

# ICC-ES EPD Program Instructions

## Program Instructions for the ICC Evaluation Service (ICC-ES) EPD Program on Building and Construction Products and Materials

To ensure comparability of Environmental Product Declarations (EPDs) that are conducted internationally in different business sectors, the International Organization for Standards, ISO, developed ISO14025, "Environmental labels and declarations — Type III environmental declarations — Principles and procedures," which provides a framework for the development of PCRs and EPDs, and the establishment of an EPD Program. This document fulfills the requirement of establishing an ICC-ES EPD Program, referred to as "*Programme Instructions*" in ISO 14025. ISO also requires that "the general programme instructions shall be available to any person on request."

### Program Scope

The scope of the ICC-ES EPD Program is to develop and publish Type III EPDs for building and construction products intended for use on the interior and/or exterior of buildings or sites. This includes, but is not limited to, products and materials, manufactured in North America, that are regulated by any of the model codes promulgated by the International Code Council.

### Program Operator

ICC-ES is a Program Operator responsible for the preparation, maintenance, and communication of general program instructions governing the development of Product Category Rules, sub-category PCRs (hereinafter referred to as 'PCRs') and EPDs for building and construction products.

As Program Operator, ICC-ES is responsible for the ICC-ES EPD Program, which may include setting up product forums to develop and implement product category rules (PCRs) for a variety of products, commissioning life-cycle assessment (LCA) studies, developing EPD documentation, appointing a third-party verifier to verify EPDs, and partnering with other accredited Program Operators for the verification and development of EPDs and PCRs, respectively.

### Program Objectives

The ICC-ES EPD Program has been established to develop PCRs and EPDs in accordance with ISO 14025, ISO 14020 ("Environmental labels and declarations — General principles"), and ISO 21930-2017 ("Building construction – Sustainability in building construction – Environmental declaration of building products"). The objective is to develop credible, comparable and consistent EPDs for Business-to-Business (B-to-B) applications. The EPDs will be intended to assist purchasers and users to make informed comparisons between products; however, they will not be comparative assertions.

In order to achieve these objectives, the process will include:

- Selection of an existing suitable PCR where one exists, and modification as required to create specific PCRs for the products under consideration
- Establishment of a transparent procedure for the review of new PCRs, including details of the review process and how the PCR review panels are constituted

- Obtaining, commissioning or undertaking LCAs to develop and prepare EPD documents
- Ensuring the selection of competent independent verifiers and PCR review panel members
- Publishing Type III environmental declarations within the program
- Maintaining publicly available lists and records of PCR documents and Type III environmental declarations within the program
- Implementing changes in procedures related to the program, and revising and reissuing the program documents when necessary

## Intended Audience

The intended audience for the EPDs is Business-to-Business (B-to-B).

## Definition of Product Categories

The United Nations Standard Products and Services Code (UNSPSC®) will serve as the framework for establishing product categories. In cases where inadequate distinction is present within the UNSPSC® to adequately distinguish product categories in the functional context of LCA and product declarations, the general UNSPSC® code will be supplemented with a separate identifier to define the unique characteristics of the product category in question.

## Involvement of Interested Parties

Comments will be solicited from interested parties in both the development of the ICC-ES program instructions, and all PCRs developed under this program. As required, interested parties for review and consultation on PCRs will be identified from the stakeholder groups listed in ISO 14025 for B-to-B applications. The appropriate ones having adequate knowledge of the products under consideration and their life cycle environmental stresses, will be selected. ICC-ES will publish the names of the organizations involved in the development and review process.

The interested parties may include, but are not limited to, material suppliers, manufacturers, trade associations, purchasers, users, consumers, nongovernmental organizations (NGOs), public agencies and, when relevant, independent parties and certification bodies.

Where required, ICC-ES will set up a PCR Review Panel that consists of a Chair and two or more invited members for the PCR consultation processes. The Chair will provide adequate time for the review and make reasonable efforts to reach consensus throughout. The Chair will also make sure that the PCR Review Panel members receive consideration of their responses within a reasonable time.

ICC-ES will select members so that there is a reasonable mix of perspectives and competencies on the review panel. The combined competencies of the review panel should include the following:

- General background knowledge of the building and construction material sector, building and construction products and related environmental aspects.
- Expertise in LCA methodology and LCA framework, and knowledge of EPD principles and procedures defined in the applicable ISO standards.

To make sure members of the Review Panel fulfill competency requirements, ICC-ES shall collect information on the experience and training of potential members and choose the membership based mainly on this documentation. The documentation will become part of the permanent record for each EPD project.

The reviewers shall seek to determine that the PCRs are developed in accordance with the guidelines stated in ISO 14025 and ISO 21930, and support credible, comparable and consistent EPDs. In addition, PCRs should meet the following criteria:

- PCRs should be consistent with the rules defined under the ISO 14040:2006 series for the goal and scoping of LCA studies.
- Functional units and allocation and calculation rules must be adequate for the product categories.
- The selection of life-cycle impact assessment (LCIA) indicators and additional information to be reported is done in accordance with the guidelines stated in ISO 21930.

### **Data Confidentiality Management**

While the bulk of published life-cycle inventory (LCI) data that will be used is aggregated and publicly available, there may also be specific foreground manufacturing process data that may require protection (e.g., proprietary technology). Any confidential data or information supplied by or on behalf of parties seeking an EPD will not be used for any purpose other than in connection with the generation of EPDs in accordance with ICC-ES's EPD Program.

1. All data will be kept strictly confidential, as set forth in Section 12.0 of the ICC-ES Rules of Procedure, except for data and information that is required to be published in the EPD in accordance with the applicable PCR.
2. ICC-ES will use its best efforts to prevent access by unauthorized persons to confidential information, and its employees, subcontractors and stakeholder experts will have entered into confidentiality agreements prior to having access to any such confidential information.
3. All electronic and hardcopy data will be archived for any future communication with the client in a secure format and location when the EPD has been formally issued. Archived data will be retained for three years after the expiration of the EPD.

### **Procedure for development and maintenance of a PCR**

Prior to the development of a PCR document, an extensive search will be performed to review all published PCRs for products in similar industry sectors performing similar functions. If no PCR is adequately representative or within its period of validity, a new PCR will be commissioned that will be based on one or more life cycle assessments or other relevant studies, such as the most relevant PCRs identified in the review process.

ICC-ES will prepare draft PCRs for relevant construction products and then finalize drafts based on the comments and recommendations received during consultation with a PCR Review Panel. The PCRs will contain the intended application, product category definition and description, goal and scope of the LCA-based information for the product category, other relevant studies (such as the most relevant PCRs identified during the review process), reference service life (where applicable), and rules on producing the additional environmental information. The PCRs will also contain the details on the life-cycle stages (information modules) to be included, procedure for inventory analysis, the parameters to be covered, the way in which the parameters are collated and reported, and the period of validity.

Period of validity will be determined based on the information on technological development trends in resource extraction and manufacturing sectors (collected from the manufacturers) and comments received during consultations. Parameters will be selected in conformance with the guidelines provided in ISO 21930.

## Development of LCA-based Information for EPDs

ICC-ES will verify that LCAs are performed in accordance with ISO standards and the finalized PCRs for the product categories under consideration.

### Procedure for Verification of EPDs

The product manufacturer shall provide the EPD project documentation, as required by ISO 21930, clause 10.1. While it is not mandatory in ISO 14025 for B-to-B EPDs, ICC-ES will endeavor to confirm that independent verifiers review and verify all EPDs. The verifier may be an individual or verification body with knowledge of the building and construction products sector and related environmental aspects, with process and product knowledge of the product category, and be an expert in LCA and methodology. The verifier should be competent in relevant standards in the fields of environmental labeling and declarations, the regulatory framework within which requirements for Type III environmental declarations have been prepared, and the Type III environmental declarations program.

The chosen verifier will:

- Conduct an independent review of the LCA/LCI on which the declaration is based.
- Generate reports to state whether or not the information given in the EPDs is valid, scientifically sound, and conforms to the relevant PCRs.
- Comment on the consistency of EPD information with LCA and LCI data and additional environmental information.

With regard to EPDs based on previously peer-reviewed LCAs, the verifier will perform a background document analysis of the LCA documents to determine if the peer review has been carried out in accordance with the ISO guidelines and to ensure that the LCA is in conformance with the PCR.

## Funding Sources

ICC-ES operates as a non-profit, limited liability company (LLC) under the International Code Council (ICC). ICC-ES has no financial interest in, or is not financially dependent upon, any single company manufacturing the product being inspected or tested; it is not owned, operated, or controlled by any such company.

## Periodic Review of Program Instructions

ICC-ES will review the program instructions every three years to determine that documents are up-to-date.

## Maintaining Publicly Available Lists and Records of PCR Documents and EPDs

ICC-ES will maintain a publicly available list of all [PCRs](#) and valid [EPDs](#) completed within the program, and make that list available to the public via the Internet. EPDs are considered to be the property of the manufacturers (or relevant associations, or organizations seeking the EPD). All EPDs developed under this program will be made publicly available as required by ISO 14025.

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