



THE ENVIRONMENTAL PRODUCT DECLARATION PROGRAMME

Irish Green Building Council

Programme overview EPD Ireland

Quality assurance compliance with ISO
14025

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1.0 Introduction

This document sets out how the EPD Ireland programme will be run in compliance with ISO 14025¹. It also intends to follow the requirements of the Ecoplatform² audit checklist for EPD programme operators. The document sets out the procedures for the EPD Ireland programme, independent review and verification of Environmental Product Declarations (EPDs), the independence and competencies of verifiers and other rules pertaining to the quality and independence of EPD, in line with the requirements of ISO 14025. This is a living document which will be developed further as the EPD Ireland becomes a live programme.

2.0 General programme overview

2.1 Scope of the EPD Ireland programme

The EPD Ireland programme is currently limited to any product used in the construction, refurbishment, fit out of buildings, and in any built infrastructure, such as road, rail and waterworks.

2.2 Programme Objectives

The programme intends to encourage the development and use of Type III 3rd party verified EPD in the construction sector. The objectives of the programme are to:

- Create visibility for EPD in Ireland and increase the level of awareness around Life Cycle Assessment (LCA).
- Encourage architects, engineers and other construction professionals to specify products with transparent environmental declarations.
- Encourage the use of EPD in building level life cycle assessment to EN15978³ to support the reduction of environmental impacts at all stages of the building life cycle.
- Encourage suppliers to promote their transparent environmental declarations.
- Encourage manufacturers to carry out LCA on their products, develop transparent declarations, and innovate to reduce the environmental impacts of these products.

2.3 Programme Operator

The Irish Green Building Council (IGBC) will operate the programme, to be known as EPD Ireland. IGBC may choose to delegate some of the responsibilities such as maintenance of the verifiers register to other international and established programme operators who are audited members of Ecoplatform.

IGBC will maintain a platform within its own website for the publishing of EPD and all necessary information associated with the programme.

2.4 Programme compliance standards

The programme is designed to comply with the following standards:

¹ ISO 14025 Environmental labels and declarations - Type III environmental declarations - Principles and procedures (ISO 14025:2006,IDT)

² Ecoplatform is a group of EPD programme operators seeking to harmonise the development of EPD in Europe. <http://www.eco-platform.org>

³ EN 15978 Sustainability of construction works- Assessment of environmental performance of buildings- calculation method.

- ISO 14025 Environmental labels and declarations - Type III environmental declarations - Principles and procedures (ISO 14025:2006, IDT)
- ISO 14027⁴ Environmental labels and declarations — Development of product category rules
- EN 15804:2012+A1⁵ - Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products
- Irish Standard Recommendation S.R. CEN/TR 16970:2016⁶ - Sustainability of construction works Guidance for the implementation of EN 15804

3.0 Interested Parties

IGBC shall ensure that the development of Product Category Rules (PCR) is open for consultation for interested parties including industry, trade organisations, manufacturers and academic organisations. The period of consultation shall not be less than two months. Relevant documents will be published on the IGBC / EPD Ireland website and interested parties will be notified.

4.0 Procedure for review and independent verification

For an EPD to be credible, it must be verified by an independent and competent verifier with no direct connection to the producer who is creating the EPD.

4.1 Independence and competencies of verifiers and PCR review panel

4.1.1 Independence

The verifier will remain fully independent from the party commissioning the EPD. The verifier will be fully competent to verify the EPD. It is proposed that verifiers will be contracted with the EPD Ireland programme provider rather than with manufacturer. This avoids the risk of pressure by the manufacturer on the verifier to influence the outcome.

4.1.2 Competency of PCR review panel

IGBC has appointed a committee of national experts, to act as a PCR review panel. This committee is bolstered by international expertise drawn from other Programme Operators and verifiers, to ensure that there is the necessary competence and experience to review PCR in compliance with ISO 14025. This committee has overseen the creation of Part A Product Category rules for all products. IGBC shall establish a PCR review panel where there is a requirement to develop a PCR Part B for any particular product type.

4.1.3 Competencies of verifiers

IGBC shall only use verifiers who demonstrate competence to the National Verifier Accreditation body (NVAC). NVAC will be appointed by the IGBC based on their experience and competence.

⁴ ISO 14027⁴ Environmental labels and declarations — Development of product category rules

⁵ EN 15804:2012+A1⁵ - Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products

⁶ Irish Standard Recommendation S.R. CEN/TR 16970:2016⁶ - Sustainability of construction works Guidance for the implementation of EN 15804

IGBC will invite candidates to submit on an annual rotation an application to NVAC to be registered as a national verifier under the EPD Ireland programme. The intention is that there should be a panel of at least 3 – 5 verifiers.

Acceptance as an EPD verifier under the EPD Ireland programme may be based on a number or a combination of the following criteria depending on the exact requirements of NVAC:

- Academic qualifications in a relevant discipline.
- Practical experience in LCA (ISO 14040-14044)⁷⁸, EPD (ISO14025, EN 15804, ISO 21930⁹) and of construction branch and products / industry.
- Documented experience of carrying out review of published EPD.
- Mutual recognition through other recognised EPD programme.
- Interview with technical committee.
- Successful completion of a number of published EPD.

IGBC has agreed in principle that the NVAC will be administered by the International EPD programme based in Sweden. This programme has already listed a number of verifiers to work in Ireland and this will constitute the initial list of EPD verifiers under EPD Ireland Programme.

IGBC shall maintain and update the list of verifiers on the EPD Ireland platform. Any expert who wishes to be included on this list will apply to the NVAC.

4.2 Communication of changes in PCR to verifiers.

IGBC will communicate new developments in EPD standards to verifiers and ensure that new developments are included in program rules and PCRs. All updated PCRs will be located on the EPD Ireland platform.

4.3 Removal as EPD verifier from programme

NVAC may remove verifiers from the programme for a number of reasons such as the following:

- Where the verifier is no longer active and has verified no new EPD in the previous (12) months.
- Where the verifier is not deemed competent following audit of work.
- Where the verifier is guilty of gross professional misconduct.

NVAC will notify the verifier in writing of the intention to remove them from the panel in advance of the removal, and provide a reason for the removal.

⁷ ISO 14040:2006 - Environmental management - Life cycle assessment - Principles and framework.

⁸ ISO 14044 :2006 - Environmental management — Life cycle assessment — Requirements and guidelines

⁹ ISO 2190:2007 – Sustainability in building Construction- Environmental declaration of building products

4.4 Appeals process

An appeal process will be put in place by NVAC for verifiers who are notified of an intention to be removed from the panel of verifiers.5.0

Product Category rules (PCR)

Product category rules are the compilation of specific rules, requirements and guidelines to be used to create an Environmental Product Declaration (EPD). The EPD Ireland programme divides PCR into two parts: A and B.

Part A contains the life cycle assessment calculation rules for all product subgroups, which are developed and maintained by EPD Ireland programme National Expert Committee (NEC).

Part B regulates specific product subgroup requirements. These are only developed when there is a requirement by a manufacturer or trade group for more specific rules for a particular product type. EPD Ireland moderates the development of these PCR.

5.1 Development of PCRs -Expert review panel

IGBC has established an expert review panel for the development of Part A PCR. This is made up of key professionals and academics with expertise in LCA. This currently consists of representatives from the following organisations.

- EcoReview- Pieter Stadhouders, Peter Seymour
- IGBC - Pat Barry, Neoma Lira
- NUI Galway - Dr Jamie Goggins
- Raoul Empey - Sustaineo
- Transport Infrastructure Ireland Dr Billy O’Keefe
- UCD - Dr Nick Holden, Tom Oldfield

This also draws on international expertise available through membership of Ecoplatform. IGBC is a member of Ecoplatform, the organisation of European EPD Programme operators. It has received input from the following international programme operators and LCA experts during the development of the PCR Part A.

- EcoPlatform -Christian Donath
- BRE – Owen Abbe
- EPD Norway- Håkon Hauan
- IBU Germany- Burkhardt Lehmann
- EPD International – Sweden - Sven-Olof Ryding
- Thinkstep – Jane Anderson

5.2 PCR Part A

PCR part A was developed with the Expert Review Panel. This requires EPD under the EPD Ireland programme to comply with I.S. EN 15804 and SR Cen tr 16970 – 2016 which sets out further guidance for the adaptation of I.S. EN 15804 at a National level. A short addendum document : *Product Category Rules: Part A, Implementation and use of I.S.EN15804:2012 and CEN TR 16970:2016 in Ireland* provides additional requirements as follows:.

1. Environmental impact categories that are mandatory for use in the environmental impacts in the EPD.
2. Resource use categories that are mandatory for inclusion in the EPDs.
3. Life cycle stage modules that are mandatory for inclusion in the EPDs.
4. It also establishes that the Ecoinvent database is the recommended reference database to be used for the environmental impact records developing LCA and EPDs.
5. Default values for Module A4, transportation of goods from factory gate to place of use.
6. Default values for loss in the form of construction waste.
7. Default values for end of life scenarios waste to energy.

5.3 PCR Part B

It is not proposed to create PCR Part B for product subgroups until these are required. It is proposed that Ecoplatform will create a PCR register of existing PCRs in use by their members. In the meantime, IGBC shall consult with European Programme Operators who are members of EcoPlatform before developing a new PCR. This is intended to reduce unnecessary duplication of PCR, which creates problems with harmonisation of EPD across Europe.

If it is still necessary to create a Part B PCR, IGBC will follow ISO 14027 for the creation of Product category rules. Where a PCR needs to be developed and where there is no recognised European equivalent, EPD Ireland will convene the Expert Review Panel, to review the PCR. In all cases, there must be genuine justification for the creation of new PCR.

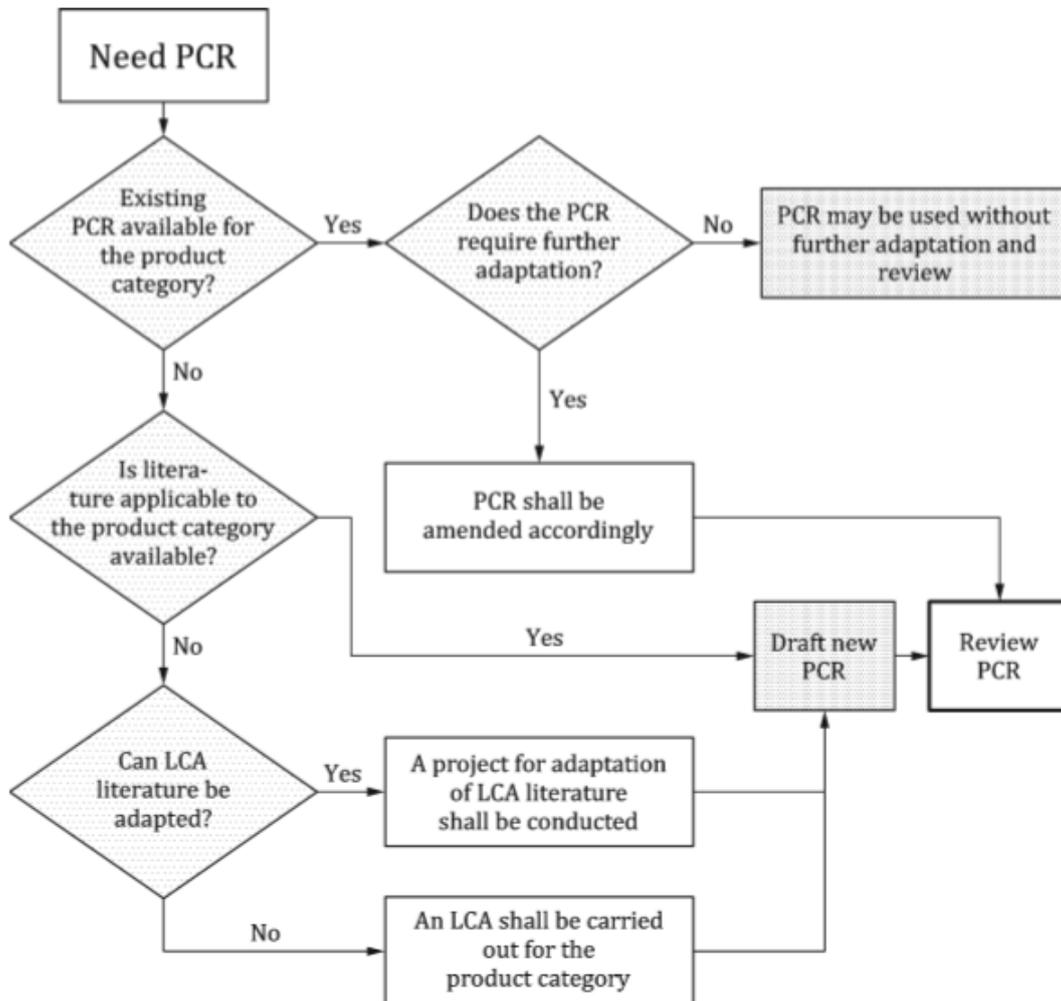


Figure 1. Guidance on the development of PCR – ISO 14027

5.4 PCR register

IGBC shall maintain an updated register of any PCRs that are created on the EPD Ireland platform.

6.0 Publishing of EPD

All verified EPD developed under the EPD Ireland programme will be published on the EPD Ireland platform located at the domain name www.epdireland.org. This platform will comprise information pages on the programme and a searchable EPD database.

The platform will also allow manufacturers and suppliers of construction products in Ireland to upload verified EPD from other programme operators. These will be checked by IGBC to confirm that they are genuine 3rd party verified EPD created under a recognised programme. The EPD Ireland platform will be open and freely searchable by the wider industry. It will serve as the central reference resource for EPDs for construction products used in the Irish construction industry.

The platform allows the user to search for EPD using various filters under different product sub groups, programme operator, manufacturer, compliance with EN 15804 etc.

EPD Ireland reserves the right in the future to restrict the platform to EPD that are compliant with EN 15804 and to mutually recognised EPD.

6.1 EPD template

EPD Ireland will provide a branded template that must be used in the creation of the EPD under the Irish EPD programme. This will follow the requirements of I.S. EN 15804 and be compliant with Ecoplatform requirements.

Where there is mutual recognition between EPD Ireland and other programme providers, EPD can be republished using the EPD Ireland template.

6.2 Fees

IGBC will publish a schedule of fees for the verification and publication of EPD on the EPD Ireland Platform.

6.2.1 EPD Verification fees

The producer of the EPD will pay the designated fee to IGBC for verification. Verifiers are contracted to IGBC to complete the verification and IGBC pays the verifier. This means that the actual fee must cover the time required to complete the verification. This typically takes just over one day for experienced verifiers, but may take longer where additional queries and clarifications arise. Therefore, the fees will be set to cover the average cost of fees for verifiers, plus programme overheads. There will be a lower cost per EPD where a number of EPD from a product group are verified at the same time.

6.2.2 EPD publishing fees

An annual fee will be charged for publishing the EPD on the EPD Ireland Platform.

IGBC may choose to offer discounted rates for IGBC members and for early movers who have existing EPD that they wish to upload on the IGBC EPD platform.

6.3 Mutual Recognition of EPD from other programme providers.

IGBC will seek to gain mutual recognition with other programme providers of the EPD provided under EPD Ireland. This is intended to reduce the cost for manufacturers and suppliers of publishing EPD under different programmes. It will also seek to offer the Ecoplatform accredited EPDs.

7.0 Auditing of EPD Ireland programme

IGBC is a member of Ecoplatform the organisation of EPD programme providers. To ensure quality and harmonisation of EPD programmes, Ecoplatform carries out audits on its members' programmes. The development of the EPD Ireland programme will be checked against the audit checklist provided by Ecoplatform with the intention that EPD Ireland would be audited by Ecoplatform to provide assurance of the quality and independence of the programme. This will then allow the EPD to be published as an Ecoplatform compliant EPD.

8.0 Rules for data confidentiality

IGBC has an internal policy for data confidentiality that is accessible at the following link:
<https://www.igbc.ie/privacy-policy/>.

IGBC is currently updating its internal procedures to comply with the General Data Protection Regulation which comes into force on 25th May 2018. This will ensure that all data retained from the programme will be secure and protected.

9.0 Use of EPD data in building level assessment.

IGBC has developed a business plan for the future use of EPD in building level LCA to the EN15804 standard. This proposes how EPD data be extracted to develop a National environmental database (NED) that can be used in building level assessment.

IGBC/EPD Ireland will publish a further document setting out how different categories of data should be treated in NED.

EPD are normally published as PDF documents. To make the data more useable it is intended to digitalise the data within the documents. This allows the integration of EPD into a database that can then be accessed by tools carrying out Building Level life cycle assessment to EN 15978.

IGBC intends to work with Ecoplatform on harmonisation of digital EPD for use in Building Information Modelling (BIM) tools.

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10.0 References

1. ISO 14025 Environmental labels and declarations - Type III environmental declarations - Principles and procedures (ISO 14025:2006, IDT)
2. Ecoplatform are the organisation of EPD programme operators in Europe seeking to harmonise the development of EPD. <http://www.eco-platform.org>
3. EN 15978 -Sustainability of construction works- Assessment of environmental performance of buildings- calculation method.
4. ISO 14027 Environmental labels and declarations — Development of product category rules
5. EN 15804:2012+A1 - Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products
6. Irish Standard Recommendation S.R. CEN/TR 16970:2016 - Sustainability of construction works Guidance for the implementation of EN 15804
7. ISO 14040:2006 -Environmental management- Life cycle assessment- Principles and framework.
8. ISO 14044 :2006 -Environmental management — Life cycle assessment — Requirements and guidelines
9. ISO 2190:2007 – Sustainability in building Construction- Environmental declaration of building products.