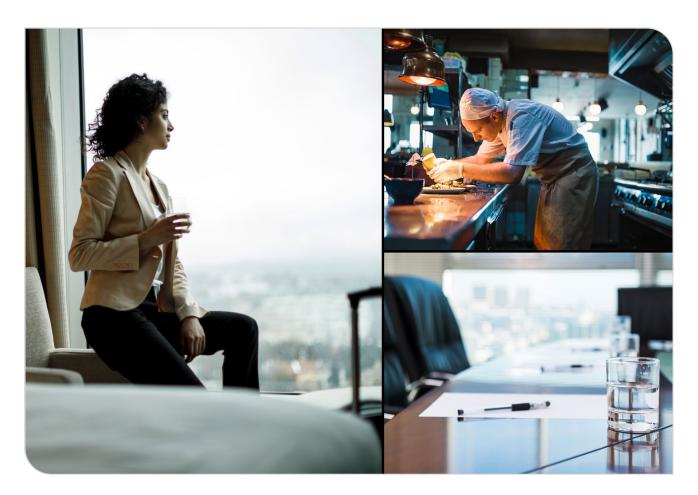
## About Nordic Swan Ecolabelled Hotels, restaurants and conference facilities



Version 5.0 • date - date

Consultation proposal



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

### Addresses

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

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# 1 Environmental impact of hotels, restaurants, and conference facilities

The environmental impact of hotels, food services and conference facilities is mainly associated with energy, water, food, waste, chemicals and purchasing. This is true of all these businesses, but to a varying extent. No requirements are set for the actual building, with a focus instead on efficient operation and maintenance.

Nordic Ecolabelling sets requirements based on relevance, potential and steerability (RPS). Are there any major environmental challenges associated with the service? Are environmental improvements achievable, and will setting requirements make a difference compared with other, non-Nordic Swan Ecolabelled businesses? And finally – is Nordic Ecolabelling able to steer the choices that the business makes.

All this has been discussed with regard to a range of themes associated with hotels, food services and conference facilities, leading to an RPS analysis. The results of the analysis are shown in the table below, and they underpin Nordic Ecolabelling's decisions on which areas to assign requirements in the product group, and the extent of these requirements.

Overall Area Comments		Comments
	Food R: high P: high S: medium	High relevance and potential. Steerability is medium, since there are major local and Nordic differences in the availability of various foodstuffs. There are large differences in environmental impact depending on farming methods and the origin of the raw ingredients. Organic:
		Organic products are better for the environment, but steerability ranges between medium and low in the Nordic region, due to varying availability of organic produce. MSC:
		Relevance and potential are high for MSC-labelled fish, which ensures a lower environmental impact since the fish comes from sustainable stocks. Vegetarian:
		Food based on vegetarian ingredients has a smaller environmental impact than meat and, to a lesser extent, fish. There are major variations in trends across the Nordic region, but vegetarian options have become a trend in many places, with more of a focus on vegan food than was previously the case. Local food:
		One trend that applies to the whole Nordic region is a focus on national food, preferably certified by a national labelling scheme. There is also an emphasis on local produce, and achieving the UN's Sustainable Development Goals will require a transition to more sustainable food, making local production important.
	Food waste R: high P: high S: medium	Food waste presents a challenge to the climate and the environment, commercial profitability and social ethics. Food waste has moved further into the spotlight in recent years, and relevance and potential are high, with medium steerability, all depending on the type of food service being provided. There are simple ways to reduce food waste at hotels, restaurants, canteens and conference facilities.
	Chemicals: dishwashing R: high P: high S: high	Relevance and potential are high, since the chemical consumption of dishwashers accounts for the vast majority of chemical use at hotels with a large-scale restaurant business. Steerability is high, since there are many ecolabelled options on the market. Large dishwashers have automatic dosing, and most facilities use these.
нісн	Consumables: tissue paper R: high	There are variations across different businesses, but the consumption of large quantities of tissue paper creates high relevance and potential. Steerability is high, since there are many ecolabelled products on the market.

Table 1 RPS analysis

	P: high S: high	
	Water R: high P: high to medium S: medium	The different businesses vary, but relevance is particularly high for hotels. The potential varies from high to medium, since water consumption has seen considerable reductions in recent years due to new water-saving technologies, both for laundry and dishwashing. Hotels can save a great deal of water through flow-limiting valves, water-saving showers and other measures.
	<b>Waste</b> R: high P: high S: medium	The relevancy is high, since the businesses generate large amounts of waste. The potential is also high, since it is possible to work on reducing quantities of waste, and on sorting the waste properly in pursuit of a circular ecocycle. The amount of waste has dropped in recent years, due to good sorting at source, with sorting of organic waste important. Sorting options vary depending on the provision of the local municipality, and whether they accept all waste fractions. Steerability can therefore be low in those municipalities where the businesses have no influence over the waste fractions that are accepted.
	Chemicals: daily cleaning R: high P: high S: high	Relevance and potential are high. The use of chemicals varies across the different businesses. There is a good choice of ecolabelled options for daily cleaning, and there are a large number of good dosing solutions on the market, with lower consumption as a result. Chemical-free cleaning methods and effective microfibre cloths can also reduce consumption.
	<b>External laundry</b> R: high P: high S: medium	Relevance and potential are high for canteens and restaurants (workwear, aprons, cloths, etc.), but the potential is particularly high for hotels, since they generate large quantities of laundry (bedlinen and towels). Most hotels send their laundry to an external laundry service, and there are many ecolabelled options available. However, access to ecolabelled laundry services may be limited in certain territories, and steerability is judged to be medium.
	Energy for operation and maintenance R: high P: medium S: low	Operation and maintenance include heating, refrigeration, hot water, ventilation and so on. Relevance is high, but steerability can be challenging, particularly if another party owns the building or premises. Investments in operation and maintenance are expensive.
	CO2 R: high P: medium S: low	Emissions of $CO_2$ can be reduced through energy savings and careful choice of energy source. Relevance is high, but as with energy, steerability can be challenging if another party owns the building or premises.
	Energy for energy- intensive kitchen equipment (new purchases) R: high P: medium S: low	Kitchens require a significant amount of energy, and the energy consumption of a food service comes mainly from the kitchen (refrigeration, cooking, ventilation, and dishwashing). There is considerable potential regarding new purchases of energy-intensive equipment, but such equipment is replaced infrequently because it is expensive, so it is best to use the equipment that is already available and works. Newer equipment/white goods are always more energy efficient.
	Energy for energy- intensive kitchen equipment (in usage phase) R: high P: medium S: medium	Relevance is high since energy consumption from the kitchen of a food service is considerable. Potential and steerability are medium, and energy can be saved by establishing training and good procedures for the use of energy-intensive equipment.
	Disposable items and packaging R: high P: medium S: medium	There has been an increase in the tendency to use disposable items for eating and drinking outside restaurants, and there is also a growing trend of taking uneaten food home from a food service to avoid food waste. Disposable items are a waste problem, but not for the business itself. Steerability can be low in view of determining factors such as quality, logistics and chain membership. Steerability is higher with individual takeaway products since ecolabelled options are available.
MEDIUM	Ecolabelled products: furniture and fittings (beds, office furniture, flooring, bed linen, et) R: high	Relevance is high, but the service life of such products is long, and the potential is thus judged to be medium. Although more and more ecolabelled options are coming onto the market, potential and steerability are rated medium, since the choice is not yet great enough to cover all needs in terms of function and design.
<b>VED</b>	P: medium S: medium	

	Chemicals: laundry (own laundry) R: medium P: medium S: high	Relevance, potential and steerability are judged to be medium, since most businesses do not wash bed linen and towels themselves, sending it all to an external laundry instead. However, this depends on the size of the business. They do tend to launder mops, cloths and sometimes pillows and bathrobes themselves. There are plenty of good dosing solutions and ecolabelled laundry detergents on the market.
	Other chemicals and specialist cleaning agents R: medium P: medium S: low	Some businesses use larger amounts of other chemicals and specialist cleaning agents (as defined by Nordic Ecolabelling) than others, and the relevance is thus judged to be medium. The potential lies in using smaller amounts of special cleaning agents, which is important since these are products that cannot be ecolabelled due to their ingoing substances. Steerability is therefore judged to be low. Examples of such products include drying agents, polish, stain remover, metal polish and oven cleaner.
	Transport: goods transport R: medium P: low S: low	Small businesses have very little control over goods transport, while larger businesses and chains may have some influence in this area. Catering businesses include transport as part of their service, which increases the level of steerability.
ГОМ	Electronics R: medium P: low S: low	Electronics are complex and generally contain many substances that are problematic for the environment. The scope to reduce the environmental impact is relatively low, but it is crucial to use ecolabelled options, and to dispose of electronics correctly. Unfortunately, there are not many Nordic Swan Ecolabelled alternatives on the market, but other labelling schemes such as TOC may be relevant.

## 2 Other labels

There are several labelling schemes for the hotel and restaurant industry. In the food industry, there are several labelling schemes, including international and national organic labels, which give some indication of the properties of the food or its production. Examples of these labels are Green Key, Fairtrade, MSC, ASC, Animal Protection Denmark, Vegan, Whole Grain and the Norwegian Bread Scale.

Below is a list of the most widely used labelling schemes and management systems for the hotel and restaurant industry in the Nordic region.

Labelling schemes and management systems			
Labelling scheme	Focus area	Distribution	Comments
	Hotels and campsites	European	The official European ecolabel, run by the European Commission. Widely used in Europe, but no accommodation provider has a licence in the Nordic countries. Type 1 ecolabel. Established in 1992. (75 businesses in the product area.)
Green Key	Hotels and conference facilities	International	Independent international labelling scheme. Run by the Foundation for Environmental Education (FEE). The label was established in Denmark in 1994 by the Danish industry body HORESTA. (2900 businesses.)
Miljøfyrtårn Miljøfyrtårn°	Hotels, restaurants and conference facilities	Norway	Miljøfyrtårn (Eco-Lighthouse) is a national environmental certification scheme run by the Eco-Lighthouse Foundation. Businesses are certified, not products. Established in 2003. (Over 178 businesses in the product areas HFC).
Debio grading labels	Food service and food retail	Norway	The grading scheme provides a marketing label to promote the proportion of organic/Debio-approved products. The bronze label requires a minimum of 15 products or 15%, silver a minimum of 50% and gold a minimum of 90% organic products.
Krav	Food products, food services, restaurants	Sweden	National label for organic production. Includes requirements concerning health, animal welfare, social responsibility, and climate. Established in 1985. (14 businesses in the product area restaurants.)
Organic Cuisine Label	Restaurants	Denmark	Free, state-backed label indicating amount of organics used in the restaurant. Has three levels: gold (90-100%), silver (60-90%) and bronze (30-60%). Established in 2009. (3179 businesses.)
Green Restaurant	Restaurants	Denmark	New ecolabelling scheme aimed at restaurants, catering and food services. Established by HORESTA and the Danish Outdoor Council. Established in 2019. (1 business.)
Environmental management	Companies in general	International	Internationally recognised standard that forms the basis for establishing an environmental management system. Can be applied to any type of organisation in any industry. Established in 1992. (No data on number of businesses.)

Table 2 Other labelling schemes and management systems

### 3 Justification of the requirements

This section presents proposals for new and revised requirements, and explains the background to the requirements, the chosen requirement levels, and any changes since generation 4.

Hotels, food services and conference facilities are core businesses in the tourism industry. Tourism has seen steady growth in recent decades, and it is currently one of the global economy's most important industries. The criteria have broken through quite widely, with interest from the industry continuing to increase. The criteria have been revised and updated, with a focus on ensuring satisfied licensees and the greatest possible environmental benefit. There has been a particular rise in interest from canteens and institutional kitchens in recent years, and the criteria have been revised with these as one of the focus areas. We also see considerable potential in the conference industry, especially in terms of one-day conferences. In recent years, one-day conferences have become bigger than conferences over several days, and the criteria therefore include requirements tailored to these.

### 3.1 The UN Sustainable Development Goals

The UN Sustainable Development Goals form the world's shared action plan for combating inequality and poverty, protecting the planet and stopping climate change by 2030. The Nordic Swan Ecolabel is a good tool for ensuring a sustainable future, and in general terms the Nordic Swan Ecolabel contributes towards Goal 12: responsible consumption and production. A Nordic Swan Ecolabelled business has less of an impact on the environment.

More specifically, the criteria for Hotels, Restaurants and Conference facilities contribute to the following targets under Goal 12:

- "Sustainable management and efficient use of natural resources" by setting strict limit values for energy and water consumption and waste. In addition, there is a requirement for a high proportion of organic food and drink, and that all fish served must come from a sustainable source.
- "Reduce waste generation through prevention, reduction, recycling and reuse" by setting comprehensive requirements for sorting at source to ensure material recovery; by focusing on keeping waste levels down through limit values for waste; and by prohibiting disposable items.
- "Halve per capita global food waste" by setting strict requirements for reducing food waste through measurement, analysis, guest information and staff training.
- "Achieve environmentally sound management of chemicals and all wastes [...] and significantly reduce their release to air, water and soil" by setting the requirement that 100% of the chemicals used for daily cleaning, dishwashing and laundry must be ecolabelled. In addition, other chemicals must meet strict requirements concerning ingoing substances and classification. The Nordic Swan Ecolabel prevents pollution, as well as stopping people from being exposed to harmful chemicals during production and use.
- "Adopt sustainable practices" by setting requirements concerning progress, employee training and internal communication on the sustainability work of the business.

### 4 General requirements of the business

#### O1 Description of the business

Applicants must provide the following information about the business:

- Name, address
- Business definition and combination: hotel, food service or conference facility?

- Description of the business (text)
- Does the business have a bar?
- Does the business have a pool and/or spa?
- Does the business have a catering operation?
- Does the business offer takeaway? What type of takeaway?
- Total annual sales
- Food service sales (restaurant sales/food and beverage) as a percentage of total annual sales for the whole business.
- Total heated area, m<sup>2</sup> (heated to over 10°C)
- Number of guest rooms
- Number of guest nights per year
- Percentage occupancy per year (total occupancy per room per year, %)
- Number of food service guests, including catering and takeaway portions, per year
   Catering and takeaway portions are a dish that is prepared for consumption somewhere other than where it was prepared.
- Number of conference guests per year
- Specific circumstances or other information you wish to give
- Enter the information digitally, following the bullet list above.
- Documentation stating the number of guests, food service sales as a percentage, total heated area, and percentage occupancy.

#### Background to requirement concerning description of business

Nordic Ecolabelling requires a detailed description of the business, to ensure the setting of appropriate and relevant requirements, tailored to your type of business. It is especially important that this information is correct, as it forms the basis for the application process and the requirements that apply to your particular business.

All the limit values that we set in this criteria document are based on calculations that take business-specific facts as their starting point. This includes guest numbers, room occupancy and the proportion of sales derived from the food service. The definition of guest numbers can be found in the section below.

If you are uncertain about any of the points, contact your case officer for help and advice.

#### Definition of guests

- A hotel guest is a guest who stays at the hotel overnight. A hotel guest who stays at the hotel for 2 nights is counted as 2 hotel guests, and 2 guests that stay 2 nights in a double room are counted as 4 hotel guests.
- A restaurant guest is a guest who eats in the restaurant (which includes breakfast, lunch, and dinner guests). The number of breakfast guests is assumed to be the same as the number of hotel guests.
- A conference guest is a guest who takes part in activities on the premises of the conference facility. If a conference guest stays overnight within the business, they will be counted twice in the total guest numbers for the

business – once as a conference guest and once as a hotel guest. A conference guest should be counted as a restaurant guest only if they have one or more meals in the restaurant, e.g. breakfast, lunch or dinner. Conference guests who have catered coffee/tea breaks do not count as restaurant guests. A conference guest participating for 2 days is counted as 2 conference guests. If the conference guest eats 2 lunches and 1 dinner at the facility, the guest must also be counted as 3 restaurant guests.

• An external pool guest is a guest who only uses the pool facilities and does not spend the night at the hotel.

#### **Documentation requirement**

• The guest number is to be stated to the nearest 1,000 if the total guest number is 100,000 or higher. If the guest number is lower than 100,000, it is to be stated to the nearest 100. As documentation, we can accept summaries based on overviews from booking systems. The underlying data for the calculation of guest numbers is to be enclosed with the application.

### 5 Environmental management

#### O2 Regulatory requirements

The licensee must ensure compliance with statutory requirements, including those on the working environment, external environment, economy, hygiene and health. The company must not be subject to any form of negative ruling by the authorities that has not been corrected before the deadline given by the supervisory authority. Failure to comply with the requirement may result in Nordic Ecolabelling revoking the licence.

- $^{\circ}$  Confirmation that the business complies with prevailing legislation.
- $\boxtimes$  Signed application form

#### O3 Responsible person

The company must appoint one person who has main responsibility for the application process, and for annual follow-up of the licence, and who ensures fulfilment of the Nordic Ecolabelling requirements during the validity period of the licence.

The business must inform Nordic Ecolabelling if the responsible person is changed.

 $^{\circ}$  Name, email, phone number and job title of responsible person

#### Background to requirement for a responsible person

A responsible person is required to ensure that Nordic Ecolabelling's requirements are fulfilled throughout the entire validity period of the licence and that the annual follow-up and reporting is completed. The business may comprise several departments but should in the first instance appoint just one person to be responsible for the licence and contact with Nordic Ecolabelling. The business may internally split responsibility between different departments and several people.

A large turnover of staff can be a challenge in this industry, not least with regard to the Nordic Swan Ecolabelling of the business. When a person who has had responsibility for producing documentation and carrying out annual reporting leaves, important experience may be lost. Passing on information and knowledge to their successor is thus vital.

#### O4 Annual follow-up of the licence

Following requirements must be followed up once a year:

- General information O1. Percentage of food service sales, percentage occupancy, number of hotel-, restaurant- and conference guests
- Energy consumption, O9
- Water consumption, O17
- Amount of general waste, O23
- Work on food waste, O27
- Information on chemicals, O40
- Requirement concerning food suppliers (applies only to conference facilities without their own food service)

Nordic Ecolabelling's annual follow-up of the business may include a review of all requirements, or only selected ones. Information about follow-up and deadline for reporting is given in advance

Confirmation that the business conducts annual follow-up of the licence.

#### Background to requirement concerning annual follow-up of the licence

A requirement to submit annual reports is included to ensure that the facility complies with the ecolabelling requirements in the criteria document during the validity period of the Nordic Swan Ecolabel licence. These reports must contain information as set out in the requirements in the criteria document to which the annual report refers. It is always the latest version of the annual report that forms the basis for ensuring that the criteria are met. If the annual report reveals that circumstances have changed, Nordic Ecolabelling must be informed of this.

#### O5 Requirement for continuous improvements

Once a year, the business must set its own environmental targets for the year to come. At the same time, a review of the previous year's environmental targets must be conducted, to ensure that they have been followed up. The "responsible person" has responsibility for making sure that the review is completed.

As a starting point, the environmental targets must focus on improvements in at least two of the following categories:

- Energy
- Water
- Waste
- Food waste
- Organic food and drink
- Chemicals
- Purchasing
- Confirmation that an annual review of environmental work will be conducted, as part of which new targets will be set.
- Report on the review work that includes the current environmental targets of the business.

## Background to requirement concerning procedures for continuous improvements

It is important that the facility regularly improves its environmental performance. A range of environmental targets need to be formulated, along with an action plan containing various measures to improve the environmental work of the business. The review should be conducted at the beginning of each year, for example before 31 January, so that new targets can then be set for the year ahead.

The targets must be measurable to allow an assessment of the improvements resulting from the measures. The targets may be measured in absolute figures, or even better using key performance indicators such as litres per guest, food waste per guest, and so on.

The review meeting must include a follow-up of the previous year's targets and action plans to analyse whether the targets have been met. If planned measures have not been carried out, this must be reported to Nordic Ecolabelling.

#### P1 Resource-saving measures for hotels (2 points)

The business will receive 2 points for having procedures for the following:

- Replacement of towels only at the request of guests (for example, replacing towels left on the floor).
- Cleaning of guest rooms only at the request of guests.
- Chemical-free cleaning of the guest room's surfaces (excluding bathroom).

There must be clear guest information in the room. On request, Nordic Ecolabelling can provide communication material once a licence been awarded.

- Confirmation of compliance with the procedures.
- $\square$  Description of the procedures.
- $\square$  Copy of the information given to guests.

## Background to requirement concerning procedures for resource-saving measures

Considerable resources can be saved by avoiding unnecessary cleaning of towels, bed linen and guest rooms. The need to clean a hotel room depends on how long the guest is staying in the room. People often stay only a few nights in a hotel room, which means that cleaning may not necessarily be needed. A great deal of water, energy and chemicals are used in laundry, so reducing the laundering of towels can generate substantial resource savings. Avoiding the use of chemicals for surface cleaning reduces resource consumption and is also positive for health and the environment. Water, microfibre cloths and good cleaning procedures enable cleaning without the use of chemicals. Vacuuming rooms counts as chemical-free cleaning, if it is combined with cleaning using water containing no chemicals.

Good communication with guests about resource-saving measures can contribute to a positive guest experience. Nordic Ecolabelling is able to provide communication material on request. For example: **Towels**: "Cutting down on unnecessary laundry is a simple way of reducing the consumption of water, energy and detergent. You can help by hanging up your towel and using it again tomorrow. Small changes can make a big difference – when lots of people get involved."

**Room cleaning**: "If you are staying here for several nights, you can choose to skip a day of room cleaning. That way you are helping the hotel to use less water, power, and detergent, which is good for the environment. Small changes can make a big difference – when lots of people get involved."

#### O6 Changes and unforeseen non-conformities

Planned changes, such as a change of chemical supplier, that have a bearing on the Nordic Swan Ecolabel's requirements are to be approved by Nordic Ecolabelling. Unforeseen non-conformities that affect the Nordic Swan Ecolabel's requirements must be reported in writing to Nordic Ecolabelling.

Procedures for changes and unforeseen non-conformities.

#### Background to requirement concerning changes and unforeseen nonconformities

Ensuring that the business has a quality management system with procedures for always reporting to Nordic Ecolabelling in the event of changes and unforeseen non-conformities also ensures constant compliance with the requirements of the Nordic Swan Ecolabel.

#### O7 Communication with staff

All employees who are involved in the everyday operation of the business must have sound environmental knowledge to ensure that the requirements of the Nordic Swan Ecolabel are fulfilled. The business must provide employees with basic training, containing as a minimum:

- information on the environmental work of the business
- what being Nordic Swan Ecolabelled means for the business
- what the employees can and must do to help with the environmental work

The training must take place no later than two months after licensing. All employees will then receive an annual orientation on general environmental issues, the environmental work of the business and the Nordic Swan Ecolabel. New employees must receive the necessary training within two months.

#### Nordic Ecolabelling can provide training material on request.

- Description of how the staff are trained in the environmental work of the business and what it means for the business to be Nordic Swan Ecolabelled.
- Confirmation that the staff receive training within two months of licensing.
- Confirmation that new employees receive training within two months.
- Confirmation that staff receive annual updates on the environmental work of the business and the Nordic Swan Ecolabel.

#### Background to requirement concerning information and training for staff

Training in the work of Nordic Ecolabelling is important in creating engagement across the whole organisation during the application period. It is important that the contact person does not feel alone in this work and that all the departments are on board from the outset. The departmental managers are the key people for building up good environmental work at the facility from the beginning and for motivating the rest of the employees.

The training must contain both basic environmental knowledge and the knowledge that is necessary to maintain the Nordic Swan Ecolabel licence.

Each year, all employees are to be informed about the environmental work of the business and matters associated with the Nordic Swan Ecolabel licence – for example which environmental improvements the business is working towards, the results of measurements relating to the limit values, and changes to procedures for the Nordic Swan Ecolabel licence.

# 6 Energy requirements for hotels, with or without a food service, with or without conference facilities

Individual hotel businesses, or hotel businesses in combination with a food service and/or conference facilities, must meet the energy requirements in sections 6.1 and 6.2. Icelandic businesses are exempt from the "O10 Limit values for energy consumption" requirement, but must meet the requirements O11, O12 and O13.

Individual food services, food services in combination with conference facilities, and individual conference facilities must meet the energy requirements in chapter 7.

#### 6.1 Requirements concerning energy consumption

#### O8 Fossil fuel

The business must not use fossil fuel to heat its premises or to produce hot water. Fossil gas may be used for cooking.

*Exception: businesses that have a legal obligation to be connected to the gas network are permitted to use fossil gas.* 

Confirmation that the business does not use fossil fuel to heat its premises or to produce hot water.

#### Background to fossil fuel requirement

A small number of the Nordic Swan Ecolabelled hotels and conference facilities have been using fossil fuel oil for heating and hot water. This has only been for peak load when demand for heating rises to a point where the hotel's regular heating system is insufficient. The facilities that have used fuel oil are typically located outside the cities and do not have access to district heating.

Nordic Ecolabelling wishes to encourage fossil-free operation, and judges that better environmental options are available for hotels and conference facilities. In most cases where fossil oil has been used for peak load, it is possible to switch to liquid biofuel with minor adjustments to the oil-fired boiler. Bio-oil is, however, problematic because it has proven to have issues with bacterial growth and consistency during prolonged storage and in cold conditions. It is possible, instead, to use the fuel RME (rapeseed methyl ester) or HVO (hydrotreated vegetable oil), which have renewable origins. An electric boiler may also be an option.

Businesses that have a legal obligation to be connected to the gas network are exempted from the requirement and are permitted to use fossil gas.

In Norway, the government has introduced a ban on the use of fossil oil to heat buildings from 2020. The ban covers residential, public and commercial buildings, including hotel buildings.

The requirement does not apply to district heating produced using fossil energy, since the hotel business is not able to influence the fuel composition of the district heating.

#### O9 Energy consumption

The business must declare its annual energy consumption in kWh.

In addition, the energy consumption is to be placed in the context of area and guest numbers, with calculations for:

• kWh per square metre

and

• kWh per guest night

Energy consumption is to be calculated based on purchased energy, such as electricity, district heating, district cooling and fuel. Self-generated renewable energy is not to be included in the calculation. Self-generated energy that is sold on can be deducted, if it can be documented.

Electricity for vehicle charging and internal laundering, and energy for the operation of a spa, may be deducted if it can be documented via separate meter readings, an estimate conducted by a third party, or other competent metrics. Electricity used in the production of self-generated energy, for example to power heat pumps, must not be deducted.

Icelandic businesses can report their district heating in cubic metres.

Area in square metres and number of guest nights are documented in O1. Area is defined as the internal space in the building that is heated to more than 10°C.

**Annual follow-up:** The business must document its energy consumption per square metre and per guest night, and compare the figures with the previous year, if Nordic Ecolabelling requests this at annual follow-up of the licence.

- Documentation of purchased energy over the past 12 months, or from a representative period of operation. For example, an invoice or confirmation from suppliers.
- Calculations showing annual energy consumption per square metre and per guest night.

- *P* Ongoing measurements are subject to on-site checks.
- ☆ Annual reporting of energy consumption, if Nordic Ecolabelling requests this information.

#### Definitions

#### **Purchased energy:**

The energy (kWh) supplied to the business in the form of electricity, fuel, gas, district heating and district cooling. Self-generated renewable energy does not count as purchased energy.

#### Self-generated renewable energy:

Energy generated from the sun, wind, ground, air or water in the buildings or on/adjacent to the land of the business. This means solar power, wind power, hydro power from a river/fjord, heat/hot water from solar panels or heat pumps, and recovered heat from ventilation or wastewater.

#### Background to requirement on energy consumption

It is important that the business has a good grip on its energy consumption and we therefore require a follow-up of consumption. The energy consumption in kWh must be related to the heated area, to have a common reference value for comparing with other, equivalent businesses. However, it may also be relevant to look at energy consumption per guest day. Large guest numbers may explain high energy consumption.

The energy at a hotel is for heating, cooling, hot water, ventilation, lighting, the kitchen, technical equipment, TV screens, minibars, office machines and laundry (of mops and cloths; most launder everything else externally). Energy in gas form is typically used in a kitchen. Gas is used in some instances for patio heaters or other equipment. Note that fossil gas is not permitted for anything other than cooking, see requirement O8, except for businesses that are legally required to be connected to the gas network. These are permitted to use fossil gas.

If the hotel has a restaurant, and not just a breakfast service, the kitchen is a major contributor to energy consumption. Energy-intensive appliances in a kitchen are typically ovens, dishwashers, fridges and freezers, chiller and freezer rooms, chiller units and food warmers. If a hotel business also has a conference department, the energy consumption for this section relates largely to heating, lighting and ventilation.

It is permitted to deduct the following energy consumption, if it can be documented via separate meter readings, estimates conducted by an independent third party or other competent metrics:

- Electricity for vehicle charging
- Energy for spa operation
- Energy for internal laundry

Energy consumption figures are affected by whether the business has one or more vehicle charging stations. The electricity for vehicle charging can therefore be deducted from the figure for annual purchased energy. If a business has a spa or pool, these also consume significant amounts of energy. Nordic Ecolabelling does not issue Nordic Swan Ecolabels specifically for spa facilities, and the energy used to operate a spa or pool can therefore be deducted.

Hotels have a major need for laundry services. Most hotel businesses send their laundry (with the exception of mops and clots) to an external laundry service. However, a few choose to do their own laundry, which leads to higher energy use compared with other businesses. The energy used for internal laundering of more than mops and cloths can therefore be deducted.

#### O10 Limit values for energy consumption

The limit values are split into three categories, depending on the food service sales and/or occupancy rate of the business, calculated on an annual basis.

- Energy consumption must not exceed the "upper limit" in Table 3.
- If the energy consumption is lower than the "lower limit" in Table 3, the business is considered energy-efficient, and thus does not need to meet requirements O11, O12 and O13.
- If the energy consumption is between the lower and upper limit values, the following obligatory requirements must be fulfilled:
  - O11 Energy efficiency
  - O12 Controlling energy consumption
  - O13 Energy and CO<sub>2</sub>-reducing measures

Icelandic businesses are exempt from the "Limit values for energy consumption" requirement, but must meet the requirements O11, O12 and O13.

Category	Category		Upper limit
Without food	a service		
1	Business without food service <b>Or</b> Businesses with only breakfast service and/or simple bar food	160 kWh/m <sup>2</sup>	300 kWh/m <sup>2**</sup>
With food se	prvice		
2	The business has food service sales accounting for less than 40% of total turnover for the business. <b>And</b> The occupancy rate is lower than 60%	190 kWh/m <sup>2</sup>	350 kWh/m <sup>2**</sup>
3	The business has food service sales accounting for over 40% of total turnover for the business. <b>Or</b> The occupancy rate is higher than 60%	230 kWh/m <sup>2</sup>	425 kWh/m <sup>2**</sup>

Table 3 Energy limit values

\* Food service sales are sales exclusively from food and beverages (F&B). This covers sales of all food and drink, including for parties, à la carte, snack menus, shop, minibars, banquets, courses, and conferences. Food service sales do not include venue hire.

\*\* The upper limit is raised with 5% for hotels located in zone 2, 15% for hotels located in zone 3, and 10% for hotels located in zone 4. The zones are found in Appendix 5.

Food service sales and occupancy are documented in O1.

- Confirmation of the category to which the business belongs.
- <sup>1</sup> Energy consumption per square metre kWh/m<sup>2</sup>.

#### Background to requirement on limit values for energy

The limit values for energy consumption comprise one upper and one lower limit value. The limit values are also split into different categories, based on the circumstances of different hotel businesses.

The upper and lower limit values have the following function:

- Exceeding the upper limit is not permitted.
- If energy consumption falls below the lower limit, the business is considered to be energy-efficient, and thus does not need to meet the "Requirements concerning energy efficiency" (O11, O12 and O13).
- If the energy consumption is between the lower and upper limit values, the "Requirements concerning energy efficiency" must be fulfilled.

#### **Upper limit value**

The upper limit is set based on data from businesses already holding the Nordic Swan Ecolabel. There is potential for energy efficiencies in many businesses and the upper limit has been set to exclude those who waste energy.

Nordic Ecolabelling's experience shows that energy consumption varies, in part due to the many different types of Nordic Swan Ecolabelled hotels. Varying factors, such as the age and geographical location of the building, also affect energy consumption. Nordic Ecolabelling is aware that certain businesses have little control over energy consumption. This is particularly the case for listed buildings and businesses that are under renovation. These can therefore be exempted from the upper limit value for energy.

The upper limit value is raised with 5, 10 or 15% depending on the geographical location. This is to ensure that the hotel is not excluded only because of the geographical location.

#### Lower limit value

The starting point is that around 20-30% of the current Nordic Swan Ecolabelled hotels are expected to fall below the lower limit. The lower limit values are based on data from existing Nordic Swan Ecolabelled facilities and on official building regulations in the different Nordic countries<sup>1</sup>. Norway's building regulations require the net energy demand of a newly built hotel to be less than 170 kWh/m<sup>2</sup>. Finland uses a different calculation method, and the Environment Ministry's regulations set the limit at 160 kWh/m<sup>2</sup>. This is a technical requirement and should not be confused with the actual, real-life consumption of an operating hotel business.

<sup>&</sup>lt;sup>1</sup> Byggteknisk forskrift (TEK17) <u>https://dibk.no/byggereglene/byggteknisk-forskrift-tek17/</u> Boverkets byggregler (föreskrifter och allmänna råd), <u>https://www.boverket.se/sv/lag--</u> <u>ratt/forfattningssamling/gallande/bbr---bfs-20116/</u> Finlands byggbestämmelsesamling , <u>https://www.ym.fi/sv-</u>

FI/Markanvandning\_och\_byggande/Lagstiftning\_och\_anvisningar/Byggbestammelser

The Nordic Ecolabelling has decided that there is no reason for adjusting the lower limit to geographical location. If the hotel does not reach the lower limit, it is not excluded, but needs to fulfil "requirements concerning energy efficiency" (O11, O12 and O13). When not adjusting the lower limit to geographical location, measures for reduced energy use will be required for more hotels, which is in line with the purpose of the new requirement structure - to ensure that hotels take energy saving measures.

The report "Energy use in hotels, restaurants and public venues (Swedish Energy Agency ER 2011:11)" has also been consulted in setting the limit values. The report collates the results of an inventory of Swedish facilities. The selection process was designed to create a representative sample of Sweden's whole stock of hotels. According to the report, a hotel in Sweden uses 250 kWh/m<sup>2</sup> when considering the entire operation. The average Swedish hotel therefore exceeds the lower value.

If the energy consumption of a business is between the upper and lower limits, the "Requirements concerning energy efficiency" must be fulfilled. The purpose of these requirements is to implement energy efficiency measures in those cases with the greatest potential.

### 6.2 Requirements concerning energy efficiency

The requirements in this chapter apply to businesses with energy consumption below the lower and upper energy limits as set out in Table 3, and to all Icelandic businesses.

#### O11 Energy efficiency

The business must meet one of the following conditions:

- The business has undergone an energy analysis over the course of the past three years, either in accordance with EN 16247-1 or conducted by an independent energy expert, with a focus on energy savings. Based on this analysis, the business must have in place a written procedure setting out targets and action plans for reducing energy consumption over the course of the licence period, with the objective of meeting the "lower limit" in Table 2. (The objective of meeting the "lower limit" does not apply to Icelandic businesses.)
- The business is certified in accordance with the international standard for energy management, ISO 50001.
- The business has an advanced management system for controlling heating and ventilation, in response to occupancy levels and seasons. A description of the management system and how the facility will be achieving energy efficiencies is to be submitted.
- Confirmation of which energy efficiency condition the business meets.
- Description of the energy analysis, including a written procedure setting out targets and associated action plans for reducing energy consumption.
- Description of the management system.
- $\square$  Proof of ISO 50001 certification.

#### Background to requirements concerning energy efficiency

We require one of three measures: an energy analysis, energy certification or confirmation that the business has an advanced management system for heating and ventilation.

An energy analysis is a systematic check and analysis aimed at identifying energy flows and potential for improved energy efficiency. The analysis is expected to suggest measures for more efficient use of energy. The analysis must serve as the basis for decisions on how a company will proceed in implementing energy efficiency measures.

Standard ISO 50001 provides a framework for policy development for more efficient energy use, setting targets, producing data to support decisions on energy use, metrics, assessment and continuous improvements.

A certified energy management system (ISO 50001) or energy analysis in accordance with EN16247-1 is, however, expensive, and not always possible for smaller companies. Nordic Ecolabelling therefore also provides the option of getting an independent and competent energy expert to conduct an energy analysis, with a focus on potential energy savings. This does not have to follow the standard EN 16247-1 but must be approved by Nordic Ecolabelling.

An alternative to performing an energy analysis is to have an advanced system for lowering the airflow and temperature to an economy level in all guest rooms and only turning the ventilation to a comfort level in a particular room when the guest checks in. This means that when no one is staying in a room, the airflow to the room can be reduced – essentially the fan speed can be lowered if rooms are empty.

#### O12 Controlling energy consumption

**Guest rooms:** Lighting and other electrical equipment must be switched off in guest rooms that are not in use. Either through

- 100% of the hotel's guest rooms having demand-controlled lighting
- or

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• personnel having procedures for switching off the lights in guest rooms (including the bathroom) and turning off the TV when they leave the room after cleaning. There must also be signs urging guests to switch off the lights and TV and close the windows when they leave the room.

**Lighting in public areas:** the business must have procedures, timers or demand controls/sensors in place to ensure that lighting is not left on unnecessarily in rooms/areas that are not in use.

**Outdoor lighting and heating:** the business must have procedures, timers or demand controls/sensors in place to ensure that outdoor lighting and heating is not left on unnecessarily.

**Pool, hot tub and sauna:** The business must have a cover for outdoor pools and hot tubs, plus demand and timer controls for saunas and hot tubs. Description of electronic equipment in the guest rooms or copy of procedures.

- Description of how lighting in public areas is controlled or copy of procedures.
- Description of how outdoor lighting and heating is controlled or copy of procedures.

- $\bowtie$
- Copy of procedures for covering and controlling the energy use of pools, hot tubs and saunas.

#### Background to requirement on controlling energy consumption

Automated lighting controls, whether via room card sensors in hotel rooms or motion sensors in corridors and other areas, are the most effective way of saving energy on lighting. However, different businesses operate under different circumstances, and not all of them have modern technical installations. Nordic Ecolabelling therefore requires those who do not have demand or sensor controls on guest room lighting to have clear and simple energy-saving procedures for staff to follow. The conduct of the guests also has a major impact on energy consumption, and it is therefore desirable to encourage the guests to switch off lighting and close windows.

The business must ensure that outdoor lighting is not used unnecessarily. Outdoor lighting and façade lighting can be controlled by a timer or sensors, since there is often no need for lighting, not least during daylight hours. In some cases, outdoor lighting is necessary in the evening/at night for safety and security reasons, but lowering the power of the lighting could still be considered. Outdoor lighting for car parks and garages can be controlled via a timer or sensors.

Some businesses have decided that they need outdoor heating for areas on an incline – for example steps, entrances or garage driveways. In this case, it is important to make sure that heating is not used unnecessarily, and that the heating is controlled according to factors such as season, weather and temperature.

Covering over heated pools can save significant amounts of energy. A cover is only required for outdoor pools. Doing this indoors would also save energy, but there is a debate about whether it has a negative effect on water quality. This is why it is not required by Nordic Ecolabelling<sup>2</sup>.

#### O13 Energy and CO<sub>2</sub>-reducing measures

The business must have put in place at least five energy and  $CO_2$ -reducing measures in the table below. Approved measures are measures implemented in the licensing process or measures that have already been introduced.

Theme	Measure	
Own measures	The business has its own energy-saving measures. The measures must be measurable and each one must demonstrate a saving of at least 5% of the total energy demand.	
Own energy production The business has its own energy production, via solar panels or other means covers over 10% of the total energy demand. This does not apply to heat pur		
Heat production         The business' heat production is demand-controlled.           In this instance, demand-controlled means heat production adapted to people on the premises, and sensor-controlled. Timer controls are not		
Ventilation system	The business' ventilation system is demand-controlled. In this instance, demand-controlled means an air supply adapted to the number of people on the premises, for example via $CO_2$ controls or sensors. Timer controls are not accepted.	
Heat pumps The business has heat pumps installed to meet part of the demand for heating		

Table 4 Energy and CO<sub>2</sub>-reducing measures

<sup>2</sup> IVL 2015, Aktiva badhus,

https://www.ivl.se/download/18.343dc99d14e8bb0f58b76cf/1446478783895/B2231.pdf

Heat exchangers	The business has heat exchangers that recover surplus heat for use in other areas of the business.	
Light fittings	All light fittings in guest rooms and corridors are at least energy class A++ (e.g. LED).	
Energy-efficient light fittings, new purchases	All products in one category – bathroom, kitchen, shower or sensor-controlled light fittings, are in energy class A.	
	The energy classification must be in accordance with the standard SS 820000:2010. "Sanitary fixtures – Method to determine the energy efficiency of mechanical washbasin and mixer taps"	
Extractor in kitchen	Turns on and off automatically via sensors or a timer.	
Minibars	At least 90% of the hotel's rooms do not have a minibar.	
Outdoor heating for restaurant	Where a business serves food and drink outdoors, it has no outdoor heating.	
Electric vehicle charging	The business offers guests charging stations for electric vehicles.	
Transport	The business has reduced the amount of transport by 25% over the past 12 months.	
Eco-driving	100% of the drivers for one of the business' three largest suppliers have taken a course in economical/eco-driving.	
Sustainable fuel	100% of the vehicles for one of the business' three largest suppliers are electric vehicles, use Nordic Swan Ecolabelled fuel or run on hydrogen.	

Description and documentation of the measures implemented.

#### Background to requirement concerning energy and CO<sub>2</sub>-reducing measures

Nordic Ecolabelling has listed a number of concrete energy saving measures that licensees are encouraged to implement. The list also includes some measures (e.g. solar panels, electric vehicles) that in the first instance reduce carbon emissions rather than energy consumption. From the list, choose at least five measures to implement, or for which to document previous implementation.

Different facilities have different needs when it comes to heat consumption, depending on the age of the building, windows, location, season and occupancy. It is desirable for a business to have clear procedures for heating its facilities in the most efficient way possible, despite the differing circumstances.

Ventilation systems in large buildings with many rooms are particularly energyintensive. It is therefore important that the ventilation system is properly controlled according to demand, depending on how many guests are on the premises. Ventilation may, for example, be controlled by  $CO_2$  sensors, or occupancy sensors. Timer controls are not as effective, so if these are used, it is particularly important to have good and detailed timer controls for the best possible effect.

Ventilation in the kitchen is exempt here, since it is usually demand-controlled or sensor-controlled. The ventilation in the kitchen generally needs to be operating as long as the kitchen is in use.

#### P2 CO<sub>2</sub> calculation

The business will earn 2 points if it carries out a  $\mathrm{CO}_2$  calculation, under the following conditions:

- Calculation of CO<sub>2</sub> emissions using a method based on the GHG Protocol, for example the "Hotel Carbon Measurement Initiative" (HCMI<sup>3</sup>).
- The business decides for itself which emission sources to include in the calculation. The same emission sources are to be included each year in order to see how the emissions develop.
- If the business intends to communicate its  $\mathrm{CO}_2$  calculations, it must be made clear which emissions sources and  $\mathrm{CO}_2$  factors have been used in the calculation.

 $\square$  Copy of CO<sub>2</sub> calculation.

 $\square$  Copy of CO<sub>2</sub> communication.

#### Background to requirement concerning CO<sub>2</sub> calculation

The  $CO_2$  calculation is to be made using a method that draws on the standards of the GHG Protocol, for example the HCMI method, which relates to "Scope 1, 2 and 3" as set out in the GHG Protocol. The  $CO_2$  calculation is to be based on the same emission sources each year so that the business can compare its  $CO_2$  emissions from year to year.

- Scope 1: Direct emissions from sources that the business itself controls, such as natural gas, propane and biofuel.
- Scope 2: Indirect emissions from purchased electricity, district heating, district cooling, fuel for the hotel's vehicles, refrigerants and so on.
- Scope 3: Other indirect greenhouse gas emissions, such as emissions from transport, and purchased goods and services. (If the HCMI method is used, only external laundry is included in Scope 3.)

HCMI is an international, industry-specific method used by over 24,000 hotels around the world<sup>4</sup>. HCMI follows the principles of the Greenhouse Gas (GHG) Protocol and ISO 14064. The method gives:

- The hotel's CO<sub>2</sub> emissions per room night (taking into account occupancy rate)
- The hotel's CO<sub>2</sub> per area for meeting rooms (taking into account hourly occupancy)

The calculation also produces a figure for an individual guest's  $CO_2$  emissions (for accommodation: per room or for a conference: use of meeting room).

#### P3 Certified electricity

The business will earn 1 point by purchasing electricity certified with Bra Miljöval/Good Environmental Choice or similar\*.

\*The Nordic Ecolabelling is analysing which certification schemes will be accepted.

<sup>&</sup>lt;sup>3</sup> Hotel Carbon Measurement Initiative v.1.1, Methodology, 2016:

https://www.thinktur.org/media/Hotel Carbon Measurement Initiative Methodology v -1 1.pdf

<sup>&</sup>lt;sup>4</sup> https://www.tourismpartnership.org/carbon-emissions/

#### Documentation confirming purchase of certified electricity.

#### Background to certified electricity

The Nordic Ecolabelling wants to promote electricity production with as low environmental impact as possible. There are different certification schemes that ensure that the renewable electricity production fulfils some minimum environmental requirements. Normally, the schemes are based on EU's guarantees of origin for renewable electricity, but above that they ensure extra environmental values.

To gain this point, it is not enough to purchase "only" renewable electricity, but the electricity must be certified by a certification scheme approved by Nordic Ecolabelling.

The Nordic Ecolabelling is analysing which certification schemes will be accepted.

## 7 Energy requirements for food services and/or conference facilities

Individual food services, food services in combination with conference facilities, and individual conference facilities must meet the energy requirements in chapter 7, O14, O15, and O16.

#### O14 New purchases of energy-intensive equipment

Restaurants must have procedures to ensure that documentation is collected from the producer/supplier, and that energy consumption is weighed up equally with price, when purchasing new energy-intensive equipment. The documentation is to be archived.

Procedures for purchasing energy-intensive equipment.

## Background to requirement concerning new purchases of energy-intensive equipment

Choosing equipment with a high energy efficiency classification is an important way to reduce a restaurant's use of electricity. The difference in energy efficiency between various energy classes varies for different product groups. As a rule, a combination fridge/freezer in energy class A+++ draws 60% less electricity than the same product in energy class A. The actual consumption figure then depends on how energy-efficiently the product is used.

The focus of energy labelling is on domestic products, but certain professional refrigerators, freezers and combined fridge/freezers have also been subject to energy rating label requirements since July 2016. Of a restaurant's professional equipment, only refrigerators and freezers with their own compressors are covered by the European Energy Labelling Directive 2010/30/EU. Nordic Ecolabelling therefore requires a procedure showing that the energy use of the equipment is taken into account, not just the energy label. The procedure must include requesting energy information from the producer or supplier. If the

purchase relates to refrigerators and freezers with their own compressors, which are covered by the European Energy Labelling Directive 2010/30/EU, Nordic Ecolabelling recommends choosing the highest or second-highest energy efficiency class.

#### O15 Training in efficient use of energy-intensive equipment

The food service must have procedures in place for training employees in effective use of energy-intensive equipment, with a view to reducing energy consumption. New employees are to be trained within their first three months of employment.

The training must include, as a minimum:

- Use and maintenance of the kitchen equipment
- Energy-efficient use of the dishwasher
- Efficient use of the kitchen equipment, including demand-controls and energy-saving functions, if relevant
- When equipment should be completely turned off, depending on guest numbers
- Energy-efficient use of chillers and freezers

Procedures for training employees in efficient use of energy-intensive equipment

## Background to requirement concerning efficient use of energy-intensive equipment

To be as energy-efficient as possible, it is important to use the equipment correctly. Nordic Ecolabelling therefore believes in the need for staff training and information on how to use the equipment so that it consumes as little energy as possible. Staff should be aware of the procedures that apply when using the equipment and why they need to follow the procedures.

It is important that the kitchen staff are given training in how all the machines in the kitchen work and how to use them efficiently. Training staff in how to adapt the use of the machines to the flow of guests is important, in order that kitchen equipment is not left running unnecessarily. One example of this is having the griddle or ovens on at times with small numbers of guests. Regular defrosting of the chiller room is another example of a procedure that saves energy and that needs to be conveyed to the staff.

#### O16 Energy and CO<sub>2</sub>-reducing measures

The business must have put in place at least four energy and  $CO_2$ -reducing measures in the table below. Approved measures are measures implemented in the licensing process or measures that have already been introduced.

Theme	Measure	
Own measures	The business has its own energy-reducing measures. It must be possible to estimate the effect of the measures and each one must demonstrate a saving of at least 5% of the total energy demand.	
Energy measurement with associated action plan	The food service calculates its energy consumption by installing fixed electricity meters for energy-intensive equipment (fridge/freezer, stove, dishwasher etc.) where possible. The rest of the energy consumption can be estimated. An annual follow-up of consumption must be carried out, and an action plan with targets for reducing energy consumption must be drawn up.	

Table 5 Energy and CO2-reducing measures

Energy analysis with associated action plan	The food service has undergone an energy analysis over the course of the past three years, either in accordance with EN 16247-1 or conducted by an independent energy expert, with a focus on energy savings. Based on the analysis, the business must put in place an action plan containing targets for reducing energy consumption.	
Own energy production	The business has its own energy production, via solar panels or other means, that covers at least 10% of the total energy demand. This does not apply to heat pumps.	
Heat production	The business' heat production is demand-controlled. In this instance, demand-controlled means heat production adapted to the number of people on the premises, and sensor-controlled. Timer controls are not accepted.	
Ventilation system	The business' ventilation system is demand-controlled. In this instance, demand-controlled means an air supply adapted to the number of people on the premises, for example via CO <sub>2</sub> controls or sensors. Timer controls are not accepted.	
Heat exchangers	The business has heat exchangers that recover surplus heat for use in other areas of the business, or in nearby premises/buildings.	
Light fittings	All light fittings in the food service and/or conference facility are at least energy class A++ (e.g. LED).	
Energy-efficient light fittings, new purchases	All kitchen light fittings are energy class A. The energy classification must be in accordance with the standard SS 820000:2010. "Sanitary fixtures – Method to determine the energy efficiency of mechanical washbasin and mixer taps"	
Extractor in kitchen	Turns on and off automatically via sensors.	
Outdoor heating for restaurant	Where a business serves food and drink outdoors, it has no outdoor heating	
Electric vehicle charging	The business offers its guests electric vehicle charging stations.	
Transport	The business has reduced the amount of goods transport by 25% over the past 12 months.	
Eco-driving	100% of the drivers for one of the business' three largest suppliers have taken a course in economical/eco-driving.	
Sustainable fuel	100% of the vehicles for one of the business' three largest suppliers are electric vehicles, use Nordic Swan Ecolabelled fuel or run on hydrogen.	

Description and documentation of the measures implemented.

#### Background to requirement concerning energy and CO<sub>2</sub>-reducing measures

Nordic Ecolabelling has listed a number of concrete energy-saving measures that licensees are encouraged to implement. The list also includes some measures (e.g. solar panels, electric vehicles) that in the first instance reduce carbon emissions rather than energy consumption. From the list, choose at least four measures to implement, or for which to document previous implementation.

# 8 Water requirements for hotels, with or without a food service, with or without conference facilities

Individual hotel businesses, or hotel businesses in combination with a food service and/or conference facility, must meet the water requirements in chapter 8.

Individual food services, food services in combination with conference facilities, and individual conference facilities must meet the water requirements in chapter 9.

#### 017 Water consumption

Nordic Ecolabelling

The business must state the amount of water consumed in daily operations per year, expressed in cubic metres, m<sup>3</sup>. The information must come from the water supplier or be based on readings from the facility's own meters. If the business takes its own measurements, there must be procedures in place to describe how water consumption is measured.

Annual follow-up: the business must document its water consumption (m<sup>3</sup>/year), and compare it with the preceding year, if Nordic Ecolabelling requests this at annual follow-up of the licence.

- $\square$ Documentation of the past year's water consumption in m<sup>3</sup>, using an invoice or information from the water supplier. Own measurements with associated procedures, if applicable.
- 企 Annual reporting of water consumption, if Nordic Ecolabelling requests this information.

#### 018 Limit values for water consumption

The business must meet the limit value for annual water consumption per guest as set out in the table below. The requirement applies to all water consumed in daily operations.

Water consumption from spa operations can be deducted if this can be documented. Water consumption for internal laundering of more than mops and cloths can be deducted if this can be documented.

If the limit value is not met at the time of application/renewal of the licence, a grace period of 12 months from issuing of the licence will be given to achieve the limit value. In this case, an action plan must be drawn up with targets for achieving the limit value. The action plan will be followed up by Nordic Ecolabelling over the course of the period, and the limit value will be checked after 12 months.

Icelandic businesses are exempted from the requirement.

Business	Limit value	
Hotel	150 litres/hotel guest	
Hotel with pool	200 litres/hotel guest	
Food service	30 litres/guest served	
Catering	20 litres/catering portion	
Conference facility	15 litres/conference guest	

Table 6 Limit values for water consumption

If the business combines several operations, water consumption is calculated using the following formula: Limit value for whole business together = (150 litres/hotel guest \* no. of hotel guests) + (30 litres/guest \* no. of guests served) + (20 litres/catering portion \* no. of catering portions) + (15 litres/guest \* no. of conference guests) + (50 litres/guest \* no. of external pool guests).

Hotels with pools use the limit value of 200 litres/guest instead of 150 litres/guest.

Calculations showing that the limit is fulfilled.  $\bowtie$ 

#### Where relevant:

Action plan with targets for achieving the limit value for water consumption.

#### Background to requirements concerning water consumption and limit values

There are many different reasons why it is important to save water. After use, water is normally treated in a traditional water treatment plant – which requires energy and chemicals. Saving on hot water is particularly important, as energy is required to heat it up.

During the recent warm and dry years, water has begun to be in short supply in the Nordic region at certain times of the year.

In the previous criteria, the water limit value has not been obligatory. Nordic Ecolabelling has tightened the requirement so that it is now obligatory for everyone to meet the limit value for water. The limit value for water is based on the combination of operations within the business (e.g. hotel with restaurant or hotel with pool and restaurant). The requirement asks for water consumption figures per guest. The requirement must be documented by providing information on total water consumption and an overview of the number of guests in the respective categories (hotel, restaurant or conference guest).

In order for businesses to be able to obtain a licence, it is essential that they are able to establish their consumption via measurements for each specific operation, using either their own meter or data from the water supplier.

Previous versions of the criteria have had point score requirements relating to different water-saving measures. In these latest criteria, the following has become obligatory: tighter limit value, annual follow-up of water consumption, procedures for new purchases, at least two measures for reducing water consumption.

We have tightened the limit values as set out in the table below:

Figure 1 Business	Figure 2 Old limit value	Figure 3 New limit value
Hotel	200 litres/hotel guest	150 litres/hotel guest
Hotel with pool	275 litres/hotel guest	200 litres/hotel guest
Restaurant	45 litres/restaurant guest	30 litres/restaurant guest
Catering	45 litres/catering portion	20 litres/catering guest
Conference facility	25 litres/conference guest	15 litres/conference guest
External pool guests	75 litres/external pool guest	50 litres/external pool guest

Table 7 Tightening of limit values

The industry uses the key performance indicator "number of litres per overnight guest", without considering other types of guest, such as restaurant and

conference guests. According to Pandox's annual report, water consumption at their hotel properties averaged 179 litres per guest night<sup>5</sup>.

Some facilities have a large spa operation that can make it difficult to meet the limit value, if they do not have their own meters for that operation. If the business can identify the specific consumption of the spa operation, they can deduct this from the total consumption for the whole business.

If a business fails to comply with the water limit value at the point of application or renewal, they have 12 months to implement measures to reduce water consumption and comply with the limit value. An action plan must be drawn up with targets for achieving the limit value within 12 months. Nordic Ecolabelling must approve the action plan.

It is important for the business to ensure that it remains within the parameters set out in the criteria document. Businesses must therefore have procedures in place to document the limit values for water consumption.

The annual summary of water consumption is to be included in the hotel's annual follow-up, which must be updated every year and may be checked by Nordic Ecolabelling. The annual follow-up must confirm compliance with the limit value.

#### O19 New purchases

- **Mixer taps:** Newly purchased mixer taps for guest room washbasins must have a maximum flow rate of 3.5 litres per minute. Newly purchased mixer taps for public areas must either be sensor-controlled or have a maximum flow rate of 3.5 litres per minute.
- **Showers:** Newly purchased showers for guest rooms must have a maximum flow rate of 9 litres per minute.
- **Toilets:** When purchasing new cisterns and toilets, the cistern must have two flush settings, or a maximum consumption rate of 3 litres per flush.
- **Main dishwasher:** Newly purchased machines should have a maximum water consumption of:
  - Hood dishwasher 3.0 litres/rack
  - Conveyor dishwasher 2.0 litres/rack
  - Undercounter dishwasher 2.5 litres/rack

The main dishwasher means the dishwasher(s) that account for at least 70% of dishwashing within the business.

For conveyor dishwashers, water consumption is to be stated in relation to a contact time of 2 min. in line with DIN 10510.

Procedures confirming that the business meets the requirements concerning new purchases of mixer taps, showers, toilets and main dishwashers.

#### O20 Water-reducing measures

The business must have put in place at least two water reducing measures as set out in the table below:

<sup>&</sup>lt;sup>5</sup> Pandox Annual Report 2018: <u>https://www.pandox.se/globalassets/annual-reports/2018/pandox-ar18-sv.pdf</u>

Theme	Measure		
Own measures	Own measures that reduce water consumption by at least 5% per measure. For example, technical devices that reduce water consumption in water-intensive equipment.		
Mixer taps	At least 90% of all mixer taps for washbasins have a limited water flow of no more than 5 litres per minute.		
Showers	At least 90% of all showers are water-saving showers with a flow of no more than 9 litres per minute.		
Toilets	90% of all cisterns for the business' toilets have two flush settings, or a maximum consumption rate of 3 litres per flush.		
Main dishwasher	In its final rinse cycle, the main dishwasher consumes no more than: Hood dishwasher 3.0 litres/rack Conveyor dishwasher 2.0 litres/rack Undercounter dishwasher 2.5 litres/rack		

Table 8 Water-reducing measures

*Own measures must be submitted to Nordic Ecolabelling for approval. The measures must be measurable.* 

Description and documentation of the water-reduction measures implemented.

## Background to requirements concerning new purchases and water-reducing measure

We require facilities to have procedures in place for the purchase of new waterrelated equipment such as mixer taps, shower mixers, toilets, and dishwashers. We consider it important for facilities to be aware that they must purchase the products that at that moment are the most water-efficient alternative on the market.

We also require the facility to have put in place at least two water efficiency measures from a list. The list contains examples of measures that the facility has or must put in place. These types of measures were included in generation 4 as a point score requirement, but in the current criteria document the facility must choose two. In addition to measures regarding mixer taps, showers, toilets and dishwashers, we have included the option of a facility having its own measures that reduce water consumption by at least 5%.

One example from Sweden is the renovation of bathrooms at Scandic Grand Örebro, Scandic St Jörgen in Malmö and Scandic Park in Stockholm, which included replacing mixer taps and shower heads. This resulted in a 25% reduction in water consumption, on average, during 2018.<sup>6</sup>

**Dishwashers:** The requirement has been carried over from the point score requirement in the previous generation of the criteria. However, water consumption for undercounter machines has been adjusted upwards to 2.5 litres per rack. As part of the process, information on water consumption has been obtained from various different producers.<sup>7</sup>,<sup>8</sup>,<sup>9</sup> There are hood dishwashers available with water consumption figures as low as 1-1.5 litres per cycle.<sup>10</sup> There

<sup>&</sup>lt;sup>6</sup> Pandox Annual Report 2018: <u>https://www.pandox.se/globalassets/annual-reports/2018/pandox-ar18-</u>sv.pdf

<sup>&</sup>lt;sup>7</sup> https://www.metos.se/

<sup>&</sup>lt;sup>8</sup> www.winterhalter.com

<sup>&</sup>lt;sup>9</sup> www.hobart.no

<sup>&</sup>lt;sup>10</sup> www.wexiodisk.com

are also conveyor machines available with water consumption figures as low as 1.4 litres per rack.<sup>10</sup> However, the total water and energy consumption cannot be measured in water use alone. It is important that good procedures are in place to ensure efficient dishwashing/optimum use of the machines' capacity.

**Toilet cisterns:** The amount of water used for flushing varies, depending on the cistern. Information from manufacturers shows that water consumption varies from 2-6 litres per flush.<sup>11</sup>, <sup>12</sup> Toilets with just one flush option/button consume more water than toilets with two flush options/buttons.

**Mixer taps/washbasin taps:** Non-touch washbasin taps are an effective way of saving water. There are several types on the market, including examples that consume 3.4 litres per minute.<sup>13</sup> Non-touch washbasin taps with sensors that dispense water in timed streams are also highly efficient, and are available with water consumption as low as 0.56 litres per use.<sup>14</sup> These taps are ideal for public areas, but are not well suited to guest rooms in a hotel, since guests need to be able to easily adjust the temperature of the tap water. There are washbasin taps available that consume only 1.7 litres per minute.<sup>15</sup> The washbasin tap has an aerator – a flow regulator that dispenses a constant amount of water, whatever the pressure. To avoid purchasing new mixer taps, it is also possible to install water-reducing valves. The most commonly used of these reduce the water flow to 3.5–8 litres per minute.<sup>16</sup>

**Showers:** There is considerable scope to save water by replacing showers or fitting a water-saving valve to older showers. An older shower can use up to 24 litres of water per minute, while a water-saving shower uses 6-10 litres per minute.<sup>17</sup>

# 9 Water requirements for food services and/or conference facilities

Individual food services, food services in combination with conference facilities, and individual conference facilities must meet the water requirements in chapter 9.

#### O21 New purchases

- **Main dishwasher:** Newly purchased machines should have a maximum water consumption of:
  - $\circ$  Hood dishwasher 3.0 litres/rack
  - Conveyor dishwasher 2.0 litres/rack
  - Undercounter dishwasher 2.5 litres/rack

The main dishwasher means the dishwasher(s) that account for at least 70% of dishwashing within the business.

<sup>&</sup>lt;sup>11</sup> www.grohe.no

<sup>12</sup> www.ifosanitar.no

<sup>&</sup>lt;sup>13</sup> <u>https://www.oras.com/no/produkter/oras-electra/product/6150F-104/</u>

<sup>&</sup>lt;sup>14</sup> https://www.oras.com/no/produkter/oras-electra/product/6150F-080/

<sup>&</sup>lt;sup>15</sup> https://www.oras.com/no/produkter/oras-electra/product/6150F-102/

<sup>&</sup>lt;sup>16</sup><u>https://www.divello.com/wp-content/uploads/Product-Data-Sheet-Divello-Classic-Aerator-ECONOM.pdf</u>

<sup>&</sup>lt;sup>17</sup> <u>https://www.enok.no/enokguiden/07\_2.html</u>

For conveyor dishwashers, water consumption is to be stated in relation to a contact time of 2 min. in line with DIN 10510.

- **Mixer taps:** Newly purchased mixer taps for public areas must either be sensor-controlled or have a maximum flow rate of 3.5 litres per minute.
- **Toilets:** When purchasing new cisterns and toilets, the cistern must have two flush settings, or a maximum consumption rate of 3 litres per flush.
- Procedures confirming that the business meets the requirements concerning new purchases of main dishwashers, mixer taps and toilets.

#### Background to requirement concerning new purchases

We require facilities to have procedures in place for the purchase of new waterrelated equipment such as mixer taps, shower mixers, toilets, and dishwashers. We consider it important for facilities to be aware that they must purchase the products that at that moment are the most water-efficient alternative on the market.

**Dishwashers:** The requirement has been carried over from the points score requirement in the previous generation of the criteria. However, water consumption for undercounter machines has been adjusted upwards to 2.5 litres per rack. As part of the process, information on water consumption has been obtained from various different producers.<sup>18</sup>,<sup>19</sup>,<sup>20</sup> There are hood dishwashers available with water consumption figures as low as 1-1.5 litres per cycle.<sup>21</sup> There are also conveyor machines available with water consumption figures as low as 1.4 litres per rack.<sup>10</sup> However, the total water and energy consumption cannot be measured in water use alone. It is important that good procedures are in place to ensure efficient dishwashing/optimum use of the machines' capacity.

**Toilet cisterns:** The amount of water used for flushing varies, depending on the cistern. Information from manufacturers shows that water consumption varies from 2-6 litres per flush.<sup>22</sup>, <sup>23</sup> Toilets with just one flush option/button consume more water than toilets with two flush options/buttons.

**Mixer taps/washbasin taps:** Non-touch washbasin taps are an effective way of saving water. There are several types on the market, including examples that consume 3.4 litres per minute.<sup>24</sup> Non-touch washbasin taps with sensors that dispense water in timed streams are also highly efficient, and are available with water consumption as low as 0.56 litres per use.<sup>25</sup> These taps are ideal for public areas, but are not well suited to guest rooms in a hotel, since guests need to be able to easily adjust the temperature of the tap water. There are washbasin taps available that consume only 1.7 litres per minute.<sup>26</sup> The washbasin tap has an aerator – a flow regulator that dispenses a constant amount of water, whatever

<sup>18</sup> https://www.metos.se/

<sup>&</sup>lt;sup>19</sup> www.winterhalter.com

<sup>&</sup>lt;sup>20</sup> www.hobart.no

<sup>&</sup>lt;sup>21</sup> www.wexiodisk.com

<sup>&</sup>lt;sup>22</sup> www.grohe.no

<sup>23</sup> www.ifosanitar.no

<sup>&</sup>lt;sup>24</sup> <u>https://www.oras.com/no/produkter/oras-electra/product/6150F-104/</u>

<sup>&</sup>lt;sup>25</sup> <u>https://www.oras.com/no/produkter/oras-electra/product/6150F-080/</u>

<sup>&</sup>lt;sup>26</sup> <u>https://www.oras.com/no/produkter/oras-electra/product/6150F-102/</u>

the pressure. To avoid purchasing new mixer taps, it is also possible to install water-reducing values. The most used of these reduce the water flow to 3.5-8 litres per minute.<sup>27</sup>

**Showers:** There is considerable scope to save water by replacing showers or fitting a water-saving valve to older showers. An older shower can use up to 24 litres of water per minute, while a water-saving shower uses 6-10 litres per minute.<sup>28</sup>

#### O22 Training in efficient use of water

The business must have procedures for training employees in efficient use of water. New employees are to be trained within their first two months of employment.

Training in efficient use of water must include the following themes, as a minimum:

- Dishwashing
- Cooking
- Cleaning the kitchen
- $\square$  Procedures for training employees in efficient use of water.

#### Background to requirement concerning training and efficient use of water

Many restaurants have difficulty submitting accurate data on consumption. This is usually because the facility is part of a bigger property and therefore does not have its own water meter for measuring its specific consumption. This applies, for example, to restaurants in shopping centres or dining rooms in other, larger premises. It is therefore difficult to identify the precise level of consumption and this makes calculating the limit values for water a problem.

To be as resource-efficient as possible, it is important that staff are informed about how they should work in order to consume as little water as possible. Therefore, those restaurants that are unable to measure their own consumption or choose their own equipment are required to have procedures in place to train their staff to be water-efficient when it comes to cleaning the kitchen, cooking and dishwashing. Staff should be aware of the procedures that apply and why they need to follow the procedures.

### 10 Waste requirements

#### 10.1 General waste, limit value for waste management

#### O23 Amount of general waste

The business must state the amount of general waste generated from daily operations, expressed in kilograms per year. The data is to be provided from the waste management contractor.

<sup>&</sup>lt;sup>27</sup><u>https://www.divello.com/wp-content/uploads/Product-Data-Sheet-Divello-Classic-Aerator-ECONOM.pdf</u>

<sup>&</sup>lt;sup>28</sup> <u>https://www.enok.no/enokguiden/07\_2.html</u>

General waste means all unsorted waste that arises from daily operations and is sent to landfill or for incineration.

Businesses that are unable to obtain information on the amount of general waste in kg per year must obtain written confirmation from their waste management contractor that it is not possible to source data on general waste and its weight. The business must then draw up an action plan containing targets and associated measures with a constant focus on reducing the amount of general waste from daily operations. The action plan is to be approved by Nordic Ecolabelling. "O24, Limit value for general waste" will not be relevant.

**Annual follow-up:** The business must document its general waste (kg/year), and compare it with the preceding year, if Nordic Ecolabelling requests this at annual follow-up of the licence.

Documentation of the past year's general waste in kg, for example an invoice or information from the waste management contractor.

Annual reporting of general waste, if Nordic Ecolabelling requests this information.

## If the business is unable to obtain information on the amount of general waste in kg per year

- Documentation from the waste management contractor, confirming that it is not possible to source data on general waste and its weight.
- Action plan containing targets and measures for reducing the amount of general waste from daily operations.

#### Background to requirement concerning amount of general waste

It is important that the business has control over the amount of general waste, and we therefore require monitoring of annual consumption, to ensure compliance with the "limit value for general waste". General waste is to be measured in kg per year, and in the annual follow-up the amount is to be compared with the preceding year. An increase in the amount of general waste could be due to higher numbers of visiting guests, renovation work, major events and so on.

In generation 4 of the criteria, Nordic Ecolabelling required that businesses whose waste management contractor was unable to measure their general waste should carry out their own measurements of general waste. However, the quality of in-house measurements was variable, and the weight figures were in some cases unrealistic. The decision was therefore taken to move away from in-house measurements and instead require the business to document the fact that the waste management contractor is unable to supply measurement data. The business must demonstrate that they are working actively to minimise the amount of general waste, by having an action plan containing targets and measures.

#### O24 Limit value for general waste

The business must meet the limit value for the annual amount of general waste per guest as set out in the table below. The requirement applies to all general waste that arises from daily operations.

If the limit value is not met at the time of application/renewal of the licence, a grace period of 12 months from issuing of the licence will be given in order to achieve the limit value. In this case, an action plan must be drawn up with measures and targets for achieving the limit value. The action plan will be followed up by Nordic Ecolabelling over the course of the period, and the limit value will be checked after 12 months.

Table 9Limit value for general waste

Business	Limit value	
Hotel	0.10 kg/hotel guest	
Food service	0.30 kg/guest served	
Catering	0.20 kg/catering portion	
Conference facility	0.10 kg/conference guest	

If the business combines several operations, general waste is calculated using the following formula: Limit value for whole business together = (0.10 kg/guest \* no. of hotel guests) + (0.30 kg/guest \* no. of guests served) + (0.20 kg/catering portion \* no. of catering portions) + (0.10 kg/guest \* no. of conference guests).

 $\mathcal{A}$  Calculations showing that the limit is fulfilled.

#### Where relevant

Action plan with measure and targets for achieving the limit value for general waste.

#### Background to requirement concerning waste

The operation of hotels, food services and conference facilities generates large quantities of waste. Food services in particular are major sources of waste, in the form of packaging and food waste. We therefore set strict requirements to ensure that the businesses focus on generating as little waste as possible, while at the same time ensuring that the waste that does arise is sorted so that it can be sent for recycling. The requirement does not apply to those businesses that are unable to obtain information on the amount of general waste in kg per year.

By setting strict limit values for general waste, we ensure that the business has good procedures for sorting into different waste fractions, while at the same time maintaining a focus on keeping down amounts of waste. We have tightened all the limit values compared with the previous generation of the criteria:

Figure 4 Business	Figure 5 Old limit value	Figure 6 New limit value	
Hotel	0.20 kg/hotel guest	0.10 kg/hotel guest	
Food service	0.80 kg/guest served	0.30 kg/guest served	
Catering	0.80 kg/catering portion	0.20 kg/catering portion	
Conference facility	0.20 kg/conference guest	0.10 kg/conference guest	

Table 10 Tightening of limit values

We are reducing the limit value for hotel and conference guests by 50%, while at the same time reducing the limit value for guests served and catering portions by more than 60%. Over the course of the past few years, it has become standard to sort out organic waste, and this is why we are tightening the requirements for guests served and catering portions by so much.

If the requirement is not met at the time of application, we are open to the possibility of the business establishing and implementing an action plan demonstrating that measures are being taken to ensure compliance with the requirement within a year. The nature of the action plan will vary depending on the kind of business involved, but improved procedures for waste management and increasing the level of sorting are likely to be key measures.

Businesses that have their waste weighed by a waste management contractor must conduct regular checks of general waste levels.

It is important for the business to ensure that they always meet the limit value, which is why they must submit an annual report of how much general waste they generate.

#### O25 Sorting at source

The business must sort all waste generated in all the fractions offered by the waste management contractor, based on what is relevant for the business in question.

Table 11	Compulsory fractions per country
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Sweden	Norway	Denmark	Finland	Iceland
Clear glass	Glass and metal	Clear and coloured glass is mixed together	Mixed glass	Glass
Coloured glass				
Metal packaging		Metal waste	Metal packaging	Metal packaging
Organic waste	Food waste (organic waste)	Organic waste	Biowaste/organic waste	Organic waste
Garden waste	Park and garden waste (organic)	Garden	Garden waste	Garden waste
Paper	Paper	Paper	Paper	Paper
Corrugated board and paperboard	Board (corrugated and paperboard)	Cardboard	Board (corrugated and paperboard)	Cardboard
Paper packaging				
Rigid plastics	Rigid plastics	Rigid and soft plastics are combined, but may also be separate fractions	Rigid plastics in mixed waste/general waste	Plastics
Soft plastics	Plastic foils (soft plastics)		Plastic foils, plastic packaging	
Ceramics	Ceramics	Ceramics, landfill	Ceramics in mixed waste	Ceramics/inert waste
Cooking fat	Cooking oil	Cooking fat/oil	Cooking fat/oil	Cooking oil

- Food waste and other organic waste must be sent for biological processing/recycling, for example to produce biogas or compost.
- Other fractions are to be sent for material recovery. If certain fractions cannot be collected by the waste management contractor, these can be exempted from the requirement.
- Everyone is legally required to sort hazardous waste, which is why it is not mentioned in the list of fractions above. This includes, for example, electrical waste, small electronics, light bulbs and batteries, a large amount of which can be generated over the course of a year.
- $\checkmark$  Confirm which waste fractions are sorted.
- Confirmation from the waste management contractor, showing which fractions can, and possibly cannot, be sorted.
- Document the processing of food waste and other organic waste.
- $\boldsymbol{\mathcal{P}}$  On-site inspection.

#### Background to requirement concerning sorting at source

Nordic Ecolabelling sets strict requirements for waste to ensure that the businesses focus on generating the least possible amounts. The aim is also to encourage correct sorting of the fractions that are generated, to ensure the highest possible degree of recycling.

In addition, the requirements are set to make sure that the businesses constantly work on meeting the limit value for general waste, and that those who do not get their general waste weighed sort their waste as well as possible.

The number of fractions into which a business can sort its waste is not a measure of how good the business is at sorting its waste. The most important thing is to have good procedures in place so that staff carry out sorting correctly, thus enabling the waste to be recycled.

There are considerable national, and regional, differences in the fractions that the different waste management contractors accept. This is not something the businesses have any control over, and the requirement has therefore been adapted to take account of all the differences.

The previous generations of the criteria for hotels, restaurants and conference facilities have contained an obligatory requirement that the business must sort its waste into at least three of the following fractions: clear and coloured glass, metal, organic waste, paper, cardboard, rigid plastics and soft plastics. The requirement has thus been tightened, compared with generation 4, so that the businesses must sort their waste into all the fractions that are relevant to their business and that their local waste management contractor accepts/processes. Fractions that must be sorted by law are not included on the list. These are fractions that all businesses must sort.

#### O26 Waste sorting for guests

• **Hotel:** Guests must be able to sort their waste into at least 2 fractions, in addition to general waste, in the different areas of the hotel. This applies to guest rooms, reception and any public areas.

If it is not possible to offer waste sorting in guest rooms, staff must sort the waste into the fractions set out in the requirement concerning "sorting at source". If staff sort the waste, written procedures must be in place for the processing of waste, guests must be informed that their waste will be sorted, and Nordic Ecolabelling must be given an explanation as to why waste sorting in the guest rooms is not possible.

- **Conference facility:** Guests must, as a minimum, be able to sort paper and general waste. If food is served, the guests must also be able to sort food waste.
- **Food service:** If the guests deal with their used plates, cutlery and so on themselves, they must be able to sort both food waste and general waste, as a bare minimum. Clear instructions must be posted concerning waste sorting.
- Description of the facility for sorting into different fractions in different parts of the business. The requirement can also be documented with photos.
- Copy of guest information and staff procedures for sorting waste from guest rooms, if relevant.
- **ρ** On-site inspection.

#### Background to requirement concerning waste sorting

Nordic Ecolabelling wishes to encourage correct sorting of the waste generated by guests, to ensure a high degree of recycling. Having sorting facilities for several relevant fractions also sends a clear signal to guests that they are visiting an environmentally aware business.

**Hotel:** Nordic Ecolabelling requires two fractions in addition to general waste. It is up to the business to decide which two fractions are available to the guests for sorting, depending on which fractions the business has, and the physical conditions on site. We encourage sorting to be performed by the guests themselves, but understand that this can be a challenge, and that in some cases the best option is for sorting at source to be performed by the staff. If the guests are expected to sort the waste themselves, it is important to provide clear instructions about sorting.

**Conference facility:** It is important that guests can sort paper waste, since this is often generated at a conference. In cases where food is served, there must be an option for sorting organic waste, if the waste management contractor offers food waste as a fraction.

**Food service:** Where guests are required to deal with their used plates, cutlery and so on themselves, it is important to have an option for sorting food waste. Bearing in mind our requirement concerning "food waste", it is particular important that both guests and staff sort correctly.

### 10.2 Food waste

#### O27 Work on food waste

The business must work actively to reduce its food waste. Nordic Ecolabelling requires the following:

- **Responsible person:** The food service must have one person with main responsibility for food waste. For tips on measures to reduce food waste, see Appendix 1.
- **Measurement:** The food service must measure the quantity of food waste\* that arises. Food waste is to be measured by weight and related to the number of guests served. The measurement of food waste is to be carried out at least twice a year, for a minimum of two weeks each time.

\* Food waste covers all elements of food that are produced for human consumption, but that are either discarded or removed from the food chain for purposes other than human food, from the point when animals and plants are slaughtered or harvested.<sup>29</sup>

- **Annual follow-up of food waste:** The food service must document its food waste (weight per guest served), and compare it with the preceding year, if Nordic Ecolabelling requests this at annual follow-up of the licence. The measurement must take place in the same weeks/periods each year.
- **Analysis:** The food service must go through its food waste data and look out for trends concerning where the food waste occurs.
- **Information:** Through clear information, the food service must make its guests aware of their food waste, and if possible encourage the guests to help reduce the waste.
- **Training:** The food service must train its staff\*\* with the aim of reducing food waste. The training must include, as a minimum:
  - Training in the difference between avoidable and unavoidable food waste
  - o Training in measuring and reporting food waste
  - $\circ$  Training in analysing/investigating where the food waste occurs
  - Training in communicating with guests about how the food service works on food waste.

\*\* Staff means everyone who works in purchasing, menu planning, food preparation, food service, dishwashing and clearing up.

Nordic Ecolabelling can provide communication material on request.

Food waste may arise in a food service due to factors such as incorrect storage, incorrect preparation, overproduction, or waste at serving or on the plate.

Food waste may comprise food that is both fit and unfit for human consumption. Food waste that is unfit for human consumption refers to the parts that are inedible, such as bone remnants, shells, peelings, cores, etc. Food waste covers all elements of food that are produced for human consumption, but that are either discarded or removed from the food chain for purposes other than human food.

- Contact info: Name, email, job title/role of person with main responsibility for food waste.
- Description of how food waste measurements are performed and logged. Description of how the measurement periods are considered to be representative.

<sup>&</sup>lt;sup>29</sup> Industry agreement on reducing food waste between the authorities and the food industry in Norway: <u>https://www.regjeringen.no/contentassets/1c911e254aa0470692bc311789a8f1cd/matsvinnavtale.pdf</u>

- Documentation of the amount of food waste per guest.
- Annual reporting of food waste, with weight related to number of guests served, if Nordic Ecolabelling requests this information.
- $\boxtimes$  Description of the analysis of food waste data, focusing on how the food waste occurs.
- Copy of information for guests that clarifies the challenges surrounding food waste, how the food service works to reduce food waste, and how the guests may be able to help.
- $\square$  Description of how the food service trains its staff.

#### Background to requirement concerning food waste

Throwing away food is not sustainable. Food waste is a significant problem all over the world, with around a third of all the food produced ending up in the bin.<sup>30</sup> This is ethically indefensible, bad for the environment and makes little financial sense for business.

The aim of reducing food waste is incorporated in the UN Sustainable Development Goals (SDG), with Goal 12.3 expressing a target to halve food waste per person by 2030. All the Nordic countries are committed to this target. Food waste is already a priority theme in the food service industry. Nordic Ecolabelling therefore sees an opportunity to set strict requirements concerning food waste. We want Nordic Swan Ecolabelled businesses to take a conscious approach to food waste and contribute towards less food being thrown away.

The requirement has been developed in dialogue with Nordic food waste organisations, including Norwegian non-profit Matvett. Their "Guide for tracking food waste in the food service sector"<sup>31</sup> has been used in the development of the requirement.

The food waste being referred to here is avoidable food waste, which should not be confused with unavoidable food waste. Avoidable food waste is all the food that could have been eaten by humans, but for one reason or another has not been. Examples of avoidable food waste are brown bananas, stale bread, soft tomatoes, mouldy cheese, off yoghurt, inedible buffet leftovers and so on.

Unavoidable food waste is the inedible parts, such as bones, skin, shells, coffee grinds, potato peel, fish innards, etc. The aim is to use all the edible parts of the food, so that only unavoidable food waste is thrown away. If a large amount of edible food remains attached to inedible parts, for example meat on a bone, this is to be counted as avoidable food waste.

#### O28 Measures to reduce food waste

**Measures:** The food service must have put in place at least 2 measures to reduce food waste as set out in the table below:

<sup>&</sup>lt;sup>30</sup> Food and Agriculture Organization of the United Nations, FOA: <u>http://www.fao.org/save-food/resources/keyfindings/en/</u>

<sup>&</sup>lt;sup>31</sup> Veileder for kartlegging av matsvinn, 2018: <u>https://www.matvett.no/uploads/documents/OR.10.19-</u> <u>Veileder-for-kartlegging-av-matsvinn-serveringssektoren.pdf</u>

Measure	Description of measure
Own measures	The food service conducts its own measures to reduce food waste. The measures must be measurable.
Use of surplus produce	The food service uses surplus produce from growers or supermarkets, either regularly or on a fixed contract.
Sale of surplus food	The food service sells surplus food, either from its own premises, at a lower price, or through alternative sales channels.
Donation	The food service has a fixed agreement with an organisation to donate surplus food.

Table 12 Measures to reduce food waste

Own measures must be submitted to Nordic Ecolabelling for approval. The measures must be measurable. See "Tips on measures to reduce food waste" in Appendix 1 for inspiration. If a business conducts multiple measures of its own, these will count as multiple food waste reduction measures.

The food waste reduction measures must be maintained/updated on an ongoing basis.

 $\square$  Description of the measures implemented by the food service.

#### Background to requirement concerning measures for reducing food waste

Measuring food waste creates an awareness of how much food is being thrown away. It is essential, however, to focus on implementing measures to reduce the amount of food waste – measuring is not enough on its own. Nordic Ecolabelling wants the business to implement concrete measures to reduce food waste. The measures proposed are based on Matvett's resource pyramid<sup>32</sup>, and measures such as sending food off to be turned into animal feed, compost or biogas are therefore not approved in this context.



#### Tips on measures to reduce food waste

- "Nudging", which means encouraging behaviour that leads to less food waste without guests thinking about it (smaller plates, for example, are a nudge).
- Plate waste can be reduced by serving smaller portions of the main dish, smaller portions of optional sides, allowing guests to choose whether they want bread with their meal, using smaller plates, offering a doggie-bag, communicating with the guests, and so on.
- Buffet waste can be cut by reducing the selection on the buffet, reducing the size of serving dishes, optimising procedures for refilling, pricing by weight or size, having a good idea of the number of visitors, maintaining food at the

<sup>&</sup>lt;sup>32</sup> Veileder for kartlegging av matsvinn i serveringssektoren, 2018 s. 6: <u>https://www.matvett.no/uploads/documents/OR.10.19-Veileder-for-kartlegging-av-matsvinn-serveringssektoren.pdf</u>

correct temperature, etc. Another option would be to sell surplus food at a reduced price, or through alternative sales channels, or to donate the food to a charity.

- Preparation-related waste can be reduced through good menu planning, and good use of ingredients. Being inventive about the reuse of food is also a key factor. In this case, it is crucial to observe food safety rules.<sup>33</sup>
- Stock-related waste can be prevented by having good purchasing procedures, and having a good overview of what goods are already in stock. Optimal storage is also important, to prevent packaging being damaged, and fruit and vegetables from being crushed to pieces.
- The focus is often on what the food service can do to reduce its own waste. However, it is also possible to take the opposite approach and help someone else who has too much food waste, by using surplus food from producers or stores.

### 10.3 Disposable items

#### O29 Ban on disposable items across the whole business

The use of disposable items is not permitted.

In this instance, disposable items are:

- Plates, bowls, cups, glasses, and cutlery
- Drinking straws, cocktail sticks, and toothpicks in plastic
- Single portions and small packs (butter, jam, pâté, milk, coffee capsules, etc.)

### Businesses with hotel rooms are also subject to requirement O30. Businesses with takeaway, catering and fast food services are subject to certain exemptions from the requirement, see requirement O31.

- $\checkmark$  Confirmation that no disposable items are used by the business.
- $\boldsymbol{\rho}$  On-site inspection.

# Background to requirement concerning the ban on disposable items across the whole business

The aim of the requirement concerning disposable items is to reduce the consumption of disposable items and save on resources, as disposable items are often unnecessary, and they are used for only a few minutes. Businesses such as hotels, food services and conference facilities have good alternatives to the use of disposable items in serving situations, and Nordic Ecolabelling therefore has a ban in place.

<sup>&</sup>lt;sup>33</sup> Veileder for trygg gjenbruk av mat i serveringsbransjen:

https://www.matvett.no/uploads/documents/Veileder-for-trygg-gjenbruk-av-mat.pdf

The EU's Directive on the reduction of the impact of certain plastic products on the environment will enter into force on 3 July 2021<sup>34</sup>, at which point the requirement concerning cutlery, drinking straws, cocktail sticks and toothpicks in plastic will be governed by the directive.

As before, an exception has been made for food services that offer takeaway, catering and fast food. Such businesses need to be able to use disposable items.

#### O30 Disposable items not permitted in hotel rooms

The hotel rooms must not contain disposable items.

In this instance, disposable items are:

- Shampoo, conditioner, soap, lotion etc. that cannot be refilled
- Products that cannot be reused, such as slippers, shower caps, cotton buds, brushes, nail files, shoe polish, etc.
- Disposable cups and glasses
- Coffee and cocoa capsules

Single-portion packs of hot chocolate, tea, instant coffee, cocoa, and sugar and milk substitutes, in plastic or paper, are permitted.

It is permitted to provide disposable items on request, and have them available in reception, for example.

Confirmation that no disposable items are used in hotel rooms.

 $\boldsymbol{\mathcal{P}}$  On-site inspection.

# Background to requirement concerning disposable items not permitted in hotel rooms

Nordic Ecolabelling has introduced a total ban on disposable items in hotel rooms. This is because they are an unnecessary use of resources, and there are plenty of good alternatives. Disposable glasses and cups can be replaced with actual glass and ceramic alternatives, and toiletries can be offered in refillable containers. Other disposable products such as slippers, shower caps, cotton buds, brushes, nail files, shoe polish, sewing kits and so on are not products that all hotel guests need, and the latter disposable products should therefore not be available in the guest rooms.

It is, however, permitted to offer the guests disposable items in reception, if the guests have forgotten something or have specific requirements. The requirement also does not apply to single-portion packs of hot chocolate, tea, instant coffee, cocoa, and sugar and milk substitutes, in plastic or paper, making it possible to offer guests a hot drink if they want one. Stirring stick in renewable material, as well as paper coasters are permitted.

A ban on coffee and cocoa capsules is a new addition to the proposed criteria. This has been suggested in light of the EU's increased focus on reducing the use of disposable items. We generally set strict requirements concerning disposable items, and it is therefore also relevant to set a requirement for capsules. A great

<sup>&</sup>lt;sup>34</sup> DIRECTIVE (EU) 2019/904 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 5 June 2019, on the reduction of the impact of certain plastic products on the environment

deal of packaging waste is created through the use of such capsules. The capsules are usually made up primarily of aluminium and grounds, and tend to end up in general waste, rather than being sorted out and sent off for special recycling. The recycling of capsules therefore relies on the people using the product sorting them correctly, and on the capsules being sent off, or delivered to an approved drop-off point. The capsules are designed to use primary aluminium, which means that recycled aluminium is not used in the production of new capsules.

The requirement concerning "disposable items not permitted in hotel rooms" has previously been a point score requirement that has earned many points. This is because such a ban conflicted with international star rating schemes, creating a situation in which a hotel might have to choose between an extra star or the Nordic Swan Ecolabel.

# O31 Disposable items in contact with food and drink, for takeaway, catering and fast-food services

Disposable items in metal, such as aluminium, are not approved.

Disposable items made of biodegradable/compostable plastic that cannot be recycled, such as polylactic acid (PLA), are not approved.

 $Cardboard/paper\ products\ with\ a\ window\ in\ biodegradable/compostable\ plastic\ are\ exempt\ from\ the\ requirement.$ 

Disposable items used by the business for takeaway, catering and fast-food services must:

• be Nordic Swan Ecolabelled. Nordic Swan Ecolabelled disposable items are rewarded in "Purchase of ecolabelled products and services"

#### And/or

• be made from renewable raw materials such as paper, cardboard, bagasse, palm leaves, etc.

#### And/or

• be made from bio-based plastic that can be recycled in current recycling systems for plastics

#### And/or

• comprise a minimum of 50% recycled fossil-based plastic\*\* that can be recycled in current recycling systems for plastics

\* Bio-based plastic is a plastic that is based on renewable raw materials, for example bio-based polyethylene (PE). Recycled bio-based plastic is a plastic that can be recycled in current recycling systems for plastics.

\*\* Disposable items that contain recycled fossil-based plastic require documentation confirming a minimum of 50% recycled content, and must be marked with the "food safe" symbol of a wine glass and a fork.

- Confirmation that no disposable items made of metal, or biodegradable plastic that cannot be recycled, are used.
- Overview of all the disposable items purchased, and information about the Nordic Swan Ecolabel and licence number, ingoing materials such as renewable raw materials and the proportion of recycled content, plus the "food safe" wine glass and fork symbol.

### *ρ* On-site inspection.

Background document, consultation

Nordic Ecolabelling

# Background to requirement concerning disposable items in contact with food and drink

The requirement has been amended and tightened up. We do not permit metal disposable items, as there are now good alternatives for serving hot foods – the area where this is particularly relevant.

The requirement concerning the ban on biodegradable plastic that cannot be recycled is new for this generation of the criteria. Nordic Ecolabelling wishes to promote products made from renewable raw materials. However, the waste phase is considered an important parameter, since disposable items generate large amounts of waste. Compostable/degradable plastics such as PLA cannot be recycled in today's systems and can also present problems for the existing recycling of materials. These compostable/degradable plastics therefore do not match the EU's objective of increased recycling in the circular economy. Composting and biogas facilities do not wish to have these plastics either, as they create problems in the facilities. Any material other than organic waste is discarded before the composting or biogas process. Nordic Ecolabelling has therefore proposed that products made entirely of plastic cannot include compostable/biodegradable plastics, if they are to be used by a Nordic Swan Ecolabelled food service.

Nordic Ecolabelling wishes to point out that the requirement can be adjusted if, in the future, a recycling system is created for compostable/degradable plastics.

Compostable/biodegradable or other types of plastic may, however, be used in cardboard/paper products as plastic windows, for example in a baguette/bread bag. In such cases the plastic will still be sorted and sent for incineration, as the situation is today. It is thus exempted from the requirement. These products are relevant for use where the whole point is that the food should be visible.

The permitted disposable items are those that are Nordic Swan Ecolabelled or comprise renewable raw materials, bioplastic or 50% recycled fossil-based plastic, if the products in plastic can be recycled in current plastic recycling systems. Nordic Ecolabelling wishes to set requirements that ensure a greater degree of recycling, so that the materials can be used again and so contribute to the circular economy. The EU's Waste Framework Directive introduces a waste hierarchy indicating an order of preference for legal and political action to prevent and manage waste, and is usually presented diagrammatically in the form of a pyramid. The most important action is to prevent waste, followed by preparation for reuse, recycling, energy recovery and disposal. The aim is for the waste to be dealt with as close to the top of the hierarchy as possible. The EU document "Closing the loop – An EU action plan for the Circular Economy"<sup>35</sup> highlights increased recycling and material recovery as a key factor in the circular economy. Nordic Ecolabelling therefore believes it is important to have recycling requirements. It should also be noted that incineration with energy recovery is not considered recycling or material recovery.

<sup>&</sup>lt;sup>35</sup> 5 Closing the loop – An EU action plan for the Circular Economy, European Commission 2015 <u>https://eur-lex.europa.eu/legal-content/FR/TXT/HTML/?uri=CELEX:52015DC0614&from=EN</u>

## 11 Sustainable food and drink

Hotels that only serve breakfast, snacks and simple meals are exempt from the requirements of "O34 Vegetarian dish" and "O35 Measures to promote food with low carbon footprint".

#### O32 Table serving of water

The serving of bottled water is prohibited where the business has table service of food and drink. In this instance, bottled water means still water bottled offsite. The requirement does not apply to carbonated water.

Exempt from the requirement: Sales of bottled water via room service, takeaway, catering, fast-food, and a hotel shop.

Restaurants that have both table service and take away can sell water but must also have tap water clearly visible as an alternative for their guests.

 $\mathcal{A}$  Confirmation that water bottled off-site is not served.

 $\boldsymbol{\rho}$  On-site inspection.

#### Background to requirement concerning drinking water

Water bottled off-site has a significantly larger climate and environmental footprint compared with the same amount of water from the tap. Tapwater ensures savings on materials for packaging and bottles, plus energy and emissions from production and transport. The water supply in the Nordic region is safe, fresh and pleasant, so it is basically unnecessary to buy water, if tapwater is available. The requirement does not apply to carbonated water.

The sale of bottled water is permitted in situations other than as part of table service – for example via room service, catering, takeaway, fast-food, a hotel shop, or reception. Food services such as canteens that sell food and drink over the counter and have both table service and takeaway are permitted to sell bottled water but must also have tap water clearly visible as an alternative for their guests.

The requirement was previously a point score requirement but has since been tightened and is now obligatory.

#### O33 Minimum threshold for proportion of organic food and drink

Differentiated requirements have been set in this area, due to the varying access to organic\* goods in the Nordic countries:

- **Danish food services:** At least 30% of the annual purchase volume must be organic, based on purchase value or weight.
- **Swedish food services:** At least 20% of the annual purchase volume must be organic, based on purchase value or weight.
- Norwegian food services: At least 10% of the annual purchase volume must be organic, based on purchase value or weight.
- **Finnish food services:** At least 20 organic products must be permanent features of daily service.
- **Icelandic food services:** At least 10 organic products must be permanent features of daily service.

\* Organic means food and drink labelled in accordance with Regulation (EC) 834/2007\*\*, KRAV, Luomu, Nyckelpigan, Debio, Statskontrollert økologisk (Ø-merket), Demeter or Tún-lífrænt.

\*\* On 01.01.2021, Regulation (EC) 834/2007 will be replaced with (EU) 2018/848.

# Calculating the proportion of organic food and drink for food services in Denmark, Sweden, and Norway:

- MSC-labelled fish and shellfish cannot be labelled as organic but can be included in the calculation if the food service wishes, although it must not exceed 50% of the calculated amount.
- It is up to the licence applicant to decide whether to include drinks in the calculation. In this instance, drinks mean mealtime drinks such as carbonated drinks, fruit juice, juice drinks, wine, beer, and cider, with or without alcohol, plus spirits.
- Mineral water and other products that cannot be labelled as organic must be taken out of the calculation.
- If the food service buys in wild game meat, this can be deducted from the total purchase value. Deer, wild boar, reindeer, and other animals that are farmed/reared do not count as wild game.

# Calculating the proportion of organic products for Iceland and Finland:

- An organic product must be a permanent feature of daily service in order to count as 1 product.
- It is fine to count several different organic products within one product category (e.g. two types of cheese/juice/bread/wine, etc.).
- Different flavours of herbs and spices and all kinds of tea only count as 1 product.
- Different types of milk such as oat milk and almond milk count as separate products, while milk from the same type of brand/producer, such as low-fat and extra low-fat milk, count as 1 product.
- MSC-labelled fish and shellfish cannot be labelled organic but can be included in the calculation if the food service wishes, although it must not exceed 50% of the product number.
- Seasonal produce that is only available at certain times of the year must be replaced with other organic products to count.
- Danish food services: Calculation showing that least 30% of the annual purchase volume is organic. The calculation must contain data from at least 3 months of purchases, either in DKK or kg. If the food service is approved by Det Økologiske Spisemærke to gold, silver, or bronze level, this may be used as documentation.
- Swedish food services: Calculation showing that least 20% of the annual purchase volume is organic. The calculation must contain data from at least 3 months of purchases, either in SEK or kg. If the food service is KRAV-certified to level 1 (using KRAV's percentage option), or level 2, this may be used as documentation.

- Norwegian food services: Calculation showing that least 10% of the annual purchase volume is organic. The calculation must contain data from at least 3 months of purchases, either in NOK or kg. If the food service is approved by Debio to silver or gold level, this may be used as documentation. If the food service is approved by Debio to bronze level, this is acceptable if Debio's percentage option is used.
- **Finnish food services:** Documentation showing which organic products are permanent features of daily service. See "Examples of how to count products".
- ☑ Icelandic food services: Documentation showing which organic products are permanent features of daily service. See "Examples of how to count products".
- If the applicant does not meet the requirement at the time of application, an action plan approved by Nordic Ecolabelling is required, showing that the minimum threshold will be met within the next year. The requirement and documentation will be followed up by Nordic Ecolabelling.
- $\boldsymbol{\rho}$  On-site inspection.

#### P4 Organic food and drink (max 5 points)

#### Denmark, Sweden, and Norway:

The food service will be awarded points according to the proportion of organic food and drink purchased on an annual basis.

#### **Finland and Iceland:**

The food service will be awarded points according to how many organic food and drink products are permanent features of daily service.

POINTS	NORWAY, %	SWEDEN, %	DENMARK, %	FINLAND, NO.	ICELAND, NO.
5	>30	>40	>60	>50	>40
4	≥25–<30	≥35–<40	≥50–<60	41-50	31-40
3	≥20–<25	≥30–<35	≥40–<50	31-40	21-30
2	≥15–<20	≥25–<30	≥35–<40	25-30	16-20
1	>10-<15	>20-<25	>30-<35	20-25	10-15

Table 13 Points table for organic food and drink

#### Background to requirement concerning organic food and drink

The aim of the requirement is to increase the proportion of organic food in the business.

Achieving the UN Sustainable Development Goals requires a transition to more sustainable food and farming systems that maintain ecosystems, are better

adapted to climate change, and improve soil quality.<sup>36</sup> Organic farming is one way to achieve this.<sup>37,38</sup>

Organic farming places an emphasis on ecological balance, local ecocycles and ecological, economic and social sustainability over the long term.<sup>39</sup> Organic methods increase biodiversity and thus help to maintain ecosystem services on which agriculture depends.<sup>40,41,42</sup> The UN's nature panel IPBES also advocates organic farming as a system for promoting biodiversity and ecosystem functions.<sup>43</sup> The UN's climate panel IPCC points out that organic farming can contribute to sustainable land management.<sup>44</sup>

Organic methods lead to higher numbers of active microorganisms in the soil, which give better soil health and soil quality.<sup>45</sup> Artificial pesticides and fertilisers are not permitted, because they have a negative impact on biodiversity, and can leach into groundwater, rivers and seas, thus affecting water quality.

Building up fertile soil and combating weeds and pests instead involves a system of crop rotation with more perennial plants, companion planting, cover crops and green manure, and less tillage of the soil.<sup>46</sup> This also contributes to biodiversity, prevents soil erosion and creates the conditions for carbon storage in the ground. Biological means of controlling pests and mechanical weed prevention methods are usually used. In livestock farming, an emphasis is placed on animal welfare and on the animals being able to exhibit their natural behaviour.

www.ifoam.bio/sites/default/files/organic3.0 v.2 web 0.pdf

<sup>&</sup>lt;sup>36</sup> UN, 'UN Sustainable Development Goals' www.fn.no/Om-FN/FNs-baerekraftsmaal [2 March 2020] <sup>37</sup> Eyhorn F, Muller A, Reganold JP, Frison E, Herren HR, Luttikholt L, Mueller A, Sanders J, Scialabba NEH, Seufert V, Smith P (2019) Sustainability in global agriculture driven by organic farming. Nature Sustainability 2:253-255. https://doi.org/10.1038/s41893-019-0266-6

<sup>&</sup>lt;sup>38</sup> Reganold JP, Wachter JM (2016) Organic agriculture in the twenty-first century. Nature Plants 2(2):15221 https://doi.org/10.1038/nplants.2015.221

<sup>&</sup>lt;sup>39</sup> Arbenz M, Gould D, Stopes C (2016) Organic 3.0 – for truly sustainable farming and consumption, IFOAM Organics International, Bonn and SOAAN, Bonn.

<sup>&</sup>lt;sup>40</sup> Tuck SL, Winqvist C, Mota F, Ahnström J, Turnbull LA, Bengtsson J (2014) Land-use intensity and the effects of organic farming on biodiversity: a hierarchical meta-analysis. Journal of Applied Ecology 51:746-755. https://doi.org/10.1111/1365-2664.12219

<sup>&</sup>lt;sup>41</sup> Rahmann G (2011) Biodiversity and Organic Farming: What do we know? vTI Agriculture and Forestry Research 3(61):189-208. Metaanalysis of 766 studies.

www.fao.org/fileadmin/user\_upload/suistainability/pdf/11\_11\_28\_OA\_biodiversity\_Rahmann.pdf <sup>42</sup> Dainese M et al. (2019) A global synthesis reveals biodiversity-mediated benefits for crop production. Science Advances 5(10) eaax0121. https://doi.org/10.1126/sciadv.aax0121

<sup>&</sup>lt;sup>43</sup> IPBES (2019) Summary for policy makers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services.

https://ipbes.net/sites/default/files/inline/files/ipbes\_global\_assessment\_report\_summary\_for\_policymak ers.pdf

<sup>&</sup>lt;sup>44</sup> IPCC (2020) Summary for policy makers. In: Climate Change and Land: an IPCC special report on climate change, desertification, land degradation, sustainable land management, food security, and greenhouse gas fluxes in terrestrial ecosystems.

www.ipcc.ch/site/assets/uploads/sites/4/2020/02/SPM\_Updated-Jan20.pdf 45 Lori M, Symnaczik S, Mäder P, De Deyn G, Gattinger A (2017) Organic farming enhances soil microbial abundance and activity - A meta-analysis and meta-regression. PLoS ONE 12(7):e0180442. https://doi.org/10.1371/journal.pone.0180442

<sup>&</sup>lt;sup>46</sup> Scialabba NEH (2013) Organic Agriculture's Contribution to Sustainability. USDA Organic Farming Systems Research Conference. Conference Proceedings. www.fao.org/3/a-aq537e.pdf

### Other discussion points

The greatest criticism levelled against organic farming concerns land use, and the question of whether organic farming can produce enough food to feed the world. Switching to 100% organic farming globally would require more land than conventional farming due to lower yields (at least in industrial nations; in developing nations use of organic farming methods has proven to produce better yields), but there would be less excess nitrogen, and less use of pesticides.<sup>47</sup> If food waste was reduced and food was grown on land that is currently used to grow animal feed, more space would not necessarily be needed.<sup>47</sup> Switching to organic could cut emissions of greenhouse gases, but getting enough nitrogen could be a challenge.<sup>47</sup>

It is uncertain whether organic farming is currently helping to cut emissions of greenhouse gases. Literature reviews from Switzerland and Germany show that when the EU's LCA guidelines are followed, greenhouse gas emissions for organic and conventional foodstuffs are on a par for each kg of product.<sup>48</sup>,<sup>49</sup> Both organic and conventional farming have scope for improvement in this area. Organic methods help to store more carbon in the ground, which increases soil quality, but it does not necessarily deliver much of a climate impact.<sup>50</sup>

#### **Differentiation of Nordic requirements**

Sales of organic food and drink have risen steadily in recent years across the Nordic region. However, there are major differences between the countries. Nordic Ecolabelling has therefore tightened all the minimum thresholds for organic food and drink products but has continued with differentiated requirements for each of the Nordic countries. Finland and Norway have seen a strong percentage growth in organic food in recent years but are still a long way behind Sweden and Denmark. Denmark has led the way in organic sales per person<sup>51</sup>, while Sweden has led the way in switching to organic farming and is also the best in the Nordic region at public sector procurement. <sup>52</sup> Food services with a higher proportion of organic food and drink than the compulsory threshold is rewarded with points. During the annual follow-up, it may be relevant for Nordic Ecolabelling to conduct random checks of the requirement. Food services that are part of a chain can obtain points at chain level, if they choose to

<sup>48</sup> Meier MS, Stoessel F, Jungbluth N, Juraske R, Schader C, Stolze M (2015) Environmental impacts of organic and conventional agricultural products – Are the differences captured by life cycle assessment? Journal of Environmental Management 149:193–208. <u>https://doi.org/10.1016/j.jclepro.2017.05.041</u>
 <sup>49</sup> Treu H, Nordborg M, Cederberg C, Heuer T, Claupein E, Hoffmann H, Berndes G (2017) Carbon footprints and land use of conventional and organic diets in Germany. Journal of Cleaner Production 161:127–142. <u>https://doi.org/10.1016/j.jclepro.2017.05.041</u>

<sup>51</sup> Bioforsk Report Vol. 9 Nr.139 2014 Økologisk mat i de nordiske landene - tilgang på råvarer og faktorer som påvirker omsetning av økologisk mat, 2014

<sup>&</sup>lt;sup>47</sup> Muller A, Schader C, Scialabba NEH, Brüggemann J, Isensee A, Erb KH, Smith P, Klocke P, Leiber F, Stolze M, Niggli U (2017) Strategies for feeding the world more sustainably with organic agriculture. Nature Communications 8:1290. <u>https://doi.org/10.1038/s41467-017-01410-w</u>

 <sup>&</sup>lt;sup>50</sup> Gattinger A, Muller A, Haeni M, Skinner C, Fliessbach A, Buchmann N, Mäder P, Stolze M, Smith P, Scialabba NEH, Niggli U (2012) Enhanced top soil carbon stocks under organic farming.
 PNAS 109(44):18226–18231. <u>https://doi.org/10.1073/pnas.1209429109</u>

http://orgprints.org/30184/1/BIOFORSK%20RAPPORT\_9\_139\_2014%20%C3%98kologisk%20mat%20i %20de%20nordiske%20landene.pdf

<sup>&</sup>lt;sup>52</sup> EKOMATCENTRUM MARKNADSRAPPORT Ekologiskt i offentlig sektor 2019, http://ekomatcentrum.se/wp-content/uploads/2019/06/Rapport-Marknadsrapport-EMC-2019-2.pdf

document purchases of organic products as an average in % (at chain level, for those businesses in the chain that are applying for the Nordic Swan Ecolabel).

The background to the major Nordic differences is complex, including various political strategic initiatives, trends and demand, plus price versus profitability.

The Nordic countries have different organic certification systems for food services. These certification systems are based on slightly different definitions of what can be considered organic, and what should be included in the calculation when working out the percentage of organic purchases. Nordic Ecolabelling has therefore chosen a single Nordic definition of organics in our criteria, and a common calculating system for those that measure organic purchases as a percentage and for those that "count" the number of organic products. The requirement is also formulated in such a way that Danish, Swedish and Norwegian food services can document the requirement via a certificate from a national organic labelling scheme, if they wish.

Iceland lacks sales statistics for organic products, but there is certainly a growing range available in supermarkets. The country has been through an economic crisis that has led to significant price rises for food generally, which may have affected demand for organic food.<sup>51</sup> There are few Icelandic producers with organic certification, and it can therefore be difficult to get hold of "fresh produce" that is organic and Icelandic. However, there is growing demand for other organic goods. Nordic Ecolabelling has therefore chosen to tighten the requirement somewhat by increasing from 5 to 10 products that must be served daily by Icelandic food services.

Minimum thresholds have only been developed for the Nordic region. If businesses outside the Nordic region wish to apply for the Nordic Swan Ecolabel, Nordic Ecolabelling will consider the possibility of developing requirements for the region in question.

There was previously an organic food requirement for the Baltic states, but there has been little interest from applicants, and therefore requirements for the Baltic states have not been included in this generation of the criteria.

#### Examples of how to count products in Iceland and Finland:

- One red wine and one white wine, from the same producer = 2 products
- Two red wines from the same producer = 2 products (as the wines may suit different types of food)
- Two types of orange juice from two different producers = 2 products (as there are two different producers, and one may be served at breakfast, for example, and one on the à la carte menu)
- One apple juice and one orange juice = 2 products
- Bread: one rye bread and one white loaf = 2 products
- Whole milk, low-fat milk, extra low-fat milk, skimmed milk, cream, soured milk and cultured milk are regarded as separate products for counting purposes
- Natural yoghurt with 3% fat and natural yoghurt with 0.3% fat = 1 product
- One type of tea and one type of green tea = 1 product (as this is a narrow product type, the decision is that all teas are to be counted as one product)
- Different types of coffee = 1 product

- MSC-labelled fish, different fish species = multiple products (If the business has cod, coley, salmon and prawns that are MSC-labelled, these count as 4 products if the products are a permanent feature of daily service)
- Seasonal produce that is only served during certain parts of the year can only be counted if it is replaced with other organic products when the season is over.
- NOTE: Products that are a fixed feature of a weekly menu may be counted, in consultation with Nordic Ecolabelling, even if they are not served daily, seven days a week for example, if organic chicken/fish is on the menu four out of seven days a week.

#### P5 Locally produced food and drink (max 2 points)

The food service is awarded points for each category in which they have one or more locally produced\* products. To earn points, the products must be available all year round. Seasonal produce that is only available at certain times of the year must be replaced with other local produce at other times of the year in order to count.

Each category gives 0.5 points:

- Dairy products (milk, cheese, etc.)
- Eggs
- Grains and baking ingredients
- Fruit and berries
- Vegetables, root vegetables and mushrooms
- Drinks (juice, beer, etc.)
- Poultry (chicken, turkey, etc.)
- Fish and seafood
- Meat (beef, pork, lamb, goat, wild game, etc.)
- Other (honey, oil, herbs, etc.)

\* In order for food and drink to count as locally produced, all production, rearing, hunting, harvesting, picking, processing and storage must take place within 250 km of the business. For businesses north of 62°N, the limit is 500 km. For fish, the distance that counts is from the fishing port. There must be full traceability along the supply chain from the food service back to the producer/place of production. If the product is processed/semi-processed, documenting the main ingredient is sufficient.

- Confirmation and overview of purchased locally produced products and categories that earn points.
- Confirmation from the supplier, showing the origin of the products.
- $\boldsymbol{\rho}$  On-site inspection.

# Background to point score requirement concerning locally produced food and drink

Achieving the UN Sustainable Development Goals requires a transition to more sustainable food and farming systems, according to the UN and other

international organisations.<sup>53</sup> Development of local production is part of this. Nordic Ecolabelling therefore wishes to reward those food services that choose to support local food production.

Today's system means that large amounts of food are produced for global markets, but the production is dependent on external inputs and requires considerable resources.<sup>54</sup> This has led to environmental problems such as deforestation, water shortages, soil depletion, loss of biodiversity and increased greenhouse gas emissions.<sup>54</sup> In recent years, the UN and its Food and Agriculture Organization (FAO) have promoted agroecology as the path to more sustainable farming.<sup>55</sup> This is a holistic system that applies organic principles to promote biodiversity and ecosystem services, and takes account of the economic and social aspects of food systems. Several UN reports and research projects on sustainable food production state that agriculture based on local resources and knowledge, local needs, local innovation, small-scale farming and short supply chains is a vital component of any sustainable food system of the future.<sup>54, 56, 57, 58, 59, 60</sup>.

Several environmental factors support the promotion of locally produced food in the Nordic region, although not all of them apply to all production in every Nordic country.

Much of the region's biodiversity can be found on farmland. Local food production helps to maintain the cultural landscape and to increase the diversity of wild species, habitats and cultivated plants.<sup>61</sup> Ecosystem services are retained, and the farming becomes more robust. Sales to local markets can encourage farmers to produce a greater variety of crops.<sup>62</sup>

With fruit and vegetables, particularly potatoes and other root vegetables, transport accounts for a large proportion of the environmental impact over their life cycle.<sup>61</sup> Use of local, seasonal produce means that less energy is used and greenhouse gas emissions are lower.<sup>63</sup> When it comes to meat, transport makes up only a small part of the overall environmental impact, but the Nordic region

<sup>&</sup>lt;sup>53</sup> www.fn.no/Om-FN/FNs-baerekraftsmaal

<sup>&</sup>lt;sup>54</sup> www.fao.org/3/i9037en/i9037en.pdf

<sup>&</sup>lt;sup>55</sup> http://www.fao.org/agroecology/home/en/

 <sup>&</sup>lt;sup>56</sup> http://www.srfood.org/images/stories/pdf/otherdocuments/20130918\_UNCTAD\_en.pdf
 <sup>57</sup> Global summary for decision makers:

www.globalagriculture.org/fileadmin/files/weltagrarbericht/IAASTDBerichte/GlobalSDM.pdf

<sup>58</sup> http://www.ipes-food.org/\_img/upload/files/CFP\_FullReport.pdf

<sup>&</sup>lt;sup>59</sup> www.iddri.org/sites/default/files/PDF/Publications/Catalogue%20Iddri/Etude/201809-ST0918ENtyfa.pdf

 <sup>&</sup>lt;sup>60</sup> http://www.naturvardsverket.se/Documents/publikationer6400/978-91-620-6842-4.pdf?pid=23308
 <sup>61</sup> Charlotte Lagerberg Fogelberg, På Väg Mot Miljöanpassade Kostråd. Vetenskapligt Underlag Inför Miljökonsekvensanalysen Av Livsmedelsverkets Kostråd (Swedish National Food Agency)
 <https://www.livsmedelsverket.se/globalassets/publikationsdatabas/rapporter/2008/2008\_livsmedelsverk et 9 miljoanpassade kostrad.pdf>.

<sup>&</sup>lt;sup>62</sup> Johanna Björklund and others, 'Local Selling as a Driving Force for Increased On-Farm Biodiversity', Journal of Sustainable Agriculture, 33.8 (2009), 885–902

<sup>&</sup>lt;https://doi.org/10.1080/10440040903303694>.

<sup>&</sup>lt;sup>63</sup> Valérie Masson-Delmotte and others, Climate Change and Land. An IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse Gas Fluxes in Terrestrial Ecosystems (IPCC, 2019) <www.ipcc.ch>

and Europe generally have low carbon emissions per kilo of protein produced, compared with other regions.  $^{64}$ 

#### O34 Vegetarian dish

The food service must have one or more vegetarian\* main courses on the menu, for both lunch and dinner.

\* Vegetarian means food from the plant kingdom such as grain products, vegetables, fruit, berries, potatoes, nuts, and seeds, but also dairy products, eggs, honey and so on.

Copy of menu and/or description of what is served.

#### Background to requirement concerning vegetarian dishes

Vegetarian produce has a lower climate footprint and requires significantly less energy and land to generate the same amount of protein and energy, compared with meat production.  $^{65}$ 

Agriculture and forestry account for almost a quarter of the world's greenhouse gas emissions and cause a great amount of damage to and depletion of the planet's resources. A new report<sup>66</sup> from the UN's climate panel states that we need to implement radical changes in order to make agriculture more sustainable. They recommend, for example, that we change how we produce food, manage land and eat. The recommendation is to switch to a more plant-based diet, which will also reduce greenhouse gas emissions. Nordic Ecolabelling wishes to see Nordic Swan Ecolabelled food services contributing to demand for plantbased food, and therefore sets requirements in this area.

The criteria cover several different types of food service, and some of them, such as canteens, may not serve hot food. These food services often have a simple offering that includes baguettes and a salad buffet. To meet the requirements, bread products with vegetarian/vegan fillings may be approved, along with salad buffets that contain high-protein ingredients, such as beans, lentils, pasta, rice, couscous, tofu, pearl barley and so on. Note that this only applies to food services that serve cold food.

Where hot food is served, there must always be a hot vegetarian/vegan option. This means that a food service that serves hot food one day a week will not have its salad buffet approved as a vegetarian option on the day of the week that hot food is served.

#### O35 Measures to promote food with low carbon footprint

The food service must put in place at least two of the measures set out in the table below.

Food services that only serve vegetarian food or fish meet the requirement.

<sup>&</sup>lt;sup>64</sup> P.J. Gerber and others, Tackling Climate Change through Livestock. A Global Assessment of Emissions and Mitigation Opportunities (Food and Agriculture Organization of the United Nations (FAO), 2013) <a href="http://www.fao.org/3/a-i3437e.pdf">http://www.fao.org/3/a-i3437e.pdf</a>>.

<sup>&</sup>lt;sup>65</sup> Lagerberg-Fogelberg. 2008. På väg mot miljöanpassade kostråd- vetenskapligt underlag inför miljökonsekvensanalysen av Livsmedelsverkets kostråd. Report, 2008:9. Swedish National Food Agency, and Röös. 2012. Köttguiden 2012 – kloka val för miljö och djurvälfärd Utkast 2012-10-10. Swedish University of Agricultural Sciences (SLU).

<sup>&</sup>lt;sup>66</sup> IPCC Special Report on Climate Change, Desertification, Land Degradation, Sustainable Land Management, Food Security, and Greenhouse gas fluxes in Terrestrial Ecosystems. 2019. Chapter 5.

Description
Own measurable measures
One or more vegetarian days a week
Reduced use of meat in fixed recipes
Better balance of portions (for example a smaller burger and more vegetables)

 Table 14
 Measures to promote food with a low carbon footprint

Own measures must be submitted to Nordic Ecolabelling for approval. The measures must be measurable.

 $\boxtimes$  Description of the measures implemented by the food service to promote food with a low carbon footprint.

#### Where relevant

 $\mathcal{A}$  Confirmation that the food service only serves fish or vegetarian food.

## Background the requirement concerning measures to promote food with a low carbon footprint

Nordic Ecolabelling wishes to encourage food services to implement measures that promote food with a low carbon footprint. The focus is on measures that the food service has control over, and the food service has the freedom to be inventive and come up with its own measures to reduce the purchase of products based on animal protein. The action they take must be measurable, and it can be relatively simple, and something that can easily be communicated to guests and staff. Measures might include moving away from food packaged in Asia, having one meat-free day a week, reducing the meat content in selected recipes, better use of ingredients, and so on.

#### O36 Sustainable fish and shellfish

A: These species, which are endangered, must not be served by a Nordic Swan Ecolabelled food service:

- shark
- all species of skate
- wild-caught sturgeon
- endangered Atlantic bluefin tuna
- eel

An exception is made in Iceland for traditional serving of the shark species Somniosus microcephalus and the skate species Dipturus batis / Raja batis and Raja Amblyraja radiata.

B: These species, which are threatened, must not be served if they are fished in the stated country (status on country's red list of endangered species in brackets):

Fish species	Country
Catfish	Sweden (EN)
Halibut	Sweden (EN)
Redfish	Norway (EN)
Sea trout	Finland (EN)
Brown trout	Finland (EN)
Rabbit fish	Sweden (EN)
Roundnose grenadier*	Sweden (CR)
White ling*	Sweden (EN)
Pollack	Sweden (CR)
Blue ling*	Norway (EN)
European weather loach / Misgurnus fossilis*	Denmark (CR)
European whitefish	Finland (EN)
Landlocked salmon*	Finland (CR)
Arctic char*	Finland (CR)
Grayling*	Finland (CR)

Table 15 "B-list" (critically endangered (CR), endangered (EN))

C: Tropical prawns, i.e. scampi, must not be served.

Bycatch of species on list A, B or C must not be served. MSC-labelled fish and shellfish may always be served.

Labels for standards other than MSC may be used if Nordic Ecolabelling has approved them. The standards must meet Nordic Ecolabelling's requirements for sustainability labelling of raw ingredients from fish and shellfish. ASC is currently not approved.

The list of non-sustainable seafood may be revised if new information is received.

For an overview of all the fish species in different Nordic languages, see Appendix 2.

- Describe the procedures that the food service has in place to ensure fulfilment of the requirement. Serving of fish on the B-list requires full traceability back to the fishery.
- $\boldsymbol{\rho}$  On-site inspection

#### Background to requirement concerning sustainable fish and shellfish

Marine ecosystems are threatened by overfishing, eutrophication, pollution and climate change. The fact that many fish stocks are overfished affects not only the individual stocks, but whole ecosystems. According to the UN's nature panel IPBES, overfishing is the key cause of diversity loss in the oceans.<sup>67</sup> This is followed by changes to land use. In freshwater, the order is reversed. To avoid use of the most endangered species of fish and shellfish and species that are produced in a not particularly eco-friendly way, Nordic Ecolabelling has drawn up a three-part list of species that cannot be served:

<sup>&</sup>lt;sup>67</sup> IPBES (2019) Summary for policymakers of the global assessment report on biodiversity and ecosystem services. <u>www.ipbes.net/global-assessment-report-biodiversity-ecosystem-services</u> (15.08.2019)

A: Species categorised as critically endangered (CR) or endangered (EN) on the red list of the International Union for Conservation of Nature (IUCN)<sup>68</sup>. Several of the species are also on the OSPAR list of threatened and/or declining species. There is a ban on serving any species of shark or skate, even though not all of them are endangered, since there is a great deal of incorrect labelling.

B: Species categorised as critically endangered (CR) or endangered (EN) on the official red list of the country in which they are fished. Finland, Norway and Sweden have national red lists for both saltwater and freshwater fish, Denmark has a red list only for freshwater fish, and Iceland has no red list. Species that are new to the list in version 5.0 of the criteria are marked\*.

C: Tropical prawns. These are not on the IUCN's list, but must not be served because their fishing and farming causes major environmental problems, such as destruction of mangrove forests.<sup>69,70</sup> Mangrove forests are highly productive ecosystems that are home to a huge number of species of fish, shellfish and other animals. They also protect the coasts against flooding and erosion.

Fish and shellfish in category A, B or C may in some cases come from sustainable fisheries or farms. In order for these species to be served, their sustainable production must be documented. They must therefore be certified to standards that meet Nordic Ecolabelling's requirement concerning standards (link to standards requirement). Nordic Ecolabelling currently approves the MSC standard, but not ASC.

An exception is made in Iceland for traditional serving of the shark species Somniosus microcephalus and the skate species Dipturus batis / Raja batis and Raja Amblyraja radiata, because these are traditional dishes served on one day of the year. The shark is served in February and the skate on 23 December. In total, 8 tonnes of the shark species, 145 tonnes of the skate species Raja batis and 614 tonnes of the species Raja Amblyraja radiata are caught each year.<sup>71</sup>

### Why does Nordic Ecolabelling not currently approve ASC?

Nordic Ecolabelling assesses standards for raw ingredients when the licensee wishes to use them. Up until now, we have therefore only assessed the ASC standard for tropical prawns (Shrimp) (version 1.0, March 2014). At that time, we judged that it does not meet our requirements concerning standards. These were the reasons:<sup>72</sup>

- The standards do not contain financial requirements and requirements concerning food safety, something that we require a standard to contain.
- The standard makes no mention that international law/conventions (apart from for chemicals) must be followed. There is only one requirement

<sup>70</sup> Richards DR, Friess DA (2016) Rates and drivers of mangrove deforestation in Southeast Asia,

<sup>68</sup> https://www.iucnredlist.org/

<sup>&</sup>lt;sup>69</sup> Thomas N, Lucas R, Bunting P, Hardy A, Rosenqvist A, Simard M (2017) Distribution and drivers of global mangrove forest change, 1996–2010. PLoSONE 12(6): e0179302. https://doi.org/10.1371/journal.pone.0179302

<sup>2000–2012.</sup> PNAS 113(2):344–349. https://doi.org/10.1073/pnas.1510272113

<sup>&</sup>lt;sup>71</sup> Statistics Iceland: <u>https://statice.is/statistics/business-sectors/fisheries/catch/</u>

https://sharepoint.nordicecolabel.org/archive/Nordisk%20Miljmrkning/Tvärgående%20Tema/Skogsbruko a/Fisk/Handläggning%20fisk/ASC/Notat\_ASC\_2015-12-08.docx

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concerning legality, and that requires local and national legislation to be followed.

- The standard does not contain definitions of the vocabulary used, which makes it vague and open to interpretation.
- It has absolute requirements relating to biodiversity, but these are weak and open to exceptions. It is difficult to see whether the standard really has requirements that are important for the preservation of biodiversity.

The tropical prawns standard is under review. There is also a standard for Salmon – 3.1.7 (Sea Lice). Four of the other ASC standards were revised in 2019 (Freshwater trout, Pangasius, Salmon – Smolt [Section 8] and Salmon PTI (Parasiticide Treatment Index). ASC also launched two new standards in 2019 (Tropical marine finfish and Flatfish), and two new standards are under development (Feed and ASC Farm).

We will assess the revised ASC standard for tropical prawns if requested by a licensee. The same applies to the other ASC standards.

### O37 Palm oil

Palm oil must not make up any part of the frying oil used by the food service.

- Confirmation that the frying oil used by the food service is free from palm oil.
- $\boldsymbol{\rho}$  On-site inspection.

#### Background to requirement concerning palm oil

Different products have different effects, and Nordic Ecolabelling has a particular focus on palm oil. The establishment of palm oil plantations is one of the main causes of rainforest destruction, which threatens the living conditions of indigenous people, plants and animals. The rainforests are particular important for biodiversity, since they are the most species-rich ecosystems on the planet. Cutting down rainforest is also a serious threat to Earth's climate. Other environmental problems relating to palm oil are the use of toxic substances in production, air pollution when burning native forest, soil erosion and sedimentation in rivers and watercourses, and discharges of wastewater from the palm oil mills. Palm oil production is also associated with social issues, including the risk of workers' rights being violated.

To reduce the use of palm oil, a ban is proposed on the use of palm oil in frying oil, which is a product that kitchens often use in large quantities.

Nordic Ecolabelling has assessed the Roundtable on Sustainable Palm Oil's (RSPO) standard for sustainable palm oil production and judges that it does not fully satisfy our requirements concerning sustainability standards, since it does not give sufficient protection to biological areas and biodiversity. Nordic Ecolabelling therefore wishes to set as strict a requirement as possible concerning palm oil, where there are alternatives to its use.

In product groups where there are still no alternative ingredients or good controls, there is a requirement that the ingredients must hold RSPO certification. In cases where it is difficult to avoid palm oil, certification and the

RSPO standard are considered the best tools on the market for more sustainable production.

#### O38 Ban on genetically modified food (GMO)

Nordic Swan Ecolabelled food services are prohibited from using or serving genetically modified food\*.

The food service must have procedures in place to ensure that genetically modified food is not purchased.

\* Genetically modified food is food that, under national legislation, is labelled as containing genetically modified ingredients or ingredients produced from genetically modified organisms (GMO). Particularly relevant products are those based on soya, maize, rapeseed, or sugar beet.

Procedures to ensure that the business does not serve food that, under national legislation, is labelled as containing genetically modified ingredients or ingredients produced from genetically modified organisms (GMO).

#### Background to requirement concerning a ban on GMO

GMO (genetically modified organisms) are a much-debated topic and many countries have banned the cultivation of GM crops. The themes of the debate include food safety, land use, lack of scientific knowledge about the effects of GM crops under local agricultural/forestry conditions and the risk of negative impacts on health and the environment. Nordic Ecolabelling applies the precautionary principle and bases its decisions on regulations that take a holistic approach to GMO. This means that sustainability, ethics, and social benefit are weighed up together with health and the environment. Nordic Ecolabelling is not, in principle, against gene technology and GMO in itself, but is concerned about the consequences of genetically modified plants, animals and microorganisms spreading in nature. Nordic Ecolabelling believes that GMO should be assessed on a case-by-case basis.

Research results have not clearly proven that today's GM plants contribute towards the development of sustainable agriculture with less use of pesticides, and there is a lack of research on the long-term effects of genetically modified plants, including both environmental and socio-economic consequences. There are potential adverse effects of GMO along the entire value chain from research and development of plants, through cultivation, to storage, use and waste management.<sup>73</sup> There is a lack of scientific research concerning several of these phases, plus a lack of wide-ranging assessments.<sup>73,74,75,76</sup> Today's GMOs are also tailored to industrial farming by businesses that have established something of a monopoly, and Nordic Ecolabelling wishes to help limit the negative consequences of this.

There is a legal requirement in the EU, Norway and Iceland that all food containing genetically modified ingredients, or ingredients produced from

 <sup>&</sup>lt;sup>73</sup> Catacora-Vargas G (2011): Genetically Modified Organisms – A Summary of Potential Adverse Effects Relevant to Sustainable Development. Biosafety Report 2011/02, GenØk – Centre for Biosafety.
 <sup>74</sup> Kolseth et al (2015) Influence of genetically modified organisms on agro-ecosystem processes. Agriculture, Ecosystems and Environment. 214 (2015) 96–106.

<sup>&</sup>lt;sup>75</sup> Fischer et al. (2015) Fischer et al. (2015): Social impacts of GM crops in agriculture: a systematic literature review. Sustainability 7:7.

<sup>&</sup>lt;sup>76</sup> Catacora-Vargas G et al. (2018): Socio-economic research on genetically modified crops: a study of the literature. Agriculture and Human Values 35:2

genetically modified organisms, must be labelled as such. Food made from genetically modified organisms, but that no longer contains DNA, must also be labelled. This applies, for example, to cooking oils. Additives such as enzymes, amino acids and vitamins that are produced using genetically modified microorganisms are not in themselves GMOs. They therefore do not require labelling, and their use is permitted in food at Nordic Swan Ecolabelled food services. These products are manufactured in closed systems at factories, and Nordic Ecolabelling therefore does not consider their production to be problematic.

#### P6 No use of genetically modified feed (1 point)

The food service earns 1 point if all the basics – milk, eggs and meat\* – come from animals that have not been fed genetically modified feed\*\*.

\* Pure meat products, not including processed meat such as ham and so on.

\*\* Feed that, under national legislation, is labelled as containing genetically modified ingredients or ingredients produced from genetically modified organisms (GMO).

#### This means:

- Food marked with an organic label, Swedish Sigill, VLOG / Ohne gentechnik or an equivalent label meets the requirement
- Food from producers who have contracts with farmers concerning the use of GMO-free feed
- Food from farmers who can document that they use GMO-free feed
- Food from countries where genetically modified feed is not used. This is milk, eggs and meat from Norway and Sweden, milk from Finland and lamb from Iceland. These are countries where the relevant producers have taken a nationwide decision to use GMO-free feed. (No genetically modified feed is approved in Norway.)
- Procedures that ensure the exclusive purchase of milk, meat and eggs that are marked with an organic label, Swedish Sigill, VLOG / Ohne gentechnik or equivalent labels; that are from producers who have contracts with their suppliers concerning the use of GMO-free feed; that are from farmers who can document with an invoice/delivery note that they use GMO-free feed; or that are produced in countries where genetically modified feed is not used (applies to milk, eggs and meat from Norway and Sweden, milk from Finland and lamb from Iceland).

# Background to point score requirement concerning no use of genetically modified feed

Nordic Swan Ecolabelled food services are subject to a requirement concerning GMO-free food. In many countries, consumers want to be able to choose GMO-free food and food from animals that are not raised on GMO feed. The reason is that they want to be able to choose whether they support the use of GMO in farming. In Denmark, Sweden and Finland, certain producers and supermarket chains offer milk, eggs and meat from animals that have not eaten GMO feed. GMO is not present in animal feed in Norway and Sweden, all Finnish milk comes from cows fed on GMO-free feed, and lambs in Iceland are also not allowed to eat genetically modified feed. In all these countries, the relevant producers

have taken a nationwide decision to use GMO-free feed. No genetically modified feed is approved in Norway either.

Legislation in the EU, Norway and Iceland requires labelling of food and feed that contains genetically modified ingredients, but there is no such requirement for the labelling of food from animals that have been given genetically modified feed. The Swedish guidelines for public sector procurement contain a voluntary requirement that beef and chicken must come from animals fed on GMO-free feed.<sup>77</sup> When a Nordic Swan Ecolabelled food service uses milk, eggs and meat from animals that have not eaten genetically modified feed, this gives consumers an extra opportunity to choose GMO-free that they would not otherwise have under current legislation.

While all Norwegian and Swedish food is produced using GMO-free feed, the range of milk, eggs and meat from entirely GMO-free production chains has also risen in the rest of the Nordic region over the past few years. The selection of processed products is also on the rise but remains small. The requirement therefore only relates to the basic goods of milk, eggs, and meat. The requirement also does not cover fish, but this will be reviewed in the next revision.

## 12 Consumption of chemicals

#### O39 Purchasing of chemicals

- **Responsible person:** The business must have one person with main responsibility for the purchasing of chemicals.
- **Purchasing procedures:** The business must have procedures in place for the purchasing of chemicals to ensure that the business only uses approved chemicals and dosing equipment as set out in the chapter "Consumption of chemicals". The procedures must also ensure that the business informs Nordic Ecolabelling if the person responsible for this area changes.
- $^{\circ}$  Name, email, phone number and job title of responsible person.
- $\square$  Purchasing procedures for chemicals.

#### Background to requirement concerning purchasing of chemicals

It is important that the business has good purchasing procedures in place and a person who is responsible for purchasing chemicals, to ensure that only approved chemicals are purchased, in order that Nordic Ecolabelling's strict chemical requirements are fulfilled throughout the validity period of the licence.

#### O40 Information on chemicals

Overview of all the chemicals expected to be used in the future. For each chemical, state the name, manufacturer, function, frequency of use and ecolabel, where relevant. Appendix 3 may be used.

<sup>&</sup>lt;sup>77</sup> <u>https://www.upphandlingsmyndigheten.se/hallbarhet/stall-hallbarhetskrav/livsmedel/kott/notkott/gmo-fritt-foder/#spjutspets</u> (30.01.2020). The text is due to be updated in March 2020.

Safety data sheets and user information must be available wherever the chemicals are used.

**Annual follow-up:** The business must submit a report on all the chemical products purchased, if Nordic Ecolabelling requests this at annual follow-up of the licence.

- Overview of all the chemicals used by the business. Name, manufacturer, function, frequency of use and ecolabel (where relevant). Appendix 3 or spreadsheet may be used.
- Confirmation that user information and safety data sheets (in line with Annex II to REACH, Regulation (EC) 1907/2006) are available within the business.
- $\boldsymbol{\rho}$  On-site inspection.
- 요 Annual reporting of purchased chemicals if Nordic Ecolabelling requests this information.

#### Background to requirement concerning information on chemicals

Nordic Ecolabelling requires a total overview of all the chemicals used by the business. This is in order to understand the demand for and function of the individual chemicals, and to ensure that chemicals that do not meet Nordic Ecolabelling's requirements are not used. The chemicals must meet the other chemical requirements in the chapter.

It is important that the safety of the employees who will be using the chemicals is taken seriously, which is why there is a requirement that safety data sheets and user information must be available wherever the chemicals are used.

#### O41 Ecolabelled chemicals

100% of the products used for general cleaning, dishwashing and internal laundry must be ecolabelled.

Ecolabelled chemicals are products that carry the Nordic Ecolabel, the EU Ecolabel or the Bra Miljöval (Good Environmental Choice) label.

**Concerning cleaning:** The requirement applies to products used for general cleaning, at least twice a week, on all flooring and surfaces, as in guest rooms, conference rooms, kitchens, bathrooms, toilets, public areas and staff offices.

The following do not fall into the general cleaning category: Floor treatments, descalers, swimming pool chemicals, dishwasher and coffee machine cleaners, drain cleaner, metal polish, freezer room cleaners, stainless steel polish, oven cleaner, grill cleaner, steel cleaner, chewing gum remover, stain remover for carpets and interiors.

**Concerning dishwashing:** The requirement applies to all detergents used in dishwashers and for manual dishwashing. Rinsing agents and descalers are excluded.

**Concerning internal laundry:** The requirement applies to all laundry chemicals (including fabric softeners) used to launder textiles within the business itself.

Ecolabelled chemicals are documented as part of "O40 Information on chemicals".

#### Background to requirement concerning ecolabelled chemicals

Nordic Ecolabelling sets a strict requirement that ecolabelled products must be used for dishwashing, laundry, and daily cleaning, since the market has a wide choice of ecolabelled products in all categories. The chemicals requirement has been amended and tightened in relation to the previous generation. Ecolabelled products are products that carry the Nordic Ecolabel, the EU Ecolabel or the Bra Miljöval (Good Environmental Choice) label.

Chemical consumption has a major influence on the environmental impact of the business. A large amount of chemicals are used in businesses such as hotels, restaurants and conference facilities, particularly businesses with a lot of food service and associated dishwashing. The environmental impact can be reduced by using chemicals that contain minimal amounts of undesirable ingoing substances, and by dosing correctly. The requirements concerning chemicals in daily use therefore focus on this.

#### O42 Dosing

All chemicals used for general daily cleaning, dishwashing and laundry are to be dosed automatically or manually using dosing equipment.

- Overview/description of the dosing equipment used for the different chemicals. Appendix 3 may be used. Photos can also be used as documentation.
- $\mathcal{P}$  On-site inspection. Service reports from checks of automatic dosing equipment are to be available for inspection.

#### Background to requirement concerning dosing

Correct dosing makes sure that no more than the necessary amount of chemicals is used, and also ensures more reliable cleaning. Businesses with good procedures for dosing save both money and the environment.

Dishwasher detergents often account for a significant proportion of the chemicals used by a business, and an automatic system for dosing of dishwasher detergent is recommended. Automatic systems are often installed by the chemical supplier, and tend to come as standard on professional dishwashers. Automatic dosing devices are also recommended for chemicals used in daily cleaning, if the conditions are in place to set up a system that can mix water and chemicals into a solution ready for use. This ensures that no more than the necessary amount of chemicals is used. Manual dosing also works if the right equipment is used, but requires the introduction of good procedures, which are followed up, to ensure that the equipment is used correctly.

#### P7 Nordic Swan Ecolabelled laundry service (3 points)

Businesses that use a Nordic Swan Ecolabelled laundry service are awarded 3 points.

To obtain the points, the majority of the business' laundry must be cleaned by the Nordic Swan Ecolabelled laundry service. Internal laundering of mops and cloths is fine.

If using a non-ecolabelled laundry service, requirement O43 must be fulfilled.

- つ Confirmation of a contract with a Nordic Swan Ecolabelled external laundry service.
- □ Licence number and name of laundry service.

#### O43 Requirement for businesses with a non-ecolabelled external laundry service

- **Explanation:** Businesses that are unable to use a Nordic Swan Ecolabelled laundry service must explain why.
- **Chemicals:** Non-ecolabelled chemicals used by the laundry service to launder the business' textiles must meet the requirement concerning other chemicals, O44. The chemical requirements in O44 must be documented by the chemical manufacturer.
- **Procedure:** The business must have a procedure in place to request a Nordic Swan Ecolabelled laundry service in a procurement context.
- Explanation of why the business is unable to use a Nordic Swan Ecolabelled laundry service, and the name of the laundry service used.
- Overview of the chemicals used by the non-ecolabelled laundry service to launder the business' textiles, plus the name of the chemical supplier.
- Procedure showing that a Nordic Swan Ecolabelled laundry service is requested in a procurement context.

#### Background to requirements concerning Nordic Swan Ecolabelled and nonecolabelled external laundry services

Nordic Ecolabelling would like the business to use a Nordic Swan Ecolabelled laundry service, if an external laundry service is going to be used. This is because a Nordic Swan Ecolabelled laundry service is more energy-efficient, saves water and has a lower environmental impact than other laundry services. They use chemicals that meet strict chemical and health requirements, and a large proportion of the textiles they purchase are ecolabelled or meet the Øko-Tex Standard 100. They also reduce the environmental impact that arises from distribution.<sup>78</sup>

Choosing an ecolabelled laundry service makes a sizeable difference, and the distribution between the laundry and the customer is of less environmental significance than many people think. A life cycle assessment of towel rolls<sup>79</sup> shows that distribution accounts for 5% and the laundry accounts for 80% of the energy consumption over the life cycle<sup>80</sup>.

If it is not possible to use a Nordic Swan Ecolabelled laundry service, the business must explain why, and meet our chemical requirement OX for the chemicals used to launder the textiles of the business. In addition, they must

<sup>&</sup>lt;sup>78</sup> Background document for Nordic Swan Ecolabelled Textile Services, version 4.0, 12 June 2018 – 30 June 2023

<sup>&</sup>lt;sup>79</sup> Schmidt, A. (2000): Life cycle assessment of towel rolls (3rd ed.). dk-TEKNIK ENERGY & ENVIRONMENT

<sup>&</sup>lt;sup>80</sup> Frydendal, J; Schmidt, A. & Zeuthen, J. (2000): Towel rolls in a life cycle perspective. Sophus Berendsen A/S & dk-TEKNIK ENERGY & ENVIRONMENT

request a Nordic Swan Ecolabelled laundry service in a procurement context, to ensure demand for ecolabelled laundries.

#### O44 Other chemicals

Other chemicals\* used regularly by the business must meet the requirements concerning hazard classification and ingoing substances. The requirement also applies to laundry detergents used by non-ecolabelled laundry services. (Documentation is not necessary if a Nordic Swan Ecolabelled laundry service is used.)

\* Other chemicals used regularly by the business are rinsing agents, descalers, drain cleaners, floor treatments, disinfectants, oven and grill cleaners and air fresheners.

Exceptions: Cleaning products used for maintenance, such as dishwasher and coffee machine cleaners, metal polish, freezer room cleaners, stainless steel polish, floor care products and stain removers for carpets and interiors, are exempted from the requirement.

#### Hazard classification:

Other chemicals must not be classified in any of the hazard categories set out in the table below.

Table 16 Classification of chemi
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CLP Regulation 1272/2008					
Hazard statement	Hazard category	Hazard code			
Hazardous to the aquatic environment	Acute category 1 Chronic categories 1-4	H400*, H410*, H411, H412, H413			
Acute toxicity	Categories 1-4	H300, H310, H330, H301, H311, H331, H302** H312**, H332**			
Specific target organ toxicity – single or repeated exposure	STOT SE categories 1-2 STOT SE Category 3 (solely applies to spray products) STOT RE category 1-2	H370, H371, H372, H373 H335 (solely applies to spray products***)			
Serious eye damage/eye irritation	Category 1 (solely applies to spray products)	H318 (solely applies to spray products***)			
Aspiration hazard	Category 1	H304			
Sensitisation on inhalation or skin contact	Category 1/1A/ 1B	H334, H317 or labelled with EUH 208: "Contains 'name of the sensitising substance'. May cause an allergic reaction".****			
Carcinogenic	Category 1A/1B/2	H350, H351			
Germ cell mutagenicity	Category 1A/1B/2	H340, H341			
Reproductive toxicity	Category 1A/1B/2	H360, H361, H362			

\* An exception is made for products that are classified as environmentally hazardous due to their content of quaternary ammonium compounds.

\*\* Professional products may be labelled H302, H312 and H332 if the packaging is designed so that the user is not in contact with the product.

This also applies to products where the classification is the result of containing oxalic acid (CAS no. 144-62-7) or peracetic acid (CAS no. 79-21-0). These are exempted from the requirement.

\*\*\* Products in spray bottles or equivalent equipment with nozzles that do not form a cloud of spray may be labelled H335 and H318.

\*\*\*\* Laundry detergents that are labelled H334, H317 or labelled with the EUH 208 statement "Contains (name of the sensitising substance). May cause an allergic reaction" due to enzyme content are exempted. It is assumed, however, that the enzymes are encapsulated or in a slurry.

#### Substances that may not be included:

Other chemicals must not contain the following substances:

• Chlorinated organic compounds and hypochlorites

Chlorinated compounds whose use is required by the authorities, for example to clean shower heads in Norway, are exempted from the requirement.

- Alkylphenol ethoxylates (APEO) and/or alkylphenol derivatives (APD)
- Linear alkylbenzene sulphonates (LAS)
- BHT (butylated hydroxytoluene, CAS no. 128-37-0)

An exception is made for BHT in fragrances at an amount of  $\leq 100 \text{ ppm}$  on condition that the amount in the cleaning agent does not exceed 1 ppm.

• EDTA and its salts

Solid soap products (such as e.g. soap flakes) may be included with a maximum overall content of up to 0.06% EDTA and phosphonates.

- DTPA
- Nanomaterials/particles

Nanomaterial/particles are defined in accordance with the European Commission's definition of nanomaterial dated 18 October 2011 as "a natural, incidental or purposely manufactured material containing particles, in an unbound state or as an aggregate or as an agglomerate and where, for at least 50% of the particles in the number size distribution, one or more external dimensions is in the size range 1–100 nm". Examples include ZnO, TiO2, SiO2, Ag and laponite with particles of nanosize at concentrations above 50%. Polymer emulsions are not considered to be a nanomaterial.

- Poly- and perfluorinated alkylated substances (PFAS) Floor care products are exempt from the requirement.
- Methyldibromo glutaronitrile (MG)
- Microplastics

Microplastic means particles with a size of below 5 mm of insoluble macromolecular plastic, obtained through one of the following processes: (a) a polymerisation process such as polyaddition or polycondensation or a similar process using monomers or other starting substances

(b) chemical modification of natural or synthetic macromolecules

(c) microbial fermentation.

- Nitromusk and polycyclic musk compounds
- Substances considered to be potential endocrine disruptors in category 1 or 2 on the EU's official priority list. The full list can be found at http://ec.europa.eu/environment/chemicals/endocrine/pdf/final\_report\_20 07.pdf (Appendix L, page 238 ff)
- Substances evaluated by the EU to be PBT (persistent, bioaccumulable and toxic) or vPvB (very persistent and very bioaccumulable), in accordance with the criteria in Annex XIII of REACH, and substances that have not been assessed yet, but fulfil these criteria.
- Substances on the Candidate List: http://echa.europa.eu/candidate-list-table
- Substances classified as CMR (categories 1 and 2) in accordance with CLP.

The requirements apply to all ingoing substances in the product, but not to impurities unless stated otherwise in a specific requirement. Ingoing substances and impurities are defined below.

**Ingoing substances**: All substances in the product, including additives (e.g. preservatives and stabilisers) in the raw materials. Substances known to be released from ingoing substances (e.g. formaldehyde, arylamine, in situgenerated preservatives) are also regarded as ingoing substances.

**Impurities**: Residues, pollutants, contaminants etc. from production, incl. production of raw materials that remain in the raw material/ingredient and/or in the product in concentrations less than 100 ppm (0.0100 wt%, 100 mg/kg) in the product

Impurities in the raw materials exceeding concentrations of 1.0% are always regarded as ingoing substances, regardless of the concentration in the product.

Examples of impurities are residues of reagents incl. residues of monomers, catalysts, by-products, scavengers (i.e. chemicals that are used to eliminate/minimise undesirable substances), and detergents for production equipment and carry-over from other or previous production lines.

- See requirement concerning "Information on chemicals".
- Appendix 4, declaration from the manufacturer, for each chemical used.
- Safety data sheet in line with Annex II to REACH (Regulation (EC) 1907/2006), for each chemical used.
- If the product is labelled H302, H312 or H332, a description or photo of the packaging's design must be enclosed.
- Declaration that products classified as H318 and H335 are not to be used in spray bottles in either diluted or undiluted form (see Appendix 4).

#### Background to requirement concerning other chemicals

The requirement has been amended in relation to the previous generation. Nordic Ecolabelling has now chosen to specify the types of products that must meet the requirements concerning hazard classification and substances that must not be included. Cleaning products used for maintenance, typically of equipment such as coffee machines and so on, are exempt from the requirement. Fabric softeners and silver polish are not included in the text of the criteria, as ecolabelled versions of these are available. The market offers fabric softeners with the Bra Miljøval label and silver polish with the EU Ecolabel. Fabric softeners are also considered a product whose use is unnecessary in this context.

Use of chemicals is of great significance to the environmental impact of the business. Hotels, food services and conference facilities need to be able to use a number of other chemicals for purposes other than daily cleaning. Although the products may only be used periodically, their volume over the course of a year can mount up. There are therefore strict requirements concerning other chemicals, as these products often contain ingoing substances that are harmful to health and the environment and that we wish to avoid. The requirement concerning other chemicals that cannot be ecolabelled has been set on the basis of Nordic Ecolabelling's objective to reduce ecotoxic substances in the aquatic environment, and in order to safeguard the working environment.

The hazard classification table and the list of substances that may not be included have been updated in accordance with the CLP regulation and harmonised with the requirements for Nordic Swan Ecolabelling of "Cleaning products" and "Cleaning services". In comparison with the previous generation of the criteria for hotels, restaurants and conference facilities, the requirement has been tightened somewhat, and some exemptions have been added.

The requirement in the previous generation did not include the chemical usage of external laundry services. In this revision, we have chosen to include and set requirements concerning the chemicals used by external laundry services that are not ecolabelled. This is because large amounts of chemicals are used to launder the business' textiles, and the environment will be affected whether the laundering takes place internally or externally. We wish to promote the use of ecolabelled laundry services, but where this is not possible, we have set requirements concerning the chemicals used.

We have chosen to include air fresheners in the list of other chemicals for which we set requirements. This is a new addition to show consideration for guests and employees since such products often contain allergenic fragrances. The requirement is new in relation to the previous generation, as these products were often approved as specialist cleaning products, whereby 5% could be exempt from all requirements.

#### O45 Water treatment

Purifying all the water coming into the business is not permitted. In this instance, purification refers to the use of chemicals, biocides or ionisation, e.g. copper-silver ionisation.

An exception is made if an independent third party has conducted a risk assessment, and can document the need for water treatment.

The chemicals used in this case must meet the requirement concerning "Other chemicals", O44. Safety data sheets and Appendix 4 are to be provided as documentation.

Confirmation that no chemicals are used by the business to treat the water.

#### Where relevant

- Risk assessment or equivalent, which documents the need for water treatment.
- Appendix 4, declaration from the manufacturer, for each chemical used.
- Safety data sheet in line with Annex II to REACH (Regulation (EC) 1907/2006), for each chemical used.

#### Background to requirement concerning water treatment

Nordic Ecolabelling does not wish Nordic Swan Ecolabelled businesses to treat their water supply, unless there are specific circumstances that make this necessary. Greater levels of biocides and heavy metals such as silver and copper ions in the water can contribute to increased antibiotic resistance.

Water treatment that is applied to all the water coming into a business means that all the drinking water and water for cooking contains larger amounts of harmful chemicals than are strictly necessary. The requirement is new, and we have seen a need to introduce it, since we have received information that several businesses in Norway use biocides to treat all the water supplied to their business, without there being any documented need for this. The treatments are often carried out as a preventive measure against Legionella.

The Norwegian regulation on environmental health protection<sup>81</sup> states that businesses (such as hotels) have a duty to provide sufficient protection against the spread of Legionella via aerosol. A risk assessment is to be carried out and procedures put in place to ensure that the operation and maintenance of the business provides satisfactory protection against Legionella. The Norwegian Institute of Public Health offers help with risk assessments, advice and guidance on surveys and management.

The Norwegian Institute of Public Health recommends that all water in water heaters should regularly be heated to at least 70 degrees Celsius. A properly designed system and established operational procedures that ensure good circulation and sufficiently high water temperatures and low cold water temperatures are the best insurance against the growth of Legionella bacteria. In addition, hot water systems, and in some cases cold water systems, must be cleaned and disinfected under the following circumstances:

- As part of a plan drawn up based on risk assessments and if routine inspections and analyses indicate that this is necessary
- If the system has been out of use for more than a month, such as at a hotel in low season
- If a system or parts of it have been subject to significant changes or been opened for maintenance purposes in such a way that the risk of Legionella growth has increased
- During or after an outbreak or suspected outbreak of Legionnaire's disease, but only after samples have been taken to check for Legionella bacteria<sup>82</sup>

### 13 Purchasing of ecolabelled goods and services

- O46 Purchasing of ecolabelled printed matter, tissue paper and copy/printing paper
  - **Printed matter:** 100% of outsourced printed matter ordered by the business must be from an eco-labelled printing company. The business must have procedures for requesting ecolabelled printed matter when placing an order.

<sup>&</sup>lt;sup>81</sup> Forskrift om miljørettet helsevern, kap. 3

<sup>&</sup>lt;sup>82</sup> Norwegian Institute of Public Health: Forebygging av legionellasmitte – en veiledning. 2015

Printed matter means, for example, information material for guests, advertising, brochures, notepads and letter paper with logo. The requirement also applies to printed matter that chain businesses order centrally.

- **Tissue paper:** 100% of purchased tissue paper, such as toilet paper, kitchen roll and paper towels must be ecolabelled.
- **Copy/printing paper:** 100% of purchased copy/printing paper for daily use must be ecolabelled.

In this instance, ecolabelled means products with the Nordic Swan Ecolabel or the EU Ecolabel.

- Confirmation of a contract with a Nordic Swan Ecolabelled printing company.
- □ Licence number and name of printing company.
- Procedures or other documentation confirming that Nordic Swan Ecolabelled printed matter is requested.
- Documentation of purchased tissue paper and copy/printing paper, showing that the purchases are ecolabelled.
- $\boldsymbol{\rho}$  On-site inspection.

#### Background to requirement concerning purchasing

Nordic Ecolabelling prioritises the purchasing of ecolabelled products and services, as these have a lower environmental impact compared with non-ecolabelled purchases.

Nordic Ecolabelling's environmental requirements for tissue paper cover everything from forestry and the choice of raw materials to low energy consumption and low carbon emissions, cleaning emissions to air and water and control of the use of chemicals and eutrophying and acidifying substances such as sulphur and nitrogen oxides.

Ecolabelled copy/printing paper means that the fibre comes from sustainable forestry and/or recycled paper. Labelling only with the PEFC or FSC logo is not sufficient, however, as these labels only cover the forest raw material. Paper labelled with the Nordic Ecolabel or the EU Ecolabel ensures that, as well as the forest raw material being sustainable, the manufacturing process has low emissions to air and water. It is manufactured with efficient energy use and a limited amount of chemicals. Copy/printing paper refers to ordinary white, A4 office paper.

The previous version of the criteria required at least 90% of all tissue paper and copy/printing paper to be ecolabelled. Documentation of this required a summary of the types of paper used in the business, with details of the proportion that was ecolabelled, as a percentage of the volume. The requirement has therefore been tightened to 100% ecolabelled. Requiring 100% makes it easier to check compliance with the requirement on site.

The previous criteria document required that at least 50% of the total purchasing of printed matter ordered by the business had to be Nordic Swan Ecolabelled and

printed by a Nordic Swan Ecolabelled printing company. In addition to the obligatory requirement, there was a point score requirement giving points if at least 90% of the total purchasing of printed matter ordered by the business was Nordic Swan Ecolabelled. The consequence was a complicated documentation requirement involving calculations from the business showing the percentage of total printed matter purchases that were Nordic Swan Ecolabelled.

In the current version of the criteria, we require 100% of all printed matter to come from a Nordic Swan Ecolabelled printing company. It is not obligatory for the printed matter to be Nordic Swan Ecolabelled but note that Nordic Swan Ecolabelled printed matter must be actively requested at the time of ordering. Even if a printing company has a Nordic Swan Ecolabel licence, the printed matter is not automatically labelled.

The purchasing manager is responsible for ensuring that the Swan logo and the printing company's licence number appear on the Nordic Swan Ecolabelled printed matter.

Printed matter refers to, for example, advertising, brochures, writing paper and other stationery carrying the hotel logo, plus all the forms used at the hotel for dry cleaning and room service, etc. The requirement also covers the printed matter that the hotel chain orders centrally.

#### P8 Purchasing of ecolabelled products and services

Different businesses can achieve different maximum points totals, as defined in the table below.

#### Table 17 Maximum points total per business type

The table uses the following abbreviations: Hotel (H), Food service/restaurant (F), and Conference facility (C)

Business type	HFC	HF	нс	FC	H	F	с
Maximum possible points, P6	13	10	10	10	8	8	6

The business receives points for purchasing ecolabelled products and services, as set out in the table below. To obtain the points, 100% of each category must be ecolabelled, unless otherwise specified in the table.

Ecolabelled means products with the Nordic Swan Ecolabel or the EU Ecolabel.

Nordic Swan Ecolabelled laundry services are awarded points in requirement P7, in the chapter on chemicals. Products that are obligatory in other requirements in the criteria are not eligible for points in the requirement.

#### Table 18 Ecolabelled products and services that are eligible for points

Ecolabelled products and services	Points
Cleaning service	3
Nordic Swan Ecolabelled food service (only relevant for one-day conferences)	3
Dry cleaning	1
Coffee service	1
Fabric hand towel rolls	1
Soap and shampoo, in guest rooms and public toilets	3

Disposable items	1 per category (max 2 categories)
Napkins	1 per category/size (max 2 categories)
Microfibre mops and cloths	1
Batteries	1
Toner cartridges	1
Flipcharts	1
Pens, whiteboard markers, marker pens for flipchart, etc.	1
Candles	1 per category (max 2 categories)
Office equipment (PC, computers, photocopiers, etc.)	1 per category (max 2 categories)
Televisions	1
Furniture	2 per category (max 3 categories)
Flooring	2
Textiles (sheets, bed linen, towels, tablecloths and napkins)	2 per category (max 2 categories)
Workwear, at least one category of staff	1
Nordic Swan Ecolabelled fuel for company vehicles	1
Other	1 per service/category, max 2 p

Overview of purchased products and services, supplier, and licence number.

 $\boldsymbol{\rho}$  On-site inspection.

# Background to requirement concerning purchasing of ecolabelled products and services

Nordic Ecolabelling rewards the use of ecolabelled goods and services by having a point score requirement containing a list of goods and services for the facilities to choose between.

Nordic Ecolabelling has introduced a common point score requirement bringing together consumables, durable goods and services in one table. We have tightened the requirement, so that to obtain points 100% of the total purchase of the good/service in question (per category) must be ecolabelled. This makes it easier to document the requirement and to check compliance on site.

The previous version of the criteria had three point score requirements based on three different categories and tables: consumables, durable goods and services. To earn points, a certain percentage of the total purchased goods/services had to be ecolabelled. Documenting the requirement involved providing a list of purchased goods with the product name, supplier, licence number and area of use, along with a calculation showing the percentage of total purchases that were ecolabelled. This was a considerable burden that saw people not even trying to obtain the points, because they felt it was too complicated.

## 14 Summary of points

#### O47 Obligatory requirement concerning points achieved

The business must meet a minimum points total for the type of business, as stated in the table below. The table also shows how many points are available for the various point score requirements.

#### Table 19 Calculation of points

The table uses the following abbreviations: Hotel (H), Food service/restaurant (F), and Conference facility (C)

Point score requirements	HFC	HF	нс	FC	н	F	С
P1 Resource-saving measures for hotels	2	2	2		2		
P2 CO <sub>2</sub> Calculation	2	2	2		2		
P3 Certified electricity	1	1	1		1		
P4 Organic food and drink	5	5	5	5	5	5	
P5 Locally produced food and drink	2	2	2	2	2	2	
P6 No use of GMO	1	1	1	1	1	1	
P7 Nordic Swan Ecolabelled laundry service	3	3	3	3	3	3	3
P8 Purchasing of ecolabelled products and services	13	10	10	10	8	8	9
Calculation of points							
Maximum possible points	29	26	26	21	24	19	12
Minimum points total, obligatory	10	9	9	7	8	6	4

<sup>1</sup> Summary of points.

### 15 Changes compared to previous generation

#### Product group change

It is proposed that one-day conferences should be included in the product group, in view of growing interest from the industry and the considerable potential for environmental improvements.

#### Structure

The structure has been amended to make the criteria more intuitive. The aim is to make it clear which requirements apply to whom, since the product group definition includes different combinations of businesses. The number of points score requirements has been significantly reduced, while retaining the flexibility by introducing obligatory requirements that offer a choice of measures to be implemented.

#### **Environmental management**

One of the new features in this chapter is the obligatory requirement for "continuous improvements" and the point score requirement for "resource-saving measures". The annual follow-up has been amended, since we would like to see a greater emphasis on annual follow-up of the requirements and dialogue with licensees.

#### Energy

The energy requirements have been amended and tightened up. An upper limit is proposed for the use of energy, to prevent businesses with high energy consumption from obtaining the Nordic Swan Ecolabel. Fossil oil is not permitted for heating. Businesses that are energy-efficient, with low energy consumption, already meet the energy requirement and do not need to document their energy efficiency further. Businesses with medium to high energy consumption must implement energy-saving measures. New and separate energy requirements have been developed for food services with or without conference facilities.

#### Water

The requirements concerning water consumption have been amended and tightened up. The proposal is to make the limit value for water obligatory for everyone, in contrast to the previous criteria, where it was optional for the business to meet the limit value for either water or waste.

New and separate water consumption requirements have been developed for food services with or without conference facilities.

#### Waste

The requirements concerning waste have been amended and tightened up. An obligatory limit value for general waste is proposed, in contrast to the previous criteria, which provided a choice between either water or waste.

The proposal contains a new and comprehensive requirement concerning food waste, which entails measurements, analysis, information for guests, training for staff and annual follow-up.

The requirements concerning disposable items have been tightened.

#### Sustainable food and drink

New requirements have been introduced concerning palm oil and GMO, and the requirements concerning organic food and vegetarian food have been amended and tightened up. Locally produced food is promoted to a higher degree than before. The proposal is to ban the serving of bottled water – this was previously a point score requirement. The requirements concerning food and drink include point score requirements to encourage improvements.

#### Chemicals

The requirements have been amended and tightened up. 100% of general cleaning, dishwashing and laundry must be ecolabelled. This makes the burden of documentation considerably lighter for applicants, since we are moving away from reporting the volume of products, and only setting a product requirement. We set requirements for the classification and ingoing substances of the chemicals used in the largest quantities, plus a requirement for product types that we know have challenging classifications/content, such as air fresheners.

#### Purchasing

The requirement concerning purchasing of ecolabelled products and services has been amended, tightened up and simplified. 100% tissue paper and copy/printing paper must be ecolabelled. 100% of outsourced printed matter must be from an ecolabelled printing company. The change to the requirement simplifies the documentation work. It is not necessary to calculate purchased amounts, just to document that ecolabelled products are used. The business is awarded points for purchasing other ecolabelled products and services.