

LIFTS (ELEVATORS)

PRODUCT GROUP CLASSIFICATION: UN CPC 4354

C-PCR-008 (TO PCR 2019:14)

VERSION 2.0.0



LIFTS (ELEVATORS)
PRODUCT GROUP CLASSIFICATION : UN CPC 4354

TABLE OF CONTENTS

1	Introduction	3
1.1	General	3
1.2	Role of this document.....	3
2	General information.....	5
2.1	Administrative information	5
2.2	Scope.....	6
3	PCR review and background information.....	8
3.1	Open consultation	8
3.2	PCR review.....	8
3.3	Existing PCRs for the product category.....	9
3.4	Reasoning for development of c-PCR	9
3.5	Underlying studies used for c-PCR development.....	10
4	LCA method.....	11
4.1	Modelling approach.....	11
4.2	Functional unit.....	11
4.3	System boundary.....	13
4.4	Cut-off rules.....	17
4.5	Process flow diagram.....	17
4.6	Allocation rules	17
4.7	Data categories and data quality rules	18
4.8	Other LCA rules.....	19
4.9	Specific rules per life-cycle stage and module D	19
4.10	Environmental performance indicators	19
4.11	Specific rules per EPD type.....	19
5	Content of the LCA report.....	20
5.1	Layout of the presentation	20
5.2	Description of the LCA modelling	20
6	Content and format of EPD	21
6.1	EPD languages	21
6.2	Units and quantities.....	21
6.3	Use of images in EPD	21
6.4	Sections of the EPD.....	21
7	List of abbreviations	24
8	References	25
9	Version history of c-PCR	26

LIFTS (ELEVATORS)
PRODUCT GROUP CLASSIFICATION : UN CPC 4354

1 INTRODUCTION

1.1 GENERAL

This document constitutes complementary Product Category Rules (c-PCR) developed in the framework of the International EPD System: a programme for Environmental Product Declarations (EPD)¹ according to ISO 14025, ISO 14040, ISO 14044, and product-specific standards such as EN 15804, EN 15941 and ISO 21930 for construction products.² EPDs are voluntary documents for a company or organisation to present transparent, consistent and verifiable information about environmental performance of their product (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. PCRs and c-PCRs complement 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). A PCR/c-PCR should enable different practitioners using the PCR/c-PCR to generate consistent results when assessing products of the same product category.

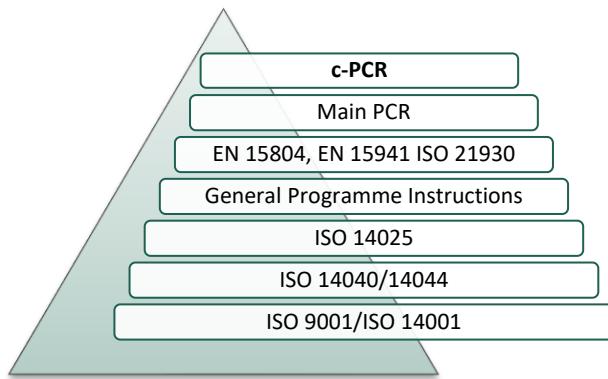


Figure 1. This c-PCR in relation to the hierarchy of standards and other documents.

The present c-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 further terms used in the document, see the GPI, the main PCR, and the normative standards.

A main PCR and its c-PCRs are valid for a pre-determined period of time to ensure that it is updated at regular intervals. The latest version of the PCR and its c-PCRs are available on www.environdec.com. Stakeholder feedback on PCRs and c-PCRs is very much encouraged. Any comments on this c-PCR may be sent directly to the PCR Moderator and/or the Secretariat during its development or during its period of validity.

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

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.

1.2 ROLE OF THIS DOCUMENT

This c-PCR complements the main PCR of construction products in the International EPD System, PCR 2019:14 Construction products, available on www.environdec.com. The c-PCR cannot be used by itself but shall be used together with PCR 2019:14, and EN 15804 and EN 15941, for products

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.

LIFTS (ELEVATORS)
PRODUCT GROUP CLASSIFICATION : UN CPC 4354

within the scope of the PCR (see Section 2.2.1). It is required to use an applicable c-PCR after it has been published 90 days. It is optional to use the c-PCR if it has been published for less than 90 days.

If more than one c-PCR is applicable, the EPD owner may choose to use any of them, but it is recommended to use the one that is more specific in scope in terms of product function. An alternative is to use, and verify the EPD towards, several applicable c-PCRs, as long as there are no conflicting requirements in the c-PCRs.

If requirements in the main PCR and the c-PCR are in conflict, the requirements in the c-PCR take precedence over those in the main PCR.

See Figure 2 for an illustration on how PCR 2019:14 and this c-PCR relate to each other and the EPDs that may be based on them.

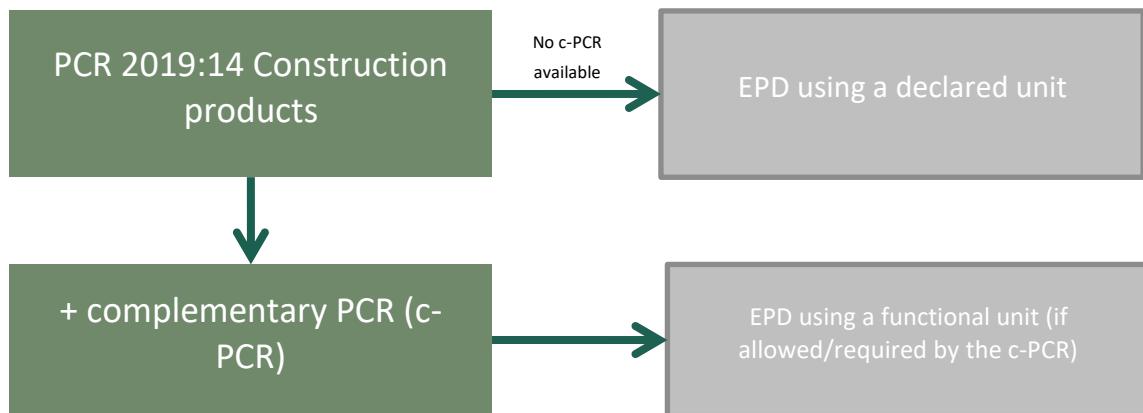


Figure 2. Overview of how PCR 2019:14 can be used directly, or together with a c-PCR, to develop an EPD. An EPD that uses a functional unit shall be based on a c-PCR. An EPD based on a declared unit can be developed without a c-PCR.

LIFTS (ELEVATORS)
PRODUCT GROUP CLASSIFICATION : UN CPC 4354

2 GENERAL INFORMATION

2.1 ADMINISTRATIVE INFORMATION

Name:	Lifts (Elevators)
Registration number and version:	c-PCR-008, version 2.0.0
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:	Dr.-Ing. Nikolay Minkov (on the behalf of the European Lift Association, ELA) nikolay@greentability.com
PCR Committee:	Product Ecology Working Group of ELA (Otis Corporation, KONE Corporation, TK Elevator Ltd., Schindler Elevators Ltd., greentability Ltd., CHM Analytics AB, IQ Consult GmbH
Publication date	2025-11-27 See Section 9 for a version history of the c-PCR.
Valid until:	2029-11-27 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 c-PCR has been developed following ISO/TS 14027, including public consultation and review. The rules for the development and updating processes are described in Section 9 of the GPI. The c-PCR is valid for a pre-determined time period to ensure that it is updated at regular intervals. When the c-PCR is about to expire, the PCR Moderator shall initiate a discussion with the Secretariat on if and how to proceed with updating the c-PCR and renewing its validity. A c-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 c-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 c-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.

LIFTS (ELEVATORS)
PRODUCT GROUP CLASSIFICATION : UN CPC 4354

	<p>In case a c-PCR is developed by a CEN Product TC, the standard will replace this c-PCR, with a transition period of at least 90 days under which both are valid.</p> <p>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.</p>
Standards documents and conformance:	<ul style="list-style-type: none">▪ General Programme Instructions of the International EPD System, version 5.0.1, based on ISO 14025:2006 and ISO 14040:2006/14044:2006.³▪ EN 15804:2012+A2:2019/AC:2021▪ EN 15941:2024▪ ISO 21930:2017. This standard is used in selected sections, such as allocation, when it provides additional but not contradictory rules to EN 15804. EPDs may comply with this standard if additional requirements are met, see Section 1.5.▪ ECO Platform standards, versions published 2024-12-20^{4,5} <p>If PCR 2019:14 refers to a later version of any of the above standards, the later version applies.</p>
PCR language(s):	<p>At the time of publication, this c-PCR was available in English. If the c-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.</p>

2.2 SCOPE

2.2.1 PRODUCT CATEGORY DEFINITION AND DESCRIPTION

This document provides complementary product category rules (c-PCR) for the assessment of the environmental performance of lifts (elevators⁶) and the declaration of this performance by an EPD. The product category corresponds to a sub-set of UN CPC 4354 Lifts, skip hoists, escalators and moving walkways.

The product category corresponds to the following group and underlying classes and sub-classes in the UN CPC classification (when used within construction):

- Section: 4 - Metal products, machinery and equipment
 - Division: 43 - General-purpose machinery
 - Group: 435 - Lifting and handling equipment and parts thereof
 - Class: 4354 - Lifts, skip hoists, escalators and moving walkways

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.

⁴ The ECO Platform standards consist of several documents, see footnote 5, whereof the LCA Calculation Rules and Digital Data Requirements are specifically relevant for this PCR. All requirements in the ECO Platform Standards that are additional to EN 15804 and EN 15941, are repeated in this PCR. Therefore, EPD developers and verifiers do not need check the LCA Calculation Rules, Digital Data Requirements, or other documents of the ECO Platform standards.

⁵ The following versions of the ECO Platform standards were published 2024-12-20: General Remarks v1.2, LCA Calculation Rules v2.0, Tool Verification Guidelines v1.1, Digital Data Requirements v1.1, Requirements for publishing digital data in ECO Portal v1.0, Quality Management Guidelines v2.0, Audit Guidelines v1.1, Audit Requirements v2.0.

⁶ The term "elevator" corresponds to the American word for "lift" in British English (according to Lifts Directive 2014/33/EU)

LIFTS (ELEVATORS)
PRODUCT GROUP CLASSIFICATION : UN CPC 4354

Additional information regarding CPC codes is available at <https://unstats.un.org/unsd/classifications/Family/Detail/1074>. UN CPC 4354 Lifts, skip hoists, escalators and moving walkways includes many different types of machinery. However, the scope of this c-PCR is limited to machinery defined as lifts (elevators), since production technologies and functionality are specific. Therefore, the PCR cannot be used for other type of products (e.g. skip hoists, escalators or moving walkways) classified under the same UN CPC 4354. The product group and UN CPC code shall be specified in the EPD. Moreover, the EPD shall clearly describe the lift system considered and its scope of application using as a minimum the mandatory performance characteristic listed in Table 1.

Lifts covered by this c-PCR can be designed for transportation of persons or freights (goods and materials), or both and can have vertical or inclined trajectories⁷. Lift systems consist of subsystems and components, which may be grouped differently depending on the product structure definition, applied by the respective company (lift manufacturer). The company shall define and disclose the configuration of the product under analysis in a tabular or schematic format in the EPD.

This c-PCR and PCR 2019:14 are limited to those products that are used as construction products. Products used in other applications are outside of the scope.

2.2.2 TYPE OF EPD AND INFORMATION MODULES INCLUDED

See PCR 2019:14.

Following the requirements in Section 2.2.2 of PCR 2019:14, an EPD based on this c-PCR shall be a type c) "cradle-to-grave and module D (A+B+C+D)". Section 4.3 provides more rules on the system boundaries.

2.2.3 GEOGRAPHICAL SCOPE

This c-PCR may be used globally.

2.2.4 EPD VALIDITY

See PCR 2019:14.

⁷ Inclined elevators are to be considered as such that travel at an angle of inclination "of more than 15 degree to the horizontal" (as per Lift Directive 2014/33/EU), "not more than 15° to the vertical" (as per EN 81-20:2020), or "of 70 deg or less from the horizontal" (as per ASME A17.1:2022)

LIFTS (ELEVATORS)
PRODUCT GROUP CLASSIFICATION : UN CPC 4354

3 PCR REVIEW AND BACKGROUND INFORMATION

This c-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 1.0.0, 2020-10-30

This c-PCR was available for open consultation from 2020-04-01 until 2020-06-01, 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. The following stakeholders provided comments during the open consultation and agreed to be listed as contributors in the c-PCR and on www.environdec.com.

- Erik Paulsson, Hydroware AB
- Marcus Wendum, Miljögiraff AB
- Claudio Donghi, KONE

3.1.2 VERSION 2.0.0, 2025-11-27

This c-PCR was available for open consultation from 2025-05-26 until 2025-07-21, 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. The following stakeholders provided comments during the open consultation and agreed to be listed as contributors in the c-PCR and on www.environdec.com.

- Mr. Luca Pezzini, Secretary General, ELA

3.2 PCR REVIEW

3.2.1 VERSION 1.0.0, 2020-10-30

PCR review panel:	<p>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.</p> <p>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.</p>
Chair of the PCR review:	Gorka Benito
Review dates:	2020-09-01 until 2020-09-24

3.2.2 VERSION 2.0.0, 2025-11-27

PCR review panel:	<p>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.</p> <p>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.</p>
-------------------	--

LIFTS (ELEVATORS)
PRODUCT GROUP CLASSIFICATION : UN CPC 4354

Chair of the PCR review:	Rui Wang
Review dates:	2025-09-08 until 2025-10-20

3.3 EXISTING PCRS FOR THE PRODUCT CATEGORY

As part of the development of this c-PCR, existing PCRs and c-PCRs and other internationally standardised methods that could potentially act as c-PCRs for the product category in scope, 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
- Institut Bauen und Umwelt (IBU). <https://ibu-epd.com/>
- AENOR (ES). <https://www.en.aenor.com/>
- RTS EPD Finland. <https://ymparisto.rakennustieto.fi/en/rakennustieto-epds>
- ZAG. <https://www.zag.si/>
- EPD Norway. <https://www.epd-norge.no/>
- EPD China. <http://www.epdchina.cn/>
- DAP Habitat. <https://www.daphabitat.pt/>
- Kiwa-Ecobility Experts. <https://www.kiwa.com/de/en/themes/ecobility-experts/ecobility-experts/>
- EPD Italy. <https://www.epditaly.it/>
- EPD Denmark. <https://www.epddanmark.dk/>
- ITB-EPD. <https://www.itb.pl/itb-epds/?lang=en>
- MRPI. <https://www.mrpi.nl/epd-certificaten/>
- Bau-EPD. <https://www.bau-epd.at/en/>
- INIES. <https://www.inies.fr/en/inies-and-its-data/fdes-construction-products/>
- PEP Ecopassport. <http://www.pep-ecopassport.org/>
- European Platform on LCA (EPLCA). <https://eplca.jrc.ec.europa.eu/EnvironmentalFootprint.html>
- CEN-CENELEC. <https://www.cencenelec.eu/>
- ECO Platform. <https://www.eco-platform.org/>

No existing PCRs or other relevant internationally standardised methods with overlapping scope were identified.

During the development of this c-PCR, alignment with the PEP Ecopassport programme was considered, given the growing demand for lift EPDs in the French market and the need to avoid proliferation of overlapping PCRs. Although the International EPD® System and PEP Ecopassport signed a mutual recognition agreement (MRA) in February 2025, this agreement applies to electrical and electronic equipment under EN 50693 and not to construction products covered by PCR 2019:14. Moreover, PEP Ecopassport does not currently maintain a valid PCR for lifts that could be adopted. As a result, the PCR Committee decided to discontinue alignment efforts for the time being, while remaining open to potential future collaboration.

The previous version of this c-PCR, version 1.0.1, expires 2026-04-30 – until this date an EPD can be verified using either version 1.0.1 or version 2.0.0 (or later version, if applicable) of c-PCR Lifts.

3.4 REASONING FOR DEVELOPMENT OF C-PCR

This c-PCR was developed to provide rules and guidance additional to those in PCR 2019:14 and EN 15804, for developing EPDs for the product category. The c-PCR thereby 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.

LIFTS (ELEVATORS)
PRODUCT GROUP CLASSIFICATION : UN CPC 4354

3.5 UNDERLYING STUDIES USED FOR C-PCR DEVELOPMENT

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

- 60 published EPDs of lifts (elevators) based on the previous version of the c-PCR, published at the repository of International EPD® System; accessed and analysed in the period February – March 2025

These are the only publicly available documents identified during the c-PCR development process. It is known that some of the PCR Committee members have experience with LCA of lifts and their knowledge and experience is applied in this project. Due to the confidentiality of their work, however, no other data or studies have been publicly disclosed herewith.

LIFTS (ELEVATORS)
PRODUCT GROUP CLASSIFICATION : UN CPC 4354

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.

4.1 MODELLING APPROACH

See PCR 2019:14.

4.2 FUNCTIONAL UNIT

EPDs based on this c-PCR shall be based on a functional unit (FU). All subsequent analyses then refer to that FU, as all inputs and outputs in the life cycle inventory (LCI)⁸ and consequently the life cycle impact assessment (LCIA) profile are related to the FU.

The function of a lift is the transportation of persons, freights or both. Based on this, the FU is defined as *the transportation of a load over a distance, expressed as one tonne [t] transported over one kilometre [km], i.e. tonne-kilometre [tkm]*⁹ over a vertical (or inclined) trajectory.

LCA results shall be presented per FU, i.e. per 1 tkm. To achieve this, first the total tkm (also referred to as transportation value, TV) shall be calculated. Subsequently, the respective inputs and outputs shall be divided by TV to obtain the LCA results per FU.

TV shall be calculated according to the formulas and predetermined parameters shown in steps 1-4 below. As also indicated further in the text, most of the predetermined parameters used are defined in ISO 25745-2:2015 and its amendment ISO 25745-2:2015/Amd1:2023. The standard and its amendment are selected as the valid reference at international level for both the estimation of the lifts' energy consumption and for the calculation of TV. It provides tables of parameters for average distance travelled and average weight transported.

- 1) Calculation of the average car load %Q in [t]:

$$\%Q = \frac{Q}{1000} \times [\text{Percentage value from Table 4 "Average car load" of ISO 25745 - 2: 2015}]$$

where Q is the lift rated load [kg].

- 2) Calculation of the one-way average travel distance for target installation s_{av} [m]:

$$s_{av} = s_{rc} \times [\text{Percentage value from Table 2 of ISO 25745 - 2: 2015}]$$

where s_{rc} is the one-way travel distance of the reference cycle according to ISO 25745-1:2023 [m] (travel height).

Regarding lifts installed in buildings with express zones (EZs), s_{av} shall be derived based on the guidance of ISO 25745-2:2015/Amd 1:2023.

- 3) Calculation of the distance travelled by the lift during the technical lifespan s_{TL} [km]:

$$s_{TL} = \frac{s_{av}}{1000} \times n_d \times d_{op} \times TL$$

where: n_d is the number of trips per day according to the selected usage category (UC) (defined in Table 1 of ISO 25745-2:2015)

d_{op} is the number of operating days per year

TL is the technical lifespan [years] based on the specifications of the product (according to Table 1)

- 4) Ultimately, calculation of TV for obtaining the results per FU:

$$TV = \%Q \times s_{TL}$$

⁸ For readability, the stated LCI in the LCA report can be presented for one full unit over the TL.

⁹ Should the information of the lift use be available in units of passengers (load) and floor transported (distance), these can be easily converted to the functional unit [tkm] multiplying the average number of passengers by the average weight per passenger and the average number of floors by the average floor height of the building.

LIFTS (ELEVATORS)
PRODUCT GROUP CLASSIFICATION : UN CPC 4354

For specific lift applications where the traffic pattern, the number of trips per day and a specific percentage of the average travel distance are well known (e.g. in existing buildings), specific values deviating from Table 1 and Table 2 of ISO 25745-2:2015 may be applied for the calculation of TV and assessment of the annual energy consumption. In this case, the selected values shall be documented transparently in the EPD.

The calculation of TV shall be documented in a transparent and reproducible manner in the EPD in the same section of the EPD where the FU is defined, i.e. section "LCA Information" of the EPD (see Section 6.4.6). The values used for this calculation shall be in accordance with the values used for the estimation of the energy consumed by the lift during the use phase (module B6, see Section 4.3.3). Furthermore, the EPD should also state the reference flow that is the quantity of the lift system needed to achieve 1 tkm of transport service across its technical lifespan (TL).

4.2.1 PRODUCT LIFESPAN

See PCR 2019:14.

The product's TL¹⁰ plays an important role in the calculation of TV (as demonstrated in the calculations above). Therefore, TL shall be declared in the product information section of the EPD (See Section 6.4.4). For more information on the general definition of TL, refer to Section A.2.1 of GPI 5.0.1.

4.2.2 TECHNICAL SPECIFICATION

To ensure transparency and credibility, the product-related part of the EPD shall include the following mandatory information as per Table 1 (in addition to Section 6.4.4).

Table 1 Mandatory information required for the specification of the product

Index	Values	Representative values chosen in case of ranges
Type of installation	<ul style="list-style-type: none"> • new specific installation OR new generic installation with modernization OR without modernization • specific OR generic modernization package¹¹ 	
Commercial name	As stated in the operating manual or sales catalogue	
Recommended application (main market)	e.g. transport of passengers / goods / both (passengers & goods)	
Geographic region of intended installation	Region, e.g. specific country or continent	
Type of lift	e.g. electric or hydraulic	
Type of drive system	e.g. gearless traction / geared traction / hydraulic	
Rated load (fixed or range)	e.g. 320 ... 1000 kg	e.g. 320 kg
Rated speed (fixed or range)	e.g. 0.4 ... 1.25 m/s	e.g. 0,5 m/s
Number of stopping floors (fixed or range)	e.g. 2 ... 21	e.g. 2
Travelled height (fixed or range)	e.g. 5...60 m	e.g. 50 m
Number of operating days per year (fixed or range)	e.g. 50...365	e.g. 365
Applied usage category (UC) according to ISO 25745-2	e.g. 1...6	e.g. 1
Technical Lifespan (TL)	e.g. 25 years (incl./excl. refurbishment/modernization)	
Additional information		
Lift system	e.g. complete lift or machinery, electrification, doors, etc.	
Recommended application (main market)	e.g. low-rise residential <ul style="list-style-type: none"> ▪ Building rise (typical) 	
	<ul style="list-style-type: none"> ▪ low- (2...6 floors) / mid- (7...20 floors) / high- rise (> 20 floors) 	

¹⁰ The term "technical lifetime" is identical to "technical lifespan" that is commonly used in the lift and escalator industry

¹¹ A modernization package consists of different components, e.g. controller kit, machinery package, doors, car, etc.

LIFTS (ELEVATORS)
PRODUCT GROUP CLASSIFICATION : UN CPC 4354

▪ Building type	▪ <i>residential / commercial / office / administrative / hotel / hospital / shopping centre / transportation / industrial</i>
Optional equipment	<i>List if the unit has optional equipment, different than the one listed under the commercial name in the sales catalogue</i>
Additional requirements	<i>e.g. seismic lift, evacuation lift or similar</i>

Comparability is a key principle of ISO 14025:2006-compliant EPDs, aiming “[...] to allow a purchaser or user to compare the environmental performance of products on a life cycle basis [...]” (ISO 14025:2006, clause 5.6). This is particularly crucial when assessing different systems with the same function, ensuring that comparisons are made on a common basis. Comparability as per ISO 14025:2006 is therefore only achievable when FU and UC are identical, as well as travel height, rated load, rated speed and geographic region¹² are equivalent.

4.2.3 LIFT CONFIGURATIONS

This c-PCR can be used for the issuing of EPDs for complete lifts and for modernization packages¹³. The manufacturer shall decide whether they want to declare the environmental performance of a specific lift (designed for a specific installation and having already fixed parameters) or a generic lift¹⁴ (i.e. selected by the company from their product portfolio and covering a given range of products and performance characteristics). The type of lift under declaration shall be clearly stated in the EPD, followed by the disclosure of the performance characteristics according to Table 1. In case the EPD covers a modernization package, this shall be described properly in the EPD.

In case of generic lift, more than one UC, as well as ranges of other performance characteristics (such as e.g., rated load, rated speed, or number of stopping floors) can be applicable. The EPD owner shall declare in the EPD for which UCs the generic lift in scope is designed and the respective performance characteristics, and/or their ranges. LCA results shall be reported for one specific UC, whereas results for any other UC may be disclosed under “Additional environmental information”. Moreover, the EPD shall describe whether the results cover the whole range (and even combinations of ranges) of the performance characteristics or not. If not, the limited representativity of the results shall be indicated. For more details on how multiple scenarios can be declared in the same EPD, please refer to Section A.9.1 of GPI v5.0.1 and Section 6.3.9 of EN 15804. In cases when only the operational energy use (module B6) differs, results for the different scenarios may be presented only for this module. PCR 2019:14 gives additional guidance on EPDs of multiple products.

4.3 SYSTEM BOUNDARY

See PCR 2019:14.

EPDs that are developed based on this c-PCR shall cover a cradle-to-grave scope. Considering also certain specifics of the production of lifts, their use and disposal, the present c-PCR gives additional guidance on the inclusion, exclusion and modelling of certain information modules (Table 2).

¹² For the sake of comparability of EPDs required by ISO 14025:2006, the equivalence of the geographic region is important due to the specifics of the electricity mix used to operate the lifts.

¹³ Modernization package is understood as partial modernization replacing components of a lift

¹⁴ This is often referred to by the lift industry as “model lift”, however, this term is not used in this PCR, because according to Directive 2014/33/EU “...‘model lift’ means a representative lift whose technical documentation shows the way in which the essential health and safety requirements set out in Annex I will be met for lifts which conform to the model lift defined by objective parameters and which uses identical safety components for lift...”

LIFTS (ELEVATORS)
PRODUCT GROUP CLASSIFICATION : UN CPC 4354

Table 2 Life cycle stages and information modules, relevant for lifts

Life cycle stage	Information module		Comment
A1-A3 Product stage	A1	Raw material supply	Included
	A2	Transport	Included
	A3	Manufacturing	Included
A4-A5 Construction process stage	A4	Transport	Included
	A5	Installation	Included
B1-B7 Use stage	B1	Use	Excluded
	B2	Maintenance	Included
	B3	Repair	Excluded
	B4	Replacement	Excluded
	B5	Refurbishment	Included when extension of the lift's technical lifetime is foreseen (i.e. modernization extending the TL)
	B6	Operational energy use	Included
	B7	Operational water use	Excluded
C1-C4 End-of-Life stage	C1	Deconstruction	Included
	C2	Transport	Included
	C3	Waste processing	Included
	C4	Waste disposal	Included
D Benefits and loads beyond the system boundary	D	Reuse, recovery, recycling, potential	Included

Additional clarifications to modules B2-B5:

Lifts are products with a long operation time, during which preventive maintenance (covered by B2 Maintenance) is needed. This is done by performing regularly scheduled maintenance activities to help prevent unexpected failures in the future. Preventive maintenance avoids corrective actions (covered under B3 Repair) by replacing wear parts and parts with limited lifetime. Therefore, B3 Repair is excluded from the scope of the EPD.

Under B4 Replacement normally the replacement of a whole construction element of a building is considered. In case of lifts, this means that in case of damage the whole lift is to be replaced. In reality, this does not happen, because preventive maintenance activities take place. Therefore, B4 Replacement is not relevant for lifts and thus out of scope.

Activities under B5 Refurbishment are such that consider "modernization" of the lift. Modernization is generally defined as a process of components' exchange that leads to the extension of the TL of a lift.

The following subsections describe the covered information modules, respective processes, and other rules on the setting of system boundary. For detailed information on each module, see EN 15804 (Section 6.3.5). Here only specific descriptions related to this c-PCR are provided.

4.3.1 PRODUCT STAGE: MODULES A1-A3

See PCR 2019:14 and Section 6.3.5.2 of EN 15804.

▪ **A1 Raw material supply:**

- Extraction and production of raw material for parts and components needed to produce the lift,
- Reuse of products or materials from a previous product system,

LIFTS (ELEVATORS)
PRODUCT GROUP CLASSIFICATION : UN CPC 4354

- Processing of secondary materials used as input for manufacturing the product, but not including those processes that are part of the waste processing in the previous product system,
- Generation of electricity, steam and heat from primary energy resources, also including their extraction, refining and transport,
- Energy recovery and other recovery processes from secondary fuels, but not including those processes that are part of waste processing in the previous product system.
- **A2 Transport:** transportation to manufacturing site (outsourced and in-house) from direct suppliers, i.e. from previous production or extraction process. Earlier transport journeys¹⁵ should be included in module A1.
- **A3 Manufacturing:** in-house and outsourced manufacturing and assembly of components for the lift in state ready for transportation to building site, including:
 - Production and use of operating and auxiliary materials consumed,
 - Production of intermediate packaging materials, incl. such that are necessary to protect the lift components during their transport from the manufacturing site to the building site,
 - Direct emissions to air, water or soils,
 - Treatment of waste generated from the manufacturing and assembly of main parts.

4.3.1.1 Information requirements for component manufacturers

The component manufacturer shall provide the lift manufacturer with the following information:

- Information of materials used (mandatory),
- Information of manufacturing processes (not needed if this process is allocated to the upstream module; data can be estimated by the lift manufacturer),
- Declaration of the component useful life,
- Information on the necessary maintenance activities to guarantee a correct operation during the declared useful life,
- Information regarding dismantling activities necessary for the management of the component end of life.

Alternatively, if there is an agreement between the customer and the supplier, the component manufacturer can directly provide the lift manufacturer with data of the environmental impact of their components. If this is case, the component manufacturer shall follow the rules of this PCR for the calculation of such environmental impacts, as if they were components for modernization¹⁶. It is mandatory that the component manufacturer use the same background generic data sources (i.e. databases) as the lift manufacturer (see Section 0). Moreover, all supporting documentation (in the best-case external verification or critical review) shall be made available to the EPD owner to facilitate the EPD verification process.

4.3.2 CONSTRUCTION PROCESS STAGE: MODULES A4-A5

See PCR 2019:14 and Section 6.3.5.3 of EN 15804.

- **A4 Transport:** transportation of the product from the manufacturing site to the building site
- **A5 Installation:** installation of the product, including:
 - The production and transport of auxiliary materials,
 - Energy used during the installation of the lift,
 - Treatment of waste generated from the lift packaging materials.

¹⁵ Example: transport of raw materials, finished and semi-finished parts to in-house and outsourced manufacturing locations of main components, in particular air cargo transport such as e.g. electrical and electronic equipment & PWBs from South East Asia

¹⁶ This PCR, however, cannot be used for the development of EPDs of single components.

LIFTS (ELEVATORS)
PRODUCT GROUP CLASSIFICATION : UN CPC 4354

4.3.3 USE STAGE: MODULES B1-B7

See PCR 2019:14 and Section 6.3.5.4 of EN 15804.

- **B2 Maintenance:** also known as “preventive maintenance”, including:
 - Transportation of the lift workers from their working place to the building site,
 - The production and transport of the components and auxiliary materials and energy used for the lift maintenance activities,
 - Direct emissions to air, water or soils,
 - Treatment of waste generated from the components and their packaging, and
 - The end-of-life (EoL) processes of any waste from transportation and the maintenance process, including any part of the component and ancillary materials removed.

The expected maintenance activities, number and type of spare parts expected to ensure a good functioning of the lift during the useful lifetime declared by the manufacturer shall be described in the EPD. This shall be done by providing a list of the exchanged materials and following the requirements in Table 12, Section 7.3.3.1 of EN 15804.

- **B5 Refurbishment:** also known as “modernization”, including:
 - The production and transport of the components and auxiliary materials and energy used for the replacement,
 - Direct emissions to air, water or soils,
 - Treatment of waste generated from the components and their packaging, and
 - The EoL processes of any losses suffered during transportation and the refurbishment process, including the components and ancillary materials removed.

In case of modernization, the EPD shall clearly describe what original components remain in the installation and what parts or components are being replaced, as well as the foreseen effects that these replacements would have in the different life cycle phases of the lift (e.g. higher or lower energy consumption during the technical or extended lifespan). This content shall be defined and disclosed in the EPD by following the requirements in Table 12, Section 7.3.3.1 of EN 15804.

- **B6 Operational energy use:** expected energy consumption of the lift calculated according to ISO 25745-2:2015 and in case of express zones ISO 25745-2:2015/Amd 1:2023; the calculation of the energy consumption shall be carried out, based on the same choice of performance characteristic values as for the calculation of TV; the country/region-specific and the default electricity consumption mix shall be documented in the EPD.

Results of different UCs can be declared in the same EPD. The results of UCs in addition to the main UC declared in the environmental performance section (see Section 5.3.5), shall be declared in a separate subsection of the environmental performance section.

Regarding module B6, the underlying LCA report shall contain as a minimum:

- Transparent documentation of power and energy measurements (as per ISO 25745-1:2023), or
- Transparent documentation of all key parameter values used, and detailed assumptions made for the electrical energy demand calculation (as per ISO 25745-2:2015 and ISO 25745:2015/Amd 1:2023 in case of lifts with EZ).

In case of an EPD for a specific lift, in which a customized estimation of the energy consumption has been made, any deviation to this calculation method shall be reported and justified in the EPD.

In case of modernization, the energy consumption shall be declared even, if only mechanical modernization packages are covered.

4.3.4 END-OF-LIFE (EOL) STAGE: MODULES C1-C4

See PCR 2019:14 and Section 6.3.5.5 of EN 15804.

- **C1 Deconstruction:** including:
 - dismantling or demolition of the product from the building,
 - initial on-site sorting of the materials,
 - auxiliary materials and energy used during the deconstruction of the lift.

LIFTS (ELEVATORS)
PRODUCT GROUP CLASSIFICATION : UN CPC 4354

- **C2 Transport:** transportation of the deconstructed product from the building site to the waste treatment site.
- **C3 Waste processing:** e.g. collection of waste fractions from the deconstruction and waste processing of material flows intended for reuse, recycling and energy recovery according to a generic scenario defined by the company.
- **C4 Waste disposal:** including physical pre-treatment and management of the disposal site, according to a generic scenario defined by the company.

Each EPD shall define its own EoL (waste treatment) scenario, considering the specifics of the geographical region where the lift is installed (or intended to be installed). The EoL scenario shall be clearly documented and justified in the EPD describing the final method of disposal, i.e. recycling, incineration and/or landfill.

Processes excluded are:

- Production, maintenance, and disposal of infrastructure (buildings, machinery and capital goods) at the sites where the product is disposed.

4.3.5 BENEFITS AND LOADS BEYOND THE SYSTEM BOUNDARY: MODULE D

See PCR 2019:14 and Section 6.4.3.3 of EN 15804.

4.4 CUT-OFF RULES

See PCR 2019:14 and EN 15804.

4.5 PROCESS FLOW DIAGRAM

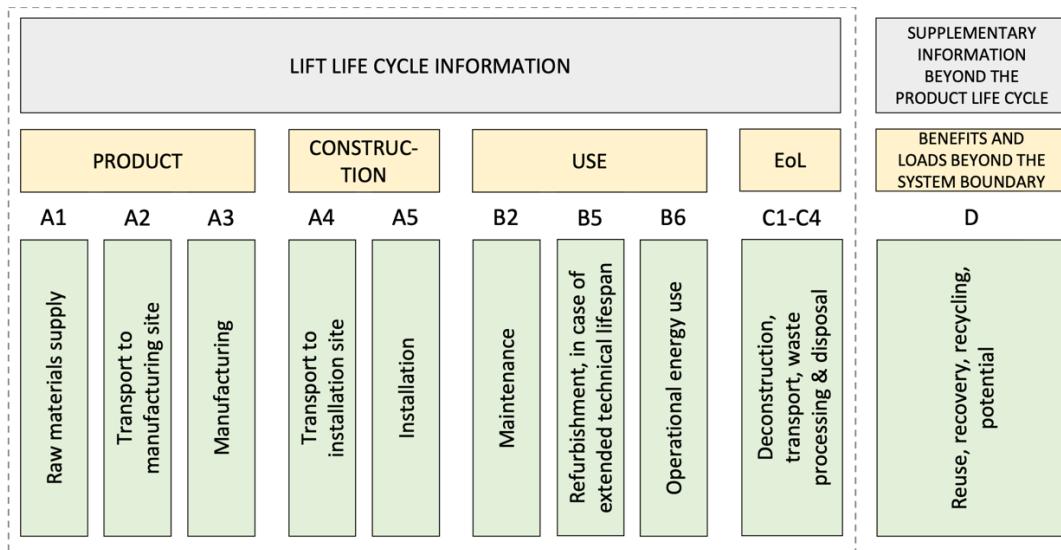


Figure 3. Process flow diagram illustrating the processes that shall be included in the product system, divided into the life-cycle stages. The illustration of processes to include may not be exhaustive.

4.6 ALLOCATION RULES

See PCR 2019:14 and EN 15804.

If mass criteria are applied, the allocation factor shall be calculated as the total mass of flows for the specific lift or component divided by the total mass of all lifts or components produced at the given production site. The allocation procedures shall be documented in the LCA report and the EPD. In case of economical allocation, the EPD shall explain the reference values that were used.

LIFTS (ELEVATORS)
PRODUCT GROUP CLASSIFICATION : UN CPC 4354

4.7 DATA CATEGORIES AND DATA QUALITY RULES

See PCR 2019:14 and EN 15804.

4.7.1 DATA QUALITY REQUIREMENTS AND OTHER MODELLING GUIDANCE TO INFORMATION MODULES A1 AND A3

For information modules A1 and A3, depending on the production supply chain specifics for each manufacturer, different possibilities exist about which commodities, raw materials and/or product components are taking place in-house or are outsourced to external suppliers. In this regard, for processes that the manufacturer has influence over¹⁷, manufacturer's average or specific data from own and/or Tier-1 suppliers shall be used. Otherwise, when these processes are outsourced (i.e. upstream processes), generic data may be used.

Manufacturer's average or specific data, called primary data herewith, are gathered from the actual manufacturing plant(s), where specific processes are carried out and data from other parts of the life cycle traced to the specific product system under study, e.g. materials or electricity provided from a contracted supplier being able to provide data for the actual delivered services, transportation taking place based on the actual fuel consumption and related emissions, etc.

The requirements for primary data also include actual product weights, gross amounts of raw materials used (including material losses) and amounts of waste, etc.

If no primary data is available to account for material losses (cuttings, wastage, residues, etc.) mass of materials used in the bill of materials shall be accounted for with an increase of 5%. Generic data shall only be used where specific data is not available or cannot be reasonably obtained; this shall be justified and transparently documented in the background LCA report. In no case shall the contribution of such generic data exceed 10% of the overall environmental impact of processes under the manufacturer's control.

Data regarding components manufactured and/or assembled by sub-suppliers can be approximated by own manufacturing data of comparable processes and be applied instead of using specific data from the sub-supplier, or in combination with (other) generic data (e.g. metal working process data of Ecoinvent) representative for the sub-supplier's manufacturing process. In such a case, this shall be made transparent in the background LCA report.

4.7.2 DATA QUALITY REQUIREMENTS AND OTHER MODELLING GUIDANCE TO INFORMATION MODULES A2 AND A4

For the transportation modules A2 and A4, use of primary data is recommended as a minimum for the specific distance and specific mass transported, and optionally for loading rates and empty return rates of the respective means of transportation (else predetermined value used by the underlying LCI background data is acceptable, e.g. average loading rate of 100%, and an empty return rate of 0%). Selection of generic LCI data within a transportation mode shall reflect as close as possible the specific context of the EPD, e.g. with regard to lorry capacities (e.g. 17 t, 40 t, etc.) or emission standards (e.g. EURO 3, EURO 5, etc.) and shall be transparently documented in the LCA report. This will make it possible to show the benefits of efforts to reduce the environmental impact of transportation, such as regional manufacturing with shorter transport distances or using cargo fleets with lower-than-average environmental impact.

If these data sources do not supply the necessary data, other generic data may be used, but shall be clearly documented. The environmental impact of the processes where the other generic data are used must not exceed 10% of the overall environmental impact from the product system.

4.7.3 DATA QUALITY REQUIREMENTS AND OTHER MODELLING GUIDANCE TO INFORMATION MODULE B6

As regards to module B6, accuracy of energy measurements and demand calculations shall comply with the requirements of ISO 25745-1: 2023, ISO 25745-2:2015. and ISO 25745-2:2015/Amend.1:2023 (in case of lifts with EZs). For the calculation of the environmental impact of the energy consumption during the operation phase (B6), the energy mix shall correspond to the actual consumption mix of the geographic region where the specific lift is installed. For generic lifts, the consumption mix for market where the lift is intended to be installed shall be used. It is acceptable to use 100% generic upstream data for electricity production, whereas quantity of energy used shall be primary/system specific modelled data. In all cases, the applied energy mix shall be declared in the EPD.

¹⁷ A manufacturer has influence over the processes of his own plant and usually of his Tier-1 suppliers, since the suppliers' plant processes are directly dependent on the manufacturer's orders for components.

LIFTS (ELEVATORS)
PRODUCT GROUP CLASSIFICATION : UN CPC 4354

Moreover, following the requirements in PCR 2019:14 for documenting the GWP-GHG results in kg CO₂ eq./kWh, of the upstream electricity used in the manufacturing process A3, the same rule shall apply also for module B6. This is justified by the fact that the energy consumption of the lift operation accounted in B6 is assumed to have a significant overall environmental impact.

4.8 OTHER LCA RULES

See PCR 2019:14.

4.9 SPECIFIC RULES PER LIFE-CYCLE STAGE AND MODULE D

See PCR 2019:14.

4.9.1 PRODUCT STAGE, A1-A3

See PCR 2019:14.

4.9.2 CONSTRUCTION PROCESS STAGE, MODULES A4-A5

See PCR 2019:14.

4.9.3 END-OF-LIFE STAGE, MODULES C1-C4

See PCR 2019:14.

4.9.4 CONSEQUENCES FOR RECOVERED MATERIAL/ENERGY BEYOND THE PRODUCT LIFE CYCLE (MODULE D)

See PCR 2019:14.

4.10 ENVIRONMENTAL PERFORMANCE INDICATORS

See PCR 2019:14 and EN 15804.

The environmental performance results shall be declared per FU, i.e. 1 [tkm], separately for each information module.

In a separate subsection of the EPD, the environmental performance results shall also be declared for the complete product over its TL, plus extended lifespan, if refurbished, as specified in Table 1, separately for each information module.

4.11 SPECIFIC RULES PER EPD TYPE

See PCR 2019:14.

LIFTS (ELEVATORS)
PRODUCT GROUP CLASSIFICATION : UN CPC 4354

5 CONTENT OF THE LCA REPORT

See PCR 2019:14.

5.1 LAYOUT OF THE PRESENTATION

See PCR 2019:14.

5.2 DESCRIPTION OF THE LCA MODELLING

See PCR 2019:14.

LIFTS (ELEVATORS)
PRODUCT GROUP CLASSIFICATION : UN CPC 4354

6 CONTENT AND FORMAT OF EPD

See PCR 2019:14.

6.1 EPD LANGUAGES

See PCR 2019:14.

6.2 UNITS AND QUANTITIES

See PCR 2019:14.

6.3 USE OF IMAGES IN EPD

See PCR 2019:14.

6.4 SECTIONS OF THE EPD

See PCR 2019:14.

6.4.1 COVER PAGE

See PCR 2019:14.

6.4.2 GENERAL INFORMATION

See PCR 2019:14.

6.4.3 INFORMATION ABOUT EPD OWNER

See PCR 2019:14.

6.4.4 PRODUCT INFORMATION

See PCR 2019:14.

Furthermore, in this section of the EPD:

- The lift system considered and its scope of application using as a minimum the mandatory performance characteristics listed in Table 1 shall be disclosed (see Section 2.2.1)
- The configuration of the product under analysis in a tabular or schematic format shall be defined and disclosed (see Section 2.2.1)
- In case of generic lifts, it shall be disclosed for which UCs the generic lift in scope is designed, as well as whether the results cover the whole range (and even combinations of ranges) of the performance characteristics (see Section 4.2.3)
- In case the EPD covers a modernization package, this shall be clearly described (see Section 4.2.3)
- The following statement shall be included below the information as per Table 1: "Comparability between EPDs based on this c-PCR-008 (to PCR 2019:14) is only achievable, if the following performance characteristics "functional unit" and "usage category" are identical and "travel height", "rated load", "rated speed" and "geographic region" are equivalent." (see Section 4.2.2)
- When specific values for the calculation of TV and assessment of the annual energy consumption are deviating from Table 1 and Table 2 of ISO 25745-2:2015, these shall be disclosed (see Section 4.2)

LIFTS (ELEVATORS)
PRODUCT GROUP CLASSIFICATION : UN CPC 4354

6.4.5 CONTENT DECLARATION

See PCR 2019:14.

In addition, the gross weight declared in the EPD shall not include spare parts. Moreover, the EPD shall include a declaration of the lift composition¹⁸ in quantitative terms (percentage of the total weight, considering all lifecycle phases and according to the cut off rules), grouped at least according to the following categories:

- Ferrous metals
- Non-ferrous metals
- Plastics and rubbers
- Inorganic materials (e.g. concrete)
- Organic materials (e.g. paper or wood)
- Lubricants (e.g. oils and greases)
- Electric and electronic equipment
- Batteries and accumulators
- Refrigerants in car air conditioners (if any)
- Other materials¹⁹

Proprietary materials and substances covered by exclusive legal rights including patent and trademarks can be reported under "Other materials".

The lift manufacturer can be more specific in the reporting of the lifts material composition if wished. For declaration of hazardous substances, a reference to the corresponding notification number in the SCIP (Substances of Concern in articles as such or in complex objects (Products)) database may be used.

Lifts put on certain markets can be subject of further local regulations or specific requirements of stakeholders. In such cases, additional requirements to declare the content of certain substances may be needed. This can be done in an annex of the EPD.

6.4.6 LCA INFORMATION

See PCR 2019:14.

In addition, this section shall clearly describe the following aspects:

- Documentation of the calculation of TV in a transparent and reproducible manner (see Section 4.2)
- The expected maintenance activities, number and type of spare parts expected to ensure a good functioning of the lift during the useful lifetime declared by the manufacturer (B2) (see Section 4.3.3)
- List of original components that remain in the installation in case of modernization (B5) (see Section 4.3.3)
- The country/region-specific and the default electricity consumption mix (B6) (see Section 4.3.3)
- The deviations (and their justifications) to the calculation method, in case of an EPD for a specific lift, in which a customized estimation of the energy consumption has been made (B6) (see Section 4.3.3)
- The definition of an own EoL (waste treatment) scenario, considering the specifics of the geographical region where the lift is installed (or intended to be installed) (C4) (see Section 4.3.4)
- The allocation procedure (see Section 4.6)

¹⁸ A detailed bill of materials shall be available in the LCA report.

¹⁹ Other materials include e.g. paintings, coatings, adhesives, fillers and those, for which the material contents cannot be established.

LIFTS (ELEVATORS)
PRODUCT GROUP CLASSIFICATION : UN CPC 4354

6.4.7 ENVIRONMENTAL PERFORMANCE

See PCR 2019:14.

In addition to the main environmental performance results per FU, the environmental performance section shall, in a separate subsection, include a declaration of the environmental performance for the complete product over its TL, plus extended TL, if refurbished (see Section 4.10). Furthermore, the separate subsection may include a declaration of the LCA results: for additional usage profiles and/or UCs (see Section 4.3.3).

6.4.8 ADDITIONAL ENVIRONMENTAL INFORMATION

See PCR 2019:14.

In addition, such information can optionally also include recommendations for energy saving measures. Other environmental information describing different waste categories and output flows may be declared as follows:

- Components potentially suitable for re-use (e.g. counterweight filling blocks, landing door frames); in kg and % of total system weight as installed
- Materials potentially suitable for recycling (e.g. all ferrous and non-ferrous parts) in kg and % of total system weight as installed
- Materials potentially suitable for energy recovery (e.g. used oils, plastic parts); in kg and % of total system weight as installed

Additional environmental information can also include a more detailed description of an organization's overall environmental work (e.g. relevant Type I and Type II environmental labels awarded to the product), information that is identified as an important environmental aspect of the product or information asked by the customer and other stakeholders

Moreover, any extraordinary efforts performed by the company for recycling and reuse of their lift material, such as e.g. voluntary take back programs of the lift company for recycling, refurbishment and reuse of PWBs and e-waste can also be declared.

In case information regarding green building certification schemes is to be disclosed, this shall be done in this section. Such information can be e.g.:

- Annual energy consumption and energy efficiency, following ISO 25745-2:2015
- Reference to published Health Product Declarations (HPD) or Cradle to cradle certificates (C2C)
- Noise generation
- Reference to REACH regulation compliance.

Any claims made about the product shall be verifiable.

6.4.9 ADDITIONAL SOCIAL AND ECONOMIC INFORMATION

See PCR 2019:14.

6.4.10 INFORMATION RELATED TO SECTOR EPDS

See PCR 2019:14.

6.4.11 VERSION HISTORY

See PCR 2019:14.

6.4.12 ABBREVIATIONS

See PCR 2019:14.

6.4.13 REFERENCES

See PCR 2019:14.

LIFTS (ELEVATORS)
PRODUCT GROUP CLASSIFICATION : UN CPC 4354

7 LIST OF ABBREVIATIONS

In addition to abbreviations listed in PCR 2019:14, Section 7:

CPC	Central Product Classification
EPD	Environmental Product Declaration
ELA	European Lift Association
EoL	End-of-Life
EZ	Express zone
FU	Functional unit
GPI	General Programme Instructions
LCA	Life Cycle Assessment
LCI	Life Cycle Inventory
LCIA	Life Cycle Impact Assessment
PWB	Printed Wiring Board
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RSL	Reference Service Life
UC	Usage Category
TV	Transportation value
TL	Technical lifespan

LIFTS (ELEVATORS)
PRODUCT GROUP CLASSIFICATION : UN CPC 4354

8 REFERENCES

ASME (2022) ASME A17.1-2022/CSA B44:22 – Safety Code for Elevators and Escalators.

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.

EN (2014) EN 81-20:2014, Safety rules for the construction and installation of lifts — Lifts for the transport of persons and goods, Part 20: Passenger and goods passenger lifts.

EPD International (2025) PCR 2019:14 Construction products, version 2.0.1.

EPD International (2021) General Programme Instructions of the International EPD System, Version 5.0.1, dated 2025-02-27.
www.environdec.com.

EU (2014) Directive 2014/33/EU of the European Parliament and of the Council of 26 February 2014 on the harmonisation of the laws of the Member States relating to lifts and safety components for lifts (Lifts Directive).

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

ISO (2017b) ISO/TS 14027:2017, Environmental labels and declarations — Development of product category rules.

ISO (2013) ISO 25745-1:2023, Energy performance of lifts, escalators and moving walks – Part 1: Energy measurement and verification.

ISO (2015) ISO 25745-2:2015, Energy performance of lifts, escalators and moving walks – Part 2: Energy calculation and classification for lifts (elevators).

ISO (2023) ISO 25745-2:2015/Amd 1:2023, Energy performance of lifts, escalators and moving walks – Part 2: Energy calculation and classification for lifts (elevators) – Amendment 1: Express zones.

LIFTS (ELEVATORS)
PRODUCT GROUP CLASSIFICATION : UN CPC 4354

9 VERSION HISTORY OF C-PCR

VERSION 2020-10-30

Original version, based on PCR 2019:14 Construction products, updating and substituting PCR 2015:05.

VERSION 2024-03-08

Editorial changes, including:

- Clarification that the main environmental performance results are those expressed per FU, and that the results for the complete product over its RSL shall be declared in a separate subsection.
- The references to sections in PCR 2019:14 have been updated to align with the present numbering of sections.

VERSION 2024-04-30

- Updated validity to align with extended validity of PCR 2019:14 as of version 1.3.4.

VERSION 2024-08-27

- New contact information to the PCR Moderator.

VERSION 1.0.0, 2025-04-08

- Updated with prolonged validity, until five years from the original publication of the PCR.
- Changed from version date to version number.
- Other editorial changes and clarifications, e.g., related to the use of the c-PCR (see Section 1).
- Removed references to specific sections of PCR 2019:14, as the sections of PCR 2019:14 changed as of the publication of version 2.0.0 in 2025-04-08 and as this c-PCR is applicable together with any version of PCR 2019:14.

VERSION 1.0.1, 2025-07-30

- The validity period of the PCR was further extended by 6 months, until 2026-04-30, due to the initiation of an updating process.

VERSION 2.0.0, 2025-11-27

- Large update based on GPI v5.0.1 and PCR 2019:14 v2.0.1.
- Editorial modifications to improve readability.
- Clarifying what modernization is and how to handle it in an EPD.
- Change in terminology (i.e. from “transportation performance, TP” to “transportation value, TV”) to align better with c-PCR 025 Escalators (moving walks).
- Creation of a list of “shall” requirements to be included in the EPD.
- Adapted reference ISO 25745:2015/Amd 1:2023 for the calculation of EZ.

LIFTS (ELEVATORS)
PRODUCT GROUP CLASSIFICATION : UN CPC 4354

© 2025 EPD INTERNATIONAL AB

YOUR USE OF THIS MATERIAL IS SUBJECT TO THE GENERAL TERMS OF USE PUBLISHED ON BY EPD INTERNATIONAL AB:S
HOMEPAGE AT [HTTPS://WWW.ENVIRONDEC.COM/CONTACT/GENERAL-TERMS-OF-USE](https://www.environdec.com/contact/general-terms-of-use). IF YOU HAVE NOT REGISTERED
AND ACCEPTED EPD INTERNATIONAL AB:S THE GENERAL TERMS OF USE, YOU ARE NOT AUTHORISED TO EXPLOIT THIS
WORK IN ANY MANNER.

COVER IMAGE © ISTOCKPHOTO.COM / FONTGRAF