EPD
INTERNATIONAL EPD SYSTEM

ELECTRIC MOTORBIKES AND ELECTRIC MICROMOBILITY VEHICLES

PRODUCT CATEGORY CLASSIFICATION: UN CPC 4991, 4992

PCR REGISTRATION NUMBER TO BE ADDED BY THE SECRETARIAT
VERSION 1.0.0 FOR OPEN CONSULTATION. DO NOT USE OR CITE.

VALID UNTIL 20XX-YY-ZZ *(TO BE ADDED BY THE SECRETARIAT)*

DRAFT FOR OPEN CONSULTATION

INTRODUCTION TO OPEN CONSULTATION

This draft PCR document is available for open consultation from 2026-01-05 until 2026-03-05. Feel free to forward the draft to any other stakeholder you might think is relevant, including colleagues and other organisations.

We are interested in comments from stakeholders on:

- General
  - Alignment with PCRs available in other programmes for type III environmental declarations, industry-specific LCA guidelines or similar.
- Scope of PCR
  - Product category definition and description
  - Classification of product category using CPC codes
- Goal and scope, life cycle inventory and life cycle impact assessment
  - Functional unit/declared unit
  - System boundary
  - Allocation rules
  - Data quality requirements
  - Recommended databases for generic data
  - Impact categories and impact assessment methodology
- Additional information

Comments shall be sent directly to the PCR Moderator (contact details available in Section 1). There is a template for comments on www.environdec.com that may be used.

For questions about the PCR, please contact the PCR moderator. For general questions about the International EPD System, EPD or PCR development, please contact the Secretariat via https://www.environdec.com/support.

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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. 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.

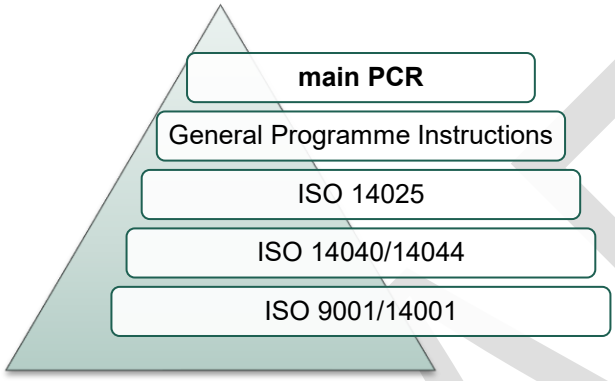

Figure 1. The hierarchy between PCRs, standards, and other documents. EN 15804 and ISO 21930 are normative standards for construction products only.

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 GENERAL INFORMATION

2.1 ADMINISTRATIVE INFORMATION

Name:	ELECTRIC MOTORBIKES AND ELECTRIC MICROMOBILITY VEHICLES
Registration number and version:	*To be added by the Secretariat*
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:	Davide Casarin, d.casarin@eambientesrl.com
PCR Committee:	Askoll EVA S.p.A.; Eambiente.
Publication date:	*To be added by the Secretariat* See Section 9 for a version history of the PCR.
Valid until:	*To be added by the Secretariat* 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 *two-wheel electric vehicles, such as electric motorcycles, bikes and low-speed e-scooters* and the declaration of this performance by an EPD. The product category corresponds to UN CPC 4991 and 4992 *"Motorcycles and side-cars"; "Bicycles and invalid carriages"*

The type of electric vehicles covered by this PCR include battery-operated two-wheel vehicles, such as:

- Electric motorbikes
- Electric bicycles
- Low-speed electric scooters

UN CPC hierarchy (UNSTATS CPC codes, s.d.)*:*

4 Metal products, machinery and equipment
49 Transport equipment
499 Other transport equipment and parts thereof
4991 Motorcycles and side-cars
4992 Bicycles and invalid carriages

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 1.0.0

This PCR was available for open consultation from *date* until *date*, during which any stakeholder was able to provide comments by contacting the PCR Moderator and/or the Secretariat.

Above dates shall be given in the following format: 20YY-MM-DD.

Add information about any physical or web-based meetings held during the open consultation, if applicable.

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 PCR and on www.environdec.com:

- *List of stakeholder names and affiliation (to be added after the open consultation).*

In case no stakeholders provided comments and agreed to be listed as contributors, the above sentence shall be adjusted accordingly ("No stakeholders provided comments during the open consultation and agreed to be listed as contributors in the PCR and on www.environdec.com.") and the bullet list shall be removed.

In case of multiple major revisions of the PCR (1.0, 2.0, etc.), information about each open consultation should be added as sub-sections (3.2.1, 3.2.2, etc.).

3.2 PCR REVIEW

3.2.1 VERSION 1.0.0

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:	*To be added by the Secretariat*
Review dates:	*To be added by the Secretariat*

In case of multiple major revisions of the PCR (1.0, 2.0, etc.), information about each review should be added as sub-sections (3.1.1, 3.1.2, etc.).

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.

- EPD-Norge. www.epd-norge.no
- EPD Italy. www.epditaly.it
- PEP Ecopassport. www.pep-ecopassport.org
- Other EPD programmes within ECO Platform: https://www.eco-platform.org/the-eco-epd-programs.html
- European Commission PEF. https://eplca.jrc.ec.europa.eu/EnvironmentalFootprint.html
- EPD Promotion Center http://www.epdchina.cn

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
PCR 2016:04 Public and private buses and coaches	International EPD System	PCR 2016:04, Version 2.0.2 Valid until 2024-12-04	UN CPC 49112 & 49113 public and private passenger buses and coaches
PCR 2024:02 Passenger Cars	International EPD System	PCR 2024:02 version 1.0.2	UN CPC 49113
PCR FOR NEW ENERGY PASSENGER VEHICLE	EPD Promotion Center	EPDCN-PCR-202202, version 4.0 Publication date 2022-07-25	New energy passenger vehicle.
Product-Category Rules (PCR) for Preparing an Environmental Product Declaration (EPD) for Electric Motorcycles	China Motor Co., Ltd.	PCR 2013:1.0 (expired)	Electric motorcycles

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.

The reason to develop the PCR is to facilitate the LCA and EPD development for electric motorcycles and micromobility vehicles producers and other stakeholders all around the world.

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 the following underlying studies:

- Askoll EVA S.p.A., LCA CFP Study Report dello Scooter eSpro45 3.4 realizzato da ASKOLL EVA, In conformità alla Norma ISO 14067:2018, rev. 02 del 19/04/2024 (Askoll EVA S.p.A., 2024)

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

See Section A.1 of the GPI.

4.2 DECLARED/FUNCTIONAL UNIT

The functional unit is defined as: transport of 1 passenger for 1 km

Vehicles of the present PCR are generally designed for 1 passenger transportation; in the case of vehicles designed and approved by local laws for transportation of more than one passenger, the number of passengers per vehicle shall be set as 1 by default. Other number of passengers can be explored in a sensitivity analysis. In any case, only one set of results shall be declared in the EPD.

4.2.1 TECHNICAL SPECIFICATION, LIFESPAN AND REFERENCE SERVICE LIFE (RSL)

The following technical specification of the passenger car shall be presented in the LCA report and in the EPD.

- Vehicle classification (vehicle commercial name)[4].
- Curb weight.
- Technical lifespan (both in years and the kilometres travelled), which is the assumed lifespan in the LCA calculations.
- Battery type to the level that can reflect the battery chemistry (e.g. Li-ion; NMC 622, Li-ion LFP, etc) and its energy density, if applicable.
- Battery gross capacity in kWh, if applicable.
- Loss in efficiency of the fuel cell over the vehicle's lifetime, if applicable.
- specifications contained in the Battery Regulation (Annex IV – regulation (EU) 2053/1542 Battery)
  - Rated capacity (in Ah) and capacity fade (in %):
  - Power (in W) and power fade (in %):
  - Internal resistance (in Ω) and internal resistance increase (in %):
  - Where applicable, energy round trip efficiency and its fade (in %):
  - The expected lifetime of the battery under the reference conditions for which it has been designed, in terms of cycles, except for non-cycle applications, and calendar years:
- Removable batteries or non-removable batteries
- Hub motor or chain drive (powertrain)

4.3 SYSTEM BOUNDARY

The scope of this PCR and EPDs based on it is cradle-to-grave.

Module D is not included in this study. Some modules are not relevant for this product category (e.g., A5 Installation, which applies to building products). For vehicles, A5 shall be considered not applicable, unless the manufacturer can justify otherwise.

As illustrated in Figure 2, the product system is divided into life cycle stages corresponding to the information modules A1–A3, A4–A5, B1–B7, and C1–C4, as described below.

[4] Some of the standards could be referred to, such as ISO 3833-1977, UNECE standards, Euro NCAP, GB9417-89, etc.

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:

- Product stage, modules A1-A3:
  - A1: Raw material extraction and processing (e.g., mining, agricultural and forestry operations), production of intermediate materials and components (e.g., including transformation processes such as rolling, drawing and extrusion), processing of secondary material input (e.g., recycling processes), production of distribution and consumer packaging, etc.
  - A2: Transports to the manufacturer of the product
- A3: Manufacturing of the product[5]
- Distribution and installation stage, modules A4-A5:
  - A4: Transport of the product to the building/installation site/user, including storage of product (e.g., warehouse and retail operations)
  - A5: Installation of the product, for example in a building as part of the construction of the building (e.g., including transports and waste processing of material and product losses arising in A5)
- Use stage, modules B1-B7:
  - B1: Use/application/operation of the product (e.g., including direct emissions associated with its use)
  - B2: Maintenance of the product
  - B3: Repair of the product
  - B4: Replacement
  - B5: Refurbishment
  - B6: Energy use in use/application/operation
  - B7: Water use in use/application/operation
- End-of-life stage, modules C1-C4:
  - C1: De-construction/demolition/deinstallation
  - C2: Transport to waste processing and/or disposal
  - C3: Waste processing for reuse, recovery and/or recycling
  - C4: Disposal

Module B7 (water use during operation) is generally not relevant for this product category and shall be reported as not applicable, unless water consumption is proven significant.In the EPD, the environmental performance of each of the life-cycle stages and module D shall be reported separately, and in aggregated form for the life-cycle stages (modules A-C).

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.

The following sections further describe the processes to include or exclude for each life-cycle stage.

4.3.1.1 Modules A1-A3: Product stage

- Module A1:
  - Extraction and production of raw and basic materials (e.g. aluminum, stainless steel, plastics, etc.) for all parts and components. This shall include all the associated processes like mining, transportation, electricity, heat, steam and fuel. The waste generated from the included processes and its treatment shall also be included. All

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

this information is often incorporated in a cradle-to-gate process/dataset for material production, e.g. steel production.
  - Production of packaging of the vehicle, if present
  - Production of imported energy (electricity, heat, steam etc.) for A1 – A3 modules.
- Module A2:
  - Transports to manufacturer of the vehicle.
- Module A3:
  - Manufacturing of the vehicle.

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 Modules A4-A5: Distribution and installation stage

- Module A4:
  - Distribution of assembled vehicles to retailers.
- Module A5:
  - Disposal of product packaging, if present.
  - If existing, energy consumption and emissions arising from product installation.

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 Modules B1-B7: Use stage

- Module B2:
  - Maintenance activities including spare parts changes, such as batteries changes, tires, brake pads and discs.
- Module B6:
  - Production and consumption of electricity, including:
    - losses occurring during the charging of the batteries and vehicle operation.
    - Battery efficiency loss during its life cycle.

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 Modules C1-C4: End-of-life stage

- Module C1:
  - Depollution, dismantling, shredding, sorting of vehicle at End of Life
- Module C2:
  - Transportation of vehicle and dismantled parts to waste processing and disposal
- Module C3:
  - Recycling of parts, components and materials recovered.
- Module C4:
  - Disposal of parts and materials not recovered

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.

4.3.1.5 Excluded processes

See Section A.3.1.1 of the GPI.

The following processes shall not be included:

- Operation of the dealership and vehicle sales service shop and storage of the vehicles here in the dealership facilities.
- Production and use of water and cleaning agents used during vehicle operation.
- Maintenance of roads or electricity grids.
- Tire Road Wear Particle Emissions (TRWP).
- Emissions from brake pads use.
- Treatment and disposal of waste generated from passenger.
- Life cycle of charging infrastructure.

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 below for rules on setting boundaries to other product systems.

4.4 PROCESS FLOW DIAGRAM

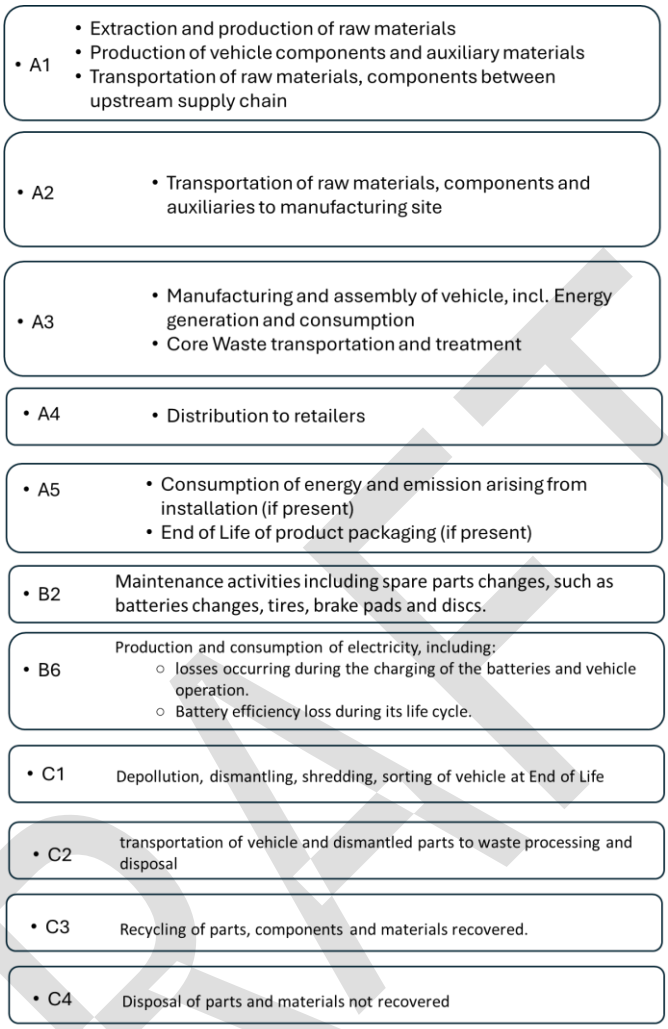

Figure 2. Process flow diagram illustrating the processes that shall be included in the product system, divided into the life-cycle stages. The illustration of processes to include may not be exhaustive.

4.5 CUT-OFF RULES

See Section A.3.3 of the GPI.

4.6 ALLOCATION RULES

See Section A.4 of the GPI. When allocation cannot be avoided, physical relationships shall be preferred (e.g., mass, energy). If physical relationships are not available, economic allocation may be applied. Recycling processes shall follow the cut-off approach, unless otherwise justified.

4.6.1 ALLOCATION OF CO-PRODUCTS

See Section A.4.1 of the GPI.

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.

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 2 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 2. Examples of databases and datasets to use for secondary data.

Process	Geographical scope	Dataset	Database
Production of steel	Several geographical scopes	Steel production, chromium steel 18/8, hot rolled	Ecoinvent 3.10
Production of ABS plastic	Several geographical scopes	Acrylonitrile-butadiene-styrene copolymer production	Ecoinvent 3.10
Production of Lithium batteries	CN, Rest of the World	battery cell production, Li-ion, LFP	Ecoinvent 3.10
Production of imported electricity	Several geographical scopes	Electricity [low/medium] voltage, residual mix	Ecoinvent 3.10

All commercial or publicly available databases that meet the data quality requirements may be used. The specifications and the version of the database shall be reported in the EPD.

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.

4.8.2 ELECTRICITY MODELLING

See Section A.6.2 of the GPI.

4.8.3 BIOGAS MODELLING

See Section A.6.3 of the GPI.

4.9 SPECIFIC 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 of relevance for the product category.

4.9.1 PRODUCT STAGE, A1-A3

- Data referring to contractors that supply main parts, battery and other electronic components, tires, and main auxiliaries, should be requested from the contractor as primary data, where relevant.
- Data on transport of main parts and components along the supply chain to a distribution point (e.g. a stockroom or warehouse) where the final delivery to the manufacturer can take place, should be specific and based on the actual transportation mode, distance from the supplier, and vehicle load.
- In case primary data is lacking, the following generic default values can be used for developing scenarios:
  - International transport: 19,000 km by ship plus 1,000 km by lorry,
  - Intracontinental transport: 3,500 km by lorry,
  - Domestic transport: 1,500 km by lorry,
  - Local transport: 50 km by lorry.

4.9.2 DISTRIBUTION AND INSTALLATION STAGE, MODULES A4-A5

This PCR does not provide any additions to the rules and guidance in the GPI on the modelling of the installation stage. Distribution scenarios shall be representative of the main sales markets. The manufacturer shall define a representative geography or declare more than one scenario if sales are diversified. If multiple retailers exist, the average or most relevant distribution channel shall be declared.

4.9.3 USE STAGE, MODULES B1-B7

- Data for the use stage are usually based on scenarios, but primary data should be used when available and relevant. Key assumptions for the use stage shall be presented in the EPD for transparency. For guidance, the following sector-specific regulation can be consulted: REGULATION (EU) No 134/2014 Annex VII/App.2, 134/2014 Annex VII/App. 3.3[6]
- Data on production of electricity for the recharging process of batteries shall be chosen according to where the product will be used (i.e., the geographical scope of the EPD)..
- The technical lifespan of the vehicle should be defined based on the car segments defined by the European Commission (1999) and the lifespans defined by PFA (2022; with interpretations for segments J, S and M), see Table 2. If the EPD owner choose lifespans based on other guidelines or standards, it shall be justified in the EPD.

[6] https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32014R0134#anx_VII.app_3

- Reg.(EU) 168/2013 as amended by Reg.(EU) 2020/169 Annex I

Table 3 Reference technical lifespans of different segments of passenger cars.

Segment	Classification	Description	Lifespan (km)	Lifespan (years)
Electric Scooters	L1e	2 wheels Power < 4 KW Speed max < 45 km/h	120.000	8
Electric Scooters	L2e	3 wheels Power < 4 KW Speed max < 45 km/h Running weight max < 270 kg	120.000	8
Electric motorbike	L3e	2 wheels Power -> different from L1e Speed max -> different from L1e	120.000	8
Electric motorbike	L4e	300 – 500 recharge cycles		3
Electric bicycle		300 – 500 recharge cycles		3
Low-speed e-scooter		300 – 500 recharge cycles		3

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

This PCR does not provide any additions to the rules and guidance in the GPI on the modelling of the end-of-life stage.

4.9.5 CONSEQUENCES FOR 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.

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.

The content declaration can, for example, be divided into the following material/substance categories:

- Steel and iron
- Aluminium
- Magnesium
- Platinum-Group Metals (PGM)
- Copper
- Zinc
- Lithium
- Rare-earth elements

- Graphite
- Magnets
- Polymers
- Natural materials
- Glass
- Electronics
- Fluids
- Other material

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 environmental performance indicators listed or referred to in Section 4.10, per functional unit per life-cycle stage.

6.4.8 ADDITIONAL ENVIRONMENTAL INFORMATION

See Section 7.4.8 of the GPI.

Additional scenarios may be reported in the 'Additional Environmental Information' section, provided they are clearly separated from the main scenario and transparently documented.

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

ANZSIC	Australian and New Zealand Standard Industrial Classification
BEVs	Battery Electric Vehicles
CPC	Central product classification
CPV	Common procurement vocabulary
EPD	Environmental product declaration
GPI	General Programme Instructions
GTIN	Global trade item number
ISO	International Organization for Standardization
LCA	Life cycle assessment
LCI	Life cycle inventory
MUD	The degree of utilised material of the total amount needed for producing a part
NACE/CPA	Classification of products by activity
ND	Not declared
NOVC-HEV	Non-Off-Vehicle-Chargeable Hybrid Electric Vehicle
OVC-HEV	Off-Vehicle-Chargeable Hybrid Electric Vehicle
PCR	Product category rules
REACH	Restriction of chemicals
REEV	Range Extended Electric Vehicle
RSL	Reference service life
SI	The International System of Units
UN	United Nations
UNSPSC	United Nations standard products and services code CPC Central product classification

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.

EPD International (2024) General Programme Instructions for the International EPD System. Version 5.0.0, dated 2024-06-19. Available on www.environdec.com.

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/TS 14067:2018, Greenhouse gases – Carbon footprint of products – Requirements and guidelines for quantification and communication.

9 VERSION HISTORY OF PCR

This section shall include a version history and the main differences compared to earlier versions of the PCR document.

VERSION 1.0.0, 20YY-MM-DD

Original version of the PCR.

EPD INTERNATIONAL EPD SYSTEM

ELECTRIC MOTORBIKES AND ELECTRIC MICROMOBILITY VEHICLES

PRODUCT CATEGORY CLASSIFICATION: UN CPC UN CPC 4991, 4992