

Practical guide for the use of the EU Ecolabel in the green public procurement of tissue paper and tissue products



HIGHLIGHTS

- The [EU Ecolabel](#) and [EU GPP](#) (Green Public Procurement) are two European policy instruments that can be used by public procurers in a synergistic manner by matching supply and demand signals to green the market.
- Suppliers receive general demand signals for greener products. However, public procurers are often reluctant to state specific green criteria in calls for competition because of uncertainty about what exactly to ask for and the availability of compliant products on the market.
- These practical guides help procurers to draw up technical specifications and award criteria based on EU Ecolabel criteria in calls for the green public procurement of tissue paper and tissue products.
- Compliance with the recommended EU GPP criteria can be verified simply by products carrying the EU Ecolabel and, in some cases, by products carrying other ISO 14024 type I Ecolabels.
- Public authorities can also directly request EU Ecolabel tissue paper and tissue products in their call for competition.

QUICK GUIDE - Recommended environmental criteria focus on: (i) fibre sourcing, (ii) pulp bleaching, (iii) emissions to water and air, and (iv) energy consumption.

For more detailed information about the rationale behind these criteria, please consult related JRC reports (Background report to the guide for the use of the EU Ecolabel criteria in the green public procurement of graphic paper, tissue paper and tissue products [1], Final Technical Report [2]).

The common goal of the EU GPP and EU Ecolabel policies is to promote products (goods and services) with a reduced environmental impact throughout their life cycle.

INTRODUCTION

Background to EU GPP

Green Public Procurement (GPP) is defined in the European Commission's Communication "Public procurement for a better environment" as "a process whereby public authorities seek to procure goods, services and works with a reduced environmental impact throughout their life cycle when compared to goods, services and works with the same primary function that would otherwise be procured." A training toolkit¹ for public authorities is available to help understand the strategic thinking, legal aspects, needs assessment and how to engage with the market.

Scale of Public Procurement in the EU

Every year, over 250 000 public authorities in the EU spend around 14% of EU Gross Domestic Product (GDP) on the purchase of services, works and supplies², accounting for roughly EUR 1.8 trillion annually³. The public sector can use procurement to boost jobs, growth and investment, and to create an economy that is more innovative, more energy-efficient and [more circular](#).

The use of labels in Public Procurement

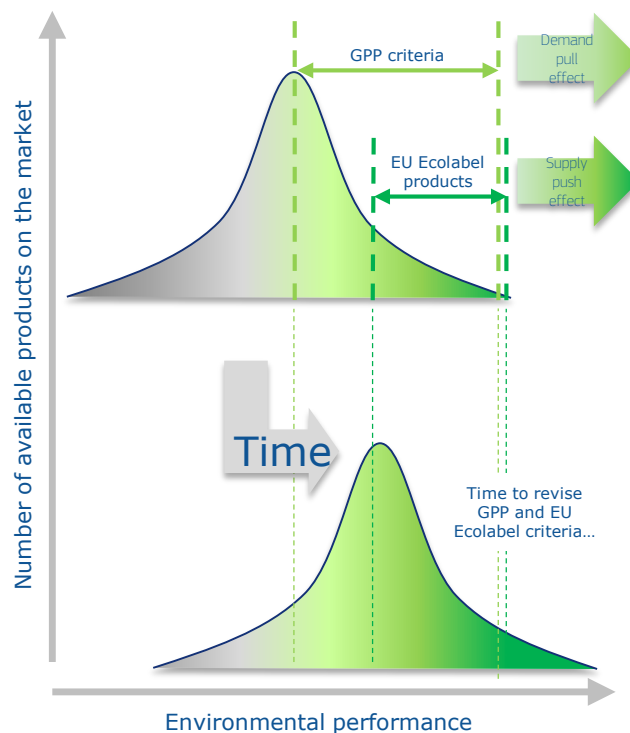
According to the EU Public Procurement Directives (2014/24/EU and 2014/25/EU) labels (e.g. ecolabels) can be used at different stages of the procurement process (e.g. preparation of documents, market engagement, evaluation of bids and assessment of contract compliance for the winning bid). At the bid evaluation and the contract compliance assessment stages, ecolabels provide a means of third-party verification, which can considerably help contracting authorities to save time and effort while ensuring the applicability of high environmental standards in government contracts.

In general, labels can be required as means of proof in the bidding exercise as long as the following conditions are fulfilled (taken from Article 43 of Directive 2014/24/EU and Article 61 of Directive

2014/25/EU with some additional text added in square brackets [] for clarity):

- (a) the label requirements [set in GPP criteria] only concern [proof of compliance with] criteria which are linked to the subject-matter of the contract and are appropriate to define characteristics of the works, services or supplies that are the subject-matter of the contract;
- (b) the label requirements are based on objectively verifiable and non-discriminatory criteria;
- (c) the labels are established in an open and transparent procedure in which all relevant stakeholders, including government bodies, consumers, social partners, manufacturers, distributors and non-governmental organisations, may participate;
- (d) the labels are accessible to all interested parties [i.e. manufacturers or service providers can apply for the label and contracting authorities can access the underlying label criteria];
- (e) the label requirements are set by a third party over which the economic operator applying for the label cannot exercise a decisive influence.

Figure 1 – Intended synergistic effect of voluntary EU Ecolabel & EU GPP policies on the “greening” of a market



Source: JRC own elaboration.

(¹) See https://green-business.ec.europa.eu/green-public-procurement/gpp-training-toolkit_en

(²) See: https://single-market-economy.ec.europa.eu/single-market/public-procurement_en

(³) European Commission, Directorate-General for Environment, Buying green! : a handbook on green public procurement, Publications Office, 2016, <https://data.europa.eu/doi/10.2779/837689>

The synergies between EU Ecolabel and EU GPP

In a similar manner to EU GPP, the aim of the EU Ecolabel, as defined in [Regulation \(EC\) No 66/2010](#), is to “*promote products with a reduced environmental impact during their entire life cycle*” via a voluntary ISO 14024 type I Ecolabel award scheme. For any given product group, whenever procurers decide to adopt requirements based on EU Ecolabel criteria, the supply side EU Ecolabel policy works in tandem with the demand side EU GPP policy to drive the market towards better products in terms of environmental performance.

This practical guide presents several EU Ecolabel criteria that are considered especially relevant for use in green public procurement of tissue paper and tissue products, with the aim of generating the synergies illustrated in Figure 1.

Types of procurement criteria

There are several different types of procurement criteria, with the most relevant to green requirements being:

(i) **Technical Specifications (TSs)**, which are mandatory requirements that ALL relevant products covered by a call for competition must meet.

(ii) **Award Criteria (ACs)**, which can be used as additional optional requirements that would make compliant products more competitive, depending on the weighting applied to the award criteria. In many cases, good environmental performance is stipulated as an award criterion.

(iii) **Contract Performance Conditions (CPCs)**, which are mandatory rules for how a contract must be carried out. They shall not have any influence on the awarding of the contract and no means of proof can be requested during the tendering phase, but failure to comply with them is linked to clear penalties and other consequences, such as the cancellation of the contract.

To make green criteria better known, it is up to procurers to specify them in calls for tender and explain more about them to potential bidders through market engagement exercises before calls for tender are published. For more information on market engage-

ment, please see module 6 of the EU GPP training toolkit¹.

SCOPE AND DEFINITION

The products included under these recommended EU GPP criteria fall within the scope of EU Ecolabel criteria for tissue paper and tissue products (Article 2 of [Commission Decision \(EU\) 2019/70](#)), as presented in Figure 2.

Figure 2 – Scope of the tissue paper and tissue products product group pursuant to Article 2 of Commission Decision (EU) 2019/70

Included ➡

- Sheets or reels of not converted tissue paper for conversion into tissue paper products as specified below.
- Tissue products fit for use for personal hygiene, absorption of liquids or the cleaning of surfaces, or for a combination of those purposes; included but not limited to tissue products of the following kinds: handkerchiefs, toilet tissues, facial tissues, kitchen or household towels, table napkins, mats and industrial wipes.

Excluded ➡

- Absorbent hygiene products;
- Products containing cleaning agents designed for the cleaning of surfaces;
- Tissue products laminated with materials other than tissue paper;
- Cosmetic products, including wet wipes;
- Fragranced paper;
- Graphic paper or printed paper.

Source: JRC own elaboration based on [4].

The scope largely relies on the ISO 12625 standard, which establishes common terminology in industry and commerce in the working field of tissue paper and tissue products.

The term “tissue” describes products and base papers made from lightweight, dry or wet-creped⁴ and some “non-creped” papers. The base “tissue paper” is taken from the tissue machine as a single-ply web wound up on a roll/reel and is used to manufacture tissue paper products. A typical weight (i.e. grammage) of single-ply tissue-based papers ranges from 10 g/m² to 50 g/m². The properties of the tissue paper give its resulting products the typical high capacity of tensile energy absorption together with a good textile-like flexibility, surface softness, comparatively low bulk density and high ability to absorb liquids. Disposable tissue paper products are commonly used for hygienic and industrial purposes.

⁽⁴⁾ According to ISO 12625: “*creping is a process by which the web is mechanically removed from the Yankee cylinder (3.63) by a blade in the*

machine direction in order to change its properties, which include stretch, thickness, strength and softness”.

“Tissue product” is a final finished product made of one or several plies, each ply being of one or several layers. These include a broad range of products such as: toilet paper, facial tissues, kitchen/household towels, hand towels, handkerchiefs, table napkins, and industrial wipes. Nonwovens are not classified as tissue (according to ISO 12625).

Common Procurement Vocabulary (CPV) codes

When procurers publish a call for competition, a CPV code should be used when describing the subject-matter of the call. Consequently, it is worthwhile to check how products included in the scope of EU Ecolabel criteria sit within the hierarchy of CPV codes set out in [Regulation \(EC\) No 213/2008](#). The following codes were found to be of direct relevance to the scope of the product group:

33000000 Medical equipments, pharmaceuticals and personal care products.

33700000 Personal care products:

33761000: Toilet paper.

33762000: Paper handkerchiefs.

33763000: Paper handtowels.

33764000: Paper serviettes.

33770000 Paper sanitary:

33771200: Paper napkins.

33772000: Disposable paper products.

Tissue products fall under category CPV 33000000: Medical equipments, pharmaceuticals and personal care products⁵, which is further divided into relevant subcategories, such as personal care products (CPV 33700000) and paper sanitary (CPV 33770000). The CPV 33770000 category (paper sanitary) needs to be analysed with caution due to possible overlaps with goods that fall under the scope of the [EU Ecolabel for absorbent hygienic products](#). Furthermore, within a diverse paper sanitary category, products made of tissue paper, i.e. tissue products, are mainly covered by: paper napkins (CPV: 33771200) and disposable paper products (CPV: 33772000). Finally, it is to be born in mind that products that fall under the [Medical Devices Regulation \(EU\) 2017/745](#) cannot be awarded the EU Ecolabel.

Potential and real-life procurement examples

The procurer might use the real-life good practice examples as an aid to identify the elements of the tendering process that raise the demand for “green” products and help shift the market towards more sustainable products.

Consistent implementation of such measures will encourage the 'doers and makers' to endorse green purchasing and implement procedures capable of advancing sustainable procurement practices. Embedding green purchase into procedures or criteria encourages innovation, supply chain traceability and resources management while shaping a sustainable transformation at the production and consumption level. More practical information about the best practice in Green Public Procurement can be found on [DG Environment website](#) and in a [dedicated brochure](#).

Procurement of tissue products is directly related to the hygiene aspects of a workplace and other facilities under the responsibility of public administration. These facilities need to ensure in-place hygiene conditions and practices that help to maintain health and prevent the spread of diseases, e.g. paper towels to sanitise the workplace. This requirement is particularly reinforced by post-COVID public demand for well-established sanitary practices.

Hence, the supply of tissue products is often aggregated (or categorised) as consumables under extensive (often centralised) framework contracts for cleaning services for, e.g. offices, hospitals, municipalities. The UNEP statistical survey situated cleaning products and services among the top sustainable procurement priorities worldwide in 2021 [3].

In this respect, the EU GPP criteria for cleaning products and services are available on the [DG ENV webpage](#). For a more detailed technical information on EU GPP criteria development, please consult the respective JRC Technical Report [4].

Based on lessons learnt from the real-life examples, centralised procurement provides goods and services at more competitive prices, as well as streamlining the administrative procedures. Notwithstanding, it might also reduce the opportunities for inserting product-specific “green” criteria and diminish the expected outcome (i.e. the magnitude of environ-

⁽⁵⁾ Pursuant to Article 9(2) of EU Ecolabel Regulation (EC) No 66/2010, the EU Ecolabel cannot be awarded to medical products for human use, or for veterinary use, or to any type of medical device.

mental savings). This is due to the risk possibility of watering down, aggregating, or omitting key environmental aspects that build up the EU GPP potential to stimulate the “green” market transition. Screening of real-life examples shows that the key (and often only) “green” requirement for tissue products focuses on fibre sourcing. While it is an appropriate consideration, other aspects of pulp and paper production should also be taken into account. With this in mind, effective incorporation of green criteria into high-volume public contracts for products that are regularly purchased, such as tissue products, could be achieved through a holistic, long-term approach, for example: 1) development of “universal” criteria lots (or sets), which are based on a product life-cycle approach, followed by their recurring update that incorporates the latest technological and policy changes; 2) definition the need for the purchase and understanding the market capacity to access green alternatives, and; 3) based on market research, selecting the applicable criteria (and their level of ambition) to be included in a tender, e.g. as technical specifications or award criteria. This concept of action could lead to a dynamic approach that responds to market capacity and enhances the targeted outcome of EU GPP policy.

ENVIRONMENTAL HOTSPOTS

Pulp and paper processing starts with the sourcing of cellulosic fibres, mainly virgin wood fibre or paper for recycling. Firstly, the fibrous raw material is transformed into pulp and afterwards the pulp is processed into tissue paper and then tissue product.

The process can be integrated or non-integrated. The non-integrated process accommodates standalone activities either reconstituting pulp made elsewhere (paper mill) or manufacturing pulp (market pulp). The integrated process combines pulping and papermaking operations on the same site, i.e. pulp and paper processing are interlinked with regards to the site and continuity of the operations.

The EU Ecolabel for tissue paper and tissue products is based on multiple criteria over the entire life cycle, addressing the most significant environmental impacts and the net environmental balance between the benefits and burdens. This involves looking at: (i) the upstream processes (cradle-to-gate) which accommodate the inflow of raw materials and energy needed mainly for the further processing, but also for the supply of wood raw material, and production of process chemicals off site and subsequent transport; (ii) the core processes (gate-to-gate), which

accommodate key operations for processing of resources from the upstream process to make the (grave) where the products arrive to users, are used and are eventually disposed of.

The upstream processes mainly produce negative effects on the impact categories land use, global warming and human toxicity. Globally, the pulp and paper industry affects forestry resources. Thus, the unsustainable sourcing of wood raw material contributes to deforestation and potential loss of biodiversity.

The core processes have negative effects on the impact categories global warming, acidification and non-renewable resource depletion. This is mainly due to CO₂, NO_x and SO₂ emissions into air and consumption of energy from non-renewable sources. The important environmental impacts are related to the high energy demand, which is fulfilled by heat/fuel and electricity consumption. Other flagged-up areas of importance are water consumption and wastewater discharge.

Finally, the environmental impact of the product’s end-of-life depends on the disposal routes, local infra-structure and end-user behaviour.

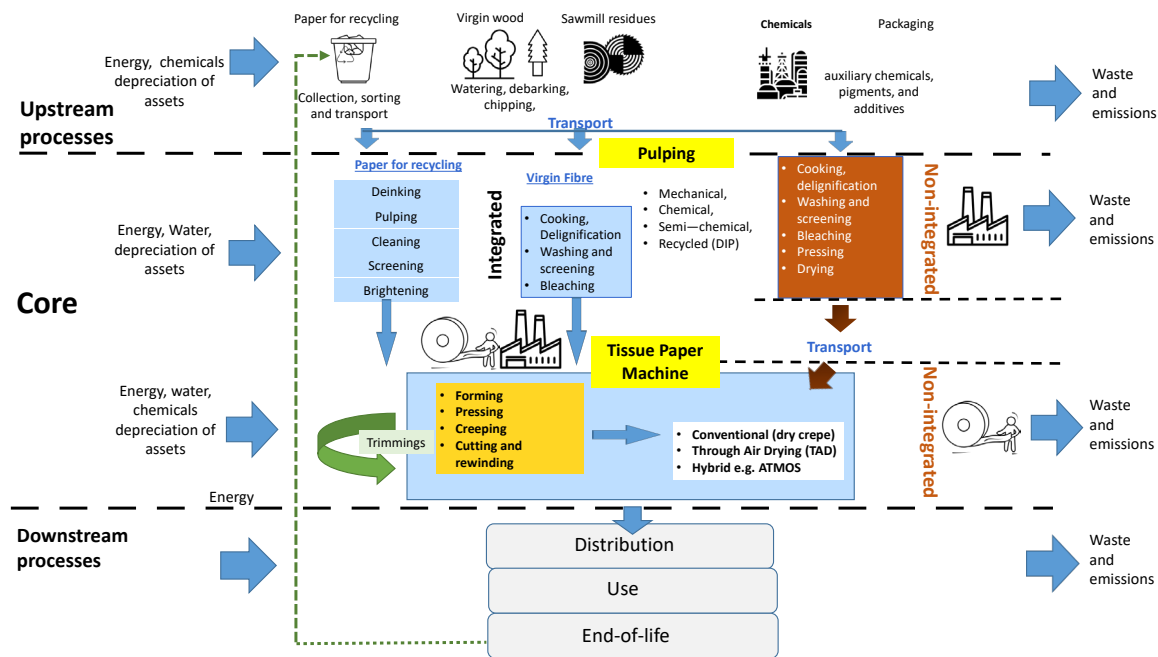
Figure 3 gives an overview of the main processes and life cycle stages of tissue paper and tissue products manufacturing. The figure considers various supply chain scenarios, i.e. for fibre sourcing (virgin vs paper for recycling), and for process continuity (integrated vs non-integrated).

All in all, for tissue paper and tissue products, the dominant life cycle impacts are associated with material sourcing, energy consumption and emissions due to the pulping, bleaching and papermaking processes.

PROPOSAL OF SUITABLE EU ECOLABEL-BASED REQUIREMENTS FOR EU GPP CRITERIA

Each of the EU Ecolabel requirements for tissue products, as established by Annex II to [Commission Decision \(EU\) 2019/70](#), has been screened for its fitness for use as a EU GPP criterion in calls for competition. The four most suitable criteria were identified based on their link to the subject-matter of the procurement contract, the ease of verifiability (in cases where there is no EU Ecolabel) and relevance to environmental hotspots. Nevertheless, public authorities could decide to increase their ambition and add more criteria, e.g. from the EU Ecolabel.

Figure 3 – Overview of the main processes and life cycle stages for tissue products



Source: JRC own elaboration.

Public authorities could also decide to simply request tissue paper and tissue products awarded the EU Ecolabel in their call for competition.

The EU GPP approach to managing the key environmental impact areas might focus on the following most relevant and suitable criteria:

1. Fibre sourcing (referring to impacts associated with upstream processes for fibre sourcing);
2. Pulp bleaching (referring to bleaching technique used and emissions of adsorbable organic halogens (AOX));
3. Emissions to water and air (referring to release of the pollutants associated with core manufacturing processes);
4. Energy consumption (referring to the energy consumed to execute the core processes).






Any tissue paper and tissue products carrying the EU Ecolabel can be automatically assumed to comply with all the EU GPP criteria recommended in this practical guide. Contracting authorities requiring a specific label shall accept all labels that confirm that the works, supplies or services meet equivalent label requirements. The recognition of other labels to be used as equivalent verification is of relevance to streamline the selection procedure and to amplify the market share of suitable green products.

Table 1 summarises equivalency checks for different criteria established by environmental schemes that might be used as a reference for the verification of EU GPP criteria for tissue paper and tissue products. A green tick applies when the criteria established by selected schemes entirely cover the verification of the proposed EU GPP requirements and therefore can directly be used as proof of compliance.

The requirements of selected environmental schemes were compared to EU Ecolabel criteria (one by one) to verify their equivalency for the compliance check. The schemes were selected due to their correlation with the EU Ecolabel criteria and their widespread use in Europe. The list of schemes is not exhaustive.

Unlike listed type I Ecolabels (EU Ecolabel, Nordic Swan Ecolabel and Blue Angel), the Forest Stewardship Council (FSC) and Programme for the Endorsement of Forest Certification (PEFC) certificates, even if labelled on the final paper (or paper-based) product, are exclusively forestry certificates and so do not address industrial production processes. The schemes are worldwide references to verify the origin of fibre with Sustainable Forest Management (SFM) principles or recycled fibre. The applicability of other appropriate means of proof or evidence of compliance always need to be checked in relation to the requirements used in a tender.

Table 1 – Verification of proposed EU GPP criteria of tissue paper and tissue products by means of ecolabelling schemes (March 2025). AOX: Adsorbable organic halogens; COD: Chemical Oxygen Demand; FSC: Forest Stewardship Council; PEFC: Programme for the Endorsement of Forest Certification.

	EU Ecolabel	Nordic Swan Ecolabel	Blue Angel	FSC	PEFC
Recommended EU GPP criteria	 [5]	 [6] [7]	 [8]		
TS1. Fibre sourcing	✓	✓	✓	✓	✓
TS2. Pulp bleaching	✓	✓	✓	X	X
AC 1. AOX	✓	✓	✓	X	X
AC 2.1. COD, S, NO_x, P	✓	✓	✓ ⁽¹⁾	X	X
AC 2.2. CO₂ emission	✓	✓	X	X	X
TS 3. Energy consumption	✓	✓ ⁽¹⁾	✓	X	X

⁽¹⁾ The equivalency is valid only if the EU Ecolabel threshold score is met.
NB: ✓ = at least equivalent to the EU Ecolabel; X = not covered.

Source: JRC own elaboration

RECOMMENDED EU GPP CRITERIA

This section provides information on the recommended EU GPP criteria that are based on EU Ecolabel criteria for tissue paper and tissue products.

If you are interested in learning more about technical rationales that support the selection of EU GPP criteria, refer to Background report for authorities awarding public contracts [1], based on EU Ecolabel criteria. The report also provides information on the verification and equivalency checks for type I Ecolabels commonly used in the EU.

The EU GPP recommendations taking the form of technical specifications (TS) and award criteria are grouped into thematic sections. Means of verification and equivalency check are combined and presented at the end of each section.

1. Paper substrate

Technical Specification TS1: Fibre sourcing

The fibre raw material may be recycled fibres and/or virgin fibres.

Any virgin fibres must not originate from GMO (genetically modified organism) species.

All fibres shall be covered by valid chain of custody certificates issued by an independent third-party certification scheme such as the Forest Stewardship Council (FSC), the Programme for the Endorsement of Forest Certification (PEFC) or equivalent, or be covered by delivery notes of paper for recycling in accordance with EN 643 ⁽¹⁾.

At least 70% of the fibre material allocated to the product or production line shall originate from forests or areas managed according to sustainable forestry management principles that meet the requirements set out by the relevant independent chain of custody scheme and/or originate from recycled materials.

Any uncertified virgin material shall be covered by a verification system which ensures that it is legally sourced and meets any other requirement of the certification scheme with respect to uncertified material. The certification bodies issuing forest and/or chain of custody certificates shall be accredited or recognised by that certification scheme.

Verification:

Tissue paper and tissue products which have been awarded the EU Ecolabel according to Annex II of [Commission Decision \(EU\) 2019/70](#) will be deemed to comply with the requirements.

Alternatively, the tenderer shall declare that the tissue paper and tissue products have been certified by another third-party-operated labelling scheme confirming that equivalent EU Ecolabel requirements are met ⁽²⁾.

If the paper substrate does not carry a required label or an equivalent label, another equivalent means of proof must be provided ⁽³⁾.

⁽¹⁾ For recycled fibre: evidence shall be covered by FSC, or PEFC, or equivalent, or EN 643 delivery notes.

⁽²⁾ Equivalency means compliance check and demonstrating that fibre used in manufacturing of non-EU Ecolabel tissue paper and tissue products meets or exceeds the requirements stated in criterion 3 of Annex II to [Commission Decision \(EU\) 2019/70](#).

⁽³⁾ The tenderer shall provide a declaration of compliance supported by a valid, independently certified chain of custody certificate from the manufacturer of tissue paper and tissue products for all virgin or recycled fibres used in the product or production line.

For TS1, at the time of writing (March 2025), suitably equivalent third-party schemes identified include: FSC, PEFC, Blue Angel Sanitary Paper (DE-UZ 5 v. 3, Jan 2022) and Nordic Ecolabelling for Tissue Paper and Tissue Products (v. 6.1., Dec 2022).

Impacts associated with possible deforestation for virgin fibre sourcing are a longstanding concern that is well understood by the public. Safeguarding compliance with (1) SFM principles and with (2) tracing and allocation of materials from SFM-certified forests (and recycled materials), through the supply chain and into the final product are essential. Many labels are available to provide assurance against deforestation and this requirement should form a mandatory part of calls for competition for tissue paper and tissue products. This enforces a continuance of existing good practice in the procurement of forest-based products.

Ecolabelling schemes such as EU Ecolabel, Nordic Swan Ecolabel or Blue Angel (Table 1) allow for straightforward verification of the proposed technical specification. The FSC and PEFC labels can be considered as suitably equivalent to the fibre sourcing requirements set for EU Ecolabel tissue paper and tissue products. As for recycled fibre, EN 643⁶ is the European standard for classifying and recording the production and movement of Paper for Recycling (PFR).

2. Pulp bleaching

Technical Specification TS2: Pulp bleaching

Pulp should be elemental chlorine free (ECF) or totally chlorine free (TCF) bleached.

Chlorine gas shall not be used as a bleaching agent. This requirement does not apply to chlorine gas related to the production and use of chlorine dioxide.

For recycled fibres, it is accepted that the fibres in their previous life cycle may have been bleached with chlorine gas.

Verification:

Tissue paper and tissue products which has been awarded the EU Ecolabel according to Annex II to [Commission Decision \(EU\) 2019/70](#) will be deemed to comply with the requirements.

Alternatively, the tenderer shall declare that the tissue paper and tissue products have been certified by another third-party-operated labelling scheme confirming that equivalent EU Ecolabel requirements are met ⁽¹⁾.

If the paper substrate does not carry a required label or an equivalent label, another equivalent means of proof must be provided.

Award Criterion AC.1 Adsorbable organic halogens (AOX)

Note: This criterion refers to elemental chlorine free (ECF) pulp.

X points will be awarded when the ECF pulp bleaching process of each pulp used in a product is demonstrated to comply with maximum AOX emissions as defined for EU Ecolabel "Tissue paper and tissue products" in accordance with criterion 1(b) of Annex II to [Commission Decision \(EU\) 2019/70](#).

Verification:

Tissue paper and tissue products which have been awarded the EU Ecolabel according to Annex II of [Commission Decision \(EU\) 2019/70](#) will be deemed to comply with the requirements.

Alternatively, the tenderer shall declare that the tissue paper and tissue products have been certified by another third-party-operated labelling scheme confirming that equivalent EU Ecolabel requirements are met ⁽¹⁾.

If the paper substrate does not carry a required label or an equivalent label, another equivalent means of proof must be provided.

⁽¹⁾ *Equivalency means compliance check and demonstrating that pulp used in manufacturing of the non-EU Ecolabel tissue paper and tissue products meets or exceeds the requirements stated in criteria 4(c) and/or 1(b), as applicable, of Annex II to [Commission Decision \(EU\) 2019/70](#). Compliance check shall include pulp and paper manufacturing processes, i.e. for non-integrated pulp and paper production the verification should separately address the pulping process and the papermaking process. For integrated production processes, a combined verification shall suffice.*

For TS2 and AC1: at the time of writing (March 2025), suitably equivalent third-party schemes identified

⁽⁶⁾ European List of Standard Grades of Paper and Board for Recycling: [Guidance on the revised EN 643](#), @CEPI.

include Blue Angel Sanitary Paper (DE-UZ 5 v. 3, Jan 2020) and Nordic Ecolabelling for Tissue Paper and Tissue Products (v. 6.1, Dec 2022).

Bleaching of pulp is carried out to improve the optical properties of the resulting paper. The two main types of bleaching methods in use are elemental chlorine free (ECF), i.e. use of chlorine dioxide (ClO₂) as a primary bleaching agent, and totally chlorine free (TCF), i.e. brightening with oxidative chemicals such as oxygen, hydrogen peroxide, ozone or peracids. ECF and TCF are both considered **best available techniques** (BAT). Monitoring and reporting of AOX emissions is requested for the plants that are covered by the **Industrial Emissions Directive 2010/75/EU** (IED) as amended by **Directive 2024/1785**, and in line with **Commission Implementing Decision 2014/687/EU** on the BAT conclusions. Hence, the reporting on AOX emissions should not be an additional barrier for the implementation of this requirement.

This recommended criterion aims mainly at reduction of the effluent's toxicity (i.e. AOX and dioxin discharges in wastewaters). The AOX emissions are associated with ECF bleaching. For this reason, the award criteria AC1 should only apply to ECF pulps.

Molecular or gaseous chlorine (Cl₂) shall not be used in bleaching sequences.

3. Emissions to water and air

Award Criteria AC2 Emissions to water and air

AC2.1 Chemical oxygen demand (COD) sulphur (S), NO_x, phosphorus (P)

X points will be awarded when the pulp, tissue paper and tissue products production processes are demonstrated to comply with maximum emission to water and air limits as defined for EU Ecolabel "Tissue paper and tissue products" in accordance with criterion 1(a) of Annex II to **Commission Decision (EU) 2019/70**.

AC2.2 CO₂ emission

X points will be awarded when the pulp, tissue paper and tissue products production processes are demonstrated to comply with maximum CO₂ emissions as defined for EU Ecolabel "Tissue paper and tissue products" in accordance with criterion 1(c) of Annex II to **Commission Decision (EU) 2019/70**.

Verification:

Tissue paper and tissue products which have been awarded the EU Ecolabel will be deemed to comply with the requirements.

Alternatively, the tenderer shall declare that the tissue paper and tissue products have been certified by another third-party-operated labelling scheme confirming that equivalent EU Ecolabel requirements are met ⁽¹⁾.

If the paper substrate does not carry a required label or an equivalent label, another equivalent means of proof must be provided.

⁽¹⁾ Equivalency means compliance check and demonstrating that emissions to water and air from manufacturing of non-EU Ecolabel tissue paper and tissue products meet or exceed the requirements stated in criteria 1(a) and/or 1(c), as applicable, of Annex II to Commission Decision (EU) 2019/70. Compliance check shall include pulp and paper manufacturing processes, i.e. for non-integrated pulp and paper production the verification should separately address the pulping process and the paper making process. For the integrated production process, a combined verification shall suffice.

For AC2.1: At the time of writing (March 2025), the suitably equivalent third-party scheme identified is Nordic Ecolabelling for Tissue Paper and Tissue Products (v. 6.1, Dec 2022). Blue Angel Sanitary Paper (DE-UZ 5 v. 3, Jan 2022) can be accepted as a suitably equivalent third-party scheme but only for integrated systems, otherwise not equivalent.

For AC2.2: At the time of writing (March 2025), the suitably equivalent third-party scheme identified is Nordic Ecolabelling for Tissue Paper and Tissue Products (v. 6.1, Dec 2022).

In Europe, the performance of pulp and paper industrial activities is covered by **Commission Implementing Decision 2014/687/EU** on the BAT conclusions pursuant to the IED. Hence, the monitoring of selected emission parameters is a well-established practice. The pulp and paper industry is covered by the **EU Emissions Trading System** (EU ETS), so CO₂ monitoring should not represent an additional barrier. *Note: The EU ETS' scope for CO₂ reporting differs from the EU Ecolabel's.*

As cellulose pulp is an internationally traded good, above all it is advisable to ensure that the feedstock comes from legally operating site(s), under conditions stated in operating permit(s) as specified by the

competent regional or national authority. Compliance with the applicable mandatory legislation should not be regarded as a “green” requirement, and therefore is not specifically listed here. The introduction of such a safeguard can be executed via exclusion criteria (ECs) for example.

For the award criterion AC2.1, the EU Ecolabel considers both pulp and paper mills that operate in an integrated or non-integrated system. As a basic rule, the reference values for emissions to water and air accommodate differences between pulping techniques and correspond to the upper 80% of the emission levels associated with the BAT. The emissions of COD, P, S and NO_x from manufacturing processes are assessed with a scoring system, which grants flexibility at the mill level and accommodates the trade-off between emission parameters, while increasing the overall ambition level beyond the minimum legal requirements set by the IED.

The recommended EU GPP award criterion AC2.2 stimulates optimisation of energy sourcing, e.g. the substitution of carbon-intensive fossil fuels for less fossil fuels in heat and/or electricity production.

Direct emissions of CO₂ are mainly caused by on-site combustion of fuels, whereas indirect emissions are related to the consumption of grid electricity. In 2021, purchased electricity made up around 58.4% of the total electricity consumption in the sector [9]. The criterion addresses total CO₂ emissions (pulp production and the paper machine) and covers emissions from all non-renewable sources, including the emissions from the production of electricity (whether on-site or off-site).

Paper manufacturing from recycled fibre is inherently less energy-intensive than producing paper from virgin materials. Nevertheless, a reduction of the process energy intensity might not necessarily be translated into a reduction of CO₂ emissions [10]. Therefore, it is advised to accompany the EU GPP requirement on recycled fibre with a requirement on CO₂ emission and/or energy consumption, as applicable.

4. Energy consumption

Technical specification TS3 Energy consumption

The energy consumed for manufacturing of pulp, tissue paper and tissue products shall comply with the maximum energy (electricity

and fuel) consumption as defined for EU Ecolabel “Tissue paper and tissue products” in accordance with criterion 2 of Annex II to [Commission Decision \(EU\) 2019/70](#).

Verification:

Tissue paper and tissue products which have been awarded the EU Ecolabel will be deemed to comply with the requirements.

Alternatively, the tenderer shall declare that the tissue paper and tissue products have been certified by another third-party-operated labelling scheme confirming that equivalent EU Ecolabel requirements are met ⁽¹⁾.

If the paper substrate does not carry a required label or an equivalent label, other equivalent means of proof must be provided.

(¹) Equivalency means compliance check and demonstrating that the energy consumption for manufacturing of the non-EU Ecolabel tissue paper and tissue products meets or exceeds the requirements as stated in criterion 2 of Annex II to Commission Decision (EU) 2019/70. Compliance check shall include pulp and paper manufacturing processes, i.e. for non-integrated pulp and paper production the verification should separately address the pulping process and the paper-making process. For integrated production processes, a combined verification shall suffice.

For TS3, at the time of writing (March 2025), the suitably equivalent third-party scheme is Blue Angel DE-UZ 5 Sanitary Paper (v. 3, Jan 2022). Nordic Ecolabelling for Tissue Paper and Tissue Products (v. 6.1, Dec 2022) can be accepted as a suitably equivalent third-party scheme but only if the sum of points for energy and fuel does not exceed 2.5 (in line with the EU Ecolabel criterion 2).

This recommended GPP criterion is a way to explore the great potential for the pulp and paper industry to optimise energy consumption by encouraging and rewarding industry best practice. The procurer using a GPP criterion for energy consumption would reward the transition efforts towards energy efficiency and incentivise sustainable investments on a long-term planning scale.

Monitoring of energy used in the pulp and paper industry is complex. Different processes will use primary energy in the form of fuel or secondary energy in the form of electricity. When considering the potential of energy management at pulp and

paper sites, it is necessary to link energy demand with the pulping technique used.

The EU Ecolabel makes a distinction between “conventional” and “structured⁷” tissue paper. Structured tissue has different technical properties to conventional tissue, such as higher bulk and absorption capacity for the same base sheet weight. Notwithstanding the advantages in product quality, manufacturing of structural tissue (e.g. through air drying) demands more energy than the conventional process. This is partially offset by a lower fibre requirement per sheet area along with a reduction of plies for the required absorption performance. The EU Ecolabel reference values for the verification of fuel and electricity consumption recognise the differences between conventional and hot through air drying operations.

While the paper sector is highly energy-intensive, around half of the primary energy demand is satisfied by biomass [11]. Also, the most modern integrated tissue mills are likely to be built with integrated solar, hydro or other non-fossil fuel energy supplies. The improvements in energy efficiency can be achieved by executing best available techniques and increasing the share of secondary fibre (paper for recycling) in the pulp mix. The energy consumption should be read together with the CO₂ emission.

The EU Ecolabel criterion 2 verifies energy consumption through a scoring system, i.e. (P_{total}), where the sum of points that express energy (P_E) and fuel consumption (P_F) should not exceed 2.5 ($P_{\text{total}} = P_{\text{electricity_total}} + P_{\text{fuel_total}}$).

Although the fundamentals of the calculation methodology are identical for Nordic Swan Ecolabel and for the EU Ecolabel, the Nordic Swan Ecolabel sets a separate threshold for fuel and for electricity consumption, whereas the EU Ecolabel addresses the sum of both. The equivalency of the Nordic Swan Ecolabel might be accepted on the condition that the EU Ecolabel threshold is met, i.e. $P_{\text{electricity_total}} + P_{\text{fuel_total}} < 2.5$.

FURTHER READING

This practical guide has been set out not only to provide guidance for the use of EU Ecolabel criteria to authorities awarding public contracts by recommending ready-to-use green criteria, but also

to link to more detailed, market-based and science-based support for choosing these criteria in the first place.

For more information on the research behind this practical guide, please consult the JRC Background Report [1], as well as the research reports supporting development of EU Ecolabel criteria for tissue paper and tissue products, such as the Final Technical Report [8]. For additional information on the EU Ecolabel criteria for this products group, readers are invited to visit the corresponding website of [DG Environment](#).

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- [5] [Commission Decision \(EU\) 2019/70](#) of 11 January 2019 establishing the EU Ecolabel criteria for graphic paper and the EU Ecolabel criteria for tissue paper and tissue products OJ L 15, 17.1.2019, p. 27–57.

⁽⁷⁾ Tissue paper that is manufactured with the use of through air drying (TAD) or hybrid process.

[6] Nordic Swan Ecolabel, Nordic Ecolabelling for Tissue Paper and Tissue Products– [Supplementary Module](#). Version 6.1, 21 December 2022 – 31 December 2027.

[7] Nordic Swan Ecolabel, Nordic Ecolabelling criteria for Paper Products – [Basic Modules](#), (Version 3.1 • 05 October 2020 – 31 December 2026).

[8] Blue Angel: [Sanitary Paper](#) DE-UZ 5, January 2022, Version 3.

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DISCLAIMER OR OTHER FINAL DETAILS

Generally speaking, these criteria can be copy-pasted into calls for tender so long as the subject-matter of the contract is relevant. Care should be taken that these criteria do not end up discriminating against other products. To avoid this, the subject-matter should be clearly defined as tissue paper and tissue products. Compliance with the criteria recommended here can be assured by relevant tissue paper and tissue products carrying the EU Ecolabel. In some cases, other labels can be considered as proof of compliance too, but this can change over time as criteria for other ecolabels are updated. In all cases, allowance must be made for equivalent means of proof for products with no label.

Public procurers can require the above-mentioned and recommended ecolabels as means of proof that the works, services or supplies comply with the proposed formulation of EU GPP criteria. Pursuant to Article 43 of Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC procurers re-main free to further assess and/or use any other Ecolabels as means of proof.

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