washing machine that takes a 4–5 kg load.
- 17.11 Advice on increasing the dosage must be stated to be a deviation from normal dosage.

Fabric softeners

- 17.12 Products must give good results at a dosage not exceeding 25 ml for soft water (0-6 °dH) in a washing machine that takes a 4–5 kg load.
- 17.13 The recommended dosage for different water hardness levels must be clearly stated on the packaging. Information on which areas in the country have hard water and which have soft water must be stated in words or shown on a map. Example: "Uppsala, Skåne and Gotland are examples of areas with hard water" or "in Sweden 80% of the population have soft water".
- 17.14 Advice on increasing the dosage must be stated to be a deviation from normal dosage.

Household dishwasher detergents

- 17.15 Products must give good results at a dosage not exceeding 18 g for soft water (0-6 °dH) in a 12-setting dishwasher.
- 17.16 The recommended dosage for different water hardness levels must be clearly stated on the packaging. Information on which areas in the country have hard water and which have soft water must be stated in words or shown on a map. Example: "Uppsala, Skåne and Gotland are examples of areas with hard water" or "in Sweden 80% of the population have soft water".
- 17.17 Advice on increasing the dosage must be stated to be a deviation from normal dosage.

Dishwater detergents for automatic dosing

- 17.18 Products must give good results at a concentration not exceeding 1g of active substance per litre of dishwashing liquid, for soft (0-6 °dH) and medium-hard (7-13 °dH) water.
- 17.19 Provisions must be made for safe handling of the product, for example, by supplying it in cartridge form or by pumping it automatically from a container.
- 17.20 The recommended dosage for different water hardness levels must be clearly stated on the packaging. Products for bulk users may have the dosage information printed on a data sheet or the like. Information on which areas in the country have hard water and which have soft water must be stated in words or shown on a map. Example: "Uppsala, Skåne and Gotland are examples of areas with hard water" or "in Sweden 80% of the population have soft water".
- 17.21 Advice on increasing the dosage must be stated to be a deviation from normal dosage.

Reasons for requirements

[17.1-17.21] The dosage requirement is intended to prevent excessive or incorrect use of the product. The aim is to reduce the burden on the environment due to chemicals, packaging and transport. The requirements have been set in line with the dosages of the most concentrated products on the market.

18 Cloth materials

18.1 No requirements are set for cloth materials in this version of the criteria for chemical products.

19 Packaging

- 19.1 Packaging must be made of components that are easy to take apart, and each component must consist of a single type of material. Refill packaging that weighs no more than 30% of the weight of the original packaging is exempted from this rule.
- 19.2 Plastic packaging must be made from polyethylene (PE), polypropylene (PP), polyethylene terephthalate (PET) or an equivalent plastic. PVC is not permitted.
- 19.3 Plastic packaging must be marked in accordance with DIN 6120 or American SPI. It is not necessary to mark small parts, such as stoppers, in this way.
- 19.4 At least 80% of cardboard packaging must be manufactured from wood fibre obtained from recycled raw material. If new raw material is used for the rest of the cardboard, at least 30% of this must be certified by FSC. If the product content prevents the use of recycled raw materials for packaging, it is acceptable to use cardboard that is 100% FSC-certified. Only wholly chlorine-free bleaching methods may be used.
- 19.5 The date of manufacture of the product must be traceable in the form of a date mark, batch number or the like on the packaging.
- 19.6 As far as possible, the packaging must comply with REPA's recommendations to facilitate recycling. Products that are intended for sale to consumers must carry instructions on how the packaging should be sorted for recycling in accordance with the document "REPA's instructions". If the packaging consists of different materials, information must also be given on how the different components should be recycled.
- 19.7 Nozzles on packaging such as pump bottles and trigger sprays are exempted from requirement 19.1. However, if the spray nozzle contains metal, the product range must include a refill pack.

Packaging refers to the product's consumer packaging or the equivalent for bulk users.

Laundry detergent, fabric softener, stain remover, bleach, all-purpose cleaners, heavy-duty detergent, soft soap, washing-up liquid, dishwasher detergent, soap, shampoo and hair conditioner.

19.8 No metal may be used in the packaging. Exceptions to this requirement may be allowed for large packaging that can be recycled.

Metal may be used in the handles of buckets that hold 15 litres or more if the handle can easily be removed when the packaging is recycled. The packaging should state how the bucket and handle are to be recycled.

19.9 Nozzles on packaging such as pump bottles and trigger sprays are exempted from requirement 19.8.

Reasons for requirements

[19.1] Packaging that is made of parts that are easily taken apart facilitates the recycling of individual materials.

[19.2] All use of plastics affects the environment. If plastic is recycled, it reduces emissions and energy consumption considerably. The Swedish Society for Nature Conservation considers the plastics polyethylene (PE), polypropylene (PP) and polyethylene terephthalate (PET) to be among the plastics that have least impact on the environment.

[19.3] The DIN 6120 and American SPI systems for marking plastic allow plastic waste to be sorted at recycling plants.

[19.4] The use of recycled paper reduces the environmental impact of the pulp and paper industry and forest felling. FSC is a certification system that identifies forestry operations that are environmentally adapted, socially beneficial and economically sustainable.

[19.5] It is important to be able trace the date of manufacture to ensure that packaging has an approved composition.

[19.6] This requirement is made to facilitate recycling.

[19.7] Pump bottles make it easier to use the correct amount of liquid products, which is an advantage even though parts of the packaging are more difficult to recycle.

[19.8] Metal packaging is restricted because only a small proportion is recycled and new production of metals such as aluminium uses a great deal of energy.

20 Company requirements

- 20.1 The licensee must have an environmental policy agreed by company management, under which the company undertakes to make continuous environmental improvements. The company must have an appointed representative for environmental work.
- 20.2 Products must be produced in a plant for which there is an environmental policy agreed by company management, under which the company undertakes to make continuous environmental improvements. The company must have an appointed representative for environmental work.

20.3 The licensee must have a travel policy, environmental goals or an action plan with clearly quantified environmental targets for business travel.

At least one of the following requirements must be met:

- 20.4 10 of the employees who drive a car on company business must have taken a course in eco-driving. If the company has fewer than 20 employees who drive a car on company business, half must have taken a course in eco-driving. This requirement must be fulfilled within six months of approval of the licensing application.
- 20.5 The company must have a scheme for encouraging staff who choose not to drive to work. This requirement must be fulfilled within six months of approval of the licensing application.
- 20.6 10 of the company's pool cars and company cars must be green vehicles. If the company has fewer than 20 pool cars and company cars then half must be green vehicles. This requirement must be fulfilled within three years of approval of the licensing application.
- 20.7 A proportion of the passenger transport used on business must be approved as Good Environmental Choice passenger transport. This requirement must be fulfilled within one year of approval of the licensing application.
- 20.8 The company must have an environmental policy, environmental goals or an action plan with clearly quantified environmental targets for its own freight transport. This requirement must be fulfilled within six months of approval of the licensing application.
- 20.9 If the company procures freight transport, at least one of its chosen freight suppliers must have an environmental policy, environmental goals or an action plan with clearly quantified environmental targets for freight transport. This requirement must be fulfilled within one year of approval of the licensing application.
- 20.10 If the company undertakes its own freight transport, 10 of the drivers must have undergone a course in eco-driving. If the company has fewer than 20 drivers, half must have taken a course in eco-driving. This requirement must be fulfilled within six months of approval of the licensing application.
- 20.11 10 drivers among the freight companies used by the company must have undergone a course in eco-driving. If the freight company has fewer than 20 drivers, half must have taken a course in eco-driving. This requirement must be fulfilled within one year of approval of the licensing application.
- 20.12 10 of the company's goods vehicles must meet Euro III requirements in accordance with EU directive 99/96/EC, or better. If the company has fewer than 20 goods vehicles, half must meet Euro III requirements in accordance with EU directive 99/96/EC, or better. This requirement must be fulfilled within three years of approval of the licensing application.

Pool cars and company cars refer to cars that are owned or leased by a company. A pool car may only be used for work, while a company car can also be used for private purposes.

The term green vehicle is used as defined by Swedish government ordinance SFS 2004:1364 on the purchasing and leasing of green vehicles by authorities. The version of the ordinance to be used is the most recent update available at the time the license application is submitted.

Good Environmental Choice passenger transport means passenger transport that is approved according to the criteria for Good Environmental Choice passenger transport.

Good Environmental Choice freight transport means freight transport that is approved according to the criteria for Good Environmental Choice freight transport.

- 20.13 10 of the goods vehicles used for transport must meet Euro III requirements in accordance with EU directive 99/96/EC, or better. If the company has procured fewer than 20 goods vehicles, half must meet Euro III requirements in accordance with EU directive 99/96/EC, or better. This requirement must be fulfilled within five years of approval of the licensing application.
- 20.14 A proportion of the company's own freight transport or procured freight transportmustbeapprovedasGoodEnvironmentalChoicefreighttransport.Thisrequirement must be fulfilled within two years of approval of the licensing application.

Reasons for requirements

[20.1-20.2] It is important that all chemical products that bear the Good Environmental Choice label are produced in a way that has as little impact on the environment as possible.

[20.3–20.14] Passenger transport and freight transport create a long list of environmental problems:harmfulairpollutionthatincreases the greenhouse effect and harms nature and people; consuming energy and raw materials, producing was teanden vironmentally-hazardous was te; and spreading substances that are environmentally disruptive.

[20.4, 20.10, 20.11] Eco-driving techniques reduce environmental impact regardless of the type of fuel that is used.

[20.5] The best alternative for the environment is to walk, cycle or use public transport. This can be encouraged, for instance, by giving discounts on travel passes or equivalent salary supplements to employees who cycle or walk to work.

[20.3, 20.8, 20.9] A travel policy or environmental policy that is set out by top management and makes a commitment to continuous improvement can make a valuable contribution to reducing the environmental impact of passenger transport and freight transport.

[20.6] Vehicles that are powered by alternative fuels reduce environmental impact. For example, they emit less carbon dioxide, particulates, or may be more fuel-efficient.

[20.7, 20.14] Freight transport or passenger transport that bears the Good Environmental Choice label reduces emissions of pollutants such as hydrocarbons and nitrogen oxides.

[20.12-20.13] Euro III is part of EU emission control legislation for heavy vehicles that limits emissions of carbon monoxide, hydrocarbons, particulates and nitrogen oxides.



The Swedish Society for Nature Conservation Box 4625, SE-11691 Stockholm, Sweden Tel. +46 (0)8-702 65 00. info@naturskyddsforeningen.se

The Swedish Society for Nature Conservation is a non-profit environmental organisation with the power to bring about change. We spread knowledge, chart threats to the environment and create solutions, as well as lobby politicians and agencies at both national and international levels. The society has more than 180,000 members and is represented by local groups and regional associations throughout the country.

We are behind the world's toughest ecolabel Bra Miljöval – Good Environmental Choice. www.naturskyddsforeningen.se