PRODUCT CATEGORY RULES (PCR)
PUBLICATION DATE 2026-01-08

TISSUE PRODUCTS

PRODUCT CATEGORY CLASSIFICATION: UN CPC 32131

PCR 2011:05
VERSION 4.0.0

VALID UNTIL 2030-01-08

TISSUE PRODUCTS
PRODUCT CATEGORY CLASSIFICATION: 32131

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1 INTRODUCTION

This document constitutes Product Category Rules (PCR) developed in the framework of the International EPD System: a programme for Environmental Product Declarations (EPD)[1] according to ISO 14025:2006, ISO 14040:2006, ISO 14044:2006, and product-specific standards, such as EN 15804 and ISO 21930 for construction products.[2] EPDs are voluntary documents for a company or an industry association to present transparent, consistent, and verifiable information about the environmental performance of their products (goods or services).

The General Programme Instructions (GPI), publicly available on www.environdec.com, includes the rules for the overall administration and operation of the programme and the basic rules for developing EPDs registered in the programme. A PCR complements the GPI and the normative standards by providing specific rules, and guidelines for developing an EPD for one or more specific product categories (see Figure 1), thereby enabling the generation of consistent EPDs within a product category. A PCR should not repeat the rules and guidelines of the GPI, but include additions, specifications and deviations to the rules set in the GPI. As such, a PCR shall be used together with the GPI.

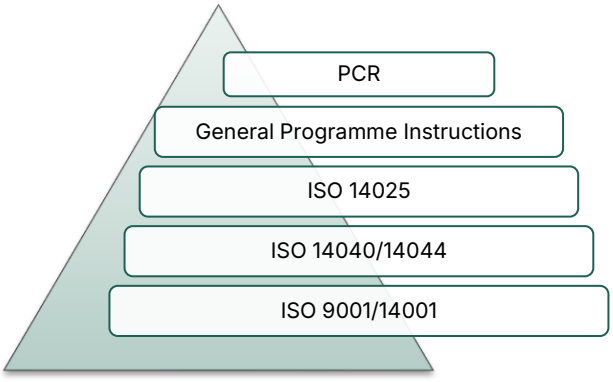

Figure 1. The hierarchy between PCRs, standards, and other documents.

The present PCR uses the following terminology:

- The term “shall” is used to indicate what is obligatory, i.e., a requirement.
- The term “should” is used to indicate a recommendation. Any deviation from a recommendation shall be justified in the EPD development process.
- The terms “may” or “can” are used to indicate an option that is permissible.

For definitions of other terms used in the document, see the GPI and normative standards.

Any references to this PCR shall include the PCR registration number, name, and version number.

The programme operator maintains the copyright of the PCR to ensure that it is possible to publish, update, and make it available to all organisations to develop and register EPDs. Stakeholders participating in PCR development should be acknowledged in the final document and on the website.

1 Termed type III environmental declarations in ISO 14025.

2 When standards are referred to in this document, the version listed in Section 8 is intended unless otherwise stated.

2 GENERAL INFORMATION

2.1 ADMINISTRATIVE INFORMATION

Name:	Tissue products
Registration number and version:	2011:05, version 4.0.0
Programme:	EPD INTERNATIONAL EPD SYSTEM
Programme operator:	EPD International AB, Box 210 60, SE-100 31 Stockholm, Sweden Website: www.environdec.com E-mail: support@environdec.com
PCR Moderator:	Phil Mogel, European Tissue Symposium (ETS)
PCR Committee:	European Tissue Symposium, ETS
Publication date:	2026-01-08 See Section 9 for a version history of the PCR.
Valid until:	2030-01-08 The validity may change. See www.environdec.com for the latest version of the PCR and the latest information on its validity and transition periods between versions.
Development and updates:	The PCR has been developed following ISO 14027, including public consultation and review. The rules for the development and updating processes are described in Section 9 of the GPI. The PCR is valid for a pre-determined time period to ensure that it is updated at regular intervals. When the PCR is about to expire, the PCR Moderator shall initiate a discussion with the Secretariat on if and how to proceed with updating the PCR and renewing its validity. A PCR may be updated before it expires, based on changes in normative standards or provided significant and well-justified proposals for changes or amendments are presented. When there has been an update of the PCR, the new version should be used to develop EPDs. For small updates (change of third-digit version number), the previous version is normally immediately removed from the PCR library on www.environdec.com and there is no transition period. For medium updates (change of second-digit version number), the previous version of the PCR is valid in parallel during a transition period of at least 90 days, but not exceeding its previously set validity period. For large updates (change of first-digit version number), the previous version is valid in parallel during a transition period of at least 180 days, but not exceeding its previously set validity period. Stakeholder feedback on PCRs is very much encouraged. Any comments on this PCR may be sent directly to the PCR Moderator and/or the Secretariat during its development or during its period of validity.

Standards and documents conformance:	General Programme Instructions of the International EPD System, version 5.0.1, based on ISO 14025 and ISO 14040/14044.[3]
PCR language(s):	At the time of publication, this PCR was available in English. If the PCR is available in several languages, these are available on www.environdec.com. In case of translated versions, the English version takes precedence in case of any discrepancies.

2.2 SCOPE OF PCR

2.2.1 PRODUCT CATEGORY DEFINITION AND DESCRIPTION

This document provides Product Category Rules (PCR) for the assessment of the environmental performance of tissue products and the declaration of this performance by an EPD. The product category corresponds to UN CPC 32131 Toilet or facial tissue stock, towel or napkin stock and similar paper; cellulose wadding and webs of cellulose fibres. The cellulose fibres may be virgin fibres or recycled fibres, i.e. fibres derived from recycled fibre process (de-inking process).

For additional information of the UN CPC classification system (version 2.1) see: https://unstats.un.org/unsd/classifications/Family/Detail/1074 .

The product groups covered by this PCR include:

- Products that consist of at least 90% fibres (based on dry mass), the fibres being virgin or recycled cellulose-based natural fibres.
- Parent reels, sheets or rolls of tissue paper fit for use for personal hygiene, wiping, cleaning and absorption.
- The tissue product normally consists of creped or embossed paper in one or several plies. When present, the core in a rolled product is included.

Excluded from this product group

- Laminated tissue products and wet wipes.

The product group and UN CPC code (UN CPC 32131) shall be specified in the EPD.

2.2.2 GEOGRAPHICAL SCOPE

This PCR may be used globally.

2.2.3 EPD VALIDITY

An EPD becomes valid as of its version date (see Section 8.4.5 of the GPI). When an EPD is originally published, the validity period is normally five years starting from the version date or until the EPD has been de-registered from the International EPD System. Shorter validity periods are also accepted, for example if decided by the EPD owner.

For rules on when an EPD shall be updated and re-verified during its validity, see Section 6.8.1 of the GPI. For validity periods in case of updates of EPDs, see Section 6.8 of the GPI.

The version date and the period of validity shall be stated in the EPD.

Publication of a new version of the PCR or the GPI does not affect the validity of already published EPDs.

[3] Some rules influencing EPD development are independent of the GPI version referred to in the PCR. For example, the latest rules on EPD verification procedures in the GPI shall be followed within 90 days of its publication. See Section 5.1 in the GPI for a description of the four categories of rules and when they shall be followed.

3 REVIEW AND BACKGROUND INFORMATION

This PCR was developed in accordance with the PCR development process described in the GPI of the International EPD System, including open consultation and review.

3.1 OPEN CONSULTATION

3.1.1 VERSION 1.0

This PCR was available for open consultation from 2011-03-14 until 2011-04-07, during which any stakeholder was able to provide comments by contacting the PCR Moderator and/or the Secretariat.

Stakeholders were invited via e-mail or other means to take part in the open consultation and were encouraged to forward the invitation to other relevant stakeholders. No stakeholders provided comments during the open consultation and agreed to be listed as contributors in the PCR and on www.environdec.com .

3.1.2 VERSION 2.0

This PCR was available for open consultation from 2015-02-02 until 2015-04-02, during which any stakeholder was able to provide comments by posting on the PCR forum on www.environdec.com or by contacting the PCR moderator. No stakeholders provided comments during the open consultation and agreed to be listed as contributors in the PCR and on www.environdec.com .

3.1.3 VERSION 3.0

This PCR was available for open consultation from 2020-02-14 until 2020-04-10, during which any stakeholder was able to provide comments by posting on the PCR forum on www.environdec.com or by contacting the PCR moderator.

Stakeholders were invited via e-mail or other means to take part in the open consultation and were encouraged to forward the invitation to other relevant stakeholders. The following stakeholders provided comments during the open consultation, and agreed to be listed as contributors to the PCR and at www.environdec.com:

- Riccardo Balducci and Marco Simoncini, Sofidel.

3.1.4 VERSION 4.0

Version 1.0.0 of this PCR was available for open consultation from 2025-08-15 until 2025-10-15, during which any stakeholder was able to provide comments by contacting the PCR Moderator and/or the Secretariat.

Stakeholders were invited via e-mail or other means to take part in the open consultation and were encouraged to forward the invitation to other relevant stakeholders.

3.2 PCR REVIEW

3.2.1 VERSION 1.0

PCR review panel:	The Technical Committee of the International EPD System. A full list of members is available on www.environdec.com. The review panel may be contacted via support@environdec.com. Members of the Technical Committee were requested to state any potential conflict of interest with the PCR Committee, and if there were conflicts of interest they were excused from the review.

3.2.2 VERSION 2.0

PCR review panel:	The Technical Committee of the International EPD System. A full list of members available on www.environdec.com. The review panel may be contacted via info@environdec.com. Members of the Technical Committee were requested to state any potential conflict of interest with the PCR moderator or PCR committee and were excused from the review.
Chair of the PCR review:	Rita Schenck
Review dates:	2015-06-25 until 2015-08-13

3.2.3 VERSION 3.0

PCR review panel:	The Technical Committee of the International EPD® System. A full list of members available on www.environdec.com. The review panel may be contacted via info@environdec.com. Members of the Technical Committee were requested to state any potential conflict of interest with the PCR moderator or PCR committee and were excused from the review.
Chair of the PCR review:	Lars-Gunnar Lindfors
Review dates:	2020-08-20 until 2021-02-02

3.2.4 VERSION 4.0

PCR review panel:	The Technical Committee of the International EPD System. A full list of members is available on www.environdec.com. The review panel may be contacted via support@environdec.com. Members of the Technical Committee were requested to state any potential conflict of interest with the PCR Committee, and if there were conflicts of interest they were excused from the review.
Chair of the PCR review:	Nasser Ayoub
Review dates:	2025-10-22 until 2025-12-09

3.3 EXISTING PCRS FOR THE PRODUCT CATEGORY

As part of the development of this PCR, existing PCRs and other internationally standardised methods that could potentially act as PCRs were considered to avoid unnecessary overlaps in scope and to ensure harmonisation with established methods of relevance for the product category. The existence of such documents was checked among the following EPD programmes and international standardisation bodies:

- International EPD System. www.environdec.com.
- Global EPD. https://www.aenor.com/certificacion/certificacion-de-producto/declaraciones-ambientales-de-producto.
- IBU. https://ibu-epd.com/en/.
- EPD Norway. www.epd-norge.no.
- FPInnovation. https://web.fpinnovations.ca/environmental-product-declarations-services/.

Table 1 lists the identified PCRs and other standardised methods.

Table 1. Existing PCRs and other internationally standardised methods that were considered to avoid overlap in scope and to ensure harmonisation with established methods.

Name of PCR/standard, incl. registration number	Programme/standardisation body	Version number/date of publication	Scope
Product category rules for North American market pulp, paper and paperboard products, tissue and containerboard	FP Innovations	WP PCR 2017 / March 2023	North American market pulp, paper and paperboard products, tissue, and containerboard. UN CPC 32: pulp, paper and paper products; printed matter and related articles
PCR 2011:14 Absorbent hygiene products	EPD International	Version 4.0.0 / Being updated	Globally applicable PCR that covers a subset of products within UN CPC 32193 Toilet paper, handkerchiefs, towels, serviettes, napkins for babies, tampons, and similar household, sanitary or hospital articles, and articles of apparel, of paper pulp, paper, cellulose wadding or webs of cellulose fibres.
PCR 2022:02 Pulps of wood or other fibrous cellulosic material	EPD International	Version 1.0.1 / January 2024	Globally applicable PCR that covers CPC 3211 Pulps of wood or other fibrous cellulosic material.

3.4 REASONING FOR DEVELOPMENT OF PCR

This PCR was developed to enable publication of EPDs for the product category defined in Section 2.2.1 based on ISO 14025 and ISO 14040/14044. The PCR enables different practitioners to generate consistent results when assessing the environmental impact of products of the same product category, and thereby it supports comparability of products within a product category.

3.5 UNDERLYING STUDIES USED FOR PCR DEVELOPMENT

The methodological choices made during the development of this PCR (declared/functional unit, system boundary, allocation methods, impact categories, data quality rules, etc.) were primarily based on different internal underlying studies.

4 LCA METHOD

This section provides rules for the LCA method used to develop an EPD for the product category as defined in Section 2.2.1. The basic rules of the LCA method are set in Annex A of the GPI, and this section only includes additions, specifications and deviations to the rules set in the GPI. Guidance and examples of applying the LCA method are also available on www.environdec.com/methodology.

4.1 MODELLING APPROACH

The LCA modelling approach of the International EPD System is attributional LCA. This primarily means that specific or average data shall be used, i.e., not marginal data. See Section A.1 of the GPI

4.2 DECLARED/FUNCTIONAL UNIT

The declared unit shall be one tonne (1,000 kg) of tissue and its packaging (including core) as additional weight, and shall be declared in the EPD. In addition, environmental performance results may also be shown for one or several of the following alternative declared/functional units:

- One square meter of tissue (i.e. different g/m^2 of tissue) and its packaging (including core) as additional weight.
- The amount of tissue required to absorb 1 g of water with its packaging (including core) as additional weight. The determination of the amount of water absorbed should be with test method ISO 12625-8. If this method is not used it shall be an approved and documented test method.
- Amount of tissue used for a specified functional unit with its packaging (including core) as additional weight, e.g. amount of paper needed for a hand-drying.

The environmental performance results shall be given per declared unit, and functional unit if applied. A description of the function of the product should be included in the EPD, if relevant.

4.3 SYSTEM BOUNDARY

EPDs based on this PCR shall be cradle-to-grave and module D.

The end-of-life stage is included as the PCR is for products containing biogenic carbon and is primarily for finished products, and as such it the GPI's criteria for excluding end-of-life are not fulfilled.

For the disposable tissue products covered by this PCR the use stage is not relevant since the products are typically single use, i.e. used for a very short time and disposed of immediately afterwards. However, the use stage shall still be part of the system boundary, but there will be no collected data for it and its declared environmental performance results will be zero.

4.3.1 LIFE-CYCLE STAGES AND INFORMATION MODULES

Because of different data quality rules and the presentation of results, the product life cycle shall be divided into the following life-cycle stages and information modules:

- Upstream stage, corresponding to module A1:
  - A1: Raw material extraction and processing, processing of secondary material input (e.g., recycling processes), production of distribution and consumer packaging, etc.
- Core stage, corresponding to modules A2 and A3
  - A2: Transports to the manufacturer of the product
  - A3: Manufacturing of the product[4]
- Downstream stage, corresponding to modules A4, B1, C2 and C4:

[4] These are often, but not always, the processes under operational control of the EPD owner.

- A4: Transport from final manufacturing to average customer (e.g., retailer) or distribution point,
- A5: Consumer and transport packaging waste processing and disposal
- B1: Use of the product
- C2: Transport to waste processing and/or disposal
- C4: Product waste processing and disposal

In addition, consequences of recovered material/energy beyond the product cycle shall be reported in module D.

In the EPD, the environmental performance of each life-cycle stage (upstream, core, downstream) and module D shall be reported separately, and in aggregated form for the life-cycle stages (upstream, core, downstream).

Section A.3.1 of the GPI outlines rules for how to assign generation of electricity and production of fuels, steam and other energy carriers used, and losses arising, in each information module.

Sections 4.3.1.1-4.3.1.3 further describe the processes to include or exclude for each life-cycle stage.

Note: The above assignment of waste management of packaging to module C, and waste processing to module C4, is a deviation to the rules in the GPI. This deviation is to simplify the LCA modelling, e.g., so that the modeller does not have to decide whether a waste incineration process belongs to module C3 or C4. This simplification has no influence on the reporting of the results in the EPD, as this is done per life-cycle stage.

4.3.1.1 Upstream stage, corresponding to module A1

The upstream processes include the following production processes of raw materials needed for the manufacture of tissue products:

- Production of purchased fuels used in the upstream processes.
- Production process of purchased electricity/steam/heating/cooling used in the upstream processes.
- Forestry, from first thinning to final felling and transport to pulp mill.
- Production of functional chemicals and other chemicals used in the core processes.
- Production of other raw materials.
- Transports between upstream processes.
- Production of packaging for product and transports (including cores, if applicable)
- Process and disposal of upstream production waste

Upstream processes not listed here may also be included. All elementary flows at resource extraction shall be included, except for the flows that fall under the general cut-off rule in Section 4.5.

4.3.1.2 Core stage, corresponding to modules A2 and A3

- Transports of raw materials to core processes (including pulp, packaging, chemicals, paper for recycling)
- Production of purchased fuels used in the core processes.
- Production process of purchased electricity/steam/heating/cooling used in the core processes.
- Pulp production (in the case of virgin fibres).
- Recycled fibre process (de-inking process) and the transport from the recycled fibre process to where the deinked pulp is used.
- Tissue paper manufacturing.
- Transport of parent reels (if applicable).
- Converting of products.
- Transportation, processing and disposal of waste generated during manufacturing.

- Wastewater treatment from paper mill.
- Transports to warehouse for finished products.

Core processes not listed here may also be included. All elementary flows at resource extraction shall be included, except for the flows that fall under the general cut-off rule in Section 4.5.

4.3.1.3 Downstream stage, modules A4, A5, B1, C2 and C4

- Transport of the product to customer, where an average market shall be presented giving an average distance to market.
- Processing and disposal of consumer and transport packaging waste
- Use of product
- Processing and disposal of product waste

Downstream processes not listed here may also be included. All elementary flows at resource extraction shall be included, except for the flows that fall under the general cut-off rule in Section 4.5.

4.3.1.4 Excluded processes

See Section A.3.1.1 of the GPI.

- Production and waste management of packaging of raw materials
- Personnel activities
- Production and waste management of pallets and other tertiary packaging
- Business travel of personnel
- Travel to and from work by personnel
- Research and development activities
- The construction and maintenance of factory buildings and infrastructure
- Production and maintenance of manufacturing equipment

4.3.1.5 Infrastructure and capital goods

See Section A.3.1.2 of the GPI.

4.3.2 OTHER BOUNDARY SETTING RULES

See Section A.3.2 of the GPI for rules on setting boundaries to nature as well as geographical and temporal boundaries. See Section A.4 of the GPI and Section 4.6 for rules on setting boundaries to other product systems.

4.4 PROCESS FLOW DIAGRAM

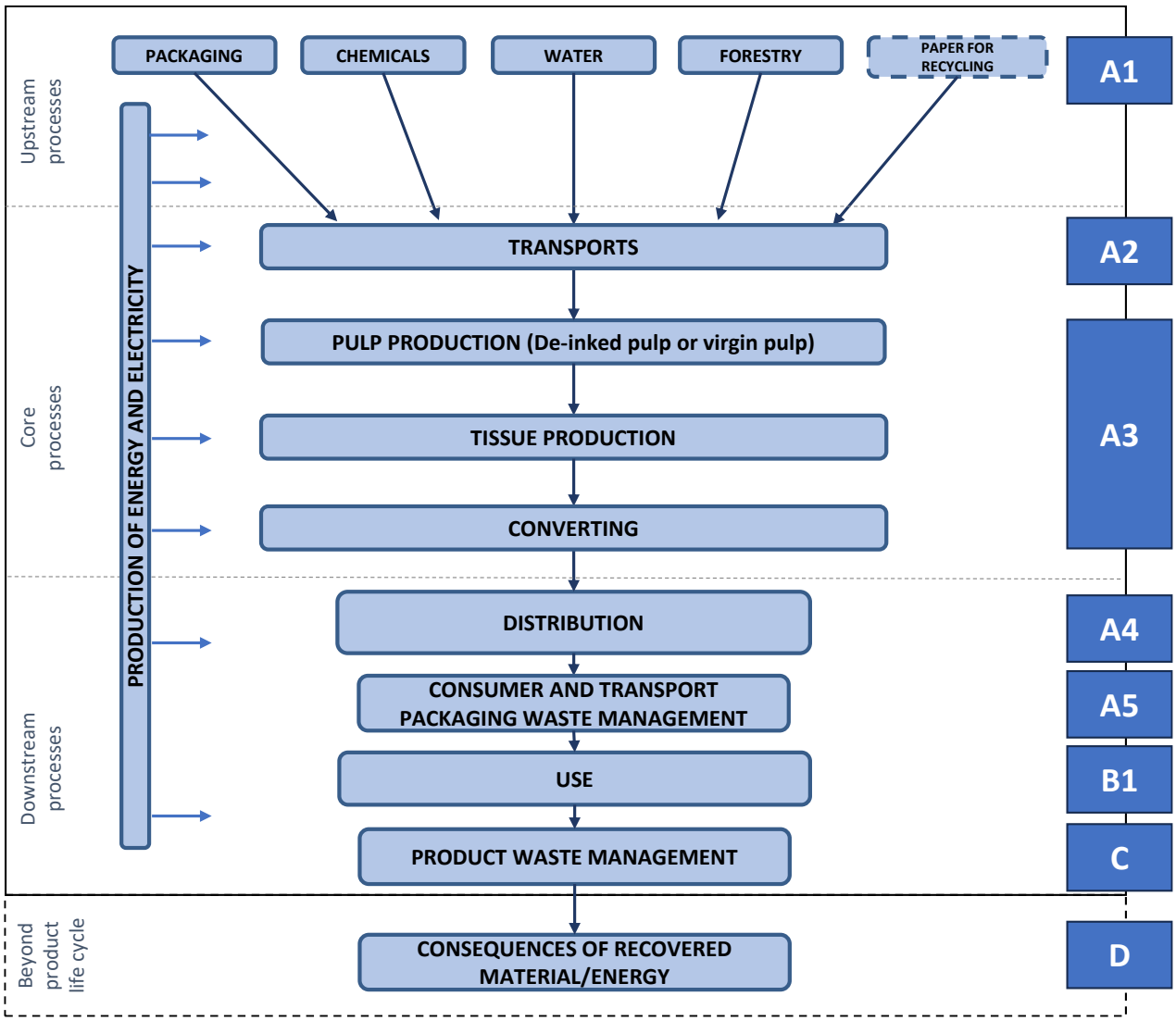

Figure 2. Process flow diagram illustrating the processes that shall be included in the product system, divided into the life-cycle stages and module D. The illustration of processes to include may not be exhaustive.

4.5 CUT-OFF RULES

See Section A.3.3 of the GPI.

4.6 ALLOCATION RULES

See Section A.4 of the GPI.

4.6.1 ALLOCATION OF CO-PRODUCTS

See Section A.4.1 of the GPI.

For key processes in the product system, Table 2 provides specifications of the allocation method to use. These allocation rules for pulp processes are aligned with PCR 2022:02 Pulps of wood or other fibrous cellulosic material (version 1.0.0) and, for the co-product excess heat, PCR 2007:08 Electricity, heat and hot/cold water generation and distribution (version 5.0.0).

Table 2. Allocation method for key processes in the product system.

Process	Main product and co-products	Allocation method
Pulp process	Main product: pulp; co-products: turpentine, tall oil, energy products, etc.	For material outputs (e.g., turpentine, tall oil): physical allocation based on dry mass For on-site co-generation of heat and electricity: the alternative generation method (see Appendix 1 in PCR 2022:02 Pulps of wood or other fibrous cellulosic material) For excess heat, e.g. used for district heating: economic allocation at the point of sale

4.6.2 ALLOCATION OF WASTE

See Section A.4.2 of the GPI.

4.7 DATA AND DATA QUALITY RULES

See Section A.5 of the GPI.

See Section 4.8 for further rules related to data and data quality per life-cycle stage and module D.

4.7.1 DATA CATEGORIES

See Section A.5.1 of the GPI.

4.7.2 DATA QUALITY REQUIREMENTS FOR PRIMARY DATA

See Section A.5.2 of the GPI.

Additionally, the reference year of the primary data shall not be more than five years old and shall be representative for the validity period of the EPD (if not, the EPD shall be updated, see Section 2.2.4). The reference year, which does not need to be a calendar year, is the latest year in which the data provider confirmed the data to be representative/valid, i.e., the end year for the most recently set validity period.[5] This means that primary LCI data can have been collected more than five years ago, but the representativeness/validity shall have been reassessed and confirmed by the data provider (the manufacturer/service provider) within the past five years.[6] In such reassessments, it may be that data is confirmed to be conservative compared to fully representative data, for example because it is known that the manufacturing process has improved (e.g., less material losses or lower energy use) but collected data from the past five years is missing. In such

[5] This definition of "reference year" is a specification and merge of the definitions in EN 15804, EN 15941, ISO 21930 and in the ILCD format.

[6] This reassessment can, for example, be done based on collected metadata, such as information on the type of machinery being used in a manufacturing process. So it can be that some data (LCI and/or meta data) have been collected within five years, while some data are older than five years but has been confirmed to still be representative based on the more recently collected data. An example: the amount of electricity a machinery use and the emissions generated was measured seven years ago, but within the past five years the producer has confirmed the same machine is still in use and has provided updated data on the type of electricity used to run the machine.

cases, the reference year can still be updated, and the data can still qualify as primary data. If this is done, it shall be described and justified in the LCA report.

4.7.3 DATA QUALITY REQUIREMENTS FOR REPRESENTATIVE SECONDARY DATA

See Section A.5.3 of the GPI.

4.7.4 DATA QUALITY ASSESSMENT AND DECLARATION

See Section A.5.4 of the GPI.

4.7.5 EXAMPLES OF DATABASES FOR SECONDARY DATA

Table 3 lists examples of databases and datasets to be used for secondary data. Note that a data quality assessment shall be performed also for data listed in the table, and that other data that fulfil the data quality requirements may also be used.

Table 3. Examples of databases and datasets to use for secondary data.

PROCESS	GEOGRAPHICAL SCOPE	RECOMMENDED DATASET	DATABASE
Energy mixes	Regional	-	Ecoinvent 3.12 or later
Transport	Global/European	-	Ecoinvent 3.12 or later
Forestry operations	Global/European	-	Ecoinvent 3.12 or later
Plastics (and precursors)	Global/European	-	Ecoinvent 3.12 or later, Plastics Europe
Packaging	Global/European	-	FEFCO
Other chemicals	Global/European	-	Ecoinvent 3.12 or later
Waste statistics	OECD	-	OECD Statistics Environment Database - Municipal waste, Generation and Treatment Latest version.
Waste statistics	EU	-	Eurostat, https://ec.europa.eu/eurostat/en/web/waste/data/database. Waste generation and waste treatment
Waste processes for paper, PP, PE, PET, plastic mix, PU, viscose, $CaCO_3$, etc.	Global, Europe	-	Ecoinvent 3.12 or later
For other regions of the world, databases with appropriate geographical coverage shall be used, if possible.			

4.8 OTHER LCA RULES

See Section A.6 of the GPI.

For specific LCA rules per life-cycle stage, see Section 4.9.

4.8.1 MASS BALANCE

See Section A.6.1 of the GPI.

Note that mass balance approaches (MBAs) cannot be used in the LCA model because a lack of widely accepted international standards for applying MBA in LCAs. However, the rules on MBA in this PCR may change as a response to the future publication of such standards (e.g., ISO 13662 and ISO 14077), as the tissue products industry sees MBAs as a feasible way to increase the use of renewable or recovered resources in production in the near future.

4.8.2 ELECTRICITY MODELLING

See Section A.6.2 of the GPI.

The following requirement for contractual instruments in the GPI may not be possible to comply with in all markets for contractual instruments: "the contractual instrument shall … be valid for at least the upcoming six months from the publication of the EPD." Therefore, it is replaced with the following: "is produced as close as possible to the period to which the contractual instrument is applied and comprises a corresponding timespan."

4.8.3 BIOGAS MODELLING

See Section A.6.3 of the GPI.

4.9 SPEECIFIC RULES PER LIFE-CYCLE STAGE AND MODULE D

See Section A.7 of the GPI.

Below are further data quality requirements and other LCA rules per life-cycle stage, and for module D, of relevance for the product category.

4.9.1 UPSTREAM PROCESSES, PRODUCT STAGE, A1

Table 4 gives average conversion factors for round wood assortments from over bark to under bark. Multiplying the log volume or weight with (over) bark by the factor gives log volume or weight without (under) bark.

Table 4. Conversion factors from going from over bark to under bark volumes. Adopted from Luke (2014).

Round wood assortment	Factor
Pine logs	0.880
Spruce logs	0.898
Birch logs	0.885
Pine pulpwood	0.863
Spruce pulpwood	0.864
Birch pulpwood	0.862
All assortments, average	0.875

4.9.2 DOWNSTREAM PROCESSES, DISTRIBUTION, A4

Transport of the product to the customer shall be described in the EPD and modelled according to this priority:

1. Actual transportation modes and distances to a specific customer or market, representing the geographical scope of the EPD.
2. 1000 km by lorry and actual distances for sea and air transports, representing the geographical scope of the EPD.
3. 1000 km by lorry, 10 000 km by airplane and 10 000 km by sea transport.

Sea transports between continents shall be calculated using the following tool: https://sea-distances.org.

4.9.3 DOWNSTREAM PROCESSES, CONSUMER AND TRANSPORT PACKAGING WASTE PROCESSING AND DISPOSAL, A5

Waste management of consumer and transport packaging shall be included.

For products sold in the EU or USA/Canada, the recycling rate for transport packaging shall be assumed to be 83% (EU) or 81% (USA/Canada), respectively.[7]

4.9.4 DOWNSTREAM STAGE, MODULE B1

For the disposable products covered by this PCR, there are no processes in the use stage since the products are typical single use, i.e. used for a very short time and disposed of immediately afterwards. Use of additional products (e.g. soaps or detergents) in the use stage is explicitly excluded from the system boundaries. This means that the declared results for the use stage will be zero.

4.9.5 DOWNSTREAM STAGE, MODULES C2 AND C4

Waste management of used products:

The waste impact of tissue products is influenced by type of waste management and there are two main waste streams. For bathroom tissue the waste handling is wastewater treatment, for all other tissue it is municipal solid waste (MSW) treatment, encompassing incineration, composting or landfill.

For the sake of consistency and comparisons of EPDs in the EU, the main scenario for waste management shall be 100% incineration for all other tissue types than bathroom tissue. The extent of energy recovery and other modelling assumptions is not defined in the default scenario and shall be decided based on the specific geographical scope of the EPD. The rationale for this default scenario for the EU is that incineration is the dominant and growing means of waste management in the EU and that it avoids the many assumptions involved in modelling landfill (rate of degradation, CH4 capture, pretreatment etc.).

In the rest of the world, where incineration is less common, the main scenario for waste managed shall be based on statistics on waste management reflecting the geographical scope of the EPD.

In addition to the main scenario, results for other waste management scenarios may be declared in the EPD.

If landfill is part of a declared waste management scenario, the amount of landfill gas shall be based on an assumption of 50% degradation of biodegradable materials, which reflects the default fraction of degradable organic carbon for moderately decompostable wastes in IPCC (2019).

If landfill or composting is part of a declared waste management scenario, the following is applicable:

In addition to landfill gas or emissions from composting processes within 100 years, any remaining biogenic carbon in the landfill/compost shall be accounted for as virtual biogenic CO_2 emissions. This means that the effect of long-term storage (beyond 100 years) of biogenic carbon on GWP-biogenic results shall not be considered in the main results. However, alternative GWP biogenic results that excludes these virtual biogenic CO_2 emissions may be declared as additional LCA results in a separate subsection of the Environmental performance section (see Section 6.4.7).

4.9.6 CONSEQUENCES OF RECOVERED MATERIAL/ENERGY BEYOND THE PRODUCT LIFE CYCLE (MODULE D)

This PCR does not provide any additions to the rules and guidance in the GPI on the modelling of module D.

[7]This is based on the recycling rates for paper and cardboard packaging provided by Eurostat (2022) and US EPA (2018).

4.10 ENVIRONMENTAL PERFORMANCE INDICATORS

See Section A.8 of the GPI.

4.11 SPECIFIC RULES PER EPD TYPE

4.11.1 MULTIPLE PRODUCTS FROM THE SAME COMPANY

See Section A.9.1 of the GPI.

4.11.2 SECTOR EPD

See Section A.9.2 of the GPI.

4.11.3 EPD OWNED BY A TRADER

See Section A.9.3 of the GPI.

4.11.4 EPD OF PRODUCT NOT YET ON THE MARKET

See Section A.9.4 of the GPI.

4.11.5 EPD OF PRODUCT RECENTLY ON THE MARKET

See Section A.9.5 of the GPI.

5 CONTENT OF LCA REPORT

Data for verification shall be presented in the form of an LCA report – a systematic and comprehensive summary of the project documentation that supports the verification of an EPD. The LCA report is not part of the public communication.

See Section 8.3.1 of the GPI for rules on the content of the LCA report.

Note that there may be rules on the content of the LCA report elsewhere in the GPI or in this PCR.

6 CONTENT AND FORMAT OF EPD

See Section 7 of the GPI.

6.1 EPD LANGUAGES

See Section 7.1 of the GPI.

6.2 UNITS AND QUANTITIES

See Section 7.2 of the GPI.

6.3 USE OF IMAGES IN EPD

See Section 7.3 of the GPI.

6.4 SECTIONS OF THE EPD

See Section 7.4 of the GPI.

6.4.1 COVER PAGE

See Section 7.4.1 of the GPI.

6.4.2 GENERAL INFORMATION

See Section 7.4.2 of the GPI.

6.4.3 INFORMATION ABOUT EPD OWNER

See Section 7.4.3 of the GPI.

6.4.4 PRODUCT INFORMATION

See Section 7.4.4 of the GPI.

6.4.5 CONTENT DECLARATION

See Section 7.4.5 of the GPI. In addition, the following information about the product shall be stated:

- Type of pulp or type of for recycling (reference may be made to EN-643-2001, especially if the product is to be sold in Europe)
- Bleaching agents
- Group of functional chemicals in descending order (based on mass) according to table 5, if its share of the final product is more than 2% by mass.

Table 5.Functional chemicals used for tissue products. List adopted from Council of Europe (2004).

Additive	Function/main use
Wet-strength agent	Provides the paper the ability to retain a proportion of its dry strength when it becomes wet. Active ingredients depend on pH in the tissue process.
Dry strength agent	Dry-strength additives increase the tensile and other strength properties of the paper.
Dye	Dye The colour is water-soluble and absorbed on the fibre surface
Fixing agents	To help ensure absorption of the dyes on to the fibres
Fluorescent whitening agent	To impart extra whiteness to the tissue
Glue: laminating glue, pick-up glue, tail seal glue	To achieve a tissue that includes multiple flat tissue layers by gluing them together
Softeners, de-bonders, absorbency aids	A softener interferes with substances in the tissue paper stock, resulting in improved surface softness.
Lotions, perfumes, detergents	Lotions: specialized lotion formulas applied as a post-treatment to dry tissue paper during manufacturing to impart softness, a lubricious feel, and often therapeutic benefits (e.g., soothing irritated skin). Perfumes: mixtures of fragrances used to perfume the paper directly or indirectly (in the cores of the rolls). Detergents: these can be used during offline washing of felts and cloths. Usually never used in active production.

6.4.6 LCA INFORMATION

See Section 7.4.6 of the GPI.

6.4.7 ENVIRONMENTAL PERFORMANCE

See Section 7.4.7 of the GPI.

The EPD shall declare the results of the environmental performance indicators referred to in Section 4.10, per declared unit (and per functional unit if applicable), per life-cycle stage (upstream, core, downstream) and module D.

6.4.8 ADDITIONAL ENVIRONMENTAL INFORMATION

See Section 7.4.8 of the GPI.

6.4.9 ADDITIONAL SOCIAL AND ECONOMIC INFORMATION

See Section 7.4.9 of the GPI.

6.4.10 INFORMATION RELATED TO SECTOR EPDS

See Section 7.4.10 of the GPI.

6.4.11 VERSION HISTORY

See Section 7.4.11 of the GPI.

6.4.12 ABBREVIATIONS

See Section 7.4.12 of the GPI.

6.4.13 REFERENCES

See Section 7.4.13 of the GPI.

7 LIST OF ABBREVIATIONS

CO_2	Carbon dioxide
CPC	Central product classification
DIN	Deutsche Industrienorm
EC	European Commission
EN	European Standards
EPD	Environmental product declaration
IBU	Institut Bauen und Umwelt e.V.
ISO	International Organization for Standardization
kg	kilogram
MJ	Mega joule
LCA	Life cycle assessment
LCI	Life cycle inventory
PCR	Product Category Rules
PE	Polyethylene
PET	Polyethylene terephthalate
PP	Polypropylene
PPP	Polluter Pays Principle
PU	Polyurethane
RSL	Reference Service Life
SA	Social Accountability standards
SI	The International System of Units
UN	United Nations

8 REFERENCES

CEN (2021) EN 15804:2012+A2:2019/AC:2021, Sustainability of construction works – Environmental product declarations – Core rules for the product category of construction products.

CEN (2024) EN 15941:2024, Sustainability of construction works – Data quality for environmental assessment of products and construction work – Selection and use of data.

Council of Europe (2004) Policy Statement concerning tissue paper, kitchen towels and napkins. Version 1, dated 2004-09-22. Public Health Committee.

EPD International (2025) General Programme Instructions for the International EPD System. Version 5.0.1, dated 2025-02-27. Available on www.environdec.com.

Eurostat (2022) Recycling rates for packaging waste. Available on https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Packaging_waste_statistics, accessed June 2025.

IPCC (2019) 2019 Refinement to the 2006 IPCC Guidelines for National Greenhouse Gas Inventories. Volume 5: Waste. Available on https://www.ipcc-nggip.iges.or.jp/public/2019rf/pdf/5_Volume5/19R_V5_3_Ch03_SWDS.pdf, accessed July 2025.

ISO (2006a) ISO 14025:2006, Environmental labels and declarations – Type III environmental declarations – Principles and procedures.

ISO (2006b) ISO 14040:2006, Environmental management – Life cycle assessment – Principles and framework.

ISO (2006c) ISO 14044: 2006, Environmental management – Life cycle assessment – Requirements and guidelines.

ISO (2015a) ISO 14001:2015, Environmental management systems – Requirements with guidance for use.

ISO (2015b) ISO 9001:2015, Quality management systems – Requirements.

ISO (2017) ISO 21930:2017, Sustainability in buildings and civil engineering works – Core rules for environmental product declarations of construction products and services.

ISO (2018b) ISO 14067:2018, Greenhouse gases – Carbon footprint of products – Requirements and guidelines for quantification and communication.

ISO (2025) ISO/DIS 13662 Chain of custody – Mass balance – Requirements and guidelines.

ISO (2025) ISO/DIS 14021 Environmental statements and programmes for products – Self-declared environmental claims.

Luke (2014) Metsätilastollinen vuosikirja 2014 (Finnish Statistical Yearbook of Forestry 2014). Available on https://jukuri.luke.fi/handle/10024/542362, accessed May 2025.

Together for Sustainability (2024) The Product Carbon Footprint Guideline for the Chemical Industry. Available on https://assets-global.website-files.com/5f19a993f080600777bbd184/66194d5494e98d5363178e25_TfS_PCF_guidelines_2024_EN_pages-low.pdf, accessed May 2025.

US EPA (2018) Paper and Paperboard Containers and Packaging. Available on https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/containers-and-packaging-product-specific#PaperandPaperboardC&P, accessed June 2025.

9 VERSION HISTORY OF PCR

VERSION 1.0, 2011-05-24

Original version of the PCR.

VERSION 1.01, 2013-07-19

- Compliance with to the General Programme Instructions, Version 2.01.
- Use of the latest template

VERSION 2.0, 2015-10-01

- Use of latest template
- Waste treatment of production waste and electricity generation in core process
- Clarification that justification of choices in the underlying LCA shall be done in the LCA report and not in the EPD
- Updated table for generic data
- Clarification of packaging part of product

VERSION 2.01, 2019-09-06

- Clarified terms of use
- Editorial changes

VERSION 3.0, 2021-03-08

- Use of latest template and use of latest GPI
- Clarified use of declared and/or functional unit
- Clarified figure of system boundaries and clarified listing of upstream and core processes
- New requirement on separate declaration of results for the additional, virtual process of virgin fibre production compensating for the fibre loss in the recycled fibre process (de-inking process).
- Updated table for recommended generic data
- Added table for conversion factors for wood
- Updated Glossary section
- Updated Environmental Performance section according to latest version of the GPI

VERSION 3.0.1, 2022-04-20

- Editorial changes in Sections Error! Reference source not found. to Error! Reference source not found., to clarify the in dicator list at www.environdec.com applies also for the indicators of resource use, waste production and other output flows.

VERSION 4.0.0, 2026-01-08

- Use of latest template and use of latest GPI
- Clarified use of declared and/or functional unit

- Updated figure of system boundaries and clarified listing of upstream and core processes according to updates
- Updated table for recommended generic data
- Updated Environmental Performance section according to latest version of the GPI
- Updated rules on mass balance approaches (MBA).
- Updated rules on modelling of transport to the customer.

TISSUE PRODUCTS

PRODUCT CATEGORY CLASSIFICATION: 32131