



Part B: Product group definition

<p>What constitutes a product group (product category)?</p> <p>A product group consists of products that compete for/deliver the SAME function. Product group definitions use a functional performance¹ requirement(s) that impacts/drives the potential environmental performance of the products in a product category as codified or specified in standards.</p> <p>From this baseline, each manufacturer can then demonstrate business advantage, competitive advantage, and differentiation.</p>	<p>Part A + Part B = PCR</p> <p>Part A: LCA calculation rules and report requirements Part B: Product group definition</p> <p>Transparency Report™ / EPD (TR/EPD)</p> <p>Both are names for ISO 14025 Type III environmental declarations. A Transparency Report™ is Sustainable Minds' brand of EPD. Part A provides the content requirements for reporting; any delivery format can be selected.</p>
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Part B: Product group definitions consist of eight sections:

- 1. Product group** (*identification of the product group/category*)
 An appropriate and clearly defined product group (aka product category) is a critical part of understanding which products can use this Part B for declaring environmental performance. A product category is a group of products, elements, or systems that can fulfill equivalent functions.
- 2. Program operator responsibilities** (*how this definition works with other programs and requirements*)
 Product group definitions must attempt to harmonize with other existing definitions and/or product category rules (PCRs). This section cites material use to support the development of this product group definition, justification for its development, commentary on harmonization and alignment with other programs or PCRs, and whether the definition meets the requirements of regulatory purchasing requirements.
- 3. Functional performance** (*what performance are customers buying and how the industry measures it*)
 Performance is a measurable expression relating to the magnitude of a particular aspect of the product group relative to specified requirements, objectives, or targets. Every product group has its own (set of) performance parameter(s). A product group definition includes, when available, the functional performance parameters that are measurable and are codified or specified in a commonly accepted national standard. *Example: Insulation products are measured in R-values: 1 square foot of insulation per R-value point.* When necessary, excluded products will be identified.
- 4. Functional/declared unit** (*how the performance of a product system can be quantified*)
 A **functional unit** is the quantified performance of a product system. In other words, a functional unit defines the amount of service to be delivered by a product. The functional unit includes 1) an amount or quantity using SI-units; 2) a description of the application; and 3) the performance parameters, as many as relevant. After the functional unit is specified, the applicable region and a time period for which the performance is met (RSL) should also be described.

 A **declared unit** is used instead of the **functional unit** when an LCA study does not cover the entire life cycle, but only certain modules (e.g., only 'cradle-to-gate'). The declared unit includes an amount or quantity using SI-units.

 The functional/declared unit is used to express the results of the LCA for a given product group. **If different products do not fulfill the same performance, by definition they represent different product groups.**
- 5. Data quality and required data** (*required background data*)
 Product groups often share common materials and processes. To limit the artificial variation of product environmental performance results due to the use of different background data, some product group definitions may require default data sets to be used.
- 6. Additional rules for comparability** (*to enhance the comparability of products within the same group*)
 A TR/EPD documents the LCA performance following the rules specified in the document **Part A: LCA calculation rules and report requirements**. Additional rules may be necessary to enhance the comparability between different products belonging to the same product group.

Conditions for adding rules include:
 - A. Clarification:** When the rules in Part A are not clear when applied to a specific product group (aka product category), an interpretation may be in order to better define the rules applied to the product group. An interpretation request may be submitted to the Technical Advisory Board (TAB) for more details on product group parameters and reporting specifications.

¹ Functional equivalence: quantified functional requirements and/or technical requirements for a building or an assembled system (part of works) for use as a basis for comparison (ISO 21931:2010).

- B. **Incompleteness of rules in Part A:** When the rules in Part A are incomplete when applied to a specific product group, the issuance of additional rule(s) may be in order. These could be added to Part B or be integrated into Part A.
 - C. **Default life cycle stage scenarios²:** The variation of parameters in the LCA that are expected to be relevant to the results (i.e., lead to a difference >10% in any impact category) can require a specific rule or scenario that is required to be used by all products in the group. Examples include scenarios for any life cycle stage that are not under direct control of manufacturers. This is especially true in the use stage of products.
 - D. **Additional data quality requirements:** Data quality requirements specific to the product group may be needed in addition to those listed in Part A. Examples include whether certain secondary life cycle data should have priority, if applicable, and where data collection efforts should be focused within the life cycle.
7. **Additional LCA calculation rules** *(to specify conformance to additional standards or guidance)*
There may be circumstances where it is appropriate for the LCA to follow additional standards or guidance, either by the manufacturer's choice or as required. Substantiation is needed for why conformance is appropriate.
8. **Part B development information** *(transparent information about the development of the Part B)*
Product group definitions must be transparently developed in a non-biased way with an open consultation. This section lists the names and affiliations of the Part B review panel, the open consultation process information, a conflict statement, and contact information.

²The process of requesting additional rules may be challenging for products that do not have an LCA. However, once the LCA is completed and a need for additional rules is identified, Part B can be enhanced with additional rules.

Parts A & B: How they work together

The intended application of the framework is to provide a common set of general LCA calculation rules, requirements, and guidelines applicable to any product to ensure that all Type III environmental declarations based on the framework are derived, verified, and presented in a harmonized and consistent manner.

A TR/EPD presents the summary of the LCA background report, which includes quantified environmental information on the life cycle of a product in information modules. Modularity allows for a consistent and structured organization and communication of data and results throughout the life cycle of a product (in conformance with ISO 14025:2006 Clause 5.3).

Parts A and B establish the principles and specify the procedures for developing a TR/EPD.

Applying the general rules of Part A together with the specific rules of a Part B creates a TR/EPD. A verified TR/EPD is an ISO 14025:2006 conformant Type III environmental declaration which communicates verifiable, accurate, and non-misleading environmental information for products and their applications. The creation, development, and their use is voluntary (in conformance with ISO 14025:2006 Clause 5.2). This program allows conformance to the American Center for Life Cycle Assessment (ACLCA) PCR Open Standard v1.0 (May 2022) as specified in each Part B.

Getting started

Anyone can start a Part B as it is a publicly available form. It is then submitted to the TAB as a 'request.' This starts the review process. Here are some options for how to create Part B requests:

- **One company submits a Part B request**
- **An informal group of 2 or more collaborates to create a Part B request**
- **An industry group representative creates a strawman Part B and invites companies to review**
- **A program operator uses its own process to create and facilitate a stakeholder group**

Then refer the recommended steps in the table below:

	Using an existing LCA	LCA not yet developed
Creating new Part B	<ol style="list-style-type: none"> 1. A Part B request form is submitted to the TAB. 2. TAB working group (minimum three members) reviews the request within 2 weeks and either returns to initiator as incomplete; or if acceptable, notification of public 30-day review period is sent to interested parties and relevant stakeholders. A participant with relevant expertise will be invited to the working group if none exist on the TAB. 3. TAB reviews feedback and either returns it to the initiator to complete or publishes the approved Part B*. 4. The LCA report is updated following Part A and approved Part B. 5. The LCA report is submitted for 3rd party verification in conformance with Parts A & B. 	<ol style="list-style-type: none"> 1. LCA consultant is engaged in the process. 2. A Part B request form is submitted to the TAB. 3. TAB working group (minimum three members) reviews the request within 2 weeks and either returns to initiator as incomplete, or if acceptable, notification of public 30-day review period is sent to interested parties and relevant stakeholders. A participant with relevant expertise will be invited to the working group if none exist on the TAB. 4. TAB reviews feedback and either returns it to the initiator to complete or publishes the approved Part B*. 5. The LCA report is drafted following Part A and approved Part B. 6. The LCA report is submitted for 3rd party verification in conformance with Parts A & B.
Using existing Part B	<ol style="list-style-type: none"> 1. The LCA is updated following Part A and the approved Part B. 2. The LCA report is submitted for 3rd party verification in conformance with Parts A & B. <ul style="list-style-type: none"> • Updates to an existing Part B can be requested by submitting the Part B request form. The review and approval process above is repeated. 	<ol style="list-style-type: none"> 1. The LCA consultant is engaged in the process. 2. The LCA is drafted following Parts A & B. 3. The LCA report is submitted for 3rd party verification in conformance with Parts A & B.

Sustainable Minds Transparency Report™ / EPD Program

Part B: Product group definition | <Product group name> | Part B #YY-###

<optional> This Part B conforms to the ACLCA PCR Open Standard version 1.0 (May 2022) at the following level:

 1 – Transparency 2 – Procurement 3 – Data source

Initiated by	<Organization(s) name & URL>		
Working group members	<List individual names and their relevant employer/entity affiliation>		
Public notices of development/outreach	<List date & communication channel for each notice and outreach effort>		
Non-participating parties	<Explanation of interested parties that did not participate in the working group>		
New Part B?	<Yes / No>	Part B version number	<v1.0>
Publication date	<Date>		
Validity period	<5-year period beginning and end dates>		
Expected renewal schedule	Sustainable Minds intends to notify the working group and post update/renewal information on its website approximately four months prior to expiration to determine update, extension, or expiration options for this Part B.		

Product group

Name	<Name>	CSI MasterFormat® #	<Include all that apply>
Description	<Description of group of products, elements, or systems that can fulfill equivalent functions >		
Exclusions	<List specific exclusions from the product category>		
Geographic representativeness	North America		

Program operator responsibilities

Existing PCRs, EPDs, TRs, or LCAs	<List applicable literature and published material used to support development of the Part B.>
Justification for new Part B if relevant non-expired PCR exists	<If applicable, list relevant PCR(s) considered along with justification on why it is not being adapted, along with elements from the PCR that are included in this new Part B.>
Harmonization activities pursued	<Describe harmonization activities, including other program operators engaged and harmonization opportunities explored (e.g., joint development, merging, applying existing PCR, or adapting existing PCR), the relevant existing PCR(s), and whether a mutual recognition agreement exists between the relevant program operators.>
Alignment with other value chain PCRs	<List other relevant PCR(s) that represent products/materials upstream or downstream in the value chain, how alignment with those PCRs was considered, and the outcome of the alignment considerations. This must include difference in allocation rules, potential conflicts or inconsistencies, and how such differences were resolved.> <i>Note: This row may be deleted if the "Data source" level of conformance with the ACLCA PCR Open Standard is not desired/required.</i>
Relevant procurement requirements	This Part B has been confirmed to meet the requirements of the following federal and/or state procurement requirements: <List relevant requirements/legislation, if applicable. This row may be deleted if not relevant.>

Functional performance

Standard/certification (most recent edition, conformance not required for PCR conformance)	URL

System boundary

System boundary	<p>The type of TR/EPD shall be specified as <specify scope: cradle to gate, cradle to gate with options, or cradle to grave>. The modules considered in the LCA shall be described in brief as per “System boundaries” outlined in ISO 21930:2017 section 5.2. Module D <select inclusion, e.g., may be optionally declared>. It should be apparent as to what processes are considered in each module per the module descriptions in ISO 21930:2017 section 7.1.7.</p> <p><Determine whether capital goods and infrastructure are included in system boundary. Example text below.></p> <p><i>While it is unclear whether capital goods and infrastructure are significant to the overall impacts of the products, it is known that different databases inconsistently account for these items in secondary data sets. To reduce possible artificial variation in TR/EPD results across the product group, capital goods and system infrastructure flows shall be excluded from the system boundary by default, with justification required for alternative assumptions.</i></p>
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Functional / declared unit

Unit	
Rationale	

Data quality and required data

Required background data sets	<p>The following default data sets shall be used to represent relevant background processes in the product system. Deviations shall be justified and based on the premise that another data set is more representative of the specific background process.</p> <ul style="list-style-type: none"> <List database/source, name of data set, version/year, as needed to explicitly identify required data sets not already prescribed by the addendum below.> For fossil fuels, transport, equipment, and electricity, the data sets listed in ACLCA PCR Open Standard addendum “Assessing Data Quality of Background Life Cycle Inventory Datasets”, Resource section, are acceptable. <p><i>Note: This is required for “Procurement” or “Data source” level conformance with ACLCA PCR Open Standard. Otherwise, this can be deleted.</i></p>
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Additional rules for comparability

1. TR/EPD types	<Determine which TR/EPD types may be developed: product-specific and/or industry-wide. If industry-wide TRs/EPDs may be developed, complete the industry-wide TR/EPD additional rules section.>
2. Additional rules to Part A	<ul style="list-style-type: none"> TRs/EPDs that use secondary data for any unit process that contributes <X% or more, to be defined; ≤30% per the ACLCA open standard> to any disclosed environmental impact category shall disclose the data source (database name and version, dataset name, dataset geography, and dataset allocation method). Materials considered confidential may be reported as “proprietary ingredient” along with the database name and version. <List any additional rules>
3. Default life cycle stage scenario(s)	<p><Example scenario definition for A4 below; define defaults for all life cycle stage scenarios></p> <p><u>Transport to site (A4)</u></p> <p><u>Land transport</u></p> <p><i>If primary data are unavailable, assume land transport distance in the destination country is <XX miles (XX km)> by truck with an empty return trip of the same distance. This includes transport to the final installation site if multiple transport legs are included.</i></p> <p><u>Warehouse/distribution center and retail</u></p> <p><i>Energy consumption in warehouses, distribution centers, and retail facilities during the course of transportation to the final customer shall be <included in / omitted from> the analysis.</i></p>
4. Additional data quality requirements	<p><Optionally specify any additional method(s) appropriate for primary data collection (e.g., measured, calculated, estimated).></p> <p><Optionally specify additional type of uncertainty analysis to be performed in background LCA.></p>

Additional LCA calculation rules

N/A	Optional	Required	Indicate whether conformance is the manufacturer's choice or required for TRs/EPDs.
		X	ISO 21930: conformance is required by construction product manufacturers
			<List any additional standards or sets of rules to which conformance is desired>

Part B development information

Part B review panel	This Part B was reviewed for conformance to <ISO 14025, ISO 21930, and ACLCA PCR Open Standard v1.0> by the following parties: <Add names, companies>
Open consultation	Sustainable Minds solicited public comments on this Part B from <open date – close date>. This consultation period and list of parties to submit comments were made available to the review panel.
Update justification	<i>Note: Complete this row only in the case of an update. Otherwise delete this row.</i> This Part B was updated upon consideration of ISO 14027 and
Conflict statement	Funding sources used to develop this Part B were disclosed to the working group during the development process. The policies identified in Sustainable Minds' Program Governance were followed to identify and resolve any potential conflicts of interest.
Sustainable Minds information	This Part B was developed by Sustainable Minds and participating interested parties according to the Sustainable Minds Program Governance available at http://www.sustainableminds.com/transparency-report-program/how-it-works . For questions about this or another Part B, to submit comments on this Part B, or to obtain a template for developing a transparency report, contact us using the information on the following page: http://www.sustainableminds.com/contact-us .

Industry-wide TR/EPD additional rules (optional)

Minimum participation	Example: The minimum required level of market participation is 50% of the North American market, measured by annual production volume.
Retroactive pathway requirements	Example: A manufacturer who did not participate in the original industry-wide TR/EPD submits their product-specific LCA primary data, under NDA, to the party responsible for collecting and averaging data for the industry-wide TR/EPD. The data must follow the Part B for the product group and be reviewed to make sure it can be used in the next update of the industry-wide TR/EPD. The manufacturers who submitted data may compare their product-specific TRs/EPDs to the industry-wide TR/EPD no sooner than 12 months after the industry-wide TR/EPD publication date. After a specified number or percentage of new participants submits data, an early update is forced, which is paid for by the new participants. The original participants may choose whether or not to update their data early. The party responsible for collecting and averaging data for the industry-wide TR/EPD shall maintain an ongoing list of manufacturers who submitted data to publicly contribute to the next update of the industry-wide TR/EPD.
Required impact categories	Example: Global warming, acidification, eutrophication, ozone depletion, smog
Required or preferred background LCI data sets Include data set name and intended application	Example: Use of 'RER: steel production, low-alloyed, hot rolled' required to represent hot rolled low-alloyed steel
LCIA method & version #	Example: TRACI v2.1
Threshold of performance improvement or reduction for each impact category Based on quantitative uncertainty of industry-wide TR/EPD results	Example: +6% / -5% Global warming +13% / -15% Acidification +22% / -21% Eutrophication +35% / -42% Ozone depletion +10% / -9% Smog