

General Program Instructions

for The Institute of Global Sustainability Certification

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1. INTRODUCTION

This document constitutes the General Program Instructions(hereafter referred to as GPI) of the Institute of Global Sustainability Certification(hereafter referred to as IGSC). This document represents the main technical document of the IGSC and form the basis of the overall administration and operation of a program for type III environmental declarations according to ISO 14025.

A Type III environmental declaration developed in the program is referred to as an Environmental Product Declaration (hereafter referred to as EPD).

1.1 VERSION HISTORY

This document has been issued in the following versions:

- 1st-JAN-2022: Version 1.0
- 3rd-JAN-2023: Version 2.0

References to this document should be:

IGSC (2022) General Program Instructions for the IGSC. Version 2.0. www.igsc.kr

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2. PROGRAM OBJECTIVES AND SCOPE

The IGSC has, as a main objective, the ambition to enable and support organizations to communicate environmental performances for products and services in an understandable and credible manner by offering verified and approved EPD.

This is done by offering a voluntary program for verified EPD according to

- ISO 14025, ISO 14040/14044, and other relevant standards or methodology guides,
- EN 15804 and/or ISO 21930 for construction products (including both goods and services),
- ISO/TS 14027 for the development of Product Category Rules (PCR)
- EN 50693:2019 Product category rules for life cycle assessments of electronic and electrical products and systems, and
- ISO 14067 and ISO 14046 for the calculation of carbon footprint- and water footprint-related indicators.

IGSC shall contribute to the creation of standardized, verified, and life cycle-based environmental information, and promote automation and digitalization. And IGSC shall promote cooperation and harmonization with other environmental declaration programs. Also, IGSC shall constantly make bilateral mutual recognitions with established program operators as encouraged by ISO 14025.

The scope of the program includes any type of product and service from any organization in any country where there is a market demand to communicate its life cycle-based environmental information. EPDs are open to a number of applications and target audiences, including but not limited to business-to-business and business-to-consumer communication. It is the responsibility of the Each declaration owner making any claims to ensure that they are compliant with national laws or regulations in the relevant geographical area.

3. PROGRAM ORGANIZATION AND ROLES

IGSC is structured according to the following activities:

- Program Administration
- PCR development and/or approval (other EPD Program operator's PCR)
- EPD development
- EPD verification and publication

3.1 Program Administration

They are managing internal and external verifiers and analysis and Final decisions on verification as the body performing 3rd party verification, and conduct duties as set out in the ISO 14025 chapter 6.3.

3.2 Technical Committee

They are Third party panel of external experts reviewing the PCR(s) as set out in ISO 14025 chapter 8.1.2 and reviewing GPI and providing expert advice on operation and future development of the program.

3.3 Verification Committee

They are third party EPD verification experts with experience from various sectors and performing duties as third-party verifier under program responsibility as outlined in ISO 14025 chapter 8.

3.4 Mutual recognition (MR)

IGSC will strive to harmonize the GPI with other program operators such that an EPD can be registered simultaneously in several programs. Mutual recognition agreements with other established programs shall include:

- The scope of the mutual recognition (e.g. only for environmental declarations for a specific product category),
- Licensing fee structures,
- Procedures for the harmonization of PCRs and PCR development,
- Procedures for verification,
- Procedures for registration and publication, including additional requirements if specified in an MR agreement, and
- Procedures to ensure that the conditions for the mutual recognition are kept valid.

3.5 Development of PCRs

IGSC shall ensure that the development of PCRs associated with the program follow the rules outlined in ISO 14025. During PCR development, efforts shall be made to harmonize the PCR with the goals of the program. A PCR group shall be established consisting of experts and stakeholders within that relevant product category. At the beginning of this work, a survey will be taken to determine if there are existing national or international PCRs for the product.

- Ensure (in cooperation with IGSC) that LCA/PCR experts and interested parties are invited to join the PCR group to develop the PCR document.
- Be responsible for the first draft document.
- Ensure that meetings of the PCR group are convened.
- Guide the process in the PCR group.
- Revise the draft PCR document.
- Ensure that the PCR document follows the IGSC PCR template.
- Ensure that the PCR document will be sent out for open consultation by the Secretariat.
- Collect comments and finalize the PCR document.
- Alert all involved parties of the result of the work and ensure, that the document is published on IGSC's website.

3.5.1 PCRs should contain the following information:

- General information
 - Name of PCR
 - Registration number and version
 - Identification of programme (IGSC), programme operator (IGSC), logotype, contact information, and reference to www.igsc.kr
 - Information about PCR Committee and PCR Moderator, including contact information for PCR Moderator,
 - Date of publication and latest revision
 - Date of validity
 - Schedule for renewal
 - Standards conformance, including version of GPI

- Scope of PCR
 - Product category definition and description (e.g. synonyms, function, technical performance, reference service life, and use)
 - Classification of product category using UN CPC code(s), and other relevant classification schemes
 - Products not covered by the PCR, if relevant
 - Geographical scope of the PCR
 - Maximum period of validity of EPDs based on the PCR

- PCR review and background information
 - Information about review, e.g. dates, review panel, chair of PCR review, and contact information
 - Information about open consultation
 - Existing PCRs for the product category and reasoning for developing the PCR
 - Reasoning for development of the PCR
 - Underlying studies used for the PCR development

- Goal and scope, life cycle inventory, and life cycle impact assessment
 - Declared/functional unit
 - Technical specification, lifespan or reference service life, where applicable
 - System boundary, including information on lifecycle stages not considered and omitted in the EPD, if relevant
 - System diagram
 - Cut-off rules
 - Allocation rules
 - Data quality requirements and selection of data
 - Environmental performance indicators, with reference to website for default list of -indicators and information on inventory and impact assessment methods, and adjustments or amendments of default list, if relevant
 - Other rules on calculations and scenario development, if relevant
- Instructions for the content and format of EPDs based on the PCR
- Requirements for comparability between EPDs
- Additional information
 - Materials and substances to be declared in a product content declaration
 - Rules for provision of additional environmental as well as social and economic Information
 - Mandatory statements, e.g. regarding verification
- List of abbreviations
- References
- Version history of PCR

3.6 EPD development

Companies that wish to prepare an EPD for registration and publication shall:

- Collect LCA data and other relevant environmental information according to the general program instructions and relevant PCR document.
- Process LCA information that will be necessary for the EPD.
- Prepare an LCA report and EPD report.
- Ensure that an approved, independent external verifier verifies the LCA data and EPD information.
- Routinely monitor the accuracy of the information in the EPD and notify the verifier about significant changes in the input data during both the development and the valid lifetime of the EPD.
- Ensure that the verifier sends a verification report with an enclosed EPD to IGSC for approval.
- Pay the annual fee and registration fee to IGSC.
- (if necessary) Give notice to IGSC concerning the withdrawal of the EPD.

4. PERFORM LCA STUDY BASED ON PCR

When developing an EPD, the environmental performance of the product shall be described from a life cycle perspective why one of the main steps is to carry out an LCA of the product. The LCA study may be performed by the organization itself (in-house) or with the help of a consultant with expertise in LCA and environmental declarations. To avoid conflicts of interest between a consultant and the verification, the cost of verification shall be set up and paid between the company and the verifier, and not be included in the offer from the consultant.

The LCA study shall comply with:

- the international accepted principles, framework, methodology and practices for LCA established by ISO 14040 and ISO 14044,
- the general purpose of EPDs in the collection of data, and the methods and assumptions used as advocated in the ISO standard 14025 and described in Annex A of the GPI, and
- the PCR applicable for the product category.

5. REQUIREMENTS OF EPDs

In general, the program operator will accept all Type III environmental declarations of a product category that include the parameters identified in the PCR. EPDs can be prepared in different languages, however IGSC recommends that EPD owners always publish an English version.

An EPD shall include the following sections:

• EPD's cover Page

- Product name and image
- Name and logotype of EPD owner
- The text "Environmental Product Declaration" and/or "EPD"
- Program: IGSC, www.igsc.kr
- Program operator: IGSC
- Logotype of the IGSC
- EPD registration number as issued by the program operator
- Date of publication (issue): 20XX-YY-ZZ
- Date of revision: 20XX-YY-ZZ, where applicable,
- Date of validity; 20XX-YY-ZZ.
- A statement of conformity with ISO 14025
- For construction products: a statement of conformity or non-conformity with EN 15804:2012+A1:2013, EN 15804:2012+A2:2019, or later versions of EN 15804 (if published), and ISO 21930

• Name of program and program operator

- the address of the program operator: IGSC, 604A, milaecheong, 684, Tongil-ro, Eunpyeong-gu, Seoul. 03371, Republic of Korea, E- mail: igsc@igsc.kr,
- the following mandatory statement from ISO 14025: "EPDs within the same product category but from different programs may not be comparable",
- for EPDs of construction products claiming compliance with EN 15804: "EPDs of construction products may not be comparable if they do not comply with EN 15804",
- a statement that: "The EPD owner has the sole ownership, liability, and responsibility for the EPD", and
- information about verification and PCR.

• Description of the product

- the address and contact information of the EPD owner,
- a description of the organization. This may include information on product-related or management system-related certifications (e.g. ISO 14024 Type I environmental labels, ISO 9001- and 14001-certificates and EMAS- registrations) and other relevant work the organization wants to communicate (e.g. SA 8000, supply chain management and social responsibility),
- the name and location of the production site,
- product identification by name, and an unambiguous identification of the product by standards, concessions, or other means,
- identification of the product according to the UN CPC scheme system. Other relevant codes for product classification may also be included, e.g.
- a description of the product,
- a description of the technical purpose of the product, including its application/ intended use,
- a description of the background system, including the main technological aspects,
- the geographical scope of the EPD, i.e. for which geographical location(s) of use and end-of-life the product's performance has been calculated,
- the declared/functional unit,
- the reference service life (RSL) and/or technical/actual lifespan, where applicable,
- the declaration of the year(s) covered by the data used for the LCA calculation and other relevant reference years,
- a reference to the main database(s) for the generic data and LCA software used, where relevant,

- a system diagram of the processes included in the LCA, divided into the life cycle stages,
- a description of the EPD system boundary is “cradle-to-gate”, “cradle-to-gate with options”, or “cradle-to-grave”,
- information on which life cycle stages are not considered (if any), with a justification for the omission, and
- references to any relevant websites for more information or explanatory materials.
- the name and contact information of the organisation carrying out the underlying LCA study,
- any additional information about the underlying LCA-based information, such as cut-off rules, data quality, allocation methods, and other methodological choices and assumptions, and
- a description of the material properties of the product with a declaration of relevant physical or chemical product properties, such as density, etc.

• Content declaration

The content declaration section shall declare the weight of one unit of the product, as purchased, and contain information about the content of the product in the form of a list of materials and chemical substances including information on their environmental and hazardous properties. The gross weight of each material/substance shall be declared, including a minimum of 99% of the materials/substances in one unit of the product. A content declaration may not be appropriate for EPDs for intangible products, such as services, which should be specified in the PCRs of such product categories.

In general, an indication that a product is “free” of a specific hazardous material or substance should be done with caution and only when relevant, following the rules in ISO 14021 on self-declared environmental claims.

Information on the hazardous properties of materials and chemical substances should follow the requirements given in the latest revision of the Globally Harmonized System of Classification and Labelling of Chemicals (GHS), issued by the United Nations or national or regional applications of the GHS. As an example, the following regulations should be used for EPDs intended to be used in the European Union:

- Regulation (EC) No 1907/2006 of the European parliament and of the council of 18 December 2006 concerning the Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH); and
- Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling, and packaging of substances and mixtures.

Additional requirements for the content declaration may be set by the PCR, e.g. which materials and substances to declare.

• Information on environmental performance

The results of the environmental performance indicators shall be declared per declared or functional unit and per included life-cycles stage (upstream, core, and downstream) or information module (A1 to A5, B1 to B7, etc.). Whether life-cycle stages or information modules should be used as the basis for declaration shall be specified in the PCR.

When indicator results are declared per life-cycle stage, also the total sum shall be declared. When indicator results are declared per information module, results shall not be added up into a total or sub-total of the life cycle stages (A, B, C, or D). As an exception, information modules A1, A2, and A3 may be aggregated to "A1-A3".

A PCR may require or recommend results for downstream processes to be declared separately for use/operation of the product and other downstream processes (e.g. end-of-life treatment), instead of being declared in aggregated form, if relevant for the product category.

• Additional environmental information

- the release of dangerous substances into indoor air, soil, and water during the use stage,
- instructions for proper use of the product, e.g. to minimise energy or water consumption or to improve the durability of the product,
- instructions for proper maintenance and service of the product, e.g. to minimise energy or water consumption or to improve the durability of the product,
- information on key parts of the product that determine its durability,
- information on recycling including, e.g. suitable procedures for recycling the entire product or selected parts and the potential environmental benefits gained,
- information on a suitable method of reuse of the product (or parts of the products) and procedures for disposal as waste at the end of its life cycle,

- a system diagram of the processes included in the LCA, divided into the life cycle stages,
- information regarding disposal of the product, or inherent materials, and any other information considered necessary to minimise the product's end-of-life impacts, and

• References

- A reference section shall be included, including a list of all sources referred to in the EPD, including the GPI (including version number), and PCR (registration number, name, and version) used to develop the EPD.
- The content of an EPD shall be accurate, verifiable, relevant and not misleading (see ISO 14020). An EPD shall not make comparisons with other products (see ISO 14025).

5.1 Registration of an EPD

When an EPD is to be registered, the verifier shall submit an electronic verification report to IGSC's EPD-approval and publication portal with the EPD as an attachment. The EPD shall include information about the manufacturer, place of manufacture, contact persons, who has created the EPD and who has carried out the verification.

IGSC will submit a registration form to the EPD owner/company. When the registration form is returned to IGSC, the EPD will be published on www.igsc.kr.

The EPD will remain on the website during the validity period or until the owner asks for revocation. IGSC can choose to withdraw the EPD based on violations of the program instructions

5.2 Costs and fees

There is a fee structure associated with the registration and publication of EPDs in the IGSC. These fees are the main source of funding for the operation of the program. The fees include a one-time registration fee and recurring fees (e.g. annual) to maintain registration, publication and the continued use of EPDs.

The fee structure and fee amounts are revised regularly and are approved by the Board of IGSC. The fee system is divided into the following main types:

- Registration fee
- Approval and publication fee for EPDs
- Verification and approval fee for EPD tools

The fee structure for approval and registration of EPDs is as follows:

- EPD owners pay an annual fee to IGSC independent of how many EPDs they own.
- EPD owners pay a registration fee for each approved and registered EPD. If a company withdraws an EPD before the expiry date, the fee shall be paid for the whole year within which the withdrawal was made.
- There is a one-time fee for the audit of an EPD in languages other than English.

5.3 Validity of an EPD

The validity period for an EPD registered with IGSC is 5 years. The EPD owner should initiate, in due time before expiry, revision of the EPD. If one or several impact categories increases by more than 10% during the validity period, the EPD owner must update the EPD.

5.4 Updating the EPD

An agreement should be established between the company and verifier to ensure that the content of the EPD during the validity period is still in line with production at the company.

The EPD owner is obliged to update the EPD if the environmental impact increases by more than 10% from when the data were published (e.g. due to a change in the production process, energy source, material use or supplier selection etc.). A company or organization might also request to update an EPD because of significant improvements in the environmental performance of the product.

If there is a need for adjustments to the EPD, the verifier must submit a verification report (online report) to IGSC with the adjusted EPD enclosed. It is not necessary to carry out a full LCA, only the changes affected by the adjustment need to be verified.

When updating an EPD, the same requirements shall be satisfied as when the original declaration was made. An announcement about the changes made in the EPD and the verification report shall be sent by the verifier to IGSC.

5.5 Withdrawal of an EPD

An EPD will remain registered and published on IGSC's website up until the EPD owner contacts IGSC via e-mail or in writing for withdrawal of the EPD. Alternatively, IGSC may withdraw an EPD if fees are not paid in time, or if the EPD contains errors that are not corrected by the EPD owner. A withdrawn EPD may no longer be used as it is no longer administered by a program operator and thus does not fulfil the requirements of ISO 14025.

The EPD owner may choose to let an EPD that has passed the period of validity to continue to be published. This may be relevant for products that are discontinued but remain available on the market or in use. In such cases, the organization is not allowed to use the expired EPD in marketing unless an exception is made by the program operator.

5.6 Feedback or complaints

It is possible to contact IGSC with feedback or complaints about registered and published EPDs, other documents published by the program or the appointment of individual verifiers. Such a complaint:

- must be written and sent to: igsc@igsc.kr,
- not be anonymous,
- include a clear description of the scope and nature of the complaint, and
- include a reference to the rule in the General Program Instructions, ISO 14025 or other standard or reference that refers to the topic of the complaint.

IGSC must respond to any complaints as soon as possible and contact the organizations that are affected. IGSC may temporarily withdraw the document in question from www.igsc.kr pending investigation or corrective action by the document owner. If corrective action is needed but not taken within a reasonable time, then the affected document or information will be withdrawn by IGSC.

6. VERIFICATION PROCESS

IGSC's verification system for Type III environmental declarations shall ensure that verification is carried out according to ISO 14025, section 8.1 "Procedure for review and independent verification" and the GPI.

Independent third-party verification of EPDs shall be in accordance with the EPD program, relevant product category rules (PCR), and relevant ISO, EN and KS standards. This includes verification of new EPDs and follow-up audits. Verification of the EPD according to ISO 14025 is divided into two parts:

- Independent verification of data according to ISO 14025, section 8.1.3.
- Independent verification of Type III environmental declarations according to ISO 14025, section 8.1.4

An approved verifier shall carry out both parts of the verification process, and the same person can perform both parts.

6.1 Requirements for carrying out verification

Requirements for carrying out independent verification are crucial for maintaining the acceptance and trustworthiness of EPDs in the market.

Verification shall be carried out under the auspices of the program operator in the case of individual verifiers.

Independent verifiers shall examine the EPD with emphasis on:

- Assessing the underlying data used in the LCA calculations.
- Checking how LCA-based calculations are carried out and that they are consistent with the calculation rules outlined in the PCR.
- Reviewing other additional information included in the EPD and ensuring that this information is included in the LCA report.

The verifier shall come from a third-party and have no conflicts of interest due to their position with the owner of the EPD. The verifier should not belong to the same organization that conducts and prepares the LCA report and the EPD.

If the verifier and the person preparing the LCA report and EPD belong to the same organization, then they should operate in separate units. Independence shall be ensured by accreditation according to ISO 17021.

If no such accredited system exists, independent verification shall be documented through written procedures in accordance with the requirements of ISO 14025.

6.2 Reporting of the LCA

The EPD shall describe the environmental performance of the product or service from a LCA report. A LCA is a method that describes the use of energy and materials and shows the potential environmental impact of a product or service either as part of the “cradle-to-gate”, “cradle-to-gate with options” or complete “cradle-to-grave” life cycle. This method includes the following steps:

- Definition of goal and scope of the LCA study
- Data collection, inventory of relevant activities and emissions from the materials and energy in a production system
- Environmental impact, an assessment of the potential environmental effects associated with use and emissions
- Interpretation of the results from the inventory and of environmental impact phases in relation to the goal and scope of the study
- Presentation of the results of the inventory in such a way that they can be used to prepare an EPD

The LCA shall be carried out according to the ISO standards for life cycle assessment (ISO 14040 and ISO 14044) as well as supplementary rules issued in the PCR and EPD program and documented in a LCA report.

6.3 Verification report

An approved and independent verifier shall complete the electronic verification report, available from IGSC, in English, and the EPD shall be included in the report and uploaded to IGSC's EPD- approval and publication portal.

7. REFERENCE

ISO 14025, 2010: Environmental labels and declarations - Type III environmental declarations - Principles and procedures

ISO 14040, 2006: Environmental management - Life cycle assessment Principles and framework

ISO 14044, 2006: Environmental management - Life cycle assessment - Requirements and guidelines

ISO 14046, 2016: Environmental management - Water footprint - Principles, requirements and guidelines

ISO 14067, 2018: Greenhouse gases -- Carbon footprint of products -- Requirements and guidelines for quantification and communication

ISO 21930, 2017: Sustainability in building construction - Environmental declaration of building products

ISO/TS 14027, 2017: Environmental labels and declarations — Development of product category rules

EN 15804:2012+A2:2019: Sustainability of construction works - Environmental product declaration - Core rules for the product category of construction products

EN 15942, 2011: Sustainability of construction works – Environmental product declarations – communication format business-to-business.

ISO 19011 Guidelines for Auditing Management Systems

ISO/IEC 17011 Conformity assessment – General requirements for accreditation bodies accrediting conformity assessment bodies

ISO/IEC 17065, 2012 : Conformity assessment – Requirements for bodies certifying products, processes and services

ISO/TS 14071 LCA Critical Review Process and Reviewer Competencies



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