

Procedure for Environmental Product Declaration (EPD) Verification

Overview

This procedure describes the process for EPD Verification for the SCS Type III EPD program to be followed by SCS staff and external verifiers. The procedure includes:

- Review of EPD Data and Supporting Documentation
- Review of Additional Environmental Information
- Verification Findings and Corrective Action Procedure
- Steps for EPD Verification
- Additional requirements for Business-to-Consumer EPDs and EPD verification based on ISO 21930
- Modification of Verified Environmental Product Declaration
- Suspension, Withdrawal and Termination

Prior to EPD Verification, the competency of the verifier shall be documented and reviewed by the Program Manager against the requirements stated in the SCS Program Operator Manual.

The EPD Verifier shall have had no involvement in the development of the LCA or the EPD.

The EPD Verifier shall not disclose any information described as CONFIDENTIAL obtained through verification process.

Review of EPD Data and Supporting documentation

EPD verification shall include review of the following documents and supporting information:

- The LCA Report
- The EPD
- Supporting documentation for verification of information contained in Additional Environmental Information. (if applicable)

EPD verification shall ensure that the EPD conforms to requirements of the ISO 14025, the PCR, the appropriate Program Operator Manual, and other standards as they may apply based on the PCR requirements (e.g., ISO 21930, EN 15804). In most cases, the appropriate Program Operator Manual is

the current SCS Program Operator Manual, although use of Program Operator Manuals from other Program Operators may be required in order to conform to ANSI PRO-NT-118.

Review of Additional Environmental Information

1. EPDs may contain “Additional Environmental Information.”¹ As part of the EPD Verification process, claims and certifications included in the EPD as Additional Environmental Information shall be verified based on supporting documentation. Additional Environmental Information shall also be reviewed for truthfulness and transparency following the requirements outlined below.
2. All environmental claims and certifications shall be supported by verifiable information. As part of the EPD verification process, each claim or certification shall be verified through review of supporting documentation. This review may include but is not limited to: review of 3rd party certifications, 3rd party reports, and certified products databases. As part of this review, any expiration dates for the certification shall be reviewed to ensure the certificate is valid at the time of EPD verification.
3. Self-declared (type II) claims shall be verified according to the requirements of ISO 14021, section 5.
4. In addition to verification of any claims or certifications referenced in the EPD, all information shall be reviewed to ensure that it is specific, accurate, not misleading, and unlikely to result in misinterpretation. The review shall ensure that the Additional Environmental Information follows the FTC Green Guide (current version) and the nine principles described in ISO 14020.

The nine principles of ISO 14020 are:

- Environmental labels and declarations shall be accurate, verifiable, relevant and not misleading.
- Procedures and requirements for environmental labels and declarations shall not be prepared, adopted, or applied with a view to, or with the effect of, creating unnecessary obstacles to international trade.
- Environmental labels and declarations shall be based on scientific methodology that is sufficiently thorough and comprehensive to support the claim and that produces results that are accurate and reproducible.
- Information concerning the procedure, methodology, and any criteria used to support environmental labels and declarations shall be available and provided upon request to all interested parties.

¹Additional Environmental Information is either quantitative or qualitative environmental information which is not LCI or LCA information. Additional Environmental Information could be in any section of the EPD, and is not necessarily a separate section titled ‘Additional Environmental Information.’ See ISO 14025, section 7.2.3. for further elaboration on the types of Additional Environmental Information

- The development of environmental labels and declarations shall take into consideration all relevant aspects of the life cycle of the product.
- Environmental labels and declarations shall not inhibit innovation which maintains or has the potential to improve environmental performance.
- Any administrative requirements or information demands related to environmental labels and declarations shall be limited to those necessary to establish conformance with applicable criteria and standards of the labels and declarations.
- The process of developing environmental labels and declarations should include an open, participatory consultation with interested parties. Reasonable efforts should be made to achieve a consensus throughout the process.
- Information on the environmental aspects of products and services relevant to an environmental label or declaration shall be available to purchasers and potential purchasers from the party making the environmental label or declaration.

Verification Findings and Corrective Action Plan

1. Different types of verification findings include:
 - **Verified (V):** Requirement met.
 - **New Information Request (NIR):** Written request by SCS to provide additional information to determine compliance with specific requirements.
 - **Non-conformity Report (NCR):** Audit finding(s) issued when the client is not meeting one or more requirements of the applicable standard compliance criteria.
 - **Opportunity for Improvement (OFI):** Current circumstances observed during the review that, if addressed, would enhance conformity to the applicable standard.
2. NCRs are issued during LCA critical review and EPD verification in instances where the LCA report, or EPD, is inconsistent with requirements of the applicable standards (e.g., ISO 14025, ISO 14044, applicable PCR), the SCS program operator manual, or the LCA report (for EPD verification, only). NCRs must be issued against a specific criteria from the standard, or a specific error in the reports.
3. Findings are issued to clients when:
 - a. The output of the LCA Critical Review is an LCA critical report. This report will include a checklist of all Verified (V), Non-Conformity Report (NCR), Opportunities for Improvement (OFI), and New Information Request (NIR). Upon completion of the critical review report, it is reviewed internally by SCS staff, and then sent to the client. SCS will schedule a conference call to review the findings with the client.
 - b. The output of the EPD verification is an EPD Verification report. This report will include a list of all Verified (V), Non-Conformity Report (NCR), Opportunities for Improvement (OFI), and New Information Request (NIR). Upon completion of the EPD verification

report, it is reviewed internally. SCS will schedule a conference call to review the findings with the client.

4. To resolve a NCR, a follow up review will be required. The follow up review shall document whether the corrective actions provided addressed the NCR. No LCA critical review shall be deemed conformant to ISO 14044 and no EPD shall be deemed verified, unless all NCRs are closed.

EPD Verification and Checklist

1. EPDs shall be verified in accordance with this procedure and the appropriate ISO standard:
 1. All EPD verifications shall follow the requirements of ISO 14025 identified below,
 2. EPDs of building products, prepared according to a PCR normative to ISO 21930 and/or EN 15804, shall follow the requirements of ISO 14025 and ISO 21930;
 3. An EPD may also be prepared for communication to consumers, and shall follow the requirements for “business-to-consumer” EPDs identified below.
 4. **NOTE:** Additional Environmental Information is either quantitative or qualitative environmental information which is not LCI or LCA information. Additional Environmental Information could be in any section of the EPD, and is not necessarily a separate section titled ‘Additional Environmental Information.’ See ISO 14025, section 7.2.3. for further elaboration on the types of Additional Environmental Information.

| Step | Reference |
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| Requirements for all EPDs – ISO 14025 and SCS Program Verification Requirements | |
| The EPD conforms with all of the Product Category Rule requirements | ISO 14025, Section 8.1.3, (a); section 8.1.4 |
| The EPD conforms to all requirements of the current appropriate Program Operator manual. In most cases, the appropriate Program Operator Manual is the current SCS Program Operator Manual, although use of Program Operator Manuals from other Program Operators may be required in order to conform to ANSI PRO-NT-118. | ISO 14025, Section 8.1.3, (c) |
| Quantitative data is reported using units prescribed by the PCR. Qualitative data, where provided, shall be comparable and use the same methods to produce the qualitative information. | ISO 14025, Section 7.1 |
| LCA data contained in the EPD is consistent with the LCA Report. | ISO 14025, Section 7.2.1 |
| All data in the EPD is verified against supporting documentation, and supporting documents are listed in the EPD verification report. | ISO 17065 |

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| EPD contains all the necessary elements of ISO 14025 | ISO 14025, Section 7.2.1 |
| The EPD includes 1) life cycle inventory data and/or aggregated life cycle inventory flows (e.g., primary energy demand), 2) indicator results from the life cycle impact assessment, and 3) other quantitative data such as waste generation. | ISO 14025, Section 7.2.2 |
| The EPD shall make it clear whether the information applies to a product, part of a product or packaging, or a service. | ISO 14025, Section 7.2.2 |
| The EPD contains Additional Environmental Information which is clearly identified as separate from the quantitative results, and follows the requirements of ISO 14025, section 7.2.3. NOTE: Additional Environmental Information is not necessarily in a separate section of the EPD. | ISO 14025, Section 7.2.3 |
| Additional Environmental Information is verified by supporting documentation | ISO 14025, section 7.2.4 |
| Additional Environmental Information is truthful, accurate, and not misleading according to the FTC Green Guides | ISO 14025, section 7.2.4; FTC Green Guides |
| Additional Environmental Information is truthful, accurate, and not misleading according to the nine principles of ISO 14020. | ISO 14025, section 7.2.4; ISO 14020, section 4 |
| An EPD may be based, in whole or in part, on Information Modules. Information modules may only be used if the following three requirements are met: 1) the Information Modules for all stages of the life cycle are combined, 2) ISO 14040 and ISO 14044 requirements are met, and 3) the PCR requirements are followed. | ISO 14025, Section 7.2.5 |
| If the EPD does not cover all life cycle stages, omitted life cycle stages shall be stated on the EPD. | ISO 14025, Section 7.2.5 |
| If Information Modules are used in the development of an EPD, and relevant aspects and impacts are not covered, the EPD shall be supported with Additional Environmental Information and any omissions shall be justified. | ISO 14025, Section 7.2.5 |
| Self-declared claims in Additional Environmental Information, and other sections of the EPD, conform to requirements of ISO 14021, section 5. | ISO 14025, Section 7.2.4; ISO 14021, section 5 |

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| All laboratory test results documented in the EPD are produced by a laboratory compliant with ISO/IEC 17025 ² . | ISO 17065, Section 6.2.2.1 |
| Requirements for EPD of Building Products, prepared based on a PCR normative to ISO 21930:2007 and/or EN 15804 – ISO 21930:2007 Verification Requirements | |
| The EPD addresses all significant environmental aspects of the building product. Any gaps shall be addressed following the requirements of the PCR and shall be stated in the PCR. | ISO 21930 sections 6.1 and 6.2.5 |
| For an EPD covering all life cycle stages, the life cycle stages are subdivided into at least four stages (more than four are ok): Product Stage, Design and Construction Process Stage, Use/ Operation Stage, and End-of-life Stage. See ISO 21930, section 6.1 for further detail of each stage. | ISO 21930, section 6.1 |
| All data sources are documented in the LCA Report | ISO 21930, section 6.2.6 |
| Allocation is documented in the LCA Report | ISO 21930, section 6.2.7.1 |
| All hazardous and toxic materials are included in the life cycle inventory (no cut off applied). Maximum cut off for inventory not considered hazardous or toxic is 5% on either a mass, energy, or environmental relevance basis. | ISO 21930, section 6.2.7.2 |
| Project documentation, provided to EPD verifier includes: LCA report, supporting data for Additional Environmental Information, and product performance data (if applicable). | ISO 21930, Section 7.3 |
| The following items are included in the EPD: a) name and address of the manufacturer(s); b) description of the building product's use and the functional or declared unit of the building product to which the data relates; c) building product identification by name and a simple visual representation of the building product to which the data relates; d) name of the programme and the programme operator's address and, if relevant, the logo and website; e) PCR identification; f) data from LCA or LCI or information modules; see 8.2.2 and 8.2.3; g) additional environmental information; see 8.2.4; h) content of the product as identified in c) above, covering materials and substances to be declared (e.g. | ISO 21930, section 8.1 |

² This criterion applies to all new EPDs with an initial project start date after February 1, 2017.

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| <p>information about product content, including specification of materials and substances that can adversely affect human health and the environment, in all stages of the life cycle).</p> <p>NOTE With appropriate justification, this requirement does not apply to proprietary information relating to materials and substances covered by intellectual property rights or similar legal restrictions. It also might not be appropriate for information concerning intangible products.</p> <p>l) information on which life-cycle stages are not considered, if the declaration is not based on an LCA covering all stages;</p> <p>j) statement that environmental declarations from different programmes might not be comparable;</p> <p>k) statement that this declaration represents an average performance, where an EPD declares an average performance for a number of products; in addition, information on the deviation of the products' performance with respect to the average shall be stated;</p> <p>l) site(s), manufacturer or group of manufacturers, or those representing them, for whom the results of the LCA are representative;</p> <p>m) information on where explanatory material can be obtained;</p> | |
| <p>The EPD includes the following impact categories:</p> <ul style="list-style-type: none"> - Climate Change - Depletion of stratospheric ozone layer - Acidification - Eutrophication - Formation of tropospheric ozone | <p>ISO 21930, Section 8.2.2.1</p> |
| <p>The EPD includes the aggregated inventory flows:</p> <ul style="list-style-type: none"> - Depletion of non-renewable energy resources - Depletion of non-renewable material resources - Use of renewable material resources - Use of renewable primary energy - Consumption of freshwater - Hazardous waste or non-hazardous waste. | <p>ISO 21930, Section 8.2.2.2 and 8.2.2.3</p> |
| <p>Requirements for EPD intended for business-to-consumer communication.</p> | |

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| <p>No part of the content required by the PCR in the EPD is omitted or simplified for business-to-consumer communication.</p> <p>UNLESS: The EPD is based on the life cycle of the product unless information on specific stages is not available and reasonable scenarios cannot be modelled, or these stages are environmentally insignificant. A statement on any omissions is included in the EPD, as well as any assumptions made in order to produce the EPD based on the life cycle of the product.</p> | <p>ISO 14025, Section 9.2.1</p> |
| <p>The EPD includes contact information for the manufacturer so that explanatory material may be obtained.</p> | <p>ISO 14025, Section 9.2.3</p> |
| <p>The EPD states that the verification was performed by a competent third party</p> | <p>ISO 14025, Section 9.4</p> |
| <p>Requirements for EPD of Building Products, prepared based on a PCR normative to ISO 21930:2017 Verification Requirements</p> | |
| <p>The EPD shall include the following main parts as a minimum for B2B communication:</p> <ul style="list-style-type: none"> — declaration of general information (see 9.2); — declaration of the methodological framework (see 9.3); — declaration of technical information and scenarios (see 9.4); — declaration of environmental indicators derived from LCA (see 9.5); — declaration of additional environmental information (see 9.6); — references (see 9.6.1). | <p>See requirements below</p> |
| <p>For B2C communication, the development and content of EPDs shall follow ISO 14025 and any relevant sub-category PCR that are in accordance with ISO 21930:2017.</p> | <p>ISO 21930 Section 9.1</p> |
| <p>The following shall be declared in the EPD:</p> <p>a) the name and address of the EPD holder(s) (manufacturer, association, service provider, etc.);</p> | <p>ISO 21930 Section 9.2</p> |

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| <p>b) the description of the construction product's intended application and use (as identified when determining the product RSL), where relevant;</p> <p>c) construction product identification by name (including any product code) and a simple visual representation, if relevant, of the construction product or work to which the data relates;</p> <p>d) a description of the main product components or material that make up the construction product or work, given in percentage;</p> <p>f) name of the EPD programme used and the programme operator's name, address, logo and website;</p> <p>g) a reference to this document and, if used, the sub-category PCR version number, publisher and year published;</p> <p>h) the date the declaration was issued;</p> <p>i) the end of the period of validity (e.g. 5 years);</p> <p>j) a statement that EPDs are comparable only if they comply with this document, use the same sub-category PCR where applicable, include all relevant information modules and are based on equivalent scenarios with respect to the context of construction works;</p> <p>l) any other environmental certification programme applied to the product and a statement on where an interested party can find details of the certification programme, if relevant;</p> <p>m) other environmental activities of the organization, such as participation in recycling or recovery programmes, provided that the details of these programmes are readily available to the purchaser or user and contact information is provided, if relevant;</p> <p>o) information on where explanatory material may be obtained.</p> | |
| <p>The information given in Figure 3, excluding the footnotes, shall be completed and presented in the EPD.</p> | <p>ISO 21930 Section 9.2</p> |

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| <p>ISO 21930:<insert year of publication>— serves as the core PCR</p> <p><Sub-category PCR, if relevant></p> <p><PCR review^{a,b,c} was conducted by:></p> <p><Sub-category PCR review^{a,d,e} was conducted by:></p> <p><name and organization of the panel chair, and their contact information^f></p> <hr/> <p>Independent verification of the declaration and data, according to ISO 21930: <insert year of publication> and ISO 14025: <insert year of publication></p> <p><input type="checkbox"/> internal <input type="checkbox"/> external</p> <hr/> <p>Third party verifier:</p> <p><Name of the third party verifier></p> <hr/> <p>^a If relevant. ^b Any overarching PCR shall be in accordance with this document, particularly 6.1 and 6.2. ^c Any overarching PCR review shall be in accordance with 6.1. ^d Sub-category PCR shall be in accordance with 6.1, 6.2 and 6.3. ^e Sub-category PCR review shall be in accordance with 6.3. ^f The specific details of the review, including those to be named in the EPD, are the responsibility of the Programme Operator. ^g Where appropriate — optional for B2B communication; mandatory for B2C communication (see ISO 14025:2006, 9.4).</p> | |
| <p>The EPD shall specify the following:</p> <ul style="list-style-type: none"> — functional unit or declared unit depending on type of EPD; — the type of EPD with respect to life cycle stages covered as given in 5.2.2; — life cycle stages covered and not covered; — for declarations representing an average of similar products from the same or different manufacturer, a description of what the average represents as stated in 5.3; — the reference conditions for achieving the declared technical and functional performance and the RSL, where relevant as described in 7.1.4; — allocation procedure; — cut-off procedure; — declaration of technical information and scenarios. | <p>ISO 21930 Section 9.3</p> |
| <p>The information modules A1 to A3 are mandatory for the three types of EPDs (cradle-to-gate, cradle-to-gate with options, and cradle-to-grave).</p> | <p>ISO 21930 Section 9.4.1</p> |
| <p>If additional technical information is provided in the EPD for any information modules beyond the factory gate, the information to specify the product’s scenarios or to support development of the scenarios describing the product’s installation or use at the level of the construction works assessment shall be provided as described in 7.1.7.3 to 7.1.7.5. Any scenarios for module D shall be reported in the EPD as described in 7.1.7.6.</p> | <p>ISO 21930 Section 9.4.1</p> |

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| <p>The following predetermined core indicators are required and shall, as a minimum, be specified for all information modules included in the EPD:</p> <ul style="list-style-type: none"> — global warming potential (GWP); — depletion potential of the stratospheric ozone layer (ODP); — eutrophication potential (EP); — acidification potential of soil and water sources (AP); — formation potential of tropospheric ozone (POCP). | <p>ISO 21930 Section 9.5.1</p> |
| <p>The following parameters derived from LCI shall, as a minimum, be included and specified for all information modules:</p> <ul style="list-style-type: none"> — use of primary resources (several indicators); — use of secondary resources (several indicators); — abiotic depletion potential for fossil resources (ADP_{fossil}); — consumption of freshwater resources; — waste and output flows (several indicators). | <p>ISO 21930 Section 9.5.2</p> |
| <p>Use of primary and secondary resources and recovered energy shall be provided for the impact category indicators listed. The inventory indicators describing primary and secondary resource use and recovered energy shall not be combined, aggregated or amalgamated with one another.</p> | <p>ISO 21930 Section 9.5.2</p> |
| <p>The following indicators shall be included for transparency and specified for all information modules, where the respective flows occur:</p> <ul style="list-style-type: none"> — removals and emissions associated with biogenic carbon content of the bio-based product; — emissions from calcination and removals from carbonation; — removals and emissions associated with biogenic carbon content of the bio-based packaging; — emissions from combustion of waste from renewable sources used in production processes; — emissions from combustion of waste from non-renewable sources used in production processes. | <p>ISO 21930 Section 9.5.2</p> |

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| <p>The output flows that have crossed the system boundary between product systems shall be declared and specified for all information modules.</p> | <p>ISO 21930 Section 9.5.2</p> |
| <p>Regulated substances of very high concern shall be declared, if relevant. Reporting of substances of very high concern shall include:</p> <ul style="list-style-type: none"> — a description of the regulated substance, — the chemical abstracts service (CAS) number, and — a reference to standard(s) or regulation(s) applicable for the relevant market. | <p>ISO 21930 Section 9.6</p> |
| <p>A list of references used shall be provided.</p> | <p>ISO 21930 Section 9.6.1</p> |