

THE GREEN STANDARD

PROGRAM OPERATING RULES FOR THE EPD PROGRAM of The Green Standard

1 General program rules

1.1 Scope of the program

The program will support the development and publication of Type III environmental product declarations (EPDs) for any product or service.

1.2 Objective of the program

To develop credible, comparable and consistent EPDs for business to business communication primarily.

1.3 Program operator

As the program operator, The Green Standard prepares, maintains and communicates the general program rules. Tasks of the program operator are:

- Appointing the third party verifier for the verification of the EPD
- Establishing the required procedure for the verification
- Inviting industry and LCA experts to participate in development of Product Category Rules when needed and engaging a committee of third party experts to review the committee's work. The procedures for PCR development shall follow strictly the requirements of ISO 14025

1.4 Involvement of interested parties

Interested parties are involved in developing the program rules and the PCR documents when The Green Standard has been asked to serve as the facilitator. Then the program operator is responsible for inviting members of all stakeholder groups and facilitating their participation in an open consultation process.

1.5 Product category rules

The Green Standard shall only register EPDs which are based on third party reviewed PCRs. In the case of a PCR development led by The Green Standard, the program operator defines the product categories and the definition becomes part of the PCR.

1.6 Compliance with relevant standards

EPDs developed under this program shall comply with the international standards for Type III environmental product declarations and LCA:

- ISO 14020 Environmental labels and declarations —General principles
- ISO 14025 Environmental labels and declarations – Type III environmental declarations – principles and procedures

EPD data shall be calculated and documented in accordance with:

- ISO 14040 Environmental management —Life cycle assessment — Principles and framework
- ISO14044 Environmental management —Life cycle assessment — Requirements and guidelines

1.7 Data confidentiality management

Any data submitted to The Green Standard shall be handled within the framework of a confidentiality agreement signed with the relevant manufacturer. A verifier appointed by The Green Standard for verifying within The Green Standard EPD program shall have access to such data that can reasonably be considered relevant to the verification process. The verifier shall handle all data related to the EPD verification process confidentially.

2 Maintaining a publicly available list of verified PCRs

The program operator maintains a publicly available list of all valid and reviewed PCRs applied by The Green Standard EPD program. The list and PCR documents are to be accessible at www.TheGreenStandard.org where there will be a link to the GEDNet PCR database as soon as this database is online.

3 Monitoring related EPD programs

The program operator strives to keep up-to-date on the general rules of related programs and PCR development. The goal is to make EPDs registered by The Green Standard as consistent as possible with those in other EPD programs around the globe in order to support use of that information with building rating and green procurement tools. When it improves consistency and applicability, without compromising the data quality, PCRs for the same product category but from different programs may be used in an aligned format.

4 Requirements for the use of PCR documents by The Green Standard

As stated in 1.5, The Green Standard shall only apply PCR documents reviewed by a third party review panel. Only review processes conducted according to ISO 14025 shall be accepted as described below:

A third party review panel reviews the PCR. The manager of the review process (e.g. a program operator) shall ensure a reasonable mix of interested party perspectives and competencies. It shall not include any producers of construction products dealt with in the reviewed PCR. Nor shall any member financially connected with the review manager invite members of the review. The review panel shall at minimum consist of a chairperson and two other members. The combined competencies of the PCR review panel should include:

- General knowledge of relevant sector, product and product-related environmental attributes;
- Expertise in LCA and methodology for LCA work;
- Awareness of relevant standards in the fields of environmental labeling and declarations and LCA;
- Knowledge of the regulatory framework within the scope of the PCR;
- Knowledge of the relevant EPD programs which potentially will apply the PCR for their registered EPD.

A review statement should be prepared by the chairperson for the PCR development and reviewed by a third party review panel. The review statement may also be prepared in its entirety by the review panel. The final review statement and any response to recommendations made by the reviewers shall be included in the PCR document.

The PCR review shall ensure that:

- The PCRs support credible, comparable and consistent EPDs;
- The rules of ISO 14040 and 14044 are followed, in particular, the provisions for defining scope and goal of a LCA study. Care should be taken that the provisions for functional or declared unit or allocation and calculation rules are adequate for the product category;
- The PCRs are based on experience with LCA studies carried out in compliance with ISO 14040.
- The selection of LC-Indicators and additional information to be reported is adequate for the product category under study-- e.g. no relevant information is missing
- Other information is based on scientifically-sound methodology and is verifiable.

5 Procedure for the third party verification of EPD

One or more independent third party expert(s) shall review the plausibility of the underlying LCA for the relevant product category. The verification procedure shall be transparent. The verification procedure shall include data from LCA, LCI and information modules, and additional environmental information. It shall confirm:

- Conformance with the PCRs and whether the information given in an EPD accurately reflects the information in the documents on which the declaration is based and whether this information is valid and scientifically sound,
- Conformance with ISO 14040 series of standards,
- Conformance with general program instructions,
- Plausibility, quality, accuracy of the
- LCA-based data and its completeness
- additional environmental information,
- additional technical information
- supporting information.

The procedure proposed in this program requires that:

- The manufacturer or the LCA practitioner appointed by the manufacturer supplies the verifier with a project report. The project report describes the LCA work underlying the EPD as detailed in Annex 1. It is not available to the public.
- The independent verifier generates a report documenting the results of the verification process, while adhering to his obligations for data confidentiality. This report shall be available to any person upon request.

The program operator appoints the verifier(s). Members of the review panel can also act as verifiers for the EPD. The minimum requirements for the verifiers in terms of competence are the following:

- Knowledge of industry, product and product-related environmental matters;
- Process and product knowledge of the product category;
- Expertise on LCA and methodology for LCA work;
- Knowledge of the relevant standards in the field of environmental labeling and declarations, and life cycle assessment;
- Knowledge of the regulatory framework in which requirements for environmental declarations have been prepared;
- Knowledge of the program for Type III environmental declarations.

6 Maintaining a publicly available list of verified EPDs

The program operator maintains a publicly available list of all verified EPDs registered by the manufacturers using this program. The list is accessible via the Internet. The short and/or long version of the EPD can be made available by the program operator via the Internet, if the manufacturers agree.

7 Establishing procedures to avoid misuse of references to the program and its logo

The general legal requirements for the protection of rights on intellectual property apply. The program operator develops a procedure to follow up on of references to the program and its logo. However, the operator is not required to keep track of all applications of EPD developed under this program. It is the responsibility of manufacturers using the program to keep the operator informed of where the EPD is referenced.

ANNEX 1 Reporting

Project report¹ [adapted from ISO 14044, chapter 7]

The project report summarises the project documentation in a systematic and comprehensive manner in order to fully support an effective verification of the EPD. The project report should be prepared in accordance with the requirements and guidance of ISO 14044 for third party reports as outlined below.

The project report should contain any data and information of importance for the information published in the EPD. Special care is necessary to demonstrate in a transparent way how the data and information declared in the EPD results from the LCA study.

The project report is not available to the public. However to facilitate verification it is considered good practice to make quantitative (possibly confidential) information available to the verifier, be it as part of the project report, be it as separate confidential information accompanying the project report as outlined in chapter 2 - Data availability for verification.

1. LCA-related elements of the project report²

Results, data, methods, assumptions and limitations and conclusions of the LCA should be completely and accurately reported without bias. They should be transparent and presented in sufficient detail to allow the independent verifier to comprehend the complexities and trade-offs inherent in the LCA. The report should also allow the results and interpretation to be used in support of the data and additional information made available in the respective EPD.

The project report shall address the following LCA-related aspects³:

1) **General aspects:**

- a) LCA commissioner, practitioner of LCA (internal or external);
- b) date of report;
- c) statement that the study has been conducted according to the requirements of the International Standards ISO 14040 and ISO 14044.
- d) description of the life cycle of the declared product as a flow chart

2) **Goal of the study:**

- a) reasons for carrying out the study and its intended application, *i.e.* providing information and data for an EPD;
- b) the target audiences, *i.e.* EPDs for business-to-business and/or business-to-consumer communication.

3) **Scope of the study:**

- a) declared/functional unit, including:
 - i) definition, including relevant technical specification(s);

¹ Adapted from ISO 14044

² adapted from ISO 14044, 5.1.1

³ adapted from ISO 14044, 5.2

- ii) calculation applied for averaging data if the declared/functional unit consists of:
 - (1) a group of similar products, the same product produced at different production sites;
- b) Description of the system boundary according to the modular approach (preferably as a flow chart or other visualisation) including
 - i) omissions of life cycle stages, processes or data needs;
 - ii) quantification of energy and material inputs and outputs, taking into account that plant-level data might need to be attributed to the declared products; and
 - iii) assumptions about electricity production and other relevant background data;
- c) cut-off criteria for initial inclusion of inputs and output, including
 - i) description of the application of cut-off criteria and assumptions;
 - ii) list of excluded processes.

4) Life cycle inventory analysis:

- a) qualitative/quantitative description of unit processes defined to model the life cycle stages of the declared unit, taking into account this program's rules on data confidentiality; This can be done e.g. by showing the models developed by the LCA software applied, e.g. through the relevant screen shots of the applied software.
- b) sources of generic data or other literature used to conduct the LCA; This should preferably be done by a table listing the most sensitive data sets.
- c) validation of data, including
 - i) data quality assessment; and
 - ii) explanation how missing data is treated;
- d) allocation principles and procedures, including
 - i) documentation and justification of allocation procedures; and
 - ii) documentation of uniform application of allocation procedures.

5) Life cycle impact assessment:

- a) the LCIA procedures, calculations and results of the study.
Mean value and data range should be stated if generic data is declared from several plants or for a range of similar products;
- b) the relationship of the LCIA results to the LCI results;
- c) reference to all characterization models, characterization factors and methods used, as defined in the respective PCR;
- d) a statement that the LCIA results are relative expressions and do not predict impacts on category endpoints, the exceeding of thresholds, safety margins or risks.

6) Life cycle interpretation:

- a) the results;
- b) assumptions and limitations associated with the interpretation of results as declared in the EPD, both methodology and data related;
- c) data quality assessment;
- d) full transparency in terms of value-choices, rationales and expert judgements.

2. Documentation on additional environmental information

The project report shall include any documentation on additional environmental information declared in the EPD as required in the respective PCR and by the general program instructions. Such documentation on additional environmental information can include, e.g. as copies or references:

- 1) laboratory results/measurements for the content declaration;
- 2) laboratory results/measurement of functional/physical performance;
- 3) laboratory results/measurements for the declaration of health and comfort aspects;
- 4) laboratory results/measurements for the declaration of eco-toxicological aspects;
- 5) certificates for quality or environmental management systems in place;
- 6) documentation on required information on life cycle stages not considered in the LCA of the building product that will be used for the assessment of buildings (e.g. transport distances, service life estimates according to ISO 15686, energy consumption during use, length of cleaning cycles, etc.).

D) DATA AVAILABILITY FOR VERIFICATION

To facilitate verification it is considered good practice to make the following information available to the verifier, taking into account data confidentiality:

- 1) analysis of material and energy flows to justify their inclusion or exclusion;
- 2) quantitative description of unit processes that are defined to model processes and life cycle stages of the declared unit;
- 3) attribution of process and life cycle data to datasets of an LCA-software (if used);
- 4) LCIA results per modules of unit processes, e.g. structured according to life cycle stages;
- 5) LCIA results per production plant/product if generic data is declared from several plants or for a range of similar products;
- 6) documentation that substantiates the percentages or figures used for the calculations in the end of life scenario;
- 7) documentation that substantiates the percentages and figures (number of cycles, prices, etc.) used for the calculations (number of cycles, prices, etc.) in the allocation procedure, if it differs from the PCR.