Part B: Utility poles | February 7, 2024 | Sustainable Minds | Contact Kim Hammer (kim@sustainableminds.com)

EPD use case goal: 1

EPD use levels are cumulative. Transparency is the baseline. To create a 'Data source' conformant PCR, all criteria in all checklists must be documented.

1. Program Operator (PO) checklist Version 1.0, May 25, 2022 | ACLCA PCR Open Standard 2022

3 Data source
2 Procurement
1 Transparency

Categories		#	Criteria	ISO reference	Supporting documentation	EPD use	How criteria were met	Due
Organizational	**Ground rules**							
	☑	1	Prior to using the ACLCA PCR Guidance 2022 to develop PCRs, the PO **shall** use this guidance to develop and publish conformant program instructions that describe the process of PCR development aligned with ISO/TS 14027.	**This guidance**	**General program instructions (governance document):** • ACLCA PCR Guidance 2022 conformant statement with version number	**1 Transparency**	Updated program instructions published to SM website http://www.sustainableminds.com/files/transparency/SM_Governance_and_program_rules.pdf	Complete
	☑	2	PO **shall** use this checklist to guide the creation of a PCR, identify how criteria were met, and provide the completed Program Operator Checklist and PCR Review Panel Checklist to the PCR Review Panel.	**This guidance**	**PCR supporting documentation:** • Completed checklist	**1 Transparency**	Completed checklists saved with the PCR supporting documentation.	Complete
	☑	3	PO **shall** be the secretariat of the PCR and manage an open and transparent process to develop or update a PCR. This process **shall** include public notices prior to PCR development and an open consultation process with interested parties while the PCR Committee remains active. PO **shall** publish the intention to develop (or update) a PCR on its website, in relevant industry and trade publications and/or news services, and through centralized notification mechanisms. The announcements **shall** include contact information that allows interested parties to request more information about participation in the PCR development or review process. Interested parties may include material suppliers, manufacturers, trade associations, purchasers (such as architects, designers, specifiers, contractors, and engineers), users, non-governmental organizations (NGOs), and public agencies.	**14027 Clause 6.4.1**	**PCR supporting documentation:** • Date(s) announcement(s) were posted and where	**1 Transparency**	Public notice on the Sustainable Minds website announcing the new utility poles Part B on June 1, 2023: http://www.sustainableminds.com/transparency-report-program/part-b Email blast on May 12, 2023 to mailing lists of LCA professionals, building and construction industry and trade associations, concrete manufacturers, and others identified by ACMA as having a potential interest in participating, requesting participation on the PCR committee.	Complete
	☑	4	PO **shall** determine whether to create a new PCR or to adapt an existing PCR from other geographic regions. The PO **shall** justify the determination in the PCR.	**14027 Clause 6.4.2, 6.4.3**	**PCR:** • Identify existing PCRs considered, and provide justification for creating a new PCR. • If new, identify the supporting LCA. • Describe how existing PCRs will be adapted.	**2 Procurement**	N/A	N/A
	☑	5	PO **shall** evaluate upstream and downstream PCRs in the value chain to be considered for alignment. PO **shall** list relevant PCRs in the PCR. *Note: Also see Criterion 15 for the process of determining when a PCR may be updated.*	**14044** **14027 Clause 6.4.3** **This guidance**	**PCR supporting documentation:** • Identify existing upstream PCRs for the major inputs to the product(s) considered in the PCR. • Describe differences in allocation rules or other potential conflicts and how they were resolved. • Identify existing downstream PCRs that use products/materials from the PCR and how inconsistencies were resolved.	**3 Data source**	N/A	N/A
	☑	6	PO **shall** harmonize PCR activities with other EPD programs to avoid unnecessary duplication and proliferation of similar PCRs, and align on mutual recognition agreement (MRA) requirements. PO **shall** list relevant PCRs in the PCR. *Note: Refer to both the ACLCA's PCR library and the North American PCR Catalog: Building & Construction Materials https://www.transparencycatalog.com/na-pcr-catalog-building-products*	**14027 Clause 6.5.5** **14029 Clause 7, 9.2**	**PCR supporting documentation:** • Identify whether this criteria is applicable. • Identify other POs engaged to harmonize PCR activities and opportunities explored (joint development of new, merging, application of existing, or adaption of existing). • MRA between POs one exists.	**1 Transparency**	Addressed in Program operator responsibilities section of the Part B.	Complete
	☑	7	PO **shall** publish and implement procedures for an appeals mechanism to ensure prompt and impartial handling of procedural complaints regarding any action or inaction of the PCR Committee, PCR Review Panel, or Program Operator.	**14027 Clause 6.4.4**	**General program instructions (governance document):** • Explanation of appeals process	**1 Transparency**	Addressed in section 10.0 of the governance document.	Complete
	☑	8	PO **should** include a method for addressing data quality in its general program instructions. *Note: Refer to the addendum "Assessing Data Quality of Background Life Cycle Inventory Datasets"* for an example data quality assessment method.		**General program instructions (governance document):** • Method for Data Quality Assessment	**2 Procurement**	N/A	N/A
	PCR committee formation						**How criteria were met**	**Due**
	☑	9	PO **shall** actively reach out to interested parties (including parties outside the PO's country or region) to ensure that the PCR Committee is composed of independent members, making sure that the interests of one party do not dominate the PCR development process. No single interested party category (at individual, organizational, or sectoral levels) shall dominate the membership of a PCR Committee. Interested parties may include material suppliers, manufacturers, trade associations, purchasers (such as architects, designers, specifiers, contractors, and engineers), users, non-governmental organizations (NGOs), and public agencies.	**14025 Clause 5.5, 6.5, & 9.3** **14027 Clause 6.4.1 and 6.4.2**	**PCR:** • List of PCR Committee members with employer and/or other entity on behalf of which they are participating. **PCR supporting documentation:** • Description of interested party outreach efforts and explanation of interested parties that did not participate.	**1 Transparency**	Working group members listed on page 1 of the Part B.	Complete
	☑	10	PO **shall** address potential conflicts of interest developing the PCR and fully disclose funding sources for the management to interested parties. If significant external funding was made by one or more parties to support the development, the PO **should** put in place procedures to ensure that no conflict of interest occurrs in the PCR process. 'Significant funding' is defined as more than $10,000 or its in-kind equivalent, or 20% or more of the anticipated funding needs.	**US EPA Environmentally Preferable Purchasing Program Framework for the Assessment of Environmental Performance Standards and Ecolabels for Federal Purchasing. https://www.epa.gov/system/files/documents/2022-02/updated-framework_020222.pdf**	**PCR supporing documentation:** - The policy or procedure in use when the PCR was developed covering conflicts of interest, separation of organizational functions necessary to address any potential conflict of interest. - Attestation that this policy or procedure was followed during the development. The evidence must also include one of the following: - Documentation that original sources of funding were disclosed to interested parties, such as a disclosure statement, or in meeting minutes for relevant working groups.	**1 Transparency**	Conflict statement included in the Part B development information table of Part B.	Complete
	Content of PCR						**How criteria were met**	**Due**
	☑	11	The PCR **shall** report on the following items: • Name and registration number of the PCR • General information about the program: name of the program, contact information, logo, and website if applicable • PCR Committee members and affiliations • Publication date • Expiration date and renewal schedule • Types of product claims covered by the PCR, with references to standards • Product category • Geographical representativeness of the PCR • Original language and translations (if existing) • How to make comments to the PCR	**14027 Clause 6.5**	**PCR:** • Draft PCR that includes all items reported	**1 Transparency**	Part A section 1.1 addresses the use of SM PCRs to create ISO 14025 Type III environmental declarations, and also language availability. http://www.sustainableminds.com/files/transparency/SM_Part_A_LCA_calculation_rules_and_report_requirements_2023.pdf All other items are addressed in Part B.	Complete
	☑	12	The PCR **shall** report the following information about the review process and background of the PCR: • Review panel member information • Open consultation period and participants • Other existing PCRs for the product category and reasons for developing a new one • Reference to underlying LCAs • Confirmation statement that the PCR was created in conformance with this ACLCA PCR Guidance (including version number)	**14025 Clause 5.5, 8.2** **14027 Clause 5.2, 6.4.4** **14025 Clause 6.7.1, 6.7.2** **14027 Clause 6.1, 6.4.3, 6.5.3, 7.1d**	**PCR:** • Draft PCR that includes all items except 'open consultation period' **PCR supporting documentation:** • Open consultation period and participants	**1 Transparency**	All items except open consultation participants addressed in Part B. Aggregated public comments spreadsheet, including commenter names and committee responses, to be created and made available to the review panel.	Complete
	PCR review process						**How criteria were met**	**Due**
	☑	13	PO **shall** set up an independent third-party review panel composed of a minimum of three members (a chair and two members). The combined competencies of the panel **shall** include, at a minimum, expertise in LCA and in the relevant product sector. *Note: Refer to the PCR Review Panel Checklist for review panel expectations.*	**14027 Clause 7.1, 7.2, 7.3,** **14025 Clause 8.2.3**	**PCR:** • List of review panel members	**1 Transparency**	Working group members listed on page 1 of Part B.	Complete
	☑	14	PO **shall** also set up an open consultation review.	**14027 Clause 6.4.4, 7.3**	**PCR supporting documentation:** • Date(s) open consultation period(s) announced, where/how; aggregated comments spreadsheet	**1 Transparency**	Aggregated public comments spreadsheet to be created and saved with the PCR supporting documentation.	Complete
	☑	15	PO **shall** ensure the PCR Review Panel provides comments within a 90-day period.	**This guidance**	**PCR supporting documentation:** • Date(s) PCR review period	**1 Transparency**	Due date less than 90 days provided to PCR reviewer (Aug 30 - Sep 15).	Complete
	Publication, new and updated PCRs						**How criteria were met**	**Due**

	☑	16	PO **shall** be responsible for publishing and maintaining the PCR. The published PCR shall be publicly available on the PO's website, free for any other PO to use. PO **shall** write out the publication date (e.g., June 25, 2022) and expiration date (e.g., June 24, 2027). PCRs **shall** have a validity period of no more than five years from the publication date. PCRs are invalid beyond the expiration date. PO **shall** provide the schedule for renewal, if applicable. PO **should** include a statement adjacent to the PCR Review Panel attribution to indicate conformance with this guidance (including version number) and the EPD use case level. PO **should not** act as a barrier to translating the PCR and should act as a facilitator for the translation.	**14025 Clause 6.4, 6.7.1** **14027 Clause 8.1.1** **This guidance**	**PCR supporting documentation:** • URL of PO's published PCRs page • URL PCR will be available at when published **PCR:** • Validity period of PCR • Conformance statement and EPD use case level	**1 Transparency**	A link to the SM Part Bs page is included in Part B. The completed Part B will be uploaded to that page when published. The URL of the Part B when published will be as follows: http://www.sustainableminds.com/files/transparency/pgds/Part_B_Product_Group_Definition_Utility_Poles_2023.pdf Part B contains validity period, conformance statement, and EPD use case level.	Complete
	☑	17	To manage the expectations of PCR users, the PO **shall** post update information on its website at least four months in advance of the expiration date. The update options include: extending the current PCR, updating the PCR, or letting the PCR expire with no update. If information is not provided within this timeframe, other POs may proceed with the update and post PCR update information on their website.	**This guidance**	• URL of PO's PCRs undergoing updates		Part B page includes update details: http://www.sustainableminds.com/transparency-report-program/part-b Public notice on the Sustainable Minds website announcing the new utility poles Part B on June 1, 2023: http://www.sustainableminds.com/transparency-report-program/part-b	Complete
	☑	18	To update a PCR during the validity period, the PO **shall**: 1. Notify the original PCR Committee members and original Review Panel. 2. Consult ISO 14027 to confirm the reason to update is valid. 3. Create or update the ACLCA PCR Guidance Checklists for the PCR. 4. Open consultation to interested parties. 5. Update the PCR. 6. Obtain sign-off by PCR Review Panel. 7. Republish an updated version and include a change log at the start of the document. 8. Announce the updated version. 9. Update the ACLCA PCR Repository. In the case that an existing PCR does not meet the requirements for creating EPDs for public or private procurement purposes, the PO **shall** make an effort to first engage the commissioner of the PCR to reconvene the PCR Committee in order to make the required updates. If the PCR commissioner does not reconvene the PCR Committee within 30 days of the PO's request, then the PO may proceed to develop a new PCR using the existing PCR as an informative input document.	**14027 Clause 9**	**PCR:** • Valid update reason **PCR supporting documentation:** • Checklists		The process for updating a PCR during the validity period is included in section 9.0 of the governance document. http://www.sustainableminds.com/files/transparency/SM_Governance_and_program_rules.pdf	Complete
	☑	19	For substantial PCR updates (e.g., updates that impact the results of an EPD), the PO **shall** contact manufacturers in their program with valid EPDs and other POs to bring attention to the PCR changes and encourage that they update accordingly.	**14027 Clause 9**	**PCR supporting documentation:** • Description of notification and dates of outreach		This is a new PCR, so no outreach is required.	Complete
	EPD template						**How criteria were met**	**Due**
	☑	20	PO **shall** create a standard EPD template to be used for all EPDs that can be customized per PCR to identify requirements unique to each. Consider both digital and print (PDF) publishing. *Note: Refer to the 'EPD Comparability and Digital EPDs / Open EPD addendum.* PO **shall** include a statement adjacent to the PCR name to indicate conformance with this guidance and the EPD use case level.	**This guidance**	**PCR:** • EPD template document prepared for this PCR • Statement text included in EPD template	**1 Transparency**	A standard EPD template is included in Appendix C of Part A. Under the name of the Part B is a statement indicating conformance to this guidance and the EPD use case level.	Complete
	☑	21	PO **shall** ensure that the type of EPD developed is clearly noted on the EPD. *Note: Refer the 'EPD Types' addendum.*	**This guidance**	**PCR:** • Statement text included in EPD template	**1 Transparency**	Requirement listed in the Verification statement section in Appendix C of Part A (EPD template).	Complete
Goal and scope	☑	22	Product categories **shall** be primarily defined and sufficiently described by product functionality, technical performance, and use. The PCR **shall** clearly define the product groups for which the rules apply, both by using descriptive language and by using the relevant codes for any of the existing classification systems relevant to the product category and region. Products NOT covered by the PCR **shall** be clearly listed (as a clarification when products are similar). PO **should** ensure that the product classification systems are not to be the single determining factor for defining the product category. The PCR is encouraged to provide sufficient information to clearly describe the scope of products and services for which the rules apply.	**14027 Clause 8.1.1**	**PCR:** • Draft PCR which includes all the items	**2 Procurement**	N/A	N/A

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2. PCR Committee checklist Version 1.0, May 25, 2022 | ACLCA PCR Open Standard 2022

3 Data source
2 Procurement
1 Transparency

Categories		#	Criteria	ISO reference	Supporting documentation	EPD use	How criteria were met	Due
Documentation	**Ground rules**							
	☑	1	PCR Committee **shall** use this checklist to guide the creation of a PCR, identify how criteria were met, and provide the completed checklist to the Program Operator to provide to the PCR Review Panel.	**This guidance**	**PCR supporting documentation:** • Completed checklist	**1 Transparency**	Completed checklists saved with the PCR supporting documentation.	Complete
	☑	2	PCR Committee **shall** thoroughly document the use of an existing PCR as an informative document in any adaptation to create a new PCR. Include the PO name, existing PCR name, product category classification, link to the existing PCR, and provide justification for adapting the existing PCR.	**14027 Clause 6.4.3 and this guidance**	**PCR:** • Link to PCR Committee's documentation of adaptation	**2 Procurement**	N/A	N/A
	☑	3	PCR Committee **shall** respond to each comment from the PCR Review Panel and public consultation. Responses should address any conflicting comments provided by the PCR Review Panel.	**This guidance**	**PCR supporting documentation:** • Link to PCR Committee's documented public response to comments and consultation on PO's website (aggregated comments spreadsheet).	**1 Transparency**	Aggregated public comments and review panel comments, including committee responses, created and published on the SM website with the PCR supporting documentation.	Complete
	☑	4	PCR Committee **shall** provide a limited description of the involvement of interested parties for open consultation. Specifically, the PCR should provide: • **The name and/or affiliation of the stakeholders who participated in the open consultation.** • **The dates of the open consultation period.** Public consultation should be utilized during the PCR review process. The public consultation of the completed draft PCR should include at a minimum a 30-calendar-day time period for comments to be submitted.	**14025 Clause 5.5** **14027 Clause 5.2, 6.4.4**	**PCR:** • Draft PCR that includes list of participating interested parties and dates of consultation period.	**1 Transparency**	Open consultation period listed in 'Open consultation' section of the Part B development table. Aggregated public comments spreadsheet, including commenter names and committee responses, to be created and made available to the review panel.	Complete
Compliance	☑	5	PCR Committee **shall** ensure that the underlying LCA meets the requirements of ISO 14044 and other pertinent standards and that, according to these standards, it has either been critically reviewed by a third party or has undergone an internal verification, either by the PCR Committee itself or appointed independent LCA expert.	**14025 Clause 6.7.1, 6.7.2, 8.1.3, 8.2.1, 8.2.2** **14027 Clause 5.1, 6.1, 6.5.3, 7.1d**	**PCR supporting documentation:** • Link to documentation of LCA review or internal verification.	**2 Procurement**	N/A	N/A
	☑	6	PCR Committee **shall** ensure that the PCR is compliant with any referenced standards and relevant program instructions under which it is developed.		**PCR:** • List of referenced standards and link to relevant program instructions.	**1 Transparency**	Use of the Part B in conjunction with SM Part A is addressed in Program operator responsibilities section of Part B. SM Part A section 1.1. lists the standards required for conformance. The last section of Part B contains a link to where to find the SM program instructions (governance document).	Complete
	☑	7	PCR Committee **shall** establish LCA requirements that are consistent with ISO 14044. The PCR Committee is encouraged to develop end-use case scenarios for the PCR-compliant EPDs and to incorporate considerations for these use cases into the underlying LCA.	**14025 Clause 6.7.1, 6.7.2** **14027 Clause 5.1, 6.1, 6.5.3, 7.1d**	**PCR supporting documentation:** • Third-party reviewed ISO 14040/44 conformant LCA of the product categories under consideration. The LCA will reflect cases in which the EPD may be interpreted in use.	**1 Transparency**	A link to the underlying LCA is included in the Program operator responsibilities section of Part B.	Complete
Goal and scope	**Ground rules**						**How criteria were met**	**Due**
	☑	8	PCR Committee **shall** ensure that all rules for LCA are specified and harmonized with upstream and downstream PCRs (if available) in conformance with relevant standards, including: specification of the functional unit, scope of the study, inventory collection, any allocation rules, impact assessment, and rules for additional information.	**14044** **14027 Clause 6.5.3**	**PCR:** • Draft PCR with list of specifications	**3 Data source**	N/A	N/A
	☑	9	PCR Committee **shall** ensure that the product category used in the underlying LCA supporting the PCR is directly applicable to the PCR.	**14025 Clause 3.14, 6.6, 6.7.2** **14027 Clause 6.5.2, 6.5.3**	**PCR:** • Specification and justification of the product category and applicable functional unit.	**2 Procurement**	N/A	N/A
	☑	10	PCR Committee **shall** define the study scope and EPD type for construction products and services.	**21930 Clause 5.2.1, 5.2.2**	**PCR:** • Draft PCR with specification of scope as cradle-to-gate or cradle-to-gate with options or cradle-to-grave.	**1 Transparency**	Part B specifies the scope as as cradle-to-grave.	Complete
	☑	11	PCR Committee **shall** ensure that a clearly defined and measurable functional or declared unit is included in the PCR for construction products and services.	**21930 Clause 7.1.2, 7.1.3**	**PCR:** • Draft PCR with detailed description of the application and suitability of defining functional and declared units, respectively.	**1 Transparency**	Part B provides a description of the functional unit.	Complete
	☑	12	The PCR Committee **shall** determine which EPD types may be developed (ex: product-specific, industry-wide) and state the specific data requirements for each type. Any other terminology describing types of EPDs should be discouraged. *Note: Refer to the 'EPD Types' addendum for descriptions.*	**ISO 21930 Annex B and 'EPD Types' addendum**	**PCR:** • Draft PCR with description of the EPD types with specific data requirements	**1 Transparency**	Part B specifies EPD type under the name of the Part B. Specific data requirements are listed in the Additional rules to Part A section of Part B.	Complete
	System boundary						**How criteria were met**	**Due**
	☑	13	PCR Committee **shall** determine the level of granularity of unit processes specified by the PCR to be included in the underlying LCA supporting the EPD and ensure that these are consistent with the study's goal of using well-identified and explained criteria.	**14044 4.2.3.3** **14027 Clause 6.5.3** **21930 Clause 7.1.9 for construction products & services**	**PCR:** • Draft PCR with list of all unit processes that include all service, material, and energy flows directly connected to the study project and its ability to perform its function.	**3 Data source**	N/A	N/A
	☑	14	PCR Committee **shall** ensure that the PCR requires: 1) at minimum, a cradle-to-gate[1] system boundary and that any deviation is explicitly specified and justified; and 2) the use of the recycled content (i.e., cut-off) approach for end-of-life allocation of environmental burdens between product systems. [1] "Gate" represents the finished and packaged product at the manufacturing facility just prior to shipping.	**14044 Clause 4.2.3.3.1** **14025 6.7.2b, 6.7.2c, 6.7.2j, 7.2.5** **14027 6.5.3b, 6.5.6**	**PCR:** • Draft specification of the system boundary and justification of any system boundary minimum requirement deviations (where applicable).	**2 Procurement**	N/A	N/A
	☑	15	PCR Committee **shall** ensure that the PCR specifies the capital goods and infrastructure to be included in cases whenever it is feasible. The PCR Committee is encouraged to specify lifetimes or standardized methods of computing lifetimes, as well as the depreciation method utilized to allocate the burden of capital goods over their service period, with any deviations from the default approach explicitly specified and justified.	**This guidance**	**PCR:** • Draft PCR that includes all items	**2 Procurement**	N/A	N/A
	☑	16	PCR Committee **shall** develop scenarios representing a set of domain-specific standard guidelines for any and each life cycle stage to be included beyond cradle-to-gate (i.e., A1-A3) in the PCR scope and require LCA results for these be reported. The PCR **shall** also prescribe assumptions for scenarios in cases where there is no discernable difference between one product and another in the same category for use and end-of-life stages. The PCR Committee **should** include criteria in the PCR for deviation from the prescribed scenarios.	**This guidance**	**PCR:** • Where applicable, list of scenarios and associated assumptions.	**2 Procurement**	N/A	N/A
	☑	17	PCR Committee **shall** specify whether the benefits and loads beyond the system boundary (i.e., Module D) are to be included in the EPD. If so, the PCR **shall** describe the specific scenario(s), benefits, and loads to be considered and reported separately in relevant EPDs communicating the full life cycle (cradle-to-grave) impacts of a product. *Note: Refer to the 'Circular Scenarios (Module D)' addendum.*	**This guidance and 'Circular Scenarios (Module D)' addendum**	**PCR:** • Where applicable, list of scenarios and concomitant benefits and loads to be included.	**2 Procurement**	N/A	N/A
Life cycle inventory	**Data collection**						**How criteria were met**	**Due**
	☑	18	PCR Committee **shall** prescribe acceptable primary data collection practices and clearly specify the scope and data quality for secondary data with recommendations for use of specific datasets or databases facilitating this process. Datasets used for calculations **shall** have been updated within the last 10 years for background data and within the last 5 years for producer-specific (foreground) data; deviations shall be justified. Where databases are required, alternatives or modifications shall be proposed for geographic areas or technologies beyond the scope of the specified dataset(s). Any deviation from the recommended background (secondary) datasets in the PCR shall be clearly specified and justified. In addition, the PCR **shall** require EPDs to disclose the reporting period for primary and secondary data. *Note: Refer to the 'Assessing Data Quality of Background Life Cycle Inventory Datasets' addendum.*	**ISO 21930 Clause 7.1.9 and 'Data Quality and Secondary Background Datasets' addendum**	**PCR:** • Draft PCR that includes all items	**2 Procurement**	N/A	N/A
	☑	19	PCR Committee **shall** identify and ensure that the PCR specifies the selected LCIA indicators or additional information requirements for which relevant inventory information shall be collected.	**14025 Clause 7.2.2, 7.2.3** **14027 Clause 6.5.4, 6.5.5, 6.6**	**PCR:** • Draft PCR that includes all items	**1 Transparency**	SM Part A includes the list of selected LCIA indicators.	Complete

☑	20	PCR Committee **shall** specify, based on the underlying LCA and/or additional studies informing the PCR, all the data that are to be collected (rather than specifying cut-off criteria for the inventory).	**14025 Clause 7.2.3, 7.2.4** **14027 Clause 6.6**	**PCR:** • Draft PCR that includes all items	**2 Procurement**	N/A	N/A
☑	21	PCR Committee **shall** specify the type of data to be collected. The committee is encouraged to follow standard data collection examples for foreground (primary) data collection.	**21930 Clause 7.1.9** **14044 Annex A**	**PCR:** • Draft PCR with data collection sheet example specific to PCR	**2 Procurement**	N/A	N/A
Data quality						**How criteria were met**	**Due**
☑	22	PCR Committee **shall** refer to relevant guidance to consider parameters for assessing data quality of both foreground (primary) and background (secondary) data. *Note: Refer to the 'Assessing Data Quality of Background Life Cycle Inventory Datasets' addendum which provides a data quality assessment method.*	**21930 Clause 7.1.9** **14044 Clause 4.2.3.6** **14025 Clause 6.7.2** **14027 Clause 6.2**	**PCR supporting documentation:** • Complete data quality assessment for both foreground (primary) and background (secondary) data. This information shall also be included in the underlying LCA, and reviewed.	**1 Transparency**	A data quality assessment of primary and secondary data is included in the underlying LCA and was reviewed by the PCR committee.	Complete
Background/secondary data						**How criteria were met**	**Due**
☑	23	PCR Committee shall ensure that the PCR specifies background (secondary) data quality requirements such that differences between claim results are rooted in actual technical differences, rather than artifacts of background data or the platform. If a secondary data source does not meet the required quality specified by the PCR, it shall be verified by the program operator that better data is not available. *Note: Refer to the 'Assessing Data Quality of Background Life Cycle Inventory Datasets' addendum which provides a data quality assessment method.* For example, as detailed in this addendum, the most recent version of background data for baseline electricity from Federal LCA Commons met the data quality requirements and is recommended to be specified across PCRs (with the LCI and method compatible with the Federal Elementary Flow List (FEDEFL) from https://www.lcacommons.gov/.	**Assessing Data Quality of Background Life Cycle Inventory Datasets' addendum**	**PCR:** • Draft PCR with list of background (secondary) data sources and default LCIA method(s)	**2 Procurement**	N/A	N/A
Foreground/primary data						**How criteria were met**	**Due**
☑	24	PCR Committee **shall** ensure that the PCR specifies primary data be collected for every process in the product system under the control of the organization making the product claim. The PCR Committee is encouraged to specify that data specific to the investigated product scope and supply chain are preferable to generic data, particularly in unit processes considered to have a significant contribution to the product life cycle. For EPDs seeking transparency-level conformance with this guidance, the PCR **shall** require the following: EPDs that use secondary data for any unit process that contributes 30% or more to any disclosed environmental impact category shall disclose the data source (database name and version, dataset name, dataset geography, and dataset allocation method).	**This guidance**	**PCR supporting documentation:** • Foreground (primary) data collected in conducting the underlying LCA, and the sensitivity of LCIA outcomes to variability in the foreground data. A facility-specific data collection protocol shall also be included.	**1 Transparency**	SM Part A section 7.6 states that primary data shall be collected for every process in the product system under the control of the organization(s) developing the LCA. Part B contains a statement in the Additional rules to Part A section which states: EPDs that use secondary data for any unit process that contributes 20% or more to any disclosed environmental impact category shall disclose the data source (database name and version, dataset name, dataset geography, and dataset allocation method) The underlying LCA lists primary data collected and includes an analysis on sensitivity or variability.	Complete
☑	25	For EPDs seeking procurement-level conformance with this guidance, the PCR **shall** require that EPDs use facility-specific data for upstream unit processes that cumulatively contribute 50% or more to the disclosed global warming potential. In situations where facility-specific data is not available for the upstream unit processes, and such a facility is required to report to the EPA Greenhouse Gas Reporting Program (GHGRP), the PCR **shall** require the EPD to disclose in the Additional Environmental Information section: the carbon intensity of the manufacturing plant (carbon emitted per metric ton of product manufactured) from which these products, and/or the quartile in which in which the manufacturing plant resides where benchmarks have been published [https://www.epa.gov/ghgreporting/ghgrp-minerals]. Carbon intensity shall be calculated by dividing the emissions reported to the EPA GHGRP by plant production. Emission and production data must be from the same reporting period using the most recent year of data. When a published ENERGY STAR Energy Performance Indicator is available for a product or constituent upstream product, the PCR **shall** require the EPD to disclose in the Additional Environmental Information section: the ENERGY STAR Energy Performance Score for the manufacturing plant in which the product or constituent upstream product was manufactured, and the reporting period of the underlying data. See https://www.energystar.gov/industrial_plants/energy_star_plant_certification/buy_clean_procurement_and_energy_star_0 for more information.	**This guidance**	**PCR:** • Draft PCR that includes all items	**2 Procurement**	N/A	N/A
☑	26	PCR Committee **shall** ensure that the PCR specifies the means by which primary data should be collected and may provide templates to facilitate harmonized data collection, metadata recording, and results reporting. If the specified data collection means are unachievable for a specific EPD developer, the PCR **shall** designate that the developer records the data collection method(s) utilized in the data description.	**14025 Clause 6.7.2**	**PCR:** • Specification of data collection methods (e.g., measured, calculated, estimated)	**1 Transparency**	SM Part A section 7.6 states: The method of data collection shall be specified (e.g., measured, calculated, estimated).	Complete
Data assumptions						**How criteria were met**	**Due**
☑	27	PCR Committee **shall** specify all parameters of assumed scenarios for use and end-of-life stages so as to ensure comparability and consistency of results. If a manufacturer wishes to define their own scenario(s), they **shall** be based on primary data.	**This guidance and the 'Circular Scenarios (Module D)' and the 'Allocating Materials Shared Across Product Systems' addendu**	**PCR:** • List of parameters for use and end-of-life stage scenarios	**2 Procurement**	N/A	N/A
☑	28	PCR Committee **shall** ensure that the PCR provides worst-case (i.e., 'conservative') default values for scenario data of the specified processes where no data are available for the EPD developer.	**This guidance**	**PCR:** • List of worst-case (i.e., 'conservative') default scenario values	**2 Procurement**	N/A	N/A
Data compliance						**How criteria were met**	**Due**
☑	29	PCR Committee **shall** ensure that claims made in the PCR are based on the results of an LCIA, LCI, and/or substantiated and verifiable additional information modules relevant to the product category.	**14027 Clause 6.6**	**PCR:** • An underlying LCA with supporting LCIA and LCI for all PCR guidelines	**1 Transparency**	The underlying LCA contains relevant supporting LCA results.	Complete
☑	30	PCR Committee **shall** ensure that the PCR states data quality requirements for all data applicable for use in claims. These data **shall** be verified to be compliant with the established PCR data quality requirements and those for foreground (primary) and background (secondary) data. The PCR **shall** specify that a data quality assessment be performed on all collected foreground (primary) data and may provide templates to facilitate harmonized primary data collection, assessment, reporting, and verification. *Note: Refer to the 'Assessing Data Quality of Background Life Cycle Inventory Datasets' addendum.*	**This guidance**	**PCR:** • Data quality assessment criteria and/or template	**3 Data source**	N/A	N/A
☑	31	PCR Committee **shall** ensure that PCR-designated background (secondary) data sources be specified and verified such that: • Data for electricity, transportation, basic fuels, and heavy equipment operation are the most current versions from common public background data (e.g., for North America, LCI and method compatible with the Federal Elementary Flow List (FEDEFL) from https://www.lcacommons.gov/). • Temporal, geographical, and technological coverage of the secondary data is compatible with the scope of the PCR. • System boundaries are equivalent, and reference flows are adaptable to the product system specified in the PCR. • Sources of secondary data are cited. • Allocation procedures used for secondary data are appropriate for the system under study.	**This guidance and 'Assessing Data Quality of Background Life Cycle Inventory Datasets' and the 'Allocating Materials Shared Across Product Systems' addenda**	**PCR:** • Draft PCR with list of background (secondary) data sources and default LCIA method(s)	**2 Procurement**	N/A	N/A
Allocation						**How criteria were met**	**Due**
☑	32	PCR Committee **shall** ensure that the PCR specifies which processes are to be subdivided if allocation can be avoided in this manner wherever feasible. The PCR **shall** also provide guidelines on how the subdivision should be performed.	**14025 Clause 6.7.1c, 6.7.2c** **14027 Clause 6.5.3**	**PCR** • Draft PCR that lists processes and subdivision method	**2 Procurement**	N/A	N/A
☑	33	PCR Committee **shall** ensure the PCR specifies that where allocation by physical relationship is applied, the PCR **shall** specify the relevant underlying physical relationships to be considered and establish or refer to the relevant allocation rules.	**14025 Clause 6.7.1c, 6.7.2c** **14027 Clause 6.5.3**	**PCR** • Draft PCR that includes specification	**1 Transparency**	Allocation rules are listed in section 8 of SM Part A.	Complete
☑	34	PCR Committee **should** refer to relevant standards for defining allocation procedures for reuse and recycling, as well as waste handling, and for scenarios for treating waste generation during the product life cycle.	**14044 Clause 4.3.4** **21930 Clause 7.1.7.2.7**	**PCR** • Draft PCR that includes specification	**1 Transparency**	Allocation regarding output of waste per ISO standards is listed in section 8 of SM Part A.	Complete

	☑	35	PCR Committee **shall** refer to rules for and prioritize stepwise allocation for industrial processes that produce more than one product or deliver more than one service. For example, the refining of crude oil produces more than one different product, such as liquefied petroleum gas, gasoline, naphtha, diesel, asphalt, and others. PCR Committee **shall** refer to rules prohibiting system expansion as a method for avoiding allocation for construction products that may involve the production of co-products; rather, the PCR **shall** prescribe an ISO-compliant method of allocation, or an allocation procedure if multiple methods are allowed.	**14044 Clause 4.3.4.2** **21930 Clause 7.2.5**	**PCR** • Draft PCR including allocation method and procedure (where applicable)	**2 Procurement**	N/A	N/A
	End of life scenario					**How criteria were met**	**Due**
	☑	36	PCR Committee **shall** prescribe ISO-compliant rules for allocation between product systems (across the system boundary) and designate whether Module D may be optionally reported in the EPD for construction products and services. If so, the PCR **shall** prescribe detailed calculation rules for any quantitative metrics reported therein. *Note: Refer to the 'Allocating Burdens and Benefits of Materials Shared Across Product Systems'addendum.*	**21930 Clause 7.2.6**	**PCR:** • Draft PCR with allocation rules and calculation rules	**2 Procurement**	N/A	N/A
Life cycle impact assessment	☑	37	PCR Committee **shall** include all minimally required, core indicators for ISO-compliant EPDs; specifically bulleting the indicator with: 1) the LCA characterization methodology, and 2) reference in parenthesis. Additionally, the PCR is encouraged to specify at least one LCIA method that includes characterization factors for calculating category indicator results for each impact category and each geographical region covered by the PCR.	**21930 Clause 9.5**	**PCR:** • Draft PCR including all items	**1 Transparency**	Core indicators are listed in section 9 of SM Part A.	Complete
Interpretation	☑	38	PCR Committee **shall** identify the steps for interpreting the results of the underlying LCA study.	**14044 Clause 4.5** **21930 Clause 9**	**PCR:** • Draft PCR including all items	**1 Transparency**	SM Part A section 9.3 includes steps for interpreting the results of a background LCA.	Complete
	☑	39	PCR Committee **shall** ensure that the PCR communicates requirements (either qualitative or quantitative) and reference the methods and format used to report additional environmental information.	**21930 Clause 8.4** **14025 Clause 7.2.3, 7.2.4**	**PCR:** • Detailed specification on requirements and reference methods and format used to report additional environmental information.	**1 Transparency**	SM Part A section 10 includes a description of additional environmental information and the TR/EPD template in Appendix C showing placement of such information.	Complete
	☑	40	PCR Committee **shall** ensure that the PCR lists assumptions and limitations associated with the underlying LCA results.	**14044 Clause 4.5.2.1**	**PCR:** • Draft PCR including all items	**1 Transparency**	SM Part A section 5.2 includes a description of assumptions and limitations associated with TR/EPD results.	Complete
	☑	41	PCR Committee **shall** specify different types of uncertainties to be propagated in the underlying LCA study and is encouraged to ensure that the PCR describes procedures for reporting uncertainty of results.	**14044 Clause 4.4.4.2** **14025 6.7.1b**	**PCR:** • Draft PCR including all items	**1 Transparency**	SM Part A states that uncertainty shall be addressed in the data quality assessment and may be addressed qualitatively or quantitatively.	Complete

Part B: Utility poles | February 7, 2024 | Sustainable Minds | Contact Kim Hammer (kim@sustainableminds.com)

EPD use case goal: 1

EPD use levels are cumulative. Transparency is the baseline. To create a 'Data source' conformant PCR, all criteria in all checklists must be documented.

3. PCR Review Panel checklist Version 1.0, May 25, 2022 | ACLCA PCR Open Standard 2022

Categories		#	Criteria	ISO reference	Supporting documentation	EPD use	3 Data source 2 Procurement 1 Transparency	
	Ground rules						**How criteria were met**	**Due**
Organizational	☑	1	The PCR Review Panel **shall** use this checklist to guide their process of reviewing the PCR.	**This guidance**	**PCR supporting documentation:** • Completed checklist	**1 Transparency**	Completed checklists saved with the PCR supporting documentation.	Complete
	☑	2	PCR Review Panel members **shall** disclose any conflicts of interest using the conflict of interest form.	**14027 Clause 7.2** **14071**	**PCR supporting documentation:** • Review panel completed conflict of interest forms	**1 Transparency**	Conflict of interest forms to be completed by review panel members.	Complete
	☑	3	The PCR Review Panel **shall** meet with the Program Operator to discuss the PCR and how to perform their review. The PCR Review Panel **shall** investigate whether the PCR has been developed in accordance with relevant LCA-based claim standards, general program instructions, specifications, and guidelines, and ensure that it supports the creation of credible and consistent claims. The PCR Review Panel **shall** verify that the EPD template is consistent with the PCR guidelines. The PCR Review Panel **shall** generate and compile their comments in a review report. By the agreed upon date determined by the Program Operator, the review report **shall** be sent to the PCR Committee for consideration.	**14027 Clause 7, 7.3, 7.5** **14071**	**PCR supporting documentation:** • Dated review report	**1 Transparency**	Aggregated review panel comments spreadsheet (i.e., detailed review report) sent to the PCR Committee on February 7, 2024	Complete
	☑	4	The PCR Review Panel **shall** confirm that the PCR meets relevant EPD-related federal and/or state procurement requirements (e.g., Buy Clean Legislation) that are specifically referenced in the PCR.	**This guidance and relevant EPD-related federal and/or state procurement requirements**	**PCR supporting documentation:** • Reviewers' sign-off and/or list of any deviations from procurement requirements	**2 Procurement**	N/A	N/A
	☑	5	The PCR Review Panel **shall** verify conformance the Program Operator and PCR Committee checklists and the appropriate category of EPD use is identified.	**This guidance**	**PCR supporting documentation:** • Reviewers' sign-off below and/or list of any deviations from this guidance. All three completed checklists returned to the PO.	**1 Transparency**	Section below completed by review panel chair, who confirmed sign-off from all review panel members.	Complete

Reviewer acceptance for EPD use case (1,2 or 3) Date | Reviewer names & email

Date	Reviewer name & email	Acceptance for EPD use case Level 1 (Y/N)
7-Feb-24	Alex Mlsna, alex.mlsna@kimballinternational.com	Yes
7-Feb-24	Hugues Imbeault-Tétreault, hugues.i-tetreault@groupeageco.ca	Yes
7-Feb-24	Terrie Boguski, tboguski@harmonyenviro.com	Yes

Part B comments worksheet

SM Transparency Report™ Framework Sustainable Minds, PCR Part B: Product group definition | Utility poles, 2024. http://www.sustainableminds.com/files/transparency/pgds/Part_B_Product_Group_Definition_Utility_Poles_2023.pdf.

Part B: Product group definition

Part B name:	Utility poles
Reviewers:	Hugues Imbeault-Tétreault, Alex MIsna, Terrie Boguski, Treated Wood Council, Wood Preservation Canada, Canadian Wood Council

Topic #	Page #	Section #	Type of comment (Technical/editorial/other)	Reviewer comment	Reviewer's proposed change/solution	Response	Rationale	Review Panel Response	SM Response
1	1	Description	Editorial	The text is focused on the system boundaries of the LCA. It does not describe e.g. the possible materials of the poles.	I recommend rephrasing the text in order to focus on product description instead of system boundaries.	No changes made	The PCR describes how the poles are used and is open to all material types employed. Listing material examples could limit the scope of materials used to manufacture utility poles, which is not the intent.	CLOSED	-
2	2	Existing PCRs, EPDs, TRs, or LCAs	Technical	Cements are intermediate materials for poles made of concrete. How are the PCRs on these materials relevant? Are there no steel PCR relevant?	I recommend removing cement PCRs from the list and adding a relevant steel PCR, if any.	Added steel and removed cements	Agree	CLOSED	-
3	3	Note for treated wood utility poles	Technical	The sections of the NSF PCR that are refered to are of the new one, while the one listed earlier in the part B is the old one.	In order to avoid any confusion about what version applies to this part B, specify the NSF PCR version/year.	Removed section number references and pointed users to most recent version of PCR	The updated PCR is not yet published, so we are not able to point to the new section numbers. Rather than refer to sections from an old version, we will point users to the most recent version.	CLOSED	-
4	3	System boundary	Technical	"When reporting Global Warming Potential (GWP 100 years) per 21930:2017, biomass carbon uptake and re-release of CO2 and CH4 shall be reported separately based on the biogenic carbon content of the product to be declared (see ISO 21930 Section 7.2.7)" I think this paragraph refers to the content requirement on page 51 of part A regarding biogenic emissions and removals. However, it may create confusion as to include biogenic CH4 in the main GWP results or not. Also, there is no CH4 or re-release of CH4, only CH4 emissions.	Specify that biogenic CH4 shall be include in the main GWP results. Also, part of the sentence should be writtent as follows: "...biomass carbon uptake and re-release of **carbon in the form of** CO2 and CH4..."	Added "shall also be reported separately" to indicate that biogenic CH4 is not pulled out of main GWP results. Added "carbon in the form of" for clarity.	Agree	CLOSED	-
5	4	A4	Technical	Cheryl- Regarding A4: "Transport from the customer to the final installation site varies widely by both distance and mode and is therefore excluded from the system boundary." We have distance assumptions for land transport, and there are assumptions around installation fuel use.	It feels like there should be an assumption to use here if there is no data, rather than just excluding it. Maybe a 100 km. Open to suggestions here.	Added 50 mi (80 km) as a default distance.	Committee agrees	CLOSED	-
6		B2	Technical	John- Regarding hazardous materials reporting, add substances important to EPA and other EPD users.	Add examples for where the presence of any hazardous substances could be accounted for	No changes made	Committee states that the hazardous reporting requirements included in Part A are sufficient.	CLOSED	-
7	4	Land transport	Technical	"For destinations outside North America,…" The functional unit specifies a pole installed in North America.	Remove	Edited transport assumptions to reflect sea freight within North America. Disposal outside of North America may be outside of the region; unedited in C2.	Committee agrees that edits are needed to reflect North American installation.	CLOSED	-
8	4	Footnote 1	Technical	30 miles / 4.24 mpg*3.78541 liters/gal = 26.8 LITERS per hours, not gallons per hour.	Update accordingly.	Updated to liters per hour	Agree	CLOSED	-
9	4	Installation (A5)	Technical	Significant digits are not consistent between the fuel consumption result (33.5 liters) and the data used to calculate it.	Reduce the result from 3 to 2 significant digits.	26.8 L/h plus 50% uplift is 40.2 L/h, for 50min is 40.2L/H * 50min/60min = 33.5 L or 8.85 gal	Agree that sig fig consitency needed	CLOSED	-
10	6	C2	Technical	"Outside of North America, other appropriate regional or national assumptions may be used." This part B is for North America.	Remove sentence.	Unchanged	The installation is assumed to be in North America. PCR allows for disposal outside of North America.	CLOSED	-
11	6	C4	Editorial	That section cite the UL wood PCR.	Add that PCR to the list of relevant PCRs.	Added UL wood products PCR to list of relevant PCRs	Agree	CLOSED	-
12	7	Industry-wide TR/EPD additional rules	Other	From part A section 11.2: In the Part B industry-wide TR/EPD additional rules section, specify one LCIA method and version number to be used for comparison (e.g., TRACI v2.1, CML-IA baseline v4.1).	Update accordingly.	Added to Part B: LCIA method & version # used for comparison: All comparisons to the industry-average results must use the same method and version number as the industry-wide study.	Agree	CLOSED	-
13	7	Industry-wide TR/EPD additional rules	Other	From part A section 11.2: In the Part B industry-wide TR/EPD additional rules section, specify the threshold of improvement and reduction for each impact category.	Update accordingly.	Added language specifying requirements for comparison to industry-wide results at the end of the PCR.	Committee agrees	CLOSED	-
14	7	Industry-wide TR/EPD additional rules	Other	From part A section 11.2: To demonstrate impact reduction below industry average, the product-specific TR/EPD results shall be lower than the industry-wide TR/EPD results by the threshold for improvement set by the Part B industry-wide TR/EPD additional rules section	Update accordingly.	Threshold of performance improvement for each impact category added to the PCR.	Agree	CLOSED	-
15	3	1	Technical	Additional rules for Dimensions, should include more requirements regarding the covered product.	Recommend requiring the diameter and overall weight of the covered product.	Added requirement to disclose length and weight of the representative product (could be an average) in EPD. Diameter not necessarily applicable for this product category.	Committee agrees that more information is needed in the EPD to describe the disclosed product.	CLOSED	-
16	4	2	Other	ESL and RSL requirements seem to be redundant and could add confusion	PCR requires impacts to be reported for ESL = 40 and 80 years. PCR implies that impacts "data" be reported for the RSL as well. Also, seems like if a covered product has an RSL that is less than either ESL, there should be guidance wording for clarification to the "RSL disclosure" statement. This is addressed on page 5 in Replacement (B4).	Removed "data" from RSL specification.	Agree that "data" is ambiguous. Accounting for replacements is included in the RSL disclosure, so no additional wording was included.	CLOSED	-

17	4	2	Other	ESL and RSL requirements seem to be redundant and could add confusion	Why use the fractional approach for covered products not meeting the ESL reporting requirements? You cannot replace part of a utility pole, and thusly consider rounding up to the nearest whole number of covered products, or consider adjustments to the ESL years set forth in this PCR.	No changes made	Manufacturers would not be able to custom-calculate impacts beyond the first installation for different ESLs unless fractional replacements were made optional. This enables comparison of products with different RSLs.	CLOSED	-
18	2	1	Technical	Additional rules to Part A. 1st section: In light of recent interoperability analyses, gaps in LCI-LCIA connectivity and artificial variances in LCIA results on same datasets can occur depending on the implementation of data within a platform; thus, recommend also disclosing the platform and platform version in which the database was implemented (e.g., ecoinvent v 3.8 implemented in SimaPRO v9.3) such that common discrepancies at least in e.g., electricity, transport, and fuels can be identified.	Recommend requiring disclosure of platform and platform version in which secondary data are implementation for secondary data disclosure, i.e., in addition to database name, version, dataset name, geography, allocation method, e.g., "…as implemented in [SimaPROvx.y/GaBivx.y/lcacommons.gov + date/OpenLCA version x.y]."	Added "EPDs shall disclose the LCA software and version used for modeling, and the database name(s) and version(s) used."	Agree that disclosure of software and databases is needed. Additional info is already required to be listed for unit processes that contribute 20% or more.	CLOSED	-
19	2	1	Technical	System boundaries: recommend including a diagram, e.g., such as that found in Fig 2. of: Rodrigues et al. 2021: https://www.mdpi.com/1996-1073/14/8/2307 Also, to be explicity, recommend a bullet list or some other structured way to list the steps to be included, ideally, by module, e.g.,: * raw material extraction * raw material transport * body preparation * homogenization and slip maturation * casting * drying * glaze preparation and application for glazing including landfill of glazing slurry waste and treatment of water * firing * finishing * retouching & annealing, where repair occurs * production of ancillary components * final assembly * etc.	Add system boundaries diagram and table of processes to be included by EPD module.	No changes made	The modules considered in the LCA shall be described in brief as per “System boundaries” outlined in ISO 21930:2017 section 5.2. Different processes are used by manufacturers of different material types, so a table of common processes would not meaningfully improve the clarity of the system boundaries.	Closed. Acceptable since this is a tranparency level PCR.	-
20	*	2	Technical	A1. The PCR should specifiy whether a generation or consumption mix for electricity should be utilized to represent the source country or region; note, if using public Fed Commons background data, consumption mixes can be specified to the level of balancing authority, which is more granular than country or region (i.e., eGRID) level. The PCR could specify a list of criteria for the various tiers and EPD compilers have the choice as to which tier criteria they meet, e.g., any electricity datasource for transparency, eLCI for public procurement, and eLCI harmonized across other supply chain data for data source.	More granularity in specifying electricity datasets (consumption mix and specific source in the case of complying with additional tier per ACLCA 2022 PCR Open Standard); also, refer to REC Addendum	No changes made	EPD use case for this Part B is specified as Level 1 Transparency. Part A section 7.7 requires use of eGRID for facilities in the US. The incorporation of the REC addendum is being considered for the next update to Part A.	CLOSED	-
21	3	2	Technical	A1: Upstream manufacturing should also reflect the source country or region to the extent possible (or more granular if takes place in US and PCR specifies public Fed Commons electricity baseline data); in other words, effort should be made to identify activity locations of upstream suppliers	More explicit guidance on including geographic scope for upstream suppliers and reflecting this in underlying LCA to the extent possible	Added to Part B: The upstream supplier location and potential scrap rate during the manufacturing process activity should be considered.	Agree	CLOSED	-
22	3	2	Technical	A2: Recommend adding in 5% by volume to the cutoff for transport (unlikely scenario but possible when items 'cube out' before they 'weight out' and can contirbute significantly to overall transport). Also, this section is an opportunity to contribute to criteria for EPDs intented for higher tiers (e.g., public procurement or data source). E.g., using consistent secondary data/specifying secondary data such as public data for transport, e.g., USLCI for consistency in modeling transport and could even provide an example tonne-miles calculation such that the tonne-miles are consistenly/correctly applied to transport legs (this aspect is the source of many misunderstandings and mistakes in LCAs). As with electricity, this is an opportunity to set precedent for other POs by specifying a list of criteria for the various tiers and EPD compilers have the choice as to which tier criteria they meet, e.g., any transport datasource for transparency, USLCI for public procurement, and USLCI consistently use to model transport (harmonized) across other relevant product categories for data source status.	Add 'by volume' to the 'by mass' criteria specified for cutoff for transport; add granularity to dataset specificity for tiers per the ACLCA 2022 Open Standard	Added "by volume" to the A2 text.	Agree with rationale for considering volume in cutoff. EPD use case for this Part B is specified as Level 1 Transparency.	CLOSED	-

23	3	2	Technical	A4: Recommend including a justification (e.g., US Transportation Statistics) for the average default distance for land transport to final installation site	Include information on defensibility of the default installation distance and offer more examples and guidance of how transport are included in the underlying calculations	No changes made	The distance between the customer and the final installation site cannot be approximated by US transportation statistics, since each utility pole customer is expected to have regional installation sites. Based on comittee discussion about industry norms, the A4 section requires a default distance of 50 miles at this stage.	50 miles for transport from utility yard to installation is a reasonable default. No default is given for transport from manufacturing to the utility yard. A reasonable default for this transport segment would be 800 miles.	Accept; added to A4: "In the absence of primary data, the distance from the utility pole manufacturing site to the customer is assumed to be 800 miles (1,290 km), and the distance from the customer to the final installation site is assumed to be 50 miles (80 km), assuming transportation by truck with an empty return trip of the same distance."
24	6	2	Technical	C1-4 and D: Recommend additional guidance as preparation for and transport of wastes intended for recycling may differ from those destined for landfill, e.g., % level disassembly, which can affect unit processes selected to reflect disposal	More explicit guidance on reflecting recycling and landfilling processes	Updated C3 to require any disassembly or processing prior to disposal.	Committee states they do not have a way to differentiate between landfill and recycling in the transport distance in C2, so left as 20 miles for both as a default.	CLOSED	-
25	7	3	Technical	As per the Open Standard, this section is an opportunity for the PO/PCR Committee to compile and attach a DQ template such that EPD producers can easily and consistently provide DQ indices for process and flow level indicators; e.g., see EPA Data Quality Pedigree Matrix criteria as enhanced by Bhat & Mukherjee in FHWA's Pavement LCA Tool	Add DQ template and guidance.	No changes made	SM's Part A PCR refers to the EPA DQ pedigree matrix. At this time, the committee does not want to provide a template, but will consider this going forward as the industry develops more LCAs and EPDs.	CLOSED	-
26	34/52	8.3	Technical	The allocation procedure does not require that, where allocation by physical relationship is applied, the PCR shall specify the relevant underlying physical relationships to be considered and establish or refer to the relevant allocation rules, as required by the ACLCA Open Standard (PCR Committee matrix, criteria #33).	Update part A accordingly.	No changes made	Part A secion 8.3 specifies that where allocation by physical relationship is applied, the physical relationships shall reflect the way in which the inputs and outputs are influenced by the quantitative changes of the products or functions (i.e., the outputs and/or services provided by the process, having a positive economic value) delivered by the system.	Okay, but I find the Part A language on this point difficult to understand. Consider improving clarity when Part A is updated.	Comment was added to list of updates to make in Part A v2024. We will work to improve clarity here in the next update.
27	37/52	9.1	Technical	The impact category names are not ISO21930-compliant. (PCR Committee matrix, criteria #37).	Use names and abbreviation from ISO 21930.	No changes made	Part A section 9.1 lists required and optional impact categories. Both lists are bulleted with the LCA characterization methodology and have the reference in parethesisa; ● latest TRACI impact assessment methodology (EPA)	CLOSED	-
28	3	System boundary	Editorial	per 21930:2017	per ISO 21930:2017	Accept	Corrected	CLOSED	-
29	3	Functional unit	Editorial	to its designed end of life	prior to reaching the end of its intended service life (e.g., road….')	Accept	Updated	CLOSED	-
30	3	Functional unit	Editorial	longer time period	'…time period for the design life depending…'	Accept	Updated	CLOSED	-
31	4	2	Technical	for two separate estimated service lives (ESLs) of 40 years and 80	Does this preclude EPDs citing additional ESLs and related impacts? Should these two times be stated as 'minimum' and to note that others can be cited.	Accept	Added option to present additional ESL results in a separate section.	CLOSED	-
32	6	Footnote	Editorial	50 minutes	revise to 30 minutes	Accept	Changed to 30 minutes for removal	CLOSED	-
33	3	Functional unit	Technical	Consider improvements to the functional unit	Lit review shows functional units with range of pole height, or incorporating distance of distribution network	No changes made	The committee discussed this at length and considered other functional units, but due to the variability across manufacturers and utility customers, determined that disclosure of impacts for a single pole would be most useful for customers. Disclosure requires several technical properties of the pole for transparency and to enable the customers to understand functional performance of the pole.	CLOSED	-
34	3	Default scenarios	Technical	Consider incorporating regionalization into default scenarios	Lit review shows different assumptions based on region for service life, maintenance activities	No changes made	The committee conducted a survey of contacts at utilities who would be the purchaser of poles, which intended to define an average across all regions. Part B requires that maintenance activities be based on primary data, accounting for region.	Also, consider requiring the RSL to be based on regional use. For example, consider adding the below text after the indicated existing text. "The reference service life (RSL) for a utility pole shall be specified and justified." The geographic regions of use shall be considered and declared when establishing RSL. RSL may be different for use in different geographic regions.	Accept; added to ESL/RSL section: "The geographic regions of use shall be considered and declared when establishing the RSL. The RSL may be different for use in different geographic regions."
35	3	Default scenarios	Technical	Update biogenic carbon accounting recommendations for harmonization with upstream PCRs		No changes made	Since this PCR requires wood poles to align with the NSF pressure treated wood PCR, which references another UL PCR, the biogenic results should inherently be aligned with the upstream PCRs. The committee had access to the new draft of the pressure-treated wood products PCR for reference during this process.	CLOSED	-
36	3	Default scenarios	Technical	Set upstream material transport distance default scenarios for different material types		No changes made	Part B requires primary data for upstream transportation distance. The supply chain for the various manufacturers have large differences, so the committee opted to not provide default distances and noted that manufacturers were able to set better average assumptions for their own operations.	CLOSED	-

37	4	ESL and RSL	Technical	Define service life per ISO 15686		No changes made	RSL and ESL were the most-discussed topics of the committee during PCR development. The solution accepted by all parties was to not specify a default RSL, but to instead specify requirements on the data used to specify the RSL, either based on statistical historical data or by industry-accepted testing results. The committee could not decide on a specific default ESL. We surveyed a number of customers to ask what ESL would be most useful and the results were not conclusive. Therefore, we decided to require two extreme ESLs - 40 and 80 years, along with a specific required disclaimer that will allow customers to better understand the results and potentially customize the results to their own situation. The committee thinks these are a thoughtful approach to balance specificity with flexibility in an industry with widely variable in-service conditions.	CLOSED (I agree with the committee)	-
38	3	Default scenarios	Technical	Set default scenarios for leaching of wood treatment chemicals during the use phase		No changes made	Part B says that activities related to product use in B1 are included, and "For treated wood poles, this may include treatment chemical releases and emissions as well as biogenic CO2 release during use, if quantifiable." The committee was not able to identify default factors.	Closed. Acceptable since this is a tranparency level PCR. Alternatively, the PCR committee could set a default assumption of 0.5% leaching of applied wood-treatment chemicals and other coatings per year of service life unless otherwise justified. This would assist LCA practitioners who otherwise will have to each make their own assumptions.	Added to B1: "If preservatives or other treatment chemicals are applied in the use phase, an estimated average leaching rate (e.g., percentage leached per year of service life) should be declared."
39	4	Default scenarios	technical	If you are requiring the reporting of carbon intensity of electrical datasets, carbon intensity should be defined and an explanation of how to calculate the carbon intensity of the dataset should be provided.	Don't require carbon intensity to be reported or provide the needed information to conform to the requirement.	Accept	Removed requirement to report carbon intensity	CLOSED	-