

Consultation response for

## Building operations



Version 1.0

2024-08-13

Nordic Swan Ecolabelled Building operations – Consultation response  
116/1.0, 2024-08-13

- 1 Summary .....1
- 2 About the consultation .....4
- 3 Compilation of received responses .....6
- 4 Comments to the criteria, in detail .....8
  - 4.1 General comments ..... 8
  - 4.2 Definition of the product group ..... 11
  - 4.3 Comments to the individual requirements ..... 12
    - 4.3.1 Requirements chapter 5.3 Management .....12
    - 4.3.2 Requirements chapter 5.4 Energy .....13
    - 4.3.3 Requirements chapter 5.5 Climate change .....17
    - 4.3.4 Requirements chapter 5.6 Indoor climate .....18
    - 4.3.5 Requirements chapter 5.7 Water .....21
    - 4.3.6 Requirements chapter 5.8 Recycling, reuse and waste management .....23
    - 4.3.7 Requirements chapter 5.9 Outdoor environment and biodiversity .....26
    - 4.3.8 Requirements chapter 5.10 Services and products in daily operations, maintenance and building improvements .....27
    - 4.3.9 Chapter 7 Alignment with the EU taxonomy framework .....35

# 1 Summary

The proposal for criteria for Nordic Ecolabelled Building operations was open for consultation from 10<sup>th</sup> of April to 5<sup>th</sup> of June. A total of 15 responses were received, with the majority supporting the proposal alongside providing constructive feedback. Chapter 3 details the distribution of consultation responses by country.

We extend our sincere thanks to everyone who contributed to this process. The most important input and changes made after referral are described below.

During the consultation period, there was confusion regarding the *product group definition*, particularly about the responsibilities of the license holder and what is included in the requirements, -especially concerning external services and products used in the building. To address this, the product group definition and scope have been clarified even further in both Chapter 2 (What Can Carry the Nordic Swan Ecolabel) and the general introduction to Chapter 5.10 (Services and Products in Daily Operations, Maintenance, and Building Improvements). The building types that can get the certified service has been further aligned with the updated scope of 089 New Buildings.

The requirement for *user/tenant information* (O6) has been revised to include an additional option. This new option allows for constant access to information on energy and water consumption, rather than only providing it annually. Recognizing that this additional option may be costly, the original option of annual information will remain available in this first generation of criteria.

Some stakeholders raised their concerns about the feasibility of meeting *energy efficiency requirements* for buildings in lower energy classes (O8 Energy action). Despite the challenges, Nordic Ecolabelling remains committed to include existing buildings in lower energy classes, acknowledging their potential for significant energy savings and maintaining the ambitious level of the requirement. Further, there has been some concern regarding the definition of "heritage-listed" buildings and the need for a flexible approach based on their cultural and historical significance. While the definition for heritage listed buildings has been clarified, the requirement remains unchanged. Additionally, some stakeholders responded to the operational optimization (O10) requirement regarding some clarifications and smaller corrections. As a result of the comments, the requirement has been clarified and refined to improve practical efficiency measures.

During the consultation period some responses expressed concerns about the detail level for the *climate risk analysis* (O13 and O14) while other agreed with the level of ambition. Further, some pointed out that meeting the risk analysis requirement can be challenging and costly. Despite these concerns, the requirement remains unchanged. Although no special expertise is mandated, the report must address specific scenarios and can follow national and local guidelines for compliance. The requirement's approach provides flexibility and promotes economic sustainability, as identified risks must be included in maintenance plans without a mandatory requirement for direct implementation at the time of application. Furthermore, the requirements aim to align with the EU taxonomy, which is another reason why the limits and ambition level have not been changed.

The requirement for *inventory of hazardous substances* (O17) has been slightly modified so that estimations also are accepted, since the purpose of the criteria is not to conduct a full demolition inventory. Additionally, for residential buildings, the requirement now permits using a representative sample of apartments instead of inspecting 10 % of all units. This change acknowledges that many apartments are identical and inspecting 10 % could be too expensive for buildings with a large number of units. It has also been clarified that the requirement only covers asbestos and PCB and has changed name accordingly.

Overall, the feedback on the water requirements has been positive. The requirement on *continuous operation optimization for water* (O24) has been adjusted so that water meters now require monthly follow-ups instead of weekly, aligning more accurately with actual needs. Additionally, the requirement on *water saving technologies* (O26), has been revised to include an additional measure, providing more options for potential licensees and making it more suitable for all types of buildings.

Feedback on the chapter on *recycling, reuse, and waste management* (chapter 5.8) has been mixed. Some stakeholders find the current requirements challenging yet sufficient, while others have requested a stronger focus on circular choices, especially for interior articles. It is noteworthy that several requirements within the criteria, but outside this specific chapter, are aimed at preventing waste and extending the lifespan of buildings or their installations. For instance, requirement O4 Maintenance plan and requirements for new purchases emphasize the importance of retaining well-functioning equipment until replacement is necessary. This approach ensures resource efficiency in terms of both raw materials and waste management. Nordic Ecolabelling has however considered implementing more direct requirements related to reuse, recycling, and waste management but encountered challenges. Further, the building owner or operator has limited control over tenant waste and choices regarding reused and recycled products. Additionally, verifying compliance with such requirements is complex, and managing the introduction of reused materials requires stringent measures to avoid harmful substances, increasing certification complexity. Furthermore, some of the comments brought up during the consultation fall outside the scope of these criteria since major renovations and reconstructions are covered in the criteria for Nordic Swan Renovations and are already included in the criteria for Nordic Swan Ecolabel New Buildings and/or Renovations. As a result, no new requirements have been added, and the requirement to promote repair and reuse for users/tenants (O28) remains unchanged. However, the requirement for *information to users/tenants and possibility of sorting at source* (O27) has been changed for office buildings. It now requires a minimum of four fractions to be installed in all kitchenettes (previous a minimum of two fractions was required). The requirement for *promoting repair and reuse in relation to building improvements and tenant adaptations* (O29), has been modified. Due to the challenges in steerability for housing cooperatives, where tenants hold full responsibility for their own apartments, they have been exempted from this requirement. Furthermore, requirement for ecolabelled products (O33) has been adjusted to promote reused products, see more information below.

The requirement for *outdoor area* (O30) has been clarified with that any use of insecticides/fungicides/rodenticides must be carried out by professionals.

The requirement for *cleaning products* (O31) now allows for the submission of a plan to change the external cleaning service if it does not meet the requirement at the time of application. This adjustment enables companies to obtain a license even if they have an existing valid contract that could otherwise hinder certification.

In the requirement for *other ecolabelled services* (O32) the category "printed matter" has been removed due to the complexity and uncertainty regarding what should fall under this requirement.

To encourage the use of reused products and promote a circular economy the requirement on *ecolabelled products* (O33) has been adjusted to exempt reused products. Further, kitchens, kitchen fittings and playgrounds<sup>1</sup> has been added as mandatory ecolabelled products for licensees in Sweden, Norway and Denmark. This decision was made due to the high availability of these products in the market.

Critical feedback has been received regarding the requirement on *copper* (O35). Despite this, the requirement remains unchanged following consultation due to various aspects. However, the requirement has been adjusted so that protected buildings and buildings worthy of preservation that has copper roofs or facades can apply for an exemption from this requirement, provided they can demonstrate specific protections for these building parts.

The requirement concerning *wood and bamboo* (O37) has been clarified to specify that documentation for wood purchases must adhere to FSC and PEFC principles.

The chapter on the *EU taxonomy* (Chapter 7) has been clarified to explain how this criteria set addresses chapter 3.5. Manufacture of energy efficiency equipment for buildings in the EU Taxonomy Annex I.

The table below summarizes the requirements that have been adjusted following the consultation. For detailed justification behind each decision, please refer to the corresponding section of each requirement. Other minor changes have been made to clarify other requirements not listed here. However, since those clarifications have not affected the substance of the requirements they are not listed below.

<b>Requirement</b>	<b>Short explanation on changes</b>
O6 Information to users/tenants	An additional option has been added on how to inform users/tenants about energy and water consumption.
O8 Energy action plan	Clarification on what is meant by heritage-listed buildings.
O10 Energy efficiency – continuous operation optimisation	Clarification regarding temperature for supply air and the definition of electrical heating systems.
O17 Inventory of asbestos and PCB (previously “Inventory of environmental hazardous substances”)	Clarifications on that the requirement only covers asbestos and PCB. Clarifications on the acceptable age of previously conducted surveys and the procedure for validating older surveys. Clarifications on the extent of control over apartments in residential buildings. Clarification that quantities can be reported using estimations instead of destructive measures.
O24 Water - continuous operation optimisation	Correction made to require monthly follow-ups for water meters instead of weekly.

<sup>1</sup> Playgrounds is only covered by schools and pre-schools.

O26 Water saving technologies and measures	Clarification that the requirement is fulfilled if one of the measures are already in place at the time of application. An additional option for potential measures (water mapping) has been introduced to ensure that all types of buildings have an adequate range of options to choose from.
O27 Information to users/tenants and possibility of sorting at source	For office buildings (option D) the requirement is changed to that a minimum of four fractions must be installed in all kitchenettes (previous 2 fractions).
O29 Promotion of repair and reuse in relation to building improvements and tenant adaptations	The requirement has been adjusted so it no longer covers buildings with "housing cooperative" (SV: Bostadsrättsförening) as ownership.
O30 Outdoor environment and biodiversity	Clarification that any use of insecticides / fungicides / rodenticides must be handled by professionals.
O31 Cleaning products and services	Clarification has been provided regarding the situation where a non-certified external cleaning service has been contracted prior to the application.
O32 Other Ecolabelled services	The requirement for ecolabelled "printed matter" has been removed due to the complexity and uncertainty regarding what should fall under this requirement.
O33 Ecolabelled products	The requirement has been adjusted to exempt reused products. Kitchens, kitchen fittings and playgrounds has been added as mandatory ecolabelled products for licensees in Sweden, Norway and Denmark.
O35 Copper	Clarification has been provided that protected or historically significant buildings with copper roofs or facades are qualified to apply for an exemption.
O37 Wood and bamboo	The requirement has been clarified to specify that the documentation for the purchase of wood must adhere to principles issued by FSC and PEFC.

## 2 About the consultation

Nordic Ecolabelling has been developing criteria for the new product group, Nordic Swan Ecolabel Building Operations. This initiative began with a prestudy in spring 2023, followed by the main project phase spanning autumn 2023 to winter/spring 2024. Throughout both the feasibility study and the criteria development process, numerous individual meetings were held with property owners and facility management contractors across the Nordic countries.

The criteria draft for Nordic Swan Ecolabel Building Operations were open for public consultation from the 10<sup>th</sup> of April to the 5<sup>th</sup> of June. Further a dedicated Nordic webinar for stakeholders was held on the 2<sup>nd</sup> of May.

In this compilation, all feedback has been gathered and addressed by Nordic Ecolabelling. The aim is not only to collect all comments but also to demonstrate how external input has shaped the criteria. Nordic Ecolabelling appreciates all responses that contribute to our development and help ensure that our criteria adhere to ISO 14024 standards.

During the consultation, specific comments were requested on the following:

- **Levels and structure of requirement O8 Energy action plan.** This requirement is divided into three sections. Section A is mandatory for all buildings and sets minimum energy performance standards; failure to meet this limit makes an application not qualified. For those who comply with

section A, license holders may either comply with Section B1, which applies to buildings already meeting acceptable standards of energy performance, or with Section B2, an alternative for less energy efficient buildings. In Section B2, buildings must undergo an "energy journey" to improve their energy performance based on their energy class. Nordic Swan Ecolabel, NSE, welcome input on both the level of ambition and the structure of the requirement.

- **Levels and structure of requirement O9 Energy metering and O23 Water metering.** These two requirements are based on measuring and aims to promote better control over energy and water consumption. NSE welcome input on both the level of ambition in these requirements and the overall opinion on requirements based on measuring without a threshold limit.
- **Levels and structure of requirement O13 Risk analysis climate change and O14 Adaptation to a changing climate.** A climate risk and vulnerability analysis of the building and property must be performed in O13 and based on the climate risk and vulnerability analysis the most important identified climate adaptation measures must be implemented in connection with maintenance and reconstruction projects to adapt the building to a changing climate. The requirement is mandatory and aims to align with the EU Taxonomy. NSE welcome input on both the level of ambition and the interpretation of the EU Taxonomy.
- **Levels and structure of requirement O17 Inventory of environmental hazardous substances and O18 Measurement of PCB levels in indoor air.** These requirements aim to ensure knowledge about hazardous substances such as asbestos and PCB in building. In O17 it is required to perform an inventory, and if any hazardous substances are discovered, they must be addressed in the maintenance plan. In O18 it is required to perform PCB measures on the indoor air and meet specific PCB concentration limits. NSE welcome input on the level of ambition, the proposed substances covered by O17, and input on demanding measures on PCB in the indoor air.
- **Levels and structure of requirement O26 Water saving technologies.** Nordic Ecolabelling has integrated specific measures that must be implemented within one year from the application date, aimed at advancing water savings within the industry. NSE welcome input on the level of ambition of this requirement.
- **Levels and structure of requirement O27 Information to users/tenants and possibility to sort at source.** This requirement focus on information and waste sorting within the building to promote better sorting practices among tenants. NSE welcome input on both the level of ambition and the level of steerability for the licensee in regard to this requirement.
- **Levels and structure of requirement O28 Promotion of repair and reuse for tenants.** This requirement focuses on promoting repair and reuse practices among tenants, aiming for improvements within resource efficiency. NSE welcome input on both the level of ambition and the structure of the requirement.
- **Levels and structure of requirement O33 Ecolabelled products.** This requirement focuses on promoting the use of ecolabelled products, which have met strict criteria concerning environmental performance across diverse aspects such as chemical substances, biodiversity impact, and energy and resource efficiency. Nordic Ecolabelling have set requirements on materials



and chemical products where there is a market supply, however, NSE welcome input on both the level of ambition and experience of supply of the products covered by the requirement.

- **EU Taxonomy.** Nordic Ecolabelling welcome feedback concerning the EU taxonomy, including both general input and comments specific to individual requirements.

### 3 Compilation of received responses

The consultation was sent out to 530 organisations in total (SE: 91 organisations, FI: 114 organisations, DK: 15 organisations, NO: 310 organisations). In total 15 responses were received, where the majority supported the proposal in combination with constructive comments. The distribution of responses looks as follows:

**Table 1: Compilation of received responses**

Country	A. Only comments	B. Supports the proposal	C. Supports the proposal with comments	D. Refrain from commenting	E. Rejects the proposal with justification	Totally
Denmark	1					1
Sweden	1	1	4			6
Finland	3					3
Norway	1	1	1			3
Iceland						0
All Nordic countries			2			2
<b>Totally</b>	6	2	7			15

#### Nordic consultation responses

2 official responses were received from the common Nordic market during the consultation, see table 2.

**Table 2: Common Nordic consultation responses**

Consultation body	A. Only comments	B. Supports the proposal	C. Supports the proposal with comments	D. Refrain from commenting	E. Rejects the proposal with justification
PEFC Nordics i.e. PEFC Sweden, PEFC Norway, PEFC Finland and PEFC Denmark (NGO)			X		
Scandinavian Copper Development Association (industry association)			X		
<b>Σ Nordic responses: 2</b>			2		



### Swedish consultation responses

6 official responses were received from the Swedish market during the consultation, see table 3.

**Table 3: Swedish consultation responses**

Consultation body	A. Only comments	B. Supports the proposal	C. Supports the proposal with comments	D. Refrain from commenting	E. Rejects the proposal with justification
Svenskt vatten (NGO)			X		
VVS Fabrikanternas Råd (NGO)	X				
Hyresgästföreningen (Swedish union of Tenants) (NGO)			X		
Enviri (consultant)		X			
Svensk Ventilation (NGO)			X		
HSB (property manager)			X		
<b>Σ Swedish responses: 6</b>	1	1	4		

### Finnish consultation responses

3 official responses were received from the Finnish market during the consultation, see table 4.

**Table 4: Finnish consultation responses**

Consultation body	A. Only comments	B. Supports the proposal	C. Supports the proposal with comments	D. Refrain from commenting	E. Rejects the proposal with justification
A-kruunu (Property/building owner)	X				
Rakennusteollisuus RT (Construction and renovation industry)	X				
Technology Industries of Finland (industry association)	X				
<b>Σ Finnish responses: 3</b>	3				

### Norwegian consultation responses

3 official responses were received from the Norwegian market during the consultation, see table 5.

**Table 5: Norwegian consultation responses**

Consultation body	A. Only comments	B. Supports the proposal	C. Supports the proposal with comments	D. Refrain from commenting	E. Rejects the proposal with justification
Avfall Norge (NGO)			X		
Riksanstikvaren (Authority)	X				
Norges miljø- og biovitenskapelige universitet (NMBU)		X			
<b>Σ Norwegian responses: 3</b>	1	1	1		

### Danish consultation responses

1 official response were received from the Danish market during the consultation, see table 6.

**Table 6: Danish consultation responses**

Consultation body	A. Only comments	B. Supports the proposal	C. Supports the proposal with comments	D. Refrain from commenting	E. Rejects the proposal with justification
PKA Ejendomme (building owner)	X				
<b>Σ Danish responses: 1</b>	1				

## 4 Comments to the criteria, in detail

The individual comments from the referral bodies are collected and grouped in this section, corresponding to the requirement numbers in the draft criteria. Some referral bodies have commented on multiple areas of the draft, and these comments are categorized by theme. Nordic Ecolabelling has responded to the referral comments, providing joint responses when multiple advisory bodies have commented on the same theme.

### 4.1 General comments

Nordic Ecolabelling values all the general comments received. Below are the consultation responses related to this area, along with Nordic Ecolabelling's replies. These include any changes made and the justification behind them.

#### **VVS Fabrikanternas Råd**

På VVS Fabrikanternas Råd välkomnar vi tydligare och skärpta fastighetskrav i driftskedet. Det är bra att kontinuerlig uppföljning och kontroll av oberoende part konkretiseras vilket är nyckeln till att bibehålla installationernas avsedda funktionalitet. Vi anser att Svanens remissförslag är relativt heltäckande och att nödvändig samordning med taxonomin, EPBD och andra initiativ nationellt och inom EU kommuniceras. Det finns dock några punkter i kriterierna vi vill lyfta till diskussion.

#### **Svensk Ventilation**

The overall document is well worked, and most of the criteria relating to ventilation we fully or almost fully agree on, some small comments on relevant sections.

#### **Norges miljø- og biovitenskapelige universitet (NMBU)**

NMBU støtter forslaget til endringer i forskrift.

#### **Riksantikvaren**

The document outlines the criteria for the Nordic Swan Ecolabel for building operations, focusing on environmental sustainability. It includes requirements for energy efficiency, climate change adaptation, indoor climate, water usage, waste management, and biodiversity. The criteria aim to reduce the environmental impact of buildings during their use phase by promoting resource efficiency, reducing climate impact, and improving indoor environments. The document also aligns with the EU Taxonomy framework and includes specific guidelines for different types of buildings, such as residential-, office-, and educational buildings.

## **Technology Industries of Finland**

Goals for promoting resource efficiency, safeguarding biodiversity, reducing climate impacts, extending the lifespan of buildings and adapting to a changing climate are worthwhile goals for Swan Ecolabel as well.

In the technology industry, we believe that climate change and environmental challenges must be overcome globally. We are committed to doing our part for a carbon-neutral circular economy and aim to protect and increase biodiversity. We are the first industry in Finland, who have established our own circular economy programme for the industry. In addition, we have already published an industry-wide biodiversity programme in 2020, which we will update and expand into a biodiversity programme in 2024.

The goals of the criteria proposal are correct and worthwhile, but the means to achieve the goals still need to be specified and partly corrected (see O35).

### ***Comment from Nordic Ecolabelling***

*Thank you for your comments. We are pleased to hear that you welcome these criteria. Specific comments will be addressed later in this document.*

## **Hyresgästföreningen (Swedish union of Tenants)**

The document as a whole is good and well-crafted; however, some requirements could be clarified, which applies throughout. We choose to focus on reuse and resource efficiency. The focus on sustainable practices for minor tenant adaptations and providing tenants with the opportunity to make sustainable choices is not sufficient. The property owner also needs to focus on reuse and resource efficiency during major renovations and reconstructions.

### ***Comment from Nordic Ecolabelling***

*Thank you for your comment. We are pleased to hear that you find the document well-crafted and comprehensive. Your specific comments on reuse and resource efficiency will be addressed later in this document. However, please note that these criteria focus on building operations. While we agree that reuse and resource efficiency during major renovations and reconstructions are important, these issues fall outside the scope of these criteria and are covered under the Nordic Swan criteria for Renovations, which we strongly encourage following.*

## **A-kruunu**

The content and subsections of the criteria are comprehensive. However, the criteria seem rather laborious/heavy to meet. In addition, it would be good to note that in the real estate sector, money is a big driver and the cost of the Nordic Swan Ecolabel is paid by the end users: is the label a competitive advantage or will the rent increase with it?

### ***Comment from Nordic Ecolabelling***

*Thank you for your comment. We agree that the criteria are comprehensive, which is intentional. The Nordic Swan Ecolabel is designed for those who are ambitious in the environmental field, aiming to provide the highest standards for their tenants and recognize the benefits of an environmental certification.*

## HSB

HSB önskar tydligare information om hur certifieringen och kriterier skulle kunna fungera för certifiering av en Bostadsrättsförening - om det ens kan vara aktuellt där. Flera kriterium fungerar främst för hyresfastigheter så som det är skrivet idag.

Det finns en flertalet krav i olika avsnitt som redan krävs till följd av lagstiftning där HSB anser att certifieringen inte behöver ställa krav på detta (exempelvis radon, ventilation, fukt, legionella).

Är licensägaren ansvarig för alla krav oavsett vem som utför arbetet? HSB önskar också ett förtydligande på en övergripande nivå kring vilka ytor som ingår, t.ex. om privata bostäder inte ingår samt förtydligande kring hur uppdelningen skulle se ut för en brf, ex som det är formulerat avseende vitvaror.

Underlag från annan certifiering än Svanen t.ex. Miljöbyggnad för nyproduktion bör kunna uppfylla samma grundläggande kriterier som per automatik uppfyller följande krav:

- O8 Energy action plan
- O13 Risk analysis Climate change\*
- O14 Adaptation to a changing climate\*\*
- O15 Damp, mould, and moisture survey
- O17 Inventory of environmental hazardous substances
- O18 Measurement of PCB levels in indoor air
- O21 Radon
- O26 Water-saving technologies and measures

### **Comment from Nordic Ecolabelling**

*Thank you for your comment. We acknowledge that these criteria are clearer for buildings where the operation is managed directly by the building owner. This clarity primarily arises from the clear authority of the license holder, rather than any difference in criteria for these types of buildings. The Nordic Swan Ecolabel recognizes the significant environmental potential in these types of buildings and therefore aims to include those where operations are managed by a building operation contractor, rather than excluding them. As an example a Bostadsrättsförening (housing cooperative) can certify their building under the label. Such properties can either choose to become the licensee themselves, hiring individual suppliers and ensuring they meet the requirements, or they can opt to engage a licensed company responsible for meeting all criteria in partnership with the Bostadsrättsförening. However, we have made the definition even more clear and explained this part even more in the documents. We also made a change to one specific requirements (O29).*

*The licensee must take full responsibility for the fulfilment of all requirements, no matter who the work is performed by. Under chapter "5.10 Services and products in daily operations, maintenance and building improvements" it has been clarified on which areas of the building that is or is not covered by the requirements.*

*Regarding the comment on requirements that align with legislative limits, we have decided to include these requirements to ensure that all types of buildings, especially older ones, meet legislative standards. This decision is based on the criteria's inclusivity for all buildings seeking certification. Nordic Swan must verify the condition of buildings because we lack prior knowledge of their history before*

*certification. Further, we have become aware that many buildings currently do not comply with legislative limits in these areas. Additionally, since these requirements align with legislative standards, applicants should find it straightforward to demonstrate compliance.*

*As Nordic Ecolabelling cannot guarantee that another certification system meets the same standards as the Nordic Swan Ecolabel for New Buildings or Renovation, we cannot state that other certifications automatically fulfill specific requirements in these criteria. However, those seeking to meet specific requirements through another certification system can likely demonstrate compliance with our requirements using the same documentation from other certification schemes.*

### **PKA Ejendomme**

Vi er kede af de steder, hvor der kræves special kompetencer dokumenteret via CV. Det er en dyr fornøjelse - også på ejendomme hvor der ikke umiddelbart er problemer med fugt, skimmel, pcb eller andet.

### **Comment from Nordic Ecolabelling**

*Thank you for your comment. In Nordic Swan Ecolabelling we must ensure a certain level of quality in the certification and in some cases, this is ensured via external competences. These criteria document also covers existing buildings, including older ones, which on a larger extend suffer of mould problems. Additionally, our aim is to align our criteria documents for New Buildings, Renovation and Building Operations which this approach achieves. We will monitor the economically cost of this measure together with the indoor environment impact in new buildings, during the lifetime of the first generation.*

## **4.2 Definition of the product group**

Nordic Ecolabelling values all the comments received on the definition of the product group. Below are the consultation responses related to this area, along with Nordic Ecolabelling's replies. These include any changes made and the justification behind them.

### **Svensk Ventilation**

We disagree that Residential buildings with decentralised heating and ventilation systems, can't carry a Swan lable. If there is a proper ventilation system in resedential building the indoor air is usally better.

### **Comment from Nordic Ecolabelling**

*Thank you for your comment. We fully agree that a proper ventilation system is crucial for maintaining high indoor air quality in residential buildings. It is important to note that residential buildings with centralized heating and ventilation systems are indeed covered by these criteria.*

*However, the reason decentralized heating and ventilation systems in residential buildings are excluded is due to the complexity involved in monitoring and controlling all individual units. It is challenging for a company to manage all the apartments in a building where the units are privately owned, which is for example common in Norway. Our experience indicates that there are no common industrial control systems (ICS) in residential buildings, making it difficult to gain access to and*

*manage private apartments effectively. Our requirements are not designed to accommodate this level of complexity, which is why residential buildings with decentralized systems are excluded from these criteria.*

## **HSB**

Om certifieringen ska kunna vara applicerbar för bostadsrättsföreningar behöver en översyn göras avseende kraven, se ovan samt kommande kommentarer.

### ***Comment from Nordic Ecolabelling***

*Thank you for your comment. We acknowledge that these criteria are clearer for buildings where the operation is managed directly by the building owner. This clarity primarily arises from the definitive authority of the license holder, rather than any difference in the criteria themselves. Nordic Ecolabelling believes that buildings with various types of ownership can still qualify for this certification. To address any confusion, we have refined the definitions and adapted some of the requirements. Please see our comments above and below for further details on this matter.*

## **4.3 Comments to the individual requirements**

Nordic Ecolabelling values all the general comments received. Below are the consultation responses related to each requirement, along with Nordic Ecolabelling's replies. These include any changes made and the justification behind them. Requirements not listed below did not receive any input during consultation.

### **4.3.1 Requirements chapter 5.3 Management**

#### **O4 Maintenance plan**

##### **PKA Ejendomme**

30 års vedligeholdelsesplaner er ikke noget vi normalt arbejder med, men de nu værende 10 årsplaner kombineret med en læs vurdering af år 11-30 kan nok klares.

##### ***Comment from Nordic Ecolabelling***

*Thank you for your comment. We acknowledge that Denmark typically adopts a 10-year scope for such initiatives. However, we have made a unified Nordic decision to align with countries that require longer time frame plans. This approach aims to enhance building operations performance and is expected to be manageable for countries adjusting their procedures accordingly.*

*It is important to note that while these 30-year plans often outline major maintenance activities, such as roof replacements or façade renovations, the specific details, like the materials to be used or methods employed, are usually determined closer to the time of implementation. This flexibility allows the plan to adapt to advancements in technology, changes in regulations, and the evolving condition of the building.*

#### **O6 Information to the users/tenants**

##### **Rakennusteollisuus RT**

Information on the use of energy and water in the building should be constantly available to tenants and users, not just as part of the material distributed to tenants once a year.

### ***Comment from Nordic Ecolabelling***

*Thank you for your comment. We agree with your suggestion and this option has now been added to the requirement. However, since these types of systems can be costly the other option will still be available in this first generation of criteria set.*

## 4.3.2 Requirements chapter 5.4 Energy

### O8 Energy action plan

#### **VVS Fabrikanternas Råd**

I stället för option enligt tabell 4, som kan bli svår att följa upp och öppnar för optimistisk tolkning i syfte att få byggnaden Svanenmärkt, föreslår vi att Svanen i stället begränsar sig till att kräva C.

#### **A-kruunu**

An improvement of 10%/20% in section B2 is possible if energy efficiency measures have not been done before. If measures have already done, it will be difficult to achieve the required reduction without more extensive action.

#### **HSB**

Energy Action plan. Svårt att på 3 år erhålla 20 % energiförbättring vid energiklass E, bör formuleras på annat sätt. Bra med krav på en action plan.

### ***Comment from Nordic Ecolabelling***

*Thank you for your comments. The Nordic Swan Ecolabel recognizes the significant energy-saving potential in all existing buildings, including older buildings with lower initial energy performance. Although older buildings may not meet the high energy performance standards for new buildings, they can still contribute substantially to societal energy savings. Therefore, we have decided to include the possibility for existing buildings in energy classes D and E in Sweden, Finland, Norway, and C and D in Denmark, to earn the certification, provided they achieve the required energy savings.*

*At the same time, Nordic Ecolabelling acknowledges that this requirement may pose a challenge for buildings in the categories mentioned above. However, to meet the high standards required for a Nordic Swan certificate, the requirement is intentionally ambitious. Additionally, we cannot consider measures that have already been implemented. Therefore, the requirement will remain unchanged, as altering it would undermine our goal of encouraging new energy-saving efforts.*

#### **Rakennusteollisuus RT**

The EPBD Directive 2024/1275/EU entered into force on 28 May 2024. Information on the publication of the updated directive should be in the criteria. Consideration should be given to if an update of the criteria resulting from the revision of the directive could be prepared even before the publication of national legislation.

In a criteria proposal, an energy audit is not required if the building is at least class C. We propose that the energy audit is also required in the case of energy class C, but no binding improvement percentage is given. We believe that this would encourage the energy savings sought by EPBD and the Energy Efficiency Directive.



### **Comment from Nordic Ecolabelling**

*Thank you for your comment. To the best of our knowledge, these criteria are in line with the EPBD Directive 2024/1275/EU. We are actively monitoring the development and each Nordic country's interpretation of the new directive.*

*Your understanding is correct; an energy audit is not required if the building is within energy class C or better. Nordic Ecolabelling aims to set requirements that effectively address and improve environmental issues. We appreciate your suggestion to require an energy audit for buildings within energy class C, as it would likely encourage energy savings. However, requiring an audit alone does not ensure that any measures will be implemented or that energy savings will be achieved. We believe that the other requirements set forth in this criteria set have a higher potential for impact, and we have therefore decided not to include your suggestion.*

### **Enviri**

It needs to be clear what is meant by "heritage-listed". It is unreasonable that only buildings that have the status of statligt byggnadsminne are subject to exemptions; it is better if the property owner justifies and explains based on the current building's conditions, needs and possibilities in view of cultural-historical values and characteristics.

It is very good to take cultural-historical values into account in order to avoid unnecessary measures that are not compatible with careful building maintenance where historical features are cared for and preserved.

### **Riksantikvaren**

Impact on Cultural Heritage Buildings

Challenges in Meeting Energy Efficiency Standards

- **Structural Integrity and Aesthetics:** Retrofitting heritage buildings to meet modern energy standards can compromise their structural integrity and aesthetic value. For example, adding insulation or double-glazed windows, might alter the building's appearance and historical authenticity.
- **Material Compatibility:** Modern materials used for energy efficiency improvements may not be compatible with the original materials, leading to potential damage or accelerated deterioration.
- **Cost and Feasibility:** Upgrading heritage buildings to meet energy standards can be prohibitively expensive and technically challenging, often requiring specialized skills and materials. Long-lasting traditional materials is preferable to modern elements, also considering the energy spent to produce the elements.

Exemptions for Listed Buildings

While exemptions for listed buildings (those officially recognized for their historical significance) can help preserve their integrity, this approach has limitations:

- **Non-Listed Heritage Buildings:** Many culturally significant buildings are not officially listed but still hold historical value. These buildings might not qualify for exemptions and could be at risk of inappropriate modifications to meet energy standards.

Ecological and Sustainable Aspects of Historic Homes

Historic homes often embody principles of ecological and sustainable design:

- **Natural Ventilation:** Many heritage buildings were designed with natural ventilation systems, reducing the need for mechanical cooling and heating.
- **Locally Sourced Materials:** The use of locally produced materials reduces the carbon footprint associated with transportation and production of new elements and supports local economies.
- **Circular Design:** The construction methods often emphasize durability and the ability to repair and reuse materials, aligning with modern principles of the circular economy.

## Conclusion

While exemptions for listed buildings are a step in the right direction, they are not sufficient to protect all heritage buildings. A more comprehensive approach is needed, one that recognizes the ecological and sustainable benefits of historic buildings and seeks to integrate modern energy efficiency measures in a way that respects and preserves their historical value. This might include developing specialized guidelines and technologies tailored to the unique needs of heritage buildings, as well as providing financial and technical support for their preservation and adaptation.

For further reading, please visit our webpage and read about heritage buildings and sustainability:

- [https://url12.mailanyone.net/scanner?m=1sEq6z-0007Tn-41&d=4%7Cmail%2F90%2F1717591800%2F1sEq6z-0007Tn-41%7Cin12a%7C57e1b682%7C14161982%7C11838427%7C66605F5100AD3E58E7E1AD01F607CFD5&o=%2Fphti%3A%2Frtsvnksrikaatlneinm%2Fki.olga-ukuto-%2Frennimr&s=-Hx12t\\_wOImuxLFLdZVhzHgYbSU](https://url12.mailanyone.net/scanner?m=1sEq6z-0007Tn-41&d=4%7Cmail%2F90%2F1717591800%2F1sEq6z-0007Tn-41%7Cin12a%7C57e1b682%7C14161982%7C11838427%7C66605F5100AD3E58E7E1AD01F607CFD5&o=%2Fphti%3A%2Frtsvnksrikaatlneinm%2Fki.olga-ukuto-%2Frennimr&s=-Hx12t_wOImuxLFLdZVhzHgYbSU).
- Please also visit <https://url12.mailanyone.net/scanner?m=1sEq6z-0007Tn-41&d=4%7Cmail%2F90%2F1717591800%2F1sEq6z-0007Tn-41%7Cin12a%7C57e1b682%7C14161982%7C11838427%7C66605F5100AD3E58E7E1AD01F607CFD5&o=%2Fphti%3A%2Frtsvnksrikaat9nen2%2F44.o%2F6&s=hjDGG82aDmJX5u2EZl3opi34EHQ> to read our directorates comments to various

## **Comment from Nordic Ecolabelling**

*Thank you for your comments. We agree that it must be clear what is covered by "heritage-listed" buildings. In these criteria, we have aligned the definition with the Nordic Swan Ecolabel criteria for New Buildings and Renovation. The background text of this criteria set states that the following buildings are considered "heritage-listed":*

- *DK: Protected buildings and buildings worthy of preservation with high conservation value (class 1-4 in the SAVE method1).*
- *FI: Protected buildings and buildings worthy of preservation that are defined in the law on built heritage or in town plans.*
- *NO: Protected buildings, as defined in the act kulturminneloven or svalbardmiljøloven, and buildings worthy of protection, as defined in the act plan- og bygningsloven, or naturmangfoldloven.*
- *SE: Protected buildings and buildings worthy of preservation are defined by the Country administrative Board (Länsstyrelsen). In addition, buildings q-marked by the municipalities in the local/zone plan, or alternatively buildings that are part of a municipality cultural environment programme or conservation programme.*

- *IS: Protected buildings and structures that are defined as protected by the Cultural Heritage Agency of Iceland, see: [Friðuð hús og mannvirki | Minjastofnun.](#)*

*To ensure clarity in our intention, we have decided to move this information from the background text to the criteria text, making it more explicit for the licensee.*

*We appreciate your recognition of our efforts to consider cultural and historical values to avoid unnecessary measures where preservation is needed. An important aspect of the scope of Nordic Swan Ecolabel Building operations is that the buildings either are energy-efficient from the start or after implementing energy-saving measures. The Nordic building stock is large and has great potential regarding energy efficiency and the Nordic Swan Ecolabel focuses on where the biggest difference can be made. These criteria cover a variety of buildings, not just heritage-listed ones. As a result, the requirements are not specifically tailored to address every potential scenario for heritage-listed buildings. If any special issues arise during the certification process for a heritage-listed building, we are prepared to address them as they occur. We are open to dialogue to ensure that the best possible solutions are implemented while still adhering to our requirements.*

## O9 Energy metering

### A-kruunu

Measuring energy and water consumption is a normal operational activity but it is important that this is in the criteria. The energy used to heat water is normally not measured separately, but this can be estimated in calculations.

### HSB

Bra med krav på mätning av energi-intensiv utrustning. Bra med krav på att ta fram en handlingsplan om prestandan försämrats.

### **Comment from Nordic Ecolabelling**

*Thank you for your comments. We are pleased that you are satisfied with the developed requirement, and we agree with your observations.*

## O10 Energy efficiency – continuous operation optimisation

### VVS Fabrikanternas Råd

Tabell 5. Månadsvis uppföljning bör kunna undantas vid nyttjande av värmepump, eller minst för värmepumpar kopplade till vattenburen värme. Detta bör klargöras i not \*\*.

### **Comment from Nordic Ecolabelling**

*Thank you for your comment. We fully agree with your observations. Bullet B in Table 5 is specifically intended to cover only direct electric heating, and we have clarified this in the requirement.*

### Svensk Ventilation

If the setpoint of the supply air is kept at maximum 18°C, there is a risk of draught that can be unpleasant. We agree with the target value, but would recommend to only use low supply air temperature when the system can handle it to avoid draught.

### **Comment from Nordic Ecolabelling**

*Thank you for your comment. We fully agree with your observations. The 18°C mentioned is not intended as a maximum value but rather as an example. As you correctly noted, the setpoint must be adapted to the specific circumstances of each building. This has been clarified in the requirement.*

## **O12 Purchasing of white goods**

### **Hyresgästföreningen (Swedish union of Tenants)**

Requirements regarding the energy usage of white goods could ideally be complemented with requirements concerning quality and repairability to highlight the impact of unsustainable consumption.

### **Comment from Nordic Ecolabelling**

*Thank you for your comment. We fully agree that complementing this energy performance requirement with criteria on quality and repairability would be ideal. However, the complexity of the documentation required to verify compliance with such criteria presents significant challenges. This complexity makes it impractical to achieve this goal without increasing the certification's complexity to an unmanageable level. Nordic Ecolabelling hopes that documentation standards for repairability and quality will evolve in the market, enabling us to introduce such requirements in the future.*

## **4.3.3 Requirements chapter 5.5 Climate change**

## **O13 Risk analysis climate change**

### **VVS Fabrikanternas Råd**

En risk och sårbarhetsanalys skall göras med en lista på nödvändiga åtgärder på kort och lång sikt, vilket är bra. Skrivelsen är dock otydlig från ett rent tekniskt perspektiv och vi anser att man kan vara tydligare om vad som till exempel bör kunna krävas av VA nät och enskilda avlopp i olika scenarier. Har Svanen för avsikt att ställa tydligare krav ställer vi på VVS fabrikanterna gärna upp med expertis.

### **HSB**

Oklart vilken nivå som är godkänt eller vem som kan utföra den (hur detaljerad ska den vara och vem har kompetens att utföra den). Annars ok nivå.

### **Comment from Nordic Ecolabelling**

*Thank you for your comments. Nordic Ecolabelling aims to establish functional requirements rather than prescribing specific techniques. This approach allows for flexibility in choosing technical solutions that are tailored to specific situations while still achieving the desired function. Further, in this requirement, we do not mandate specific expertise. Instead, we specify content of the report, including specific scenarios. The licensee must further present methods used. National and local guidelines can be referenced for compliance.*

### **PKA Ejendomme**

Omkring klimasikring anbefaler vi 30 års sigte frem for 50. Det er noget Dk opfundet noget med de 50 år. Det er ikke foreskrevet fra EU.

### **Comment from Nordic Ecolabelling**

*Thank you for your comment. We are following the national approach in this question and aligning it with Nordic standards. Therefore, we will maintain the 50-year analysis. Should more specific guidelines emerge from the EU, we will reassess accordingly.*

## **O14 Adaptation to a changing climate**

### **Enviri**

It is not mandatory to directly take care of actions identified in the risk and vulnerability investigation?

Is it ok to include them in the maintenance plan and review them at least every five years? Or maybe I just misunderstand.

### **A-kruunu**

From the owner's point of view, the requirement is challenging and heavy to meet, as the issues discussed in the risk analysis are big and difficult to assess. How easily can the necessary measures be implemented and how much the measures cost?

Requirements can cause an obstacle for applying the label.

### **Comment from Nordic Ecolabelling**

*Thank you for your comments. It is understood correctly that there is no requirement to immediately address identified risks, but it is mandatory to incorporate the identified measures into the maintenance plan. Nordic Ecolabelling does not impose mandatory requirements for the direct implementation of identified measures, aiming to provide flexibility and consider economic sustainability perspectives. This requirement is an important requirement with high ambitions to adapting existing buildings to a changing climate and it is aimed to be aligned with the EU Taxonomy levels.*

## **4.3.4 Requirements chapter 5.6 Indoor climate**

## **O16 Damp, mould and moisture prevention and handling plan**

### **HSB**

Oklart här vem som är ansvarig i en Brf ”Applicant”. Är det licenstagaren som ansvarar för att ta in rutiner för fuktkontroller? Vi anser att det bör ligga på Brf. Bör kopplas ihop med en riskbedömning kring hur klimatförändringar påverkar det framtida inomhusklimatet, dvs O13.

### **Comment from Nordic Ecolabelling**

*Thank you for your input. Nordic Ecolabelling acknowledge that there might have been some difficulties understanding the responsibility in some areas for a Bostadsrättsförening (housing cooperative). This have been made clearer in the product definition.*

*Requirement O13 states: ”The adaptation measures must further not adversely affect the adaptation efforts or the level of resilience to physical climate risks of other people, of nature, of cultural heritage, of assets and of other economic activities.” This is intended to address the specific concern you raised.*

## O17 Inventory of environmental hazardous substances

### Enviri

5: Idea: quantities are indicated as far as possible. Otherwise, you may make a guess/estimate or calculation (so that it is not mandatory to provide information about the exact amount/area). Based on e.g. information about the building and/or experience. Making a comprehensive inventory similar to a demolition inventory is not assumed to be the purpose of the criterion?

Depending on the type of building, it may be unnecessarily cumbersome and costly to survey 10% of the apartments (e.g. if it is an apartment building with rental units).

Should the inventory be a maximum of 3 or 10 years old? (Based on year and not exact date.)

### **Comment from Nordic Ecolabelling**

*Thank you for your comment. The requirement includes the quantities of hazardous materials, but this has been slightly modified, so estimations can also be accepted. The purpose of the requirement is not to create an inventory similar to a demolition inventory. The possibility of using a representative number of apartments has further been added to the requirement.*

*The inventory must not be older than 10 years old. The person performing the environmental survey must be qualified to conduct an environmental survey and have at least three years of relevant experience.*

### A-kruunu

It is common practice for a property owner to be responsible for identifying potential harmful substances (e.g. asbestos), but the discovery of PCB can lead to major actions and extensive renovations.

What harmful substances should be measured in the requirement? Why only one substance needs to be measured, are the measurements a risk to property owners?

### **Comment from Nordic Ecolabelling**

*Thank you for your input. Nordic Ecolabelling understand your concern, but it is very important for the Nordic Swan Ecolabel to not certify buildings that do not fulfil the current legislation on PCB harming the inhabitants or users of those buildings. The hazardous material survey must as a minimum identify asbestos and PCB. Nordic Ecolabelling is aware of other many harmful substances that can be found in building materials, however, we have worked on lowering both the complexity of the requirement and the cost of the survey. The potential and risk of exposure for those two chemicals have been evaluated to be the highest.*

## O18 Measurement of PCB levels in indoor air

### Enviri

Measurement regardless of whether PCBs were found indoors or outdoors?  
Regardless of the quantity in the material?

### Rakennusteollisuus RT

In our view, it would only be reasonable to require the measurement of PCB concentration in indoor air if potential PCB sources are detected at points where indoor air emissions would be possible.



**Comment from Nordic Ecolabelling**

*Thank you for your input. Nordic Ecolabelling understand your questions and concerns, but we will keep the requirement as it is. The reason is that PCB can migrate and is often found around windows, which can lead to its presence in indoor air. In specific cases where PCB is found in very small amounts and exclusively outside, with no possibility of migration indoors, these situations can be evaluated with our consultants/case handlers.*

**O19 Air quality and ventilation – continuous operation optimization**

**Svensk Ventilation**

We recommend to have a written action plan how to and when any audit findings from the mandatory ventilations inspection (OVK in Sweden, and what ever comes with the EPBD in rest of the nordic countries). Will be taken care of and adjusted so the remark will be gone at the next inspection as a maximum time.

**Comment from Nordic Ecolabelling**

*Thank you for your input. If deficiencies are identified during the periodic ventilation inspection (OVK), they must be promptly corrected as required by law. Our requirement specifies that any faults discovered, whether during the OVK or routine operational checks, must be addressed without delay.*

**O21 Radon**

**Svensk Ventilation**

To have the same value as what's required in the building regulations gives no added value. Therefore the criteria is of no good, better to say a more strict value than the building regulations.

We suggest to talk to "Svensk Radonförening" to find good and relevant limit values.

**Comment from Nordic Ecolabelling**

*Thank you for your comment. We have decided to include requirements that align with legislative limits to ensure all types of buildings, especially older ones, meet these standards. This decision supports the inclusivity of our certification criteria for all buildings. The Nordic Swan Ecolabel must verify the condition of buildings because we lack prior knowledge of their history before certification. We are also aware that many buildings currently do not comply with legislative limits in these areas. Enforcing these levels is valuable, as they are often not upheld, posing a health risk. Additionally, since these requirements align with legislative standards, applicants should find it straightforward to demonstrate compliance. We only set requirements at a legislative level when we know they are not being fulfilled and pose a health risk.*

**Rakennusteollisuus RT**

The proposed limit value (200 Bq/m<sup>3</sup>) does not comply with Finnish legislation. We propose that for each country the regulations of that country be complied with (<https://stuk.fi/asuntojen-radonia-koskevat-viitearvot-ja-maaraykset>).

**Comment from Nordic Ecolabelling**

*Thank you for your comment. In Finland, current legislation mandates 300 Bq/m<sup>3</sup> for existing buildings. Recognizing the serious health risks posed by radon, Nordic Ecolabelling has opted to tighten the limit to align with Norway and Sweden, setting it at 200 Bq/m<sup>3</sup>. Nordic Ecolabelling will keep the requirement as it is.*



## O22 Legionella

### VVS Fabrikanternas Råd

De krav ni ställer på svenska installationer bör ses över i samråd med Säker Vatten som just nu, tillsammans med oss, arbetar med bland annat den här frågan till sina kommande uppdaterade byggregler. Vi föreslår en kontakt med Fredrik Runius eller Pierre Lundborg.

#### **Comment from Nordic Ecolabelling**

*Thank you for your comment. Nordic Ecolabelling aims to establish functional requirements rather than prescribing specific techniques. This approach provides flexibility, allowing for the selection of technical solutions best suited to specific situations while still meeting the desired functions. We are also pleased to hear about your ongoing work and look forward to seeing the end result. We are open to further discussions when the time comes.*

### 4.3.5 Requirements chapter 5.7 Water

## O23 Water metering

### A-kruunu

Measuring energy and water consumption is a normal operational activity but it is important that this is in the criteria. The energy used to heat water is normally not measured separately, but this can be estimated in calculations.

#### **Comment from Nordic Ecolabelling**

*Thank you for your comment. We are pleased that you are satisfied with the developed requirement, and we agree with your observations.*

### HSB

Mätning av vatten på byggnadsnivå i radhus-, parhus- och fristående hus-föreningar kan vara en utmaning och då påverka möjligheten till certifiering.

#### **Comment from Nordic Ecolabelling**

*Thank you for your comment. Townhouse, semi-detached house, and detached house associations are not excluded from the criteria. However, this criteria set was not developed with these types of buildings as the primary focus. We understand that meeting the criteria may be more challenging for these buildings, but we still believe it is possible for them to achieve certification and this requirement.*

## O24 Water – continuous operation optimization

### VVS Fabrikanternas Råd

Det är bra att krav införs för att kontinuerligt följa upp, och åtgärda vattenläckage av olika slag. Det finns många lösningar på marknaden som kan göra fastigheter betydligt säkrare i det avseendet. Vi vill även påpeka att vi, tillsammans med Säker Vatten, försäkringsbolagen med mera tittar på hur kraven kan skärpas och här finns mycket att vinna på att era krav samordnas med det arbetet.

#### **Comment from Nordic Ecolabelling**

*Thank you for your comment. We are pleased that you are satisfied with the developed requirement, and about your ongoing work. We look forward to seeing the end result and are open to further discussions when the time comes.*

## **Enviri**

Suggest that meters for water also have monthly follow up.

### ***Comment from Nordic Ecolabelling***

*Thank you for your comment and for pointing this out. As you mentioned, this should indeed be followed up monthly, and the requirement has been adjusted accordingly.*

## **O25 Purchasing of sanitary tapware**

### **VVS Fabrikanternas Råd**

Det är bra att era krav är i linje med taxonomin och att det ställs krav på att nya blandare även skall vara energi klassade. Vi anser dock att det bör klargöras att flöden kan anpassas för att möta kraven med fler metoder än att byta blandare. I dag finns ofta inga blandare på marknaden för att möta krav på riktigt låga flöden och då kompletteras installationen med flödeshämmare av olika slag. Har en fastighet i dag fullt fungerande och relativt nya blandare som inte når fastställda krav anser vi att det bör tydliggöras att flödeskraven även kan uppfyllas med sådana åtgärder.

### ***Comment from Nordic Ecolabelling***

*Thank you for your comment. This requirement applies exclusively to the purchase of new sanitary tapware. If the property already has fully functional and relatively new mixers that do not meet the established requirement, there is no obligation to replace them.*

## **O26 Water saving technologies and measures**

### **A-kruunu**

It is good that the requirement allows you to choose between options and at the same time bring up options that may not have been thought of in the property. The measures can be implemented at a reasonable price.

### ***Comment from Nordic Ecolabelling***

*Thank you for your comment. We are pleased that you are satisfied with the developed requirement, and we agree with your observations.*

### **Svenskt vatten**

If systems for collection and storage of rainwater is installed the system must be designed in such a way that there is no risk for contamination of the drinking water.

### ***Comment from Nordic Ecolabelling***

*Thank you for your comment. Rainwater is distributed via a dedicated piping system designed specifically for toilet flushing, ensuring it remains completely separate from the drinking water supply. Therefore, we do not find it necessary to specify this in the requirement.*

### **HSB**

För Bostadsrätter som inte kan ta ansvar för bostadsrättsinnehavarnas armaturer finns då enbart två alternativ kvar: ”System som upptäcker läckage” och ”omhändertagande av dagvatten för toalett”. Svårt med vattenfelsbrytare i flerbostadshus.

### ***Comment from Nordic Ecolabelling***

*Thank you for your comment. We agree with your observations and recognize the importance of providing various options for all types of buildings. Therefore, we have decided to include the option of conducting a water mapping, with the requirement that at least one measure must be implemented based on the findings from the water mapping.*

#### 4.3.6 Requirements chapter 5.8 Recycling, reuse and waste management

### 5.8 General comment for chapter 5.8

#### **Avfall Norge**

Deserves even more strengthened focus on circular choices in 5.8 regarding interior articles (furniture, flooring, other typical things that tend to be renewed when tenants in a building change).

Several criteria have the potential for strengthening and being more proactive to incite results in terms of circular product and consumption choices.

A lack of criterias that demand alignment and performance aligned with national recycling targets turns a certification scheme like this from an otherwise great tool to a systemic barrier, and should therefore be addressed.

### ***Comment from Nordic Ecolabelling***

*Thank you for your response. Nordic Ecolabelling has considered implementing different requirements regarding reuse, recycling, and waste management. However, we encountered several challenges in establishing effective requirements. Firstly, the license holder (building owner or building operation contractor) has limited control over the waste generated by users/tenants and their choices regarding reused and recycled products. Secondly, the complexity of the documentation needed to verify some requirements poses significant difficulties, making it impractical to effectively limit waste generation or enhance reuse and recycling activities. Lastly, imposing mandatory requirements for reused materials would necessitate stringent measures to prevent harmful substances or chemicals from entering the building, increasing complexity and the need for chemical control. To maintain a manageable level of complexity for certification, Nordic Ecolabelling has decided not to introduce such requirements in the initial phase of this product group.*

*It is further noteworthy that several requirements within the criteria, but outside this specific chapter, are aimed at preventing waste and extending the lifespan of buildings or their installations. For instance, requirement O4 Maintenance plan and requirements for new purchases emphasize the importance of retaining well-functioning equipment until replacement is necessary. This approach ensures resource efficiency in terms of both raw materials and waste management.*

*Nevertheless, Nordic Ecolabelling fully supports national and EU targets on waste management, recycling, and promoting reuse. We actively try to incorporate these principles into our criteria, for example in Nordic Swan Ecolabel New buildings and Renovations, where we have other options in setting requirements.*

## O27 Information to users/tenants and possibility of sorting at source

### **Avfall Norge**

Providing information is a reactive, passive action. Actual in situ sorting should be measured to reflect target status that as a minimum matches current national recycling targets (such as the EU target of 65 % recycling or prepared for reuse by a certain year, or x % recycling of packaging etc.).

### **Comment from Nordic Ecolabelling**

*Thank you for your input. Nordic Ecolabelling has considered implementing a requirement regarding measuring the amount of waste generated daily by buildings and their users/tenants. However, we encountered several challenges, particularly regarding the limited control over waste management systems for residential buildings where municipalities have constrained waste receptions. The complexity of the requirement and the documentation involved posed significant difficulties, making it impractical to effectively limit waste generation through measuring. Nevertheless, Nordic Ecolabelling fully supports European targets on waste management, recycling, and promoting reuse. We actively include these principles in our criteria for new buildings and building renovations.*

### **A-kruunu**

The requirement level is sufficient as it is. The apartments are small today, so it is difficult to add extra waste containers to existing buildings and it is in any case the responsibility of the user of the apartment to carry out the separation of waste.

### **Comment from Nordic Ecolabelling**

*Thank you for your input. We appreciate your positive feedback and share your opinion.*

## O28 Promotion of repair and reuse for users/tenants

### **Avfall Norge**

Should be strengthened by demanding a certain percentage of reused materials being applied in the tenant space at all time - to prevent an endless consumption of virgin materials that may or may not be designed for future reuse - without actually getting reused by anyone. The level of reuse should reflect an estimated availability of reused said articles on the market in any given country. The criteria could even be as detailed as the example given in table 14, and the building in question should be obligated to measure and provide such information to the ecolabel regarding tenant status at regular intervals throughout the building's use phase. The criteria could thus be combined with criteria O29 (and even O30, seeing as recipes for circular soil mixtures for outdoor use are even available on the market; see a Norwegian Statsbygg report called 'sirkulære jordblandinger').

### **Comment from Nordic Ecolabelling**

*Thank you for your input. Nordic Ecolabelling strongly support and encourages the reuse of materials. However, in this case, we have not demanded a percentage of reused material being used by the tenants for several reasons. Firstly, tenants of the building are not the license holder and thus are not responsible for meeting the certification requirements. Secondly, the documentation required for verification of such requirement is complex and lacks sufficient control, limiting our ability to enforce a mandatory percentage of reused materials. Lastly, imposing a mandatory requirement for reused materials would necessitate stringent measures to prevent*

*harmful substances or chemicals from entering the building, which would increase complexity and chemical requirements. To maintain a reasonable level of complexity for certification, Nordic Ecolabelling has chosen not to introduce such requirements in the initial phase of this product group.*

#### **A-kruunu**

Meeting the requirement can be too challenging. If a property has a club room, it can be utilized, but digital systems and their maintenance are challenging from the property owner's point of view. Instead of requiring a system, the requirement could be communicative.

#### **Comment from Nordic Ecolabelling**

*Thank you for your input. In this requirement, Nordic Ecolabelling offers three different options. If digital systems and their maintenance pose challenges for property owners, they can implement a physical space instead. The intention of this requirement is to promote and facilitate material reuse. The requirement provides flexibility in implemented, allowing each licensee to choose the option that best suits their specific circumstances.*

#### **HSB**

Önskvärt kriterium, men behöver förtydligas samt breddas. T.ex. addera kriterium med fokus på samarbeten med andra aktörer som kan ta emot för återbruk etc. Risk för att bytesrummet endast blir ett utrymme avsatt för byte som sedan inte har ngt ägandeskap (möbler utan livslängd/ låg kvalitet riskerar att bli stående och sedan måste forslas bort av brf:en).

#### **Comment from Nordic Ecolabelling**

*Thank you for your comment. We appreciate that you recognize the potential of this requirement. However, the areas you mentioned are already covered by our criteria. In bullet point 3, Nordic Ecolabelling accepts collaboration with external actors if there is a system in place to encourage users/tenants to participate. Regarding the physical space, it is the responsibility of the licensee and/or building owner to establish rules for its use. If obstacles persist with this option due to tenant behavior, the requirement provides flexibility to choose alternative options (bullet points 1 or 2) instead.*

### **O29 Promotion of repair and reuse in relation to building improvements and tenant adaptations**

#### **Hyresgästföreningen (Swedish union of Tenants)**

The focus on sustainable practices for minor tenant adaptations and providing tenants with the opportunity to make sustainable choices is not sufficient. The property owner also needs to focus on reuse and resource efficiency during major renovations and reconstructions. Unfortunately, it is common for property owners to tear out fixed furnishings such as doors, windows, kitchens, and wardrobes, and undertake other actions solely to raise the rent. We believe this behavior may continue despite the criteria you propose, as the criteria are focused on maintenance and minor adaptations, not major renovations. At the same time, it is during major renovations that a resource usage perspective is particularly important and can result in the greatest gains.

**Comment from Nordic Ecolabelling**

*Thank you for your input. Nordic Ecolabelling strongly support and encourages the reuse and resource efficiency of materials during major renovations and reconstructions. However, please note that these criteria focus on building operations including maintenance work and minor adaptations. The issues brought up here therefore fall outside the scope of these criteria since major renovations and reconstructions are covered in the Nordic Swan criteria for Renovations, which we strongly encourage following.*

**Avfall Norge**

See comments for O28.

**Comment from Nordic Ecolabelling**

*Thank you for your input. See our response for O28.*

**HSB**

Utmaning för Brf, även här fokus hyresrätt.

Ansvarar licenstagaren för att utföra en inventering vid renovering eller brf-styrelsen? Vem har kompetens att utföra en inventering? Skulle i praktiken kunna innebära att en brf-styrelse måste erbjuda en inventering inför en renovering av en medlems bostadsrätt.

**Comment from Nordic Ecolabelling**

*Thank you for your input. Nordic Ecolabelling acknowledges the challenge this requirement poses for buildings owned by a housing cooperative (SV: bostadsrättsförening). This requirement is more applicable to buildings where operations are managed directly by the building owner or where the building operation contractor can provide support for building improvements and tenant adaptations. Since tenants in a housing cooperative have full responsibility for their own apartments, it becomes difficult for the Nordic Swan Ecolabelled licensee to document compliance. Due to the lack of steerability and mandate, we have decided to exempt housing cooperatives from this requirement.*

**4.3.7 Requirements chapter 5.9 Outdoor environment and biodiversity**

**O30 Outdoor area**

**Hyresgästföreningen (Swedish union of Tenants)**

The design of the outdoor environment can also help reduce the risk of flooding during heavy rainfall. Additionally, increasing canopy coverage through the planting of new trees is an important measure to lower temperatures and thereby reduce heat stress.

**Comment from Nordic Ecolabelling**

*Thank you for your input. We appreciate your feedback and share your opinion. This is however covered by the requirements O13 (Risk analysis climate change) and O14 (Adaptation to a changing climate) and will not be addressed here. The aim of this requirement is to prohibit and restrict the use for herbicides/pesticides and protect existing features of high natural value such as large-/old trees and natural watercourses.*



## **Avfall Norge**

See comments for O28.

### ***Comment from Nordic Ecolabelling***

*Thank you for your input. See our response for O28.*

## **HSB**

Smalt fokus som enbart inkluderar träd och vattendrag. Istället för specificera åtgärder skulle kravställningen kunna ställas på att inkludera kompetens. Att använda en sakkunnig som bedömer bevarandevärden och potential för ökade värden. Att den som är sakkunnig sedan ger rekommendation kring åtgärder för den specifika fastigheten. Utmaning att generalisera åtgärder för olika platser. Alternativt inkludera fler exempel på åtgärder som kan utföras, men bör vara möjligt att anpassa utifrån plats, förutsättningar etc.

## **Enviri**

Please specify chemical herbicides. Is for example weed vinegar included?

Invasive species: does it only matter if you know about them? Or should an inventory be made by an expert?

Do invasive species have to be removed or is it enough to know if they exist and that they must be taken care of when e.g. outdoor environment will be affected by maintenance?

Is it possible to get relief if, for example, parkslide is close to trees (and the trees are valuable and should not be removed)? (All parts of the parkslide cannot then be removed because the tree roots would then be destroyed.)

### ***Comment from Nordic Ecolabelling***

*Thank you for your input. The aim of the requirement is to prohibit and restrict the use for herbicides/pesticides and protect existing features of high natural value such as large-/old trees and natural watercourses. A requirement for design of the outdoor environment do not have as high potential as for a new building and are therefore not part of generation 1 of the criteria.*

*We do not allow the use of any chemical herbicides, including vinegar and acid vinegar. If insecticides/fungicides/rodenticides are deemed necessary to use these should be approved by national authorities and carried out by professionals (trained pest controllers). This has been clarified in the requirement. Foreign invasive species are one of the biggest causes of biodiversity loss and should therefore be removed as fast as possible when identified.*

## **4.3.8 Requirements chapter 5.10 Services and products in daily operations, maintenance and building improvements**

### **General comment on the chapter 5.10**

## **Enviri**

Viktigt att definiera vad fastighetsägaren etc. kan påverka.

## **HSB**

Är licensägaren ansvarig för alla krav oavsett vem som utför arbetet? HSB önskar också ett förtydligande på en övergripande nivå kring vilka ytor som ingår, t.ex. om



privata bostäder inte ingår samt förtydligande kring hur uppdelningen skulle se ut för en brf, ex som det är formulerat avseende vitvaror.

***Comment from Nordic Ecolabelling***

*Thank you for your comments. We appreciate your feedback and share your opinion. We have modified the introduction text to this chapter as well as the product group definition to make this clearer.*

**A-kruunu**

Controlling/guiding procurements is not common, but it is neither impossible. It requires the management/guiding of the service chain (e.g. maintenance company, repair partners) and following the fulfilment of contracts and the implementation to fulfil the requirement. In Ara rental apartments (Ara=The Housing Finance and Development Centre of Finland), residents have rights to competitive bidding under the Co-Governing Act. This can affect individual goals.

It would be better to set the requirement so that x% of products must be eco-labelled. If the availability of ecolabelled products is small and the only ecolabelled product is clearly more expensive, meeting the requirement according to the proposal (100% eco-labelled products) is challenging and can become an obstacle for applying the label. The requirement level should be lower in the first criterion version and tightened to the next version.

***Comment from Nordic Ecolabelling***

*Thank you for your input. We have considered the possibility of writing a requirement based on percentages for building products. However, what initially seems like a simpler solution actually becomes a much more complex requirement. Introducing percentage-based calculations necessitates specifying different product categories, units of measurement, and many other parameters. Experience with other product groups indicates that such calculations become complicated.*

*The products and services covered by the following requirements and their accessibility in the market have been evaluated for each country. The conclusion is that these products and services are sufficiently available to meet the demand outlined in this criteria document.*

**O31 Cleaning products**

**Enviri**

Impact on services already procured?

The requirement is exempted if it is beyond the property owner's control to e.g. is it something that the tenant himself is responsible for?

***Comment from Nordic Ecolabelling***

*Thank you for your input. We have now added the possibility to submit a plan for changing the external cleaning service if it does not fulfil the requirement at the time of application. The applicant has up to two years to change the service supplier if needed.*

*The requirements that are beyond the property owner's control is excluded from the requirement. This is now clarified in the introduction text of the chapter.*

### **Avfall Norge**

The criteria could also address the plastic packaging problem, in light of an increasing focus on reusable plastics and reduced plastic waste in the EU: reuse solutions such as Norway's 'Påfyll' should be mandatory to use (or at least lead to credit toward the criteria) whenever / wherever available. This would be somewhat out of the box for the current criteria, which targets the chemicals themselves, not the packaging. Also ties in with O38 and procurement procedures.

#### ***Comment from Nordic Ecolabelling***

*Thank you for your input. By requiring that the cleaning product must be ecolabelled, we ensure high restrictions for both chemicals and packaging. The criteria document for chemical products addresses both areas, emphasizing the reduction of packaging, designing for disassembly and recycling, and promoting the use of recycled plastic.*

### **HSB**

Påverkas av vem som är licenstagare. (inte tydligt)

#### ***Comment from Nordic Ecolabelling***

*Thank you for your comments. We have modified the introduction text to this chapter as well as the product group definition to make this clearer.*

## **O32 Other Ecolabelled services**

### **Avfall Norge**

Partially overlaps with the packaging issue described for O31.

#### ***Comment from Nordic Ecolabelling***

*Thank you for your input. Packaging is a focus area in the Nordic Swan and EU ecolabel criteria documents for products and services. Look at our response for O31 for more information.*

## **O33 Ecolabelled products**

### **Avfall Norge**

Would have liked to see a commitment to reused floors, countertops, particle boards and other products that can be reusable. Ties in with earlier comments.

### **HSB**

Bör förtydligas att detta avser nya produkter att återbruk undantas - annars målkonflikt mot O29 . Ev. kan det vara en utmaning att sätta en målnivå på 100% av produkterna.

#### ***Comment from Nordic Ecolabelling***

*Thank you for your input. We appreciate your feedback, and in response, we have revised the requirement to no longer cover reused products, aiming to encourage their use. Nordic Ecolabelling has as strategic focus to encourage the reuse and recycling of materials. However, further having mandatory requirements for reusing building products would necessitate addressing the chemicals within those products, significantly increasing the complexity of this chapter. We will look at extending this chapter in coming generations.*

## O34 PVC in floors, ceilings, walls, doors and windows

### Enviri

Good with exceptions in terms of slip resistance, cleanability, etc.

### **Comment from Nordic Ecolabelling**

*Thank you for your input. Nordic Ecolabelling appreciates your positive feedback and agree with your observations.*

### Avfall Norge

See O33. Would like to see mandatory commitments to actually utilize reusable waste products in the (local / regional / national) market whenever available.

### **Comment from Nordic Ecolabelling**

*Thank you for your input. See our answer in O33.*

## O35 Copper

### VVS Fabrikanternas Råd

Enligt kriterierna får tappvattenledningar inte överstiga 1 % koppar. Vi ifrågasätter begränsningen och föreslår följande fem undantag:

- Synliga rördragningar
- Vattenarmaturers anslutningsdetaljer, såsom kopplingar, fördelare
- Slutna vattenledningssystem för uppvärmning.
- Rör genom väggen för utomhuskran.
- Vattenarmaturer installerade i installationsskåp

Det har publicerats två opartiska faktagranskningar vad gäller koppar, från svenska IVL och Finlands Miljöcentral SYKE. Båda har konstaterat att det inte finns skäl att begränsa koppar i byggnadernas VVS installationer på nationell eller nordisk nivå:

- IVL, BASTA 2017: <https://www.bastaonline.se/koppar-i-byggprodukter-ny-rapport/>
- Finlands Miljöcentral 2020: [https://www.syke.fi/sv-FI/Forskning\\_utveckling/Forsknings\\_och\\_utvecklingsprojekt/Projekt/Miljoeffektbedomning\\_av\\_rormaterial\\_som\\_anvands\\_i\\_byggnader](https://www.syke.fi/sv-FI/Forskning_utveckling/Forsknings_och_utvecklingsprojekt/Projekt/Miljoeffektbedomning_av_rormaterial_som_anvands_i_byggnader)

De kopparprodukter som förbjuds tillverkas av nästan 100 procent återvunnet koppar. De återvinns med lågt klimatavtryck och utan kvalitetsförluster. Syftet att begränsa användningen av koppar är svår att motivera. Varför förbise dessa utredningar och varför tas en begränsad hänsyn till klimatpåverkan i detta fall?

### **Scandinavian Copper Development Association**

Nordic Swan Ecolabel's key drivers are circular economy, life cycle perspective and UN Sustainable Development Goals. EU Fit for 55 goal is an extremely important driver for building sector. Copper is a suitable material for buildings to contribute positively to these aspects. Copper is a fully recycled and recyclable building material, with very low carbon footprint as it is produced out of 100 % recycled raw materials. It produces no waste when installed or demolished.

According to Nordic Ecolabelling, sewage sludge is “the primary reason why Nordic Ecolabelling wants to limit copper as a material in tap water pipes and as a roof and facade material”. There is no evidence of negative environmental impacts of copper in sewage sludge.

Copper's environment and health properties have been evaluated according to EU's Existing Substances Directive and thereafter following requirements of REACH registration. No risks of using existing products have been identified. Copper is not a hazardous substance according to CLP. Copper is not nationally prioritized substance and does not belong to phase-out nor risk reduction substances. Copper is approved for drinking water use by WHO and EU, and by type approvals in Nordic countries. No other ecolabelling nor sustainability certifying body is restricting copper use.

SCDA would like to refer to our previous comments SCDA comments about Swan New Buildings criterion O29 and add scientific and statistical references to each correction of Nordic Ecolabelling's background document. Sources for referenced information are attached as links and marked with yellow.

SCDA has provided for Nordic Ecolabelling sources with unbiased scientific evidence and statistics primarily from Swedish authorities during past consultations of Swan criteria for new buildings and renovations. Also renowned Nordic governmental research institutes SYKE and IVL provided evaluations of the criteria. No evidence of caused harm has been proven.

As there is no evidence of proven negative environmental effect, measurable benefit from the restriction criteria can neither be reported. An environmental requirement without verifiable problem to solve nor verifiable benefit is in breach of "the basic concept of Green Public Procurement, which relies on having clear, verifiable, justifiable, and ambitious environmental criteria for products and services, based on a life-cycle approach and scientific evidence base." Source: [https://green-business.ec.europa.eu/green-public-procurement\\_en](https://green-business.ec.europa.eu/green-public-procurement_en)

#### Introduction

Copper concentrations in environment are determined by natural backgrounds. There is no evidence that diffuse emissions from copper drinking water tubes or roofs would cause elevated harmful levels of copper in water, sewage sludge or soil in Sweden as nowhere else either.

#### Sources:

- Vattenmyndigheter: Samrådet om vattenförvaltning 2021, Status classification copper 2018 <https://viss.lansstyrelsen.se/Search.aspx>
- Naturvårdsverket: <https://www.naturvardsverket.se/publikationer/8800/978-91-620-8895-8/>
- SCB: [https://www.scb.se/contentassets/df67fbff8d32443db04e94c1b910dd3d/mi0106\\_2020a01\\_sm\\_mi22sm2201.pdf](https://www.scb.se/contentassets/df67fbff8d32443db04e94c1b910dd3d/mi0106_2020a01_sm_mi22sm2201.pdf)
- Stockholm surroundings water quality; green = good status
- Source: Stockholm City Miljöbarometer
- <https://miljobarometern.stockholm.se/miljogifter/koppar/koppar-i-ytvatten-biotillganglig-halt/compare>:
- Attachment with detailed comments: <https://www.koppar.com/wp-content/uploads/2024/06/SCDA-comments-to-Swan-Building-Operations-criterion-O35.pdf>

## **Rakennusteollisuus RT**

We do not consider the ban on copper to be justified. In this regard, please note our comments in our previous consultation response for new buildings in 10.3.2022 (Section O29, Appendix 1).

## **Technology Industries of Finland**

We highlight one essential point in particular, which we hope will receive attention. The use of copper has been restricted in the criteria of New buildings and in the criteria of Renovation of buildings and also in this criteria proposal of Building operations.

We are concerned that the numerous comments on the ban on copper in previous consultation and the unanimous decision of the Finnish Ecolabelling Board to suggest deleting the ban on copper have not been taken into account in the criteria of New buildings. In this criteria proposal, copper is limited in pipes, roofs and façade cladding material. In our point of view there is no reasons for this.

Dissenting opinions have been expressed, and it is requested that copper would be allowed to be used in residential buildings as well as comparable buildings. In Finland, the Ministry of Economic Affairs and Employment has raised the need for an objective study to compare environmental impacts due to differing opinions.

The aim of the study was to obtain impartial information as a basis for the material recommendations of household water pipes of the Swan Ecolabel. The study was conducted by the Finnish Environment Institute (SYKE). SYKE collected comprehensive information on the manufacture of different pipe materials (copper, plastic and composite) and the effects of use on health and the environment. Data was also collected on their recyclability. The study was limited to residential use and the water pipes inside the corresponding buildings.

Based on this study, no clear differences were found between pipe materials in their environmental impact. Furthermore, no pipe material was found to cause adverse health effects.

The pipe materials used in buildings have caused debate about their potential environmental impacts and some experts have worried about the environmental impacts of copper soluble in water, but no clear justification has been found.

The study makes it very clear that the amount of copper soluble from copper pipes was low and no concentrations exceeding the recommendations have been observed in waterways.

The study assessed the harmfulness of copper in aquatic environment and its impact on cultivated land when sewage sludge is used as fertilizer. The study concludes that the effect of copper, which is soluble in water pipes, on the aquatic environment cannot be considered significant. According to the study, harmful effects may occur only in areas where copper levels are already naturally high. Such areas can be found in the Nordic countries. However, this is a very small proportion of the total area of cultivated land. In these areas, the simplest way to go is stop using sewage sludge as fertilizer material. According to the study, it is not justified to prohibit the use of copper pipes based on this cause.

The study also shows that the differences in climate impacts during the manufacture of different pipe materials are not very large and there is no clear ranking between the different pipe materials.

In Finland, copper, which is made from 100% recycled raw materials, is a completely recycled and recyclable building material with a very small carbon footprint. It does not produce waste when installed or discharged.

According to the study, pipes made of different materials each have their own place and purpose of use. For example, stiff copper or composite pipes are best suited for high rise pipes in apartment buildings. The study found no clear justification for one of the examined tube materials being inferior to the other in terms of the effects studied (carbon footprint, health, toxicity). According to the study and its research results, it is not justified to ban the use of copper.

In our opinion, there is no room for interpretation in the results of the study. They are very clear and cannot be ignored. There are no grounds for a copper ban in the proposed criterion proposal and this needs to be changed.

#### ***Comment from Nordic Ecolabelling***

*Thank you for your inputs. The requirement for copper is aligned with the corresponding requirement in New Buildings 089. The exemptions in the requirement are also aligned with the needs that have been identified in this criteria. Nordic Ecolabelling does not find that the situation has changed since the new criteria for New Buildings 089 was released in March 2023.*

*The largest sources of copper spreading into the environment are via tap water, and road traffic. Sheet metal on the outside of buildings (roofs and facades) and contact cables for the railway are also relatively large sources. The primary recipients of the copper differ. For water mains, it is the sewage treatment plant, while the distribution of copper in road traffic primarily ends up in stormwater and soil. A predominant percentage (60–80%) of the copper entering the treatment plants originate from tap water pipes in properties.*

*The Swedish Environmental Protection Agency states that the copper levels found in arable land do not show negative microbiological effects, but that the margin is small. Both the background content of copper and local factors varies across the country. To provide general protection against the effects of copper, it is, therefore, justified to have stricter requirements regarding copper for the return of sludge.*

*The Swedish Environmental Protection Agency further states that the supply of copper must specifically be reduced for sludge to be recycled in a manner that is sustainable in the long term. This is important as increased recycling of phosphorus from sludge is desirable from a resource efficiency and recycling point of view. This is the primary reason why Nordic Ecolabelling wants to limit copper as a material in tap water pipes and as a roof and facade material.*

*The study carried out by SYKES<sup>2</sup> on behalf of the Finnish Ministry of Employment and Economic Affairs concludes that the negative effects of the supply of copper to the*

---

<sup>2</sup> 25 Jyrki Laitinen and Riikka Malila, Finish Environment Institute, Sustainable Water Management,

*environment through sludge returned to agricultural land are not a general Nordic problem. This is correct. However, the problem is not limited to the Stockholm area, which is incorrectly pointed out in the investigation. On the contrary, copper is a limiting factor for returning sludge to arable land in large parts of Sweden. Nordic Ecolabelling has concluded that it is not relevant to write geographically adapted requirements. Therefore, a general Nordic restriction requirement remains in the criteria.*

*Overall, the requirement is not changed after consultation. However, it is clarified that protected buildings and buildings worthy of preservation that have copper roof or façade can apply for an exemption for the requirement if they can prove that these building parts are specifically protected.*

### **O37 Wood and bamboo**

#### **PEFC Nordics i.e. PEFC Sweden, PEFC Norway, PEFC Finland and PEFC Denmark**

PEFC Nordics suggest that in addition to a valid Chain of Custody certificate, Swan should require that all deliveries shall be followed with documentation according to FSC/PEFC schemes.

PEFC Chain of Custody requires that the supplier provides customers with the following information for each delivery: a) customer identification, b) name of supplier, c) product identification (incl tree species), d) quantity of product(s), e) date of delivery, f) PEFC claim for each product, g) certificate number.

Please note that a photo of products with a logotype cannot replace the full information (a-g) needed to ensure valid claims.

The validity of the CoC certificate should be checked on the PEFC database.

It should also be clarified if "All purchased wood raw materials and bamboo must be FSC or PEFC certified", refers to 100% PEFC/FSC certified or if a lower percentage in combination with PEFC controlled sources or the FSC equivalent is acceptable.

We suggest aligning the criteria with e.g. the criteria for new buildings to clarify what is needed to ensure certified products.

#### ***Comment from Nordic Ecolabelling***

*Thank you for your inputs. We appreciate your feedback and share your opinion. The requirement has been clarified to specify that the documentation for the purchase of wood must adhere to principles issued by FSC and PEFC. However, this requirement has been simplified compared to the requirement for Nordic Swan Ecolabel New buildings since that requirement overly complex for the need of this criteria document. If deemed necessary, we may include an appendix to provide further details in the future.*



## O38 Procurement procedures

### **Avfall Norge**

Ties in with a high but not fully realized potential to introduce criteria across the board that incite stringent compliance to select reused products when available on the market. See earlier comments and suggestions across several criteria.

#### **Comment from Nordic Ecolabelling**

*Thank you for your input. Nordic Ecolabelling has as strategic focus to encourage the reuse and recycling of materials. However, after assessing the entire life cycle of building operations, other areas with higher relative environmental impact have been identified. There has been a focus on keeping the area of materials and chemicals highly ambitious yet straightforward requirements. Introducing mandatory requirements for reusing building products would necessitate addressing the chemicals within those products, significantly increasing the complexity of this chapter. We will look at extending this chapter in coming generations.*

### **HSB**

Så som kriteriet är formulerat krävs att det finns en person som är utsedd ansvarig. Är det då en ansvarig hos förvaltaren eller hos Brf:en?

#### **Comment from Nordic Ecolabelling**

*Thank you for your input. The licensee is required to appoint a responsible person to report to Nordic Ecolabelling. However, the licensee then also has the option to appoint another individual with practical responsibilities. In all cases, it will always be the designated responsible person from the company searching for a license that must ensure that this procedure is consistently followed.*

## 4.3.9 Chapter 7 Alignment with the EU taxonomy framework

### **Avfall Norge**

Should not only focus on the taxonomy, but also focus on alignment of choices and reporting practices within the CSRD regime (ESRS E5 on resource consumption and circular economy especially).

#### **Comment from Nordic Ecolabelling**

*Thank you for your input. While Nordic Ecolabelling prioritize resource consumption and the circular economy in these criteria, our primary emphasis is currently on energy and climate issues, driven by their significant impact and relevance. This represents our current approach and alignment to the taxonomy. In future generations of this criteria, we aim to expand our focus to include other reporting practices within the CSRD regime.*

### **Svensk Ventilation**

We are missing TSC 3.5 for Energy efficiency products.

#### **Comment from Nordic Ecolabelling**

*Thank you for your input. The TSC 3.5 have been considered and an evaluation has determined that it is not feasible as an ecolabel to mandate requirements for all equipment categories listed from a) to q) in the provided list. This decision stems from the recognition that not all buildings require all upgrades to energy-efficient equipment at the time of application. We prioritize overall building energy efficiency*

*rather than prescribing specific techniques or measures. Therefore, while the criteria can be fulfilled using measures from the provided list, these are not obligatory within this set of criteria. However, we have explained this more clearly in chapter 7.*

### **HSB**

Om det inte kommer att finnas ekonomiska incitament för bostadsrättsföreningar att använda certifieringen (t.ex. gröna bolån) så kommer efterfrågan att vara låg.

HSB anser att Svanen och andra certifieringsorgan bör föra en tydlig dialog med bankerna kring detta. Både vad gäller certifieringar av befintliga fastigheter och för nyproduktion. Det bör vara en högt prioriterad fråga för Svanen.

### ***Comment from Nordic Ecolabelling***

*Thank you for your input. We appreciate your feedback and share your opinion. Nordic Ecolabelling has initiated discussions with financial institutions and insurance companies to explore this matter further. We hope they share our perspective and recognize the environmental benefits associated with it.*