ERG's Approach to Implementing the Product Category Rule Criteria (Version 1.0)

Eastern Research Group, Inc.

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RECORD OF CHANGES

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Contents

Introduction

ERG's EPD Quality Program was developed to evaluate and identify quality EPDs. The program is based on the American Center for Life Cycle Assessment's (ACLCA's) 2022 Product Category Rule (PCR) Guidance (ACLCA's PCR Open Standard), the U.S. Environmental Protection Agency's (EPA's) PCR Criteria, and relevant ISO standards.

To be considered a quality EPD under ERG's requirements, an EPD must be developed under a PCR that conforms to ACLCA's PCR Open Standard. Alternatively, for the construction sector (PCRs that are covered by ISO 21930:2017), ERG will allow EPDs developed under a PCR that conforms to EPA's PCR Criteria. This document describes how ERG intends to implement EPA's PCR Criteria in the context of our EPD Quality Program.

Use of EPA's PCR Criteria in ERG's Program

EPA's 2024 PCR Criteria include three distinct sets of criteria:

- Baseline criteria that all PCRs would be required to meet
- Baseline criteria that PCRs would need to meet by January 2026
- Leadership criteria

ERG's EPD Quality Program outlined in this document is primarily aligned with EPA's baseline level of conformance, excluding the baseline criteria that PCRs would have been required to meet starting January 2026. This document also provides guidance and insight into how ERG interprets each criterion.

ERG will evaluate new and existing PCRs for alignment with the requirements in this document. ERG does not intend to reevaluate existing PCRs that EPA previously determined to be conformant with one or more tiers of EPA's PCR Criteria (specifically, the PCR for Asphalt Mixtures version 2.0 and the Part B PCR for Supplementary Cementitious Materials version 1.0).

Format

Each EPA PCR criterion that ERG intends to evaluate is listed in this document, along with accompanying language on ERG's approach to implementing that criterion (e.g., tangible elements ERG expects in the PCR under review). Bolded, italic text in this document is language quoted directly from *U.S. EPA Criteria for Product Category Rules (PCRs) to Support the Label Program for Low Embodied Carbon Construction Materials (EPA's PCR Criteria) (Version 1—2024).* Normal font provides context from ERG. If text from a criterion will not be evaluated by ERG, it is indicated via strikeout, such as in the following example from 1.2D:

> 1.2D Criterion:
>
> ***For PCRs that go out to review after the publishing of this document*** [EPA's PCR Criteria from 2024]***, a review panel shall conduct a PCR review in accordance with ISO 14025:2006 and ISO/TS 14027:2017.***

~~Note: Effective January 1, 2026, a PCR review panel shall use ISO/TS 14071:2014 to organize and conduct the PCR review. The signed PCR review statement from the PCR review panel shall indicate whether the review was done in accordance with ISO/TS 14071:2014.~~

A full list of these criteria and justification for not including them can be found in the appendix.

Referenced Standards

As part of ERG's evaluation of PCRs under this streamlined set of EPA PCR criteria, this document refers to the following standards:

- ACLCA 2022 PCR Open Standard
- ISO 14025:2006
- ISO 14040:2006
- ISO 14044:2006
- ISO 21930:2017
- ISO/TS 14027:2017

Full references for each of the above standards are provided in the References section at the end of this document.

PCR Criteria

1.1A

1.1a Criterion:

The product category scope of the LCA(s) used for the PCR shall be within the scope of the PCR. The scope of the LCA(s) used for the PCR shall serve as the justification of the PCR and its functional (or declared) unit (see Section 2.1.A for PCR reference to the supporting LCA).

1.1A ERG's Approach:

- Ensure alignment between the functional/declared units of the life cycle assessments (LCAs) supporting the PCR and the functional/declared units presented in the PCR.
- Check the system diagrams in the LCA(s) and PCR, note any differences, and verify that the functional/declared units are identical.
- Ensure that the PCR and LCA(s) scopes are aligned.
    - **Note:** A reference LCA could have a broader scope than the PCR, so long as the results are distinguishable.

1.1B

1.1B Criterion:

The PCR shall include a clearly defined and measurable functional or declared unit.

1.1B ERG's Approach:

- [No additional guidance for this criterion.]

1.1C

1.1C Criterion:

The PCR shall indicate the types of EPDs that are allowed with respect to life cycle stages covered, with potential options including cradle-to-gate (A1–A3), cradle-to-gate with options (A1–A3, plus other identified information modules), or cradle-to-grave (A1–C4). The PCR should indicate which life cycle information modules are included for a given EPD type. See ISO 21930:2017 Clause 5.2.2 for more information.

1.1C ERG's Approach:

- Ensure that, at a minimum, the PCR includes A1–A3 as a required disclosure. Check the system boundary diagram or life cycle modules section and ensure that, at a minimum, the scope includes A1–A3.
- Ensure that the PCR indicates which boundaries apply to EPDs generated under its guidelines.
- Ensure that the PCR indicates which LCA modules are covered by which of the declared EPD types.

1.1D

1.1D Criterion:

PCRs that allow EPDs to report information modules beyond cradle-to-gate (either cradle-to-gate with options or cradle-to-grave) shall include scenarios for each life cycle stage beyond the gate that is allowed. When appropriate, the PCR should prescribe a different set of assumptions, parameters and technical information for different product types covered in the PCR. The scenarios should clearly indicate which product type the scenario is connected to, its expected service life, and all other relevant assumptions for each product type.

Note: If the scope of the PCR remains as only capturing information modules A1 to A3, then this item is satisfied provided that the PCR clearly identifies that additional modules and stages are excluded from being reported on EPDs that are developed under the PCR.

1.1D ERG's Approach:

- If the PCR allows for additional modules beyond A1–A3, verify the inclusion of scenarios for each additional module. Additional technical details are preferred but not required.
- If the product types covered in the PCR have separate, distinct scenarios beyond A1–A3, ensure that the PCR specifies scenarios for each additional module relevant to the product types.

1.1E

1.1E Criterion:

The PCR shall outline which EPD types may be developed with respect to data specificity and state the specific data requirements for each type. Any other terminology describing types of EPDs should be discouraged if it is not included within the PCR. At a minimum, the PCRs must enable the creation of Type III, product-specific EPDs from a singular production or manufacturing facility that are third-party verified against the PCR it was made under (also known as product- and facility-specific EPDs).

Note: EPA understands that there is variation in the nomenclature associated with EPD types and that this is impeding cross PCR alignment and compliance with local, state and federal procurement language. EPA is also aware of efforts to establish a consistent typology for EPDs and will continue to evaluate these efforts for potential future incorporation into this criterion.

1.1E ERG's Approach:

- Ensure that the PCR allows for the creation of an EPD that is both product- and facility-specific (i.e., EPDs correspond to one product manufactured at a single facility).
- Ensure that the PCR states the data requirements for each valid EPD type.
- **Note:** A PCR can cover additional EPD types (e.g., industry average), as long as it addresses product-specific EPDs.
- **Note on EPD terminology:** Terminology on EPD types does not need to be uniform across PCRs, as long as the PCR text allows an EPD representing one product from one facility to be created (although alignment across PCRs is highly recommended). The term "one product" can equate to one stock keeping unit (SKU), multiple SKUs, a typical product formulation for a given product, or a specific product formulation. Below is a brief overview for determining when EPD terminology aligns with Criterion 1.1E:
  - 1 product, X facilities—> Doesn't meet 1.1E
  - X products, 1 facility —> Meets 1.1E
  - 1 product, 1 facility—> Meets 1.1E

1.1F

1.1F Criterion:

The PCR shall require that an EPD disclose its EPD type with respect to data specificity. For average EPDs, refer to ISO 21930:2017 Annex B for terminology related to types of average EPDs.

1.1F ERG's Approach:

- Ensure that the PCR requires the EPD to present its type and data specificity (e.g., facility-specific, product-specific).
- **Note:** Generally, EPD type is mentioned in the "Content of EPD" section and introduction. ISO 21930:2017 Annex B Table B.1 provides examples of average EPD types.

1.1G

1.1G Criterion:

The PCR shall require that at a minimum, a cradle-to-gate (A1–A3) system boundary (and any deviation) is explicitly specified and justified.

1.1G ERG's Approach:

- Ensure that the reference LCA(s) are developed based on the PCR scope, per Criterion 1.1A.

1.1H

1.1H Criterion:

The PCR shall include criteria for deviation from the prescribed scenarios and require that any such deviation be disclosed in the EPD.

1.1H ERG's Approach:

- If the PCR allows for additional modules beyond A1–A3, ensure that scenarios are prescribed per Criterion 1.1D. If the PCR allows deviations from those prescribed scenarios within an EPD, ensure that the PCR explicitly states this and that the PCR requires disclosure and justification for permitted deviations.
- Check the system boundary diagram for the allowed modules and find the prescribed scenarios for the modules.
- Identify any language pertaining to deviation from prescribed scenarios and ensure that criteria for deviation (e.g., where and why deviation is allowable) and requirements for disclosure (most likely found in sections pertinent to EPD contents) are present.

1.2A

1.2A Criterion:

The PCR shall thoroughly document the use of an existing PCR as an informative document in any adaptation of an existing PCR. The creation of a new PCR that is part of the supply chain or is affected by an existing PCR shall also comply with this criterion. Include the program operator name, existing PCR name and product category classification; link to the existing PCR; and provide justification for adapting the existing PCR.

1.2A ERG's Approach:

- If an existing PCR (e.g., a PCR for a related product category within the same value chain) was used to develop a new PCR or revise an existing PCR, ensure that the new or revised PCR clearly specifies how each existing PCR was used.
- For each existing PCR used to inform the development of a new PCR or the revision of an existing PCR, ensure that the new or revised PCR provides the program operator name, product classification, the existing PCR name, and justification for the adaptation. For example, the new or revised PCR could include a table of existing documents that the PCR committee sought to harmonize with, including the information required per this criterion.

1.2B

1.2B Criterion:

The PCR shall list the referenced standards the PCR is in conformance with and link to relevant program instructions. This should include year of publication of the referenced standards. Specifically, the PCR shall be in conformance with the following standards:

- ***ISO 21930:2017***
- ***ISO 14025:2006***

~~***Note: Effective January 1, 2026, the PCR shall also be in conformance with ISO/TS 14027:2017.***~~

1.2B ERG's Approach:

- Ensure that the PCR references ISO 21930:2017 and ISO 14025:2006.
- Ensure that the PCR includes a statement of conformance to these standards.
- **Note:** The statement of conformance can likely be found in the introductory sections of the document or in the signed PCR Review Statement. A statement outlining conformance is important; a standalone reference to a standard is insufficient.

1.2C

1.2C Criterion:

The PCR shall list the specific standards it conforms to.

~~***Note: Effective January 1, 2026, the PCR shall list any upstream and downstream PCRs it aligns with [9]. In cases where the PCR does not align with upstream and downstream PCRs in areas of allocation (including recycling/recycled content allocation), cut-off criteria, required secondary datasets, carbon capture utilization and storage, biogenic carbon accounting, and any other aspect as determined by the PCR committee, the PCR shall identify and explain such deviations.***~~

~~***Note: See Criterion 2.1.J for more information on allocation and harmonization with upstream and downstream PCRs.***~~

~~**PCR Criteria Footnote [9]:** Upstream and downstream PCRs are not required to conform with EPA's PCR Criteria for products for the PCR under considerations to be eligible for the label program.~~

1.2C ERG's Approach:

- Identify statements of conformance to all the standards to which the PCR conforms. These statements are likely in the introductory sections of the PCR document or normative references. A standalone reference to a standard is insufficient.

- **Note**: EPA's note effective January 1, 2026, will NOT be evaluated by ERG. However, PCRs can demonstrate conformance with EPA's text using ACLCA's 2022 *Guidance for Allocating Burdens and Benefits of Materials Shared Across Product Systems*, or the forthcoming update.

1.2D

1.2D Criterion:

For PCRs that go out to review after the publishing of this document [EPA's PCR Criteria from 2024]***, a review panel shall conduct a PCR review in accordance with ISO 14025:2006 and ISO/TS 14027:2017.***

~~***Note: Effective January 1, 2026, a PCR review panel shall use ISO/TS 14071:2014 to organize and conduct the PCR review. The signed PCR review statement from the PCR review panel shall indicate whether the review was done in accordance with ISO/TS 14071:2014.***~~

1.2D ERG's Approach:

- Ensure that the PCR states that the review panel has assessed the PCR in conformance with ISO 14025:2006 and ISO/TS 14027:2017.
- **Note:** Program operators may choose to include these requirements in their Part A PCRs or their general program instructions.

2.1A

2.1A Criterion:

The PCR shall be linked to an ISO 14040:2006/ISO 14044:2006 conformant attributional LCA(s) and other relevant studies that inform the modeling of all product types within the scope of the PCR. The LCA(s) shall meet the requirements of ISO 14044:2006, alongside other pertinent standards and will have been either critically reviewed by a third party or undergone an internal verification, either by the PCR committee or appointed independent LCA expert.[13]

PCR Criteria Footnote [13]: ISO 14025:2006 requires PCRs to be based on one or more LCAs (in accordance with the ISO 14040 series of standards) and other relevant studies. These documents are collectively referred to as the LCA(s) used for the PCR throughout this PCR Criteria document.

2.1A ERG's Approach:

- Ensure that the PCR links to one or more LCAs or studies.
- Ensure that all significant aspects of the PCR scope are covered.
- Ensure that the LCA(s) is/are compliant with ISO 14044:2006.
- Ensure that the LCA(s) is/are critically reviewed by a third party or internally verified, either by the PCR committee or appointed independent LCA expert.

- Identify the reference LCA(s) with a statement of ISO conformance.
- Check the references in the LCA(s) to identify other relevant studies (e.g., industry reports on typical manufacturing processes, government agency reports) that informed the modeling.
- **Note:** "Other relevant studies" (e.g., government reports) may not be subject to ISO standards. In such cases, the PCR committee is asked to use its judgment to assess the credibility of the data and conduct an internal review prior to incorporating these reports into the PCRs.

2.1B

2.1B Criterion:

The LCA report must be publicly posted and accessible via a web link included in the PCR. The publicly posted LCA(s) shall include the required minimum nonconfidential information outlined in Clause 5 of ISO 14040:2006. Additionally, the LCI data within the LCA(s) used for the PCR may be aggregated to protect the confidentiality of manufacturer-specific details.

2.1B ERG's Approach:

- Ensure that the PCR provides a URL for the cited LCA(s). Ensure that the linked file(s) is free to use and publicly accessible.
- Ensure that the LCA(s) conform(s) to ISO 14040:2006. Check the reference LCA to ensure that there is a statement of compliance.
- If a project report is used to inform the PCR, ensure that the project report is publicly posted and accessible. See Criterion 2.2 for additional requirements.
- **Note:** ISO 14040:2006 section 5 relates to the methodological framework of the study, including scope and boundaries, functional unit, and allocation method.

2.1C

2.1C Criterion:

Both the LCA(s) used for the PCR and the PCR shall specify appropriate functional (or declared) unit(s), scope of the study, inventory collection methods, impact assessment, any allocation assumptions/rules, and additional information/rules. The functional (or declared) unit can include at least two parameters to further define the product such as area, mass and volume.

2.1C ERG's Approach:

- Ensure that the PCR and LCA(s) specify functional or declared units, scope of the study, inventory collection methods, impact assessment, any allocation assumptions/rules, and additional information/rules.
- **Note:** Ideally, the PCR should include at least two parameters to define the product, such as area, mass, or volume.

2.1D

2.1D Criterion:

The PCR shall specify all core LCIA indicators for ISO-compliant LCAs and EPDs; specifically listing the indicator with the LCIA characterization methodology and provide a reference to the LCIA characterization methodology. At a minimum, this should include LCIA indicators outlined in Table 5 of ISO 21930:2017. Alternatively, the PCR shall specify additional information requirements for which relevant inventory information shall be collected.

Note: The PCR is encouraged, but not required, to specify at least one LCIA method that includes characterization factors for calculating results for each impact category and each geographical region covered by the PCR.

2.1D ERG's Approach:

- Ensure that the PCR requires EPDs to report the minimum impact categories from Table 5 of ISO 21930:2017.

2.1E

2.1E Criterion:

The PCR shall specify, based on the LCA(s) used for the PCR, all the inventory data, by process, to be collected. Inclusion and cut-off criteria to inform these lists shall be determined based on results of the LCA. The PCR committee shall communicate their methods for performing cut-off analyses in the PCR. In cases where the LCA(s) used for the PCR is not aligned with the PCR in terms of allocation or required secondary datasets, decisions such as excluded parameters that fall below the cut-off criteria shall be evaluated to ensure consistency with the allocation approach and required secondary datasets in the PCR.

2.1E ERG's Approach:

- Ensure that the PCR specifies inventory data collection requirements by process.
- Ensure that the PCR communicates cut-off analysis methods and cut-off values.
- In cases where LCA(s) and the PCR deviate in allocation approach or secondary datasets specified, ensure that the PCR includes an evaluation of the consistency between PCR and LCA decisions related to the allocation approach or secondary datasets specified.

2.1F

2.1F Criterion:

The PCR shall specify all parameters of assumed scenarios for major (as determined by the LCA(s) in support of the PCR) use (B1–B5) and end-of-life (C1–C4) stages to ensure comparability and

consistency of results. PCRs may allow for deviations from the default parameters and in such cases must specify the evidence that is required to justify a deviation.

2.1F ERG's Approach:

- If the PCR outlines LCA information modules beyond A5 (e.g., B1–B5, C1–C4), and if the LCA(s) supporting the PCR state(s) that the environmental impact of modules beyond A5 is significant, ensure that the PCR lists parameters and scenarios for use and end-of-life phases.
- If the PCR allows for deviations from default parameters and scenarios, ensure that the PCR requires EPDs to provide justification with evidence.
- **Note:** The PCR should describe the parameters and scenarios in detail and with precision to allow for consistent application in LCA models across multiple practitioners.

2.1G

2.1G Criterion:

The PCR shall specify which processes for relevant manufacturing steps are to be subdivided. The PCR shall also provide guidelines on how the subdivision should be performed, including the necessary primary data requirements, as informed by the LCA(s) used for the PCR.

2.1G ERG's Approach:

- If subdivision is specified in the PCR, ensure that the PCR dictates which processes are to be broken out for data collection and modeling purposes.
- Check for a description of the product system and unit processes. If any processes are subdivided, ensure that the PCR provides data requirements.
- **Note:** This criterion applies if the production process involves unit processes with coproducts whose manufacture is not intrinsically linked (see ISO 21930:2017, section 7.2.5.5 for more information).
- **Note:** Subdivision may occur in LCA information modules A1, A2, or A3.

2.1H

2.1H Criterion:

The PCR shall prescribe ISO 21930:2017–compliant rules for allocation between product systems (across the system boundary) and designate whether Module D may be optionally reported in the EPD. If Module D is prescribed for inclusion by the PCR committee, the PCR shall prescribe detailed calculation rules for any quantitative metrics reported therein and require that results of Module D are reported separately.

2.1H ERG's Approach:

- Ensure that allocation rules are compliant with ISO 21930:2017.

- If Module D is included, ensure that detailed calculation rules and separate reporting of results are prescribed. There should be no room for interpretation or variation in methods used to generate results associated with Module D.
- Ensure that a prescribed allocation approach is clearly outlined. It is not sufficient to state in the PCR that ISO 21930:2017 rules should be followed. Ensure that allocation is only applied to designated coproducts.
- **Note:** Allocation rules can be found in Sections 7.2.4, 7.2.5, and 7.2.6 of ISO 21930:2017. Allocation through system expansion is not a valid allocation approach.

2.1I

2.1I Criterion:

The PCR shall specify where allocation by physical relationship is applied, specify the relevant underlying physical relationships to be considered, and establish or refer to the relevant allocation rules.

2.1I ERG's Approach:

- Check whether the PCR is using physical allocation. See Section 7.1.7.2.7, in addition to 7.2.6 of ISO 21930:2017, for further information.
- If the PCR requires or allows allocation by physical characteristics (e.g., mass, volume), ensure that the PCR clarifies physical relationships and communicates allocation rules. It is not sufficient to state that ISO 21930:2017 rules should be followed.

2.1J

2.1J Criterion:

The PCR shall define allocation procedures for reuse, recycling, and waste handling, and for scenarios for treating waste generation during the product life cycle based on the requirements in ISO 14044:2006 Clause 4.3.4 and ISO 21930:2017 Clause 7.1.7.2.7. If the PCR committee determines that a coproduct or byproduct exists, the PCR shall demonstrate steps taken to reach harmonization across PCR boundaries, such as reaching out to the impacted PCR committees to work toward cross-PCR harmonization. If the PCR committee is unable to reach harmonization with related PCRs but is aware of other PCRs' differing approaches, it shall report the alternative allocation procedures used by upstream and downstream PCRs.

2.1J ERG's Approach:

- If reuse, recycling, and waste handling are relevant to the system boundaries, ensure that the PCR defines the corresponding allocation procedures.
- Ensure that the PCR is compliant with ISO 21930:2017 and ISO 14044:2006.

- **Note:** Allocation rules under ISO 21930:2017 are more stringent than those under ISO 14044:2006.
- If one or more coproducts exist, confirm whether the PCR describes steps taken to reach PCR harmonization with downstream/related PCRs as related to allocation. If harmonization is not reached, ensure that the alternative allocation approach is reported.
- If a waste is expected to become a usable output (for example, a secondary material/fuel or recovered energy), ensure that the PCR describes steps taken to reach PCR harmonization with downstream and related PCRs as related to allocation in such a way that impacts are not omitted and gaps are transparently outlined. See section 7.1.7.2.7 of ISO 21930:2017, "Output of waste," for more information.
- Ensure that the prescribed allocation approach is clearly outlined. It is not sufficient to state that ISO 21930:2017 rules should be followed.
- Ensure that the PCR outlines whether any coproducts or byproducts (waste) exist within the system in question.
- Ensure that the PCR denotes steps for reaching cross-PCR harmonization, including all the following:
  - Identification of any directly or indirectly impacted PCRs and their prescribed allocation approaches for the process/flow in question (or the lack of such prescription).
  - Identification of efforts taken to reach a compromise across the directly impacted PCRs, including any cross-PCR discussions.
  - Clear denotation that alignment, partial alignment, or misalignment on the product in question has occurred or is occurring.

2.1K

2.1K Criterion:

The PCR shall not use system expansion as a method for avoiding allocation for construction products that may involve the production of coproducts. Rather, the PCR shall prescribe an ISO 21930:2017–compliant method of allocation based on the LCA used for the PCR.

2.1K ERG's Approach:

- If the product involves coproduct generation, ensure that system expansion is not applied.
- Ensure that the PCR prescribes an allocation procedure that is compliant with ISO 21930:2017.
- **Note:** System expansion is the allocation approach under which a substitution credit is applied. Substitution credits can involve substituting a coproduct of the study system for an input to a downstream product system, calculating the impacts of that substitution, and attributing those impacts to the study system (e.g., if material is recycled, it may not be credited for avoiding virgin material, or if electricity is produced on-site, it may not be credited for avoiding grid electricity).

- **Note:** Check for a mention of system expansion. If the PCR prescribes system expansion as a means of allocation or allows for system expansion, the PCR will not pass Criterion 2.1K.

2.1L

2.1L Criterion:

If an LCA report is produced for the PCR as part of the PCR development process, the LCA produced for the PCR shall outline any gaps or data variations within its report and the PCR shall outline these within the PCR itself.

Note: EPA acknowledges that there may be emission data variability in the associated primary and/or secondary data that can impede cross PCR alignment and the effective use of EPDs as a procurement tool. EPA is aware of efforts to identify or define data variability in EPDs, and currently is not in a position to endorse analysis or calculation methodologies for data disclosure for LCAs, PCRs or EPDs.

2.1L ERG's Approach:

- Ensure that the PCR communicates data gaps identified in the LCA(s) supporting the PCR.
- Ensure that the LCA(s) supporting the PCR note(s) data limitations in the LCA report. Verify that the PCR aligns with the findings from the LCA(s).
- **Note**: The PCR may require a supply-chain specificity score; however, this score has no bearing on conformity with Criterion 2.1L.

2.1M

2.1M Criterion:

The PCR shall include a system diagram(s) that represents all unit processes in scope for the LCA used for the PCR. In cases where a product is typically manufactured across several facilities, the system diagram(s) shall clearly visualize the separate facilities and identify the various LCA modules for which impacts will be reported.

2.1M ERG's Approach:

- Ensure that the system diagram aligns with the scope of the supporting LCA(s) for the PCR. Ensure that significant unit processes are captured in the PCR and clearly visualized in the system diagram. Multiple diagrams may be needed or appropriate for different production pathways.
- Check the system diagram of the PCR and supporting LCA(s). Ensure that the system diagram shows unit processes; indicates separate facilities where relevant; and is otherwise robust, well-documented, and thorough.

2.1N

2.1N Criterion:

The PCR shall require EPDs to clearly disclose limitations to comparability as informed by the LCA(s) used for the PCR.

2.1N ERG's Approach:

- Ensure that a disclosure of limitations to comparability is included and that the statement logically follows the results of the LCA(s) supporting the PCR. This disclosure could be a narrative within the PCR, a reference to section 5.5. of ISO 21930:2017, or another equivalent.
- **Note**: One of the goals of EPA's PCR Criteria is to allow EPDs developed under a PCR to be compared if clearly defined conditions are achieved. Therefore, a blanket statement that EPDs for similar products developed under the PCR are not comparable will cause the PCR to fail this requirement.

2.2

2.2 Criterion:

If a PCR uses a reference LCA in lieu of an LCA produced for the PCR, the reference LCA shall meet the following criteria, in addition to the relevant baseline criteria identified in 2.1:

a. Is publicly accessible.
b. Was published within five years prior to the open call for participants of the PCR.
c. Meets all relevant ISO standards that are outlined in this document (ISO 14040:2006, ISO 14044:2006, ISO 21930:2017, ISO/TS 14027:2017, ISO 14025:2006).
d. Has a scope aligned with that of the PCR.
e. Conforms to ISO 14044:2006 regarding LCAs.
f. Is attributional.
g. Conforms to the allocation rules of ISO 21930:2017.

2.2 ERG's Approach:

- All baseline requirements from Section 2.1 apply to reference LCAs used to support a PCR. Reference LCAs must also:
  - Be public.
  - Be published within five years of the PCR development.
  - Be ISO-compliant (ISO 14040:2006; ISO 14044:2006; and relevant portions of ISO 21930:2017, ISO/TS 14027:2017, and ISO 14025:2006).
  - Be aligned in scope.
  - Be attributional.
  - Use ISO 21930:2017 allocation rules.
- Check for a statement of critical review (for example, "This LCA was critically reviewed by [name/entity] in conformance with ISO...") and ensure that the reference LCA includes a statement of conformance to ISO 14044:2006.
- Check the reference LCA(s) against the PCR and PCR Criteria Section 2.1 in their entirety.

- **Note**: ERG reserves the right to determine if the reference LCA(s) is/are in conformance with the relevant portions of the ISO standards below, even if not explicitly listed as being conformant with the identified ISO standards in the LCA report.
- **Note:** Refer to ISO 21930:2017 Sections 7.2.3, 7.2.4, 7.2.5, and 7.2.6 for allocation content.
- **Note:** Relevant portions of ISO 21930:2017, ISO 14025:2006, and ISO/TS 14027:2017 include the following:
    - ISO 21930:2017
        - 7.1 (Methodological framework)
        - 7.2 (Inventory analysis)
        - 7.3 (Impact assessment indicators describing main environmental impacts derived from LCA)
        - 8.2 (Additional LCA-related environmental information not included in the pre-set Life Cycle Impact Assessment [LCIA] indicators)
        - 8.3 (Additional environmental information not derived from or related to LCA)
        - 8.4 (Mandatory additional environmental information)
        - 10.2 (LCA-related elements of the project report)
        - 10.3 (Rules for data confidentiality)
        - 10.4 (Documentation on additional environmental information)
        - 10.5 (Data availability for verification)
    - ISO/TS 14027:2017
        - 5.1 (LCA-based environmental information)
        - 5.3 (Comparability)
    - ISO 14025:2006
        - 7.2.2 (Data from LCA, LCI or information modules)
        - 7.2.3 (Additional environmental information)
        - 7.2.4 (Requirements for additional environmental information)
        - 8.1.3 (Independent verification of data)
        - 8.3 (Rules for data confidentiality)

3.1A

3.1A Criterion:

The PCR shall prescribe minimum required primary data collection practices and data quality, as determined by the PCR committee and informed by the LCA(s) used for the PCR. Primary data requirements shall be mapped to the appropriate unit processes within the product system. All data shall be provided in standard SI units in addition to any other unit(s) of measure specified by the PCR.

3.1A ERG's Approach:

- Ensure that data collection and quality requirements are prescribed for primary data. Ensure that requirements for appropriate unit processes are included.

- **Note:** Primary data are generated by direct measurement, estimation, or calculation based on specific original source measurements for the system of interest. The term primary data should be used when referencing specific emissions (or other flow) facility data for the foreground system. This definition is derived from ISO 21930:2017. For additional information, please see EPA's *A Vision and Plan to Improve Secondary Life Cycle Assessment Data Used in Environmental Product Declarations*.
- **Note:** Data quality requirements for primary data may include timeliness, measurement or estimation techniques, record-keeping practices, calibration practices for direct measurement, or other similar industry conventions that are spelled out within the PCR or within a prescribed data collection form/template.

3.1B

3.1B Criterion:

The PCR shall clearly specify the scope and data quality for secondary data and include recommendations for free-to-use and publicly accessible datasets or databases facilitating this process.

3.1B ERG's Approach:

- Ensure that secondary data scope and quality are specified and the document prescribes secondary data.
- Ensure that free-to-use and public datasets are identified and provide links to free-to-use and publicly accessible data.
- **Note:** In cases where secondary datasets are not available, the PCR should either state this and prescribe proxy data, or exclude the information (e.g., material, process, flow) for which data do not exist and list it as a data gap (refer to criterion 2.1L for the data gap disclosure requirement).
- **Note:** External links or references to such data may also be provided in an appendix.

3.1C

3.1C Criterion:

The PCR shall specify mandatory primary data that are to be collected for every foreground process in the product system under the control of the organization making the product claim. The PCR shall also specify that data specific to the investigated product scope and supply chain shall be used over generic data unless such specific data are not available. The PCR's specifications of the type of data to be used shall be supported by LCA that supports and aligns with the scope of the PCR.

3.1C ERG's Approach:

- Ensure that the PCR meets the following requirements:

1. The PCR specifies primary data for every significant foreground process (per section 7.1.8 of ISO 21930:2017 as identified by the LCA(s) supporting the PCR) under the control of the organization making the EPD.
2. The PCR specifies that in-scope, supply-chain-specific data are prioritized over generic data.

- Ensure alignment between the covered scope of the PCR, the specified items (see points 1 and 2), and the LCA(s) supporting the PCR by evaluating the LCA(s) supporting the PCR.

3.2B

3.2B Criterion:

Specific data (i.e., from upstream EPDs) that are representative of the raw material supply chain shall be used where possible. Where using specific data is not possible, PCRs shall prescribe free-to-use and publicly accessible secondary datasets. PCRs shall prescribe a unique free-to-use and publicly available secondary dataset for each of the following flows:

- ***Electricity***
- ***Fuels***
- ***Transportation***
- ~~***Other unit processes in which secondary data are required by the PCR***~~

~~***Note: Effective January 1, 2026, PCRs shall prescribe the use of EPA-designated free-to-use and publicly available datasets for the flows identified within this criterion.[15] Prior to this date, PCRs that are being updated shall provide a commitment to use public datasets in the future if they are not already using public data. If a PCR uses private datasets, the PCR shall outline why public datasets are not adequate for the flows the PCR is seeking to model.***~~

3.2B ERG's Approach:

- Determine whether the PCR prescribes foreground or background data on upstream processes. If background data are necessary for any process, where relevant, verify that the PCR prescribes free datasets for electricity, fuel, and transportation.
- **Note:** ERG is only evaluating for conformance with the use and prescription of free-to-use and publicly available secondary datasets for electricity, fuels, and transportation when processes occur in the United States.
- **Note:** Further guidance on ensuring that PCRs prescribe free-to-use and publicly available secondary data can be found in PCR Criteria Appendix G.
- **Note:** Antitrust laws prohibit the use of commercial terms or language that is contractual in nature within standards, including within PCRs. See Appendix F of the PCR Criteria for additional information.

- **Note:** 3.2B and 3.2D are interrelated. If a PCR conforms to 3.2D by requiring the disclosure of secondary datasets used per process on resulting EPDs (see 3.2D for more context), 3.2B will also be met, even if the PCR does not prescribe secondary datasets.

3.2C

3.2C Criterion:

For PCRs that cover geographic areas outside the United States or model processes that occur outside the geographic boundaries of the United States, the PCR committee shall propose appropriate secondary datasets for each specific geographic area or for technologies beyond the scope of the specified datasets for relevant supply chains.

3.2C ERG's Approach:

- Ensure that the PCR suggests geographically specific secondary datasets for processes that are in the relevant supply chain and take place outside the United States. For example, if a process that occurs in Europe is part of the relevant supply chain for a North American PCR, the PCR should suggest secondary datasets for Europe.
- **Note:** Pay attention to the geography of the suggested data sets. In certain cases, the PCR may allow some global regions to use other region-specific data as a proxy.

3.2D

3.2D Criterion:

PCRs that do not prescribe specific secondary datasets shall require that EPDs disclose the name, source reporting period, publication date and version associated with any secondary data used in the resulting EPD.

3.2D ERG's Approach:

- If the PCR does not prescribe specific secondary datasets, ensure that the PCR requires EPDs to report secondary datasets, including:
    - Name
    - Source reporting period, where available
    - Publication date
    - Version
- Ensure that the PCR aligns with section 6.7.2.b of ISO 14025:2006, which requires that "the data quality requirements…are equivalent" for systems being modeled. Failure to prescribe datasets or to provide transparency on data quality requirements for datasets used for EPDs deviates from section 6.7.2 in ISO 14025:2006 and prevents comparison of EPDs.

- **Note:** 3.2B and 3.2D are interrelated. If a PCR conforms to 3.2D by requiring the disclosure of secondary datasets used per process on resulting EPDs (see 3.2D for more context), 3.2B will also be met, even if the PCR does not prescribe secondary datasets.

3.2G

3.2G Criterion:

The PCR shall outline a list of primary data sources, secondary data sources and default LCIA method(s) such that it is clear which flows are to be modeled using which data source. This should take the form of a chart for end users to read and apply. EPA recommends including a chart with the characteristics shown in Table G1 of Appendix G.

3.2G ERG's Approach:

- Ensure that the PCR clearly outlines all data sources and LCIA methods required (or appropriate) for each flow in the modeled system. A chart is preferred but not required.

3.3B

3.3B Criterion:

The PCR shall provide guidance on how to cover purchasing and use of EACs, specifically for procuring electricity via RECs for facility emissions reporting. As part of the PCRs guidance, the PCR may also, but is not required to, consider the following:

a. Determine the renewable share at the corporate, facility or product level.
b. Identify the facility/facilities and product(s) to apply contractual instruments to and determine annual production volumes.
c. Determine whether the contractual instrument is applicable.
d. Use a balance sheet to allocate contractual instruments to annual production.
e. Model allocated electricity covered by RECs.
f. Model allocated electricity not covered by RECs using a consumption grid.
g. Retire the RECs and ensure the reported GWP[20] does not differ more than 10% for the duration of the EPD validity.

The PCR may consider following Criterion 3.3.F and Appendix D from EPA, or ACLCA's Guidance for Quantifying Renewable Electricity Instruments in Environmental Product Declarations (EPDs) from May 2023.

~~PCR Criteria Footnote [20]:~~ ~~See footnote [16].~~

3.3B ERG's Approach:

- Ensure that the PCR provides rules for addressing the purchase and use of energy attribute certificates (EACs) for emissions reporting.

- Ensure that the PCR provides guidance on EACs/renewable energy credits (RECs) accounting. Examples of acceptable language include "RECs are not to be accounted" and "follow ACLCA's *Guidance for Quantifying Renewable Electricity Instruments in Environmental Product Declarations (EPDs)*."
- **Note:** A PCR will fail this criterion if it allows RECs/EACs accounting but does not provide guidance on RECs/EACs as outlined above.
- **Note:** A PCR will pass this criterion if it includes a prohibition on including EAC accounting within EPDs.

List of Abbreviations

Abbreviation	Full Term
ACLCA	American Center for Life Cycle Assessment
CO_2e	carbon dioxide equivalent
EAC	energy attribute certificate
EPA	U.S. Environmental Protection Agency
EPD	environmental product declaration
GHG	greenhouse gas
GWP	global warming potential
IPCC	Intergovernmental Panel on Climate Change
ISO	International Organization for Standardization
LCA	life cycle assessment
LCI	life cycle inventory
LCIA	life cycle impact assessment
PCR	product category rule
REC	renewable energy certificate
SI	International System of Units

Terminology

Allocation: Partitioning the input or output flows of a process or a product system between the product system under study and one or more other product systems. This definition is consistent with the one in ISO 14044:2006.

Byproduct: A coproduct from a process that is incidental or not intentionally produced and that cannot be avoided. Note: Wastes are not byproducts. This definition is consistent with the one in ISO 21930:2017.

Coproduct: Any of two or more products coming from the same unit process or product system. This is consistent with the definition in ISO 14044:2006.

Cradle-to-gate EPD: An EPD that only includes data from the production stage of a product's life cycle, which covers the following: upstream extraction and processing of raw materials (information module A1), transport of raw materials to the factory (A2), and manufacturing (A3). The LCA results shall be reported based on a declared unit. This definition is consistent with ISO 21930:2017, Section 5.2.2.

Cradle-to-grave EPD: An EPD that includes data from the following life cycle stages: the production stage (information modules A1 to A3) and all the information modules from the construction stage (A4 to A5), use stage (B1 to B7) and end-of-life stage (C1 to C4). The LCA results shall be reported based on a functional unit. This definition is consistent with ISO 21930:2017, Section 5.2.2.

Declared unit: Quantity of a construction material used as a reference unit in an EPD based on an LCA to express environmental information needed in information modules. This definition is based on the one in ISO 21930:2017.

Downstream PCR: A PCR that covers a system or process carried out after the designated system or process associated with the given PCR. This definition is based on the definition of the term "downstream process" found in ISO 21930:2017.

End-of-life: The stage for a construction material that starts when it is replaced, dismantled, or deconstructed from the construction works and does not provide any further functionality. The end-of-life LCA stage includes information modules C1 to C4. This definition is based on the one outlined in ISO 21930:2017.

Environmental product declaration (EPD): An environmental claim providing quantified environmental data using predetermined parameters and, where relevant, additional environmental information. An EPD also includes additional product and company information. This definition is consistent with the one in ISO 14025:2006.

Functional unit: The unit of comparison that ensures that the products being compared provide an equivalent level of function or service.

Gate: The point at which a construction product or material leaves the factory before it becomes an input into a subsequent manufacturing process or before it is transported to a distributor, another factory, or a construction site. This definition is consistent with the one in ISO 21930:2017.

Global warming potential (GWP): The term "GWP" is used in EPDs, PCRs, and Buy Clean policies for construction products as an impact category to report on embodied greenhouse gas (GHG) emissions (per ISO 21930:2017, Section 7.3, Table 5). In the ISO context, GWP is conveyed in CO_2e per unit of product/material to denote product-level GHG emission intensities. We note this usage is inconsistent with how GWP is defined by the Intergovernmental Panel on Climate Change (IPCC) and in other GHG accounting efforts, including national reporting by Parties to the Paris Agreement. Per IPCC, GWP is an index measuring the radiative forcing following an emission of a unit mass of a given substance, accumulated over a chosen time horizon, relative to that of the reference substance, carbon dioxide (CO_2). For more information on the definition and use of the term "GWP," please see EPA's website, Understanding Global Warming Potentials.

LCA produced for the PCR (underlying LCA): An LCA conducted when establishing or updating a PCR that aligns with the scope of the PCR and provides a basis for claims and determinations made within the PCR.

Life cycle: All consecutive and interlinked stages in the life of the object under consideration. This definition is consistent with the one in ISO 21930:2017.

Life cycle assessment (LCA): The compilation and evaluation of the inputs, outputs, and potential environmental impacts of a product system throughout its life cycle. This definition is consistent with the one in ISO 14044:2006.

Life cycle impact assessment (LCIA): The phase of LCA aimed at understanding and evaluating the magnitude and significance of the potential environmental impacts for a product system throughout its life cycle. This definition is consistent with the one in ISO 21930:2017.

Life cycle inventory (LCI): The phase of LCA involving the compilation and qualification of inputs and outputs for a product throughout its life cycle. This definition is consistent with the one in ISO 14044:2006.

Primary data: Data determined by direct measurement, estimation, or calculation based on specific original source measurements for the specific system under investigation. This definition is based upon the one in ISO 21930:2017.

Product category rules (PCRs): A set of specific rules, requirements, and guidelines for developing EPDs for one or more product categories. This definition is consistent with the one in ISO 14025:2006.

Product category rule committee (PCR committee): A group of interested parties tasked by the program operator with drafting and finalizing the product category rules. This definition is consistent with the one in ISO/TS 14027:2017.

Product type: A specific breakdown within a material category that adds specificity to what subgroup of a material category is being referred to in a given context.

Program operator: The body or bodies that administer an EPD program. A program operator can be a company or group of companies, industrial sector or trade association, public authority or agency, independent scientific body, or other organization. Program operators are typically the organizations that develop PCRs. This definition is based on the one in ISO 14025:2006.

Reference LCA: An LCA conducted before establishing or updating a PCR that aligns with the scope of the PCR and is used as the basis for claims and determinations made within the PCR.

Secondary data: Data indirectly determined through measurement, estimation, or calculation and not based on specific original source measurements. This can include data originally developed using primary data sources, but further aggregated to represent average processes or products. This definition is based on the one in ISO 21930:2017.

Supply-chain specificity: The portion of an EPD's A1–A3 unit processes represented by specific data, calculated as the percent contribution of those processes to the total A1–A3 GWP. This definition is consistent with the one in ACLCA's Guidance for Determining EPD Types and Calculating and Communicating Data Specificity Through the Supply Chain, version 1.0.

Type III environmental product declaration (Type III EPD): An environmental claim that provides quantified environmental data using predetermined parameters and, where relevant, additional environmental information. This definition is consistent with the one in ISO 14025:2006.

Unit process: Smallest element considered in the LCI for which input and output data are quantified. This definition is consistent with the one in ISO 14040:2006.

Upstream product category rule (upstream PCR): A PCR covering a system or process that is carried out before the designated system or process associated with the given PCR. This definition is based on the definition of the term "upstream process" found in ISO 21930:2017.

Waste: Substances or objects that the holder intends to or is required to dispose of. This definition is consistent with the one in ISO 14044:2006.

References

a) ACLCA (American Center for Life Cycle Assessment). (2025). *Guidance for determining EPD types and calculating and communicating data specificity through the supply chain.* 2022 ACLCA PCR Open Standard—Process and methods toolkit. https://cdn.prod.website-files.com/685abecf52079050b589879c/685abecf52079050b58988f5_EPD%20Classifications%20Addendum%20Final%202025.pdf

b) Boguski, T., Cassese, B., Conroy, A., Cooney, G., Cross, J., DeRousseau, M., Englert, M., Fetizanan, F., Gueiros, S., Guest, G., Hensler, C., Johnson, L., Koffler, C., Lasso, A., Lindemulder, K., Montazeri, M., Norman, C., Pearson, C., Rybl, V., Smith, C., Tan, E., and Xue, C. (2023). Quantifying renewable electricity instruments in environmental product declarations (EPDs). 2022 ACLCA PCR Open Standard version 1.0., American Center for Life Cycle Assessment. https://cdn.prod.website-files.com/685abecf52079050b589877d/685abecf52079050b5898974_2022-ACLCA-PCR-Guidance_v1_Introduction_05252022.pdf

c) EPA (U.S. Environmental Protection Agency). (n.d.). *Improving data quality.* https://19january2025snapshot.epa.gov/greenerproducts/improving-data-quality/index.html

d) EPA (U.S. Environmental Protection Agency). (2024). *A vision and plan to improve secondary life cycle assessment data used in environmental product declarations.* https://19january2025snapshot.epa.gov/system/files/documents/2024-08/secondary-data-improvement-plan_08072024_final.pdf

e) EPA (U.S. Environmental Protection Agency). (2024). *U.S. EPA criteria for product category rules (PCRs) to support the label program for low embodied carbon construction materials (EPA's PCR criteria) (Version 1—2024).* EPA-740-R-24-009. Office of Chemical Safety and Pollution Prevention. https://nepis.epa.gov/Exe/ZyPDF.cgi?Dockey=P101BDR2.PDF

f) ISO (International Organization for Standardization). (2006). *ISO 14025:2006: Environmental labels and declarations—Type III environmental declarations—Principles and procedures.* https://www.iso.org/standard/38131.html

g) ISO (International Organization for Standardization). (2006). *ISO 14040:2006: Environmental management—Life cycle assessment—Principles and framework.* https://www.iso.org/standard/37456.html

h) ISO (International Organization for Standardization). (2006). *ISO 14044:2006: Environmental management—Life cycle assessment—Requirements and guidelines.* https://www.iso.org/standard/38498.html

i) ISO (International Organization for Standardization). (2017). *ISO 21930:2017: Sustainability in buildings and civil engineering works—Core rules for environmental product declarations of construction products and services*. https://www.iso.org/standard/61694.html

j) ISO (International Organization for Standardization). (2017). *ISO/TS 14027:2017: Environmental labels and declarations—Development of product category rules.* https://www.iso.org/standard/66123.html

Appendix: Requirements Not Being Evaluated by ERG

EPA Criterion	ERG Justification for Not Evaluating
1.1I	This requirement was an optional leadership criterion from EPA and was never required by the agency.
1.1J	This requirement was an optional leadership criterion from EPA and was never required by the agency.
1.1K	This requirement was an optional leadership criterion from EPA and was never required by the agency.
1.2E	This requirement was an optional leadership criterion from EPA and was never required by the agency.
1.2F	This requirement was an optional leadership criterion from EPA and was never required by the agency.
1.2G	This requirement was an optional leadership criterion from EPA and was never required by the agency.
2.1O	This requirement was an optional leadership criterion from EPA and was never required by the agency.
2.1P	This requirement was an optional leadership criterion from EPA and was never required by the agency.
3.1D	This requirement was an optional leadership criterion from EPA and was never required by the agency.
3.2A	This requirement was scheduled to take effect on 1/1/2026. Although that date has passed, the federal programs that support achieving this requirement have been paused.
3.2E	This requirement was scheduled to take effect on 1/1/2026. Although that date has passed, the federal programs that support achieving this requirement have been paused.
3.2F	This requirement was scheduled to take effect on 1/1/2026. Although that date has passed, the federal programs that support achieving this requirement have been paused.
3.2H	This requirement was an optional leadership criterion from EPA and was never required by the agency.
3.2I	This requirement was an optional leadership criterion from EPA and was never required by the agency.
3.2J	This requirement was an optional leadership criterion from EPA and was never required by the agency.

EPA Criterion	ERG Justification for Not Evaluating
3.2K	This requirement was an optional leadership criterion from EPA and was never required by the agency.
3.3A	This requirement was scheduled to take effect on 1/1/2026. Although that date has passed, the federal programs that support achieving this requirement have been paused. Additionally, this requirement was primarily focused on requirements for industry-average EPDs, which are outside the scope of ERG's program.
3.3C	This requirement was an optional leadership criterion from EPA and was never required by the agency.
3.3D	This requirement was an optional leadership criterion from EPA and was never required by the agency.
3.3E	This requirement was an optional leadership criterion from EPA and was never required by the agency.
3.3F	This requirement was an optional leadership criterion from EPA and was never required by the agency.