# VERIFICATION REPORT FOR EPD OF CONSTRUCTION PRODUCTS IN THE EPD IRELAND PROGRAMME

*Revised for compliance with EN15804 +A2 2019*

## INTRODUCTION

This document serves as the verification report template of Environmental Product Declarations (EPDs), to meet the procedural and methodological requirements in ISO 14020/14025, the General Programme Instructions of the EPD Ireland Programme (V 2.1 5/03/2022), the referenced Product Category Rules (PCR) (V 2.1 5/03/2022) and the European standard EN15804:2012+A1:2013 and EN15804:2012+A2:2019.This document is based on the ECO Platform checklist in chapter 4 of the "Audit and Verification Guidelines for ECO EPD Programme Operators, Version 6 (March 2023)". This report is mandatory to use for verification of EN 15804-compliant EPDs for construction products in the EPD Ireland Programme.

A signed copy of this verification report shall be submitted to the Secretariat of the EPD Ireland Programme as a part of the EPD registration. The verification report shall be available to any person upon request.

# EPD INFORMATION

| | |
|---|---|
| Registration number of EPD(s):<br>*As provided by the Secretariat* | |
| Product name(s): | |
| EPD owner: | |
| Product Category Rules (PCR):<br>*Registration number, name and version* | *PART A Implementation and use of EN 15804:2012+A1:2013, EN 15804:2012+A2:2019 and CEN TR 16970:2016 in Ireland for the development of Environmental Product Declarations V 2.1 Issue date: 05.03.2022* |
| Validity date of EPD: | |
| Additional comments: | |

# VERIFICATION STATEMENT

I confirm that I have been independent in my role as a verifier in accordance with the requirements in General Programme Instructions, i.e. I have not been involved in the execution of the LCA or in the development of the declaration and have no conflicts of interest regarding this verification.

I hereby confirm that, following the checks performed, in accordance with the limits of the scope of our appointment, nothing has come to the verifier's attention to suggest any data errors or deviations from the requirements by the above-referenced Environmental Product Declaration (EPD) and its project report, in terms of

- the underlying data collected and used for the LCA calculations,
- the way the LCA-based calculations have been carried out to comply with the calculation rules described in the reference PCR,

- the presentation of environmental performance included in the EPD, and
- other additional environmental information included in the declaration, if existent

with respect to the procedural and methodological requirements in ISO 14020:2000, ISO 14025:2006, the General Programme Instructions of the EPD Ireland Programme (V 2.1 5/03/2022), the referenced Product Category Rules (V 2.1 5/03/2022), ECO Platform rules and

- EN 15804:2012+A1:2013
- EN15804: 2012+A2:2019

I confirm that, in accordance with the limits of the scope of our appointment, the company-specific data has been examined as regards plausibility and consistency. The declaration owner is responsible for its factual integrity and that the product does not violate relevant legislation.

I confirm that I have sufficient knowledge and experience of construction products, the construction industry, relevant standards, and the geographical area of the EPD to carry out this verification.

| | |
|---|---|
| Name and organization of verifier: | |
| Date and location: | |
| Signature:<br>*Add as image or print and sign this document* | |

Where review of verification is required ☐

I have reviewed the verification of this EPD but not the underlying LCA data, and in so far as is possible to ascertain this has been verified correctly in accordance with the procedures and checklists set out below.

| | |
|---|---|
| Name and organization of verification reviewer: | |
| Date and location: | |
| Signature:<br>*Add as image or print and sign this document* | |

Additional information in case of EPD Process Certification:

| | |
|---|---|
| Signature of EPD process owner:<br>*Add as image or print and sign this document* | |

# VERIFICATION CHECKLIST PART A: CALCULATION RULES FOR THE LIFE CYCLE ASSESSMENT AND REQUIREMENTS ON THE PROJECT REPORT:

This checklist is based on the ECO Platform checklist of the ECO Platform Guidance Paper Verification including EN 15804+A2-vs Feb 2021".

The following issues must be checked as a minimum. The check consists of checking if the issue is described in the LCA project report and if it is line with the requirements and guidelines in the applicable reference (EN15804, other standards or PCR). Most issues are mandatory to check, some can be optional.

The Life cycle assessment must have been performed in accordance with the requirements of ISO 14040-14044, EN 15804 and applicable PCRs.

Any deviations from the requirements should be reported by the verifier. If the issue is in line with the requirements and/or accepted by the verifier, the box "done" can be ticked. If the LCA is already critically reviewed according to ISO 14044 before the verification, no duplications are necessary.

| 1 | GENERAL INFORMATION - AVAILABILITY | MANDATORY (M) OPTIONAL (O) | REFERENCE | CHECKED AND APPROVED | N/A |
|---|---|---|---|---|---|
| 1.1 | Commissioner of LCA study, LCA practitioner | M | EN15804+A1/EN15804+A2 ch.8.2 | | |
| 1.2 | Date of issue of LCA report | M | EN15804+A1/EN15804+A2 ch.8.2 | | |
| 1.3 | Statement that the Life Cycle Assessment study has been performed in accordance with the requirements of EN 15804 and applicable PCRs (date and version) | M | EN15804+A1/EN15804+A2 ch.8.1/8.2 + applicable PCR | | |
| 1.4 | Statement of the version of EN15804+A1:2013 or EN15804+A2:2019 used for the study and EPD | M | EN15804+A1/EN15804+A2 ch.8.2 | | |
| 1.5 | Any other independent verification of the data given in the LCI/LCA documentation? | O | | | |
| 1.6 EEE | **For EEE-construction products:** Statement that this EPD follows additional requirements for construction products considered as Electronic or Electric Equipment | M | EN15804+A1/EN15804+A2/EN 50693 | | |

| 2 | STUDY GOAL – AVAILABILITY OF INFO | MANDATORY / OPTIONAL | REFERENCE | CHECKED AND APPROVED | N/A |
|---|---|---|---|---|---|
| 2.1 | Reasons for performing the Life Cycle Assessment | M | EN15804+A1/EN15804+A2 ch.8.2 | | |
| 2.2 | Intended application – (e.g., for EPD, databases, publication etc.). Is the LCA designed in such a way that it allows B2B communication for environmental assessments of buildings? | M | EN15804+A1/EN15804+A2 ch.8.2 | | |
| 2.3 | Target group (B2B, B2C, ...) | M | EN15804+A1/EN15804+A2 ch.8.2 | | |
| 3 | FUNCTIONAL UNIT / DECLARED UNIT – AVAILABILITY OF INFO | MANDATORY / OPTIONAL | REFERENCE | CHECKED AND APPROVED | N/A |
| 3.1 | Functional / Declared unit, including relevant technical specification<br>The functional unit of a construction product shall specify:<br>— the application of a product or product groups covered by the functional unit.<br>— the reference quantity for the functional unit when integrated in the construction works.<br>— the quantified key properties, when integrated into a building, for the functional use, quantified performance characteristics or minimum performance of the construction product, taking into account the functional equivalent of the building.<br>— the minimum performance characteristics under defined conditions shall be fulfilled over the defined time period of the functional unit.<br>— a specified period of time under reference in-use conditions considering the RSL. If the functional unit uses a different time period than the RSL, the RSL shall be given as technical information in the EPD (see 6.3.3). | M | EN15804+A1: ch.6.3.1-6.3.2<br>or<br>EN15804+A2: ch. 6.3.1-6.3.3 and applicable c-PCR | | |
| 3.2 | Indication of a factor for the conversion into kg | M | | | |
| 3.2 | If product groups (similar products from one manufacturer and/or from different production plants) are formed as averages:<br>a. Description of the type of average.<br>b. Calculation rules for the formation of averages.<br>c. Representativeness of averages in the EPD. | M | EN15804+A1/EN15804+A2: ch.8.2 | | |

| 4 | PRODUCT DESCRIPTION – AVAILABILITY OF INFO | MANDATORY / OPTIONAL | REFERENCE | CHECKED AND APPROVED | N/A |
|---|---|---|---|---|---|
| 4.1 | Composition of the product<br>The level of detail: the main components necessary to understand what type of product is concerned (detailed mass description is not necessary if confidential). In case of average EPD: at minimum qualitative description of averages and qualitative description of ranges.<br><br>*Note: It should be settled before the verification how confidential information is dealt with (acc. to provisions ISO 14025)* | M | ISO 14025 | | |
| 4.2 | Description of technical and functional characteristics and area of intended application in the building. In case of average EPD: at minimum qualitative description of averages and qualitative description of ranges of functions | M | Applicable European product standard or c-PCR | | |
| 4.3 | Flow diagram of main production processes and visualization of system boundaries. Level of detail: see 4.1 | M | ISO 14025 | | |
| 5 +A1 | SYSTEM BOUNDARIES IN ACCORDANCE WITH THE MODULAR DESIGN OF EN 15804 +A1 | MANDATORY / OPTIONAL (Not applicable if EN158 04+A2 is used) | REFERENCE | CHECKED AND APPROVED | N/A |
| 5.1 | Description of the LC stages/modules declared. Omissions of life cycle stages declared | M | | | |
| 5.2 | Comprehensive declaration of modules A1 to A3 as a minimum requirement, A1-A3 can be reported as an aggregated module. | M | EN15804 + A1 ch. 6.3.4 | | |

| | | | | | |
|---|---|---|---|---|---|
| 5.3 | A1 to A3: System boundary<br>• Description of all processes the modules cover<br>• System boundary to nature (e.g., between forest<br>• and technosphere in wood production)<br>• Use of secondary materials and secondary fuels and waste produced<br>• Specification of the “end-of-waste state” for material leaving A1-A3 as waste<br>• If part of the energy calculation: Reference to the contract/certificate of green electricity.<br>• No offsetting allowed | M | EN15804+A1 ch. 6.3.4.2 and applicable c-PCR | | |
| 5.4 | A1 to A3: Allocation of co-products:<br>• Selection of the allocation factors for co-product allocation<br>• Justification of selected allocation method (economic, physical)<br>• Justification of specific allocation processes (e.g., if data are not available to allocate according to the EN15804 rules)<br>*NOTE: Application of the “polluter pays” principle to the use of waste as substitute for primary fuels or materials is left to the programme operator.*<br>• Presentation of the energy and material flows as a result of deviating allocation processes<br>• No declaration of loads and benefits in Module from allocation of co-products in A1-A3 | M | EN15804+A1 ch. 6.4.3.2 + Annex B.1<br>CEN TR 16970 ch.6.4.3.2 ff | | |
| 5.4 EEE | In addition for EEE-construction products: Information regarding specific allocation rules (rules, factors, interpretation...) which are not described either in EN 15804+A1 or in the applicable c-PCR shall be included in the project report and in the EPD. | M | EN15804+A1 ch. 6.4.3.2 + Annex B.1 CEN TR 16970 ch.6.4.3.2 ff | | |
| 5.5 | A4 to A5 (optional module): Description of all processes the modules cover | M | EN15804 +A1 ch. 6.3.4.3 and applicable PCR | | |
| 5.6 | Accounting losses in the modules in which they arise (e.g., A4, during transport to construction site) | M | EN15804+A1 ch. 6.3.4.1 | | |
| 5.7 | B1 to B5 (optional module): Description of all processes the modules cover | M | EN15804+A1 ch. 6.3.4.4 and applicable PCR | | |
| 5.8 | B6 and B7 (optional module): Description of all processes the modules cover | M | EN15804+A1 ch. 6.3.4.4 and applicable PCR | | |

| | | | | | |
|---|---|---|---|---|---|
| 5.8 EEE | In addition for EEE-construction products: All modules B shall be calculated for the EPD Technical information for the relevant B module(s) shall be provided in project report. B6 (energy consumption) shall be added in the calculation of EPD of final products which are consuming energy, directly or indirectly (ex. a cable is consuming energy through dissipation/losses in the cable when electricity goes through it.<br><br>B6 shall be presented separately to let users of the EPD accommodate the calculation when appropriate. The program operator shall provide a justified use scenario to apply for each family of products (or Product Category) that it covers within its program, together with the related calculation formula when appropriate. Usually this will be done through a PCR publication. When an existing regulation applies to the calculation of B6 at the geographical scope that the EPD states it covers, the "justified use scenario" to calculate B6 shall be the more demanding regulation applying to the entire scope (see also "regulatory context"). | M | | | |
| 5.9 | C1 to C4 (optional module): Description of all processes the modules cover | M | EN15804+A1 ch. 6.3.4.5 and applicable PCR | | |
| 5.10 | C3 (optional module):<br>• Waste treatment<br>• Materials for recycling<br>• Impacts of recycling processes to achieve end of<br>• waste<br>• Justification of the "end-of-waste state":<br>- Existing purpose<br>- Existing market or demand<br>- Compliance with technical requirements and legal guidelines<br>- Fulfils limit values for Substances of Very High Concern (SVHC)) | M | EN15804+A1 ch. 6.3.4.5 and ch.6.3.4.6 | | |
| 5.11 | C4 (optional module): Is the complete waste disposal process included in this module? Is its inclusion described transparently and is it plausible? | M | EN15804+A1 ch. 6.3.4.5 and ch.6.3.4.6 | | |

| | | | | | |
|---|---|---|---|---|---|
| 5.12 | D (optional module): System boundary and contents of module justified Assumptions with regard to substituted processes in D incl. year of reference (e.g. assumptions with regard to substitution of electricity and power production). | M | EN15804+A1 ch. 6.3.4.6 | | |
| 5.13 | D (optional module, thus if covered): Check if the net flow calculation is done correctly, transparently, plausible, taking into consideration relevant factors, e.g.:<br>• Processing losses over the whole life cycle (including<br>• collection and pre-processing)<br>• Inputs in Modules A1 to A3 (and A4 to B5 if necessary)<br>• The reaching of end-of-waste-state by all waste flows considered in module D | M | EN15804+A1 ch. 6.3.4.6 and 6.4.3.3 | | |
| 5.14 | D (optional module, thus if covered): No benefits or loads of allocated co-products | M | EN15804+A1 ch.6.4.3.3 | | |
| 5 +A2 | SYSTEM BOUNDARIES IN ACCORDANCE WITH THE MODULAR DESIGN OF EN 15804 +A2 | MANDATORY / OPTIONAL (Not applicable if EN158 04+A1 is used) | REFERENCE | CHECKED AND APPROVED | N/A |
| 5.1 | Description of Life Cycle stages/modules declared. Omissions of the life cycle stages declared | M | EN15804+A2 ch. 5.2 | | |
| 5.2 | Comprehensive declaration of modules A1-A3, C and D<br>as a minimum requirement. If necessary, A1-A3 can be reported as an aggregated module. The minimum requirement can be omitted – are the requirements for exemption met?<br>Only products which fulfil all three of the conditions below shall be permitted to be exempt from this requirement:<br>• the product or material is physically integrated with other products during installation so they cannot be physically separated from them at end of life, and<br>• the product or material is no longer identifiable at end of life as a result of a physical or chemical transformation process, and<br>• the product or material does not contain biogenic carbon.<br><br>*NOTE This means any product containing biogenic carbon cannot omit the declaration of modules C1–C4 and module D*. | M | EN15804+A2 ch. 6.3.5 | | |
| 5.2 EEE | In addition for EEE-construction products:<br>All modules B shall be calculated for the EPD Technical information for the relevant B module(s) shall be provided in the project report. | M | | | |

| | | | | | |
|---|---|---|---|---|---|
| | B6 (energy consumption) shall be added in the calculation of EPD of final products which are consuming energy, directly or indirectly (ex. a cable is consuming energy through dissipation/losses in the cable when electricity goes through it.<br>B6 shall be presented separately to let users of the EPD accommodate the calculation when appropriate.<br>The program operator shall provide a justified use scenario to apply for each family of products (or Product Category) that it covers within its program, together with the related calculation formula when appropriate.<br>Usually this will be done through a PCR publication.<br>When an existing regulation applies to the calculation of B6 at the geographical scope that the EPD states it covers, the "justified use scenario" to calculate B6 shall be the more demanding regulation applying to the entire scope (see also "regulatory context"). | | | | |
| 5.3 | A1 to A3: System boundary<br>• Clear description of what the modules cover.<br>• System boundary to nature (e.g., in the case of forests between nature and technosphere);<br>• Use of secondary materials and secondary fuels and waste produced (check end-of-waste state).<br>• Specification of the "end-of-waste-state" for material leaving A1-A3 as waste.<br>• If applicable: Reference to the contract/certificate of green electricity.<br>No off setting allowed | M<br>certificates optional | EN15804+A2 ch. 6.3.5.2 and applicable c-PCR | | |
| 5.4 | A1 to A3: Allocation of co-products:<br>• Selection of the allocation factors for co-product allocation and justification of allocation method.<br>• Justification of specific allocation processes (e.g., if data are not available to allocate according to the EN15804 rules);<br>• Presentation of the energy and material flows in case of deviating allocation processes.<br>• No declaration of loads and benefits in Module D<br>• from allocation in A1-A3. | M | EN15804+A2 ch. 6.4.3.2<br>CEN TR 16970 ch. 6.4.3.2 | | |
| 5.4 EEE | In addition for EEE-construction products: Information regarding specific allocation rules (rules, factors, interpretation...) which are not described either in EN 15804+A2 or in the applicable c-PCR shall be included in the project report and in the EPD. | M | | | |
| 5.5 | A4 to A5 optional module, thus if covered: Clear description and content of modules | M | EN15804+A2 ch. 6.3.5.3 and applicable PCR | | |
| 5.6 | Accounting losses in the modules in which they arise<br>(e.g., A4, transport to construction site) | M | EN15804+A2 ch. 6.3.5.1 | | |

| | | | | | |
|---|---|---|---|---|---|
| 5.7 | B1 and B7 (optional modules except for EEE-construction products, thus if covered): Clear description and content of modules | M | EN15804+A2 ch. 6.3.5.4 and applicable PCR | | |
| 5.7 EEE | For EEE-construction products: B1 to B7 are mandatory modules. Clear description and content of modules, see 5.2 | M | | | |
| 5.9 | C1 to C4: Clear description and content of modules | M | EN15804+A2 ch. 6.3.5.5 and applicable PCR | | |
| 5.10 | C3:<br>• Waste treatment<br>• Materials for recycling<br>• Impacts of recycling processes to achieve end of<br>• waste<br>• Justification of the “end-of-waste state”<br>- Existing purpose<br>- Existing market or demand<br>- Compliance with technical requirements and legal guidelines<br>• Fulfils limit values for Substances of Very High Concern (SVHC) | M | EN15804+A2 ch. 6.3.5.5 + table 8 + ch. 7.2.4.4 + annex B.1 and applicable PCR | | |
| 5.11 | C4:<br>Is the complete waste disposal process included in this module? Is its inclusion described transparently and is it plausible?<br>Carefully check the correct allocation for deposition of biogenic material: The degradation of a product’s biogenic carbon content in a solid waste disposal site, declared as GWP-biogenic, shall be calculated without time limit. Any remaining biogenic carbon is treated as an emission of biogenic CO2 from the technosphere to nature. | M | EN15804+A2 ch. 6.3.5.5 and ch. 6.3.5.6 | | |
| 5.12 | D: System boundary and contents of Module justified Assumptions with regard to substituted processes in D incl. year of reference (e.g., assumptions with regard to substitution of electricity and power production). | M | EN15804+A2 ch. 6.3.5.6 | | |
| 5.13 | D: Check if the net flow calculation is done correctly taking into consideration relevant factors, e.g.:<br>• Processing losses over the whole life cycle (including collection and pre-processing);<br>• Inputs in Modules A1 to A3 (and A4 to B5 if necessary);<br>• The reaching of end-of-waste-state by all waste flows considered in module D. | M | EN15804+A2 ch. 6.3.5.6 and 6.4.3.3 | | |
| 5.14 | D: No benefits or loads of allocated co-products | M | EN15804+A2 ch. 6.3.6.5 and ch.6.4.3.3 | | |
| 6 | POWER MIX | MANDATORY / OPTIONAL | REFERENCE | CHECKED AND APPROVED | N/A |
| 6.1 | Selection of the power mix in accordance with the location of the production | M | CEN TR 16970 + CEN TR | | |

| | | | | | |
|---|---|---|---|---|---|
| | site(s)<br>Is the reference year for the dataset documented? | | 15941 and applicable PCR | | |
| Info | Terms & Definitions<br>Definitions for the terms “Guarantee of Origin (GoO)”, “Consumption Mix” and “Residual Electricity Mix” are provided in prEN 15941. | | | | |
| 6.1.1 | **Electricity (rules in addition to ISO 14067)** | **Mandatory** | **Reference** | **Checked and Approved** | |
| 6.1.2 | Does the PO accept the application of GoOs (and market-based approach) for contractual purchase of electricity? If applicable: Validity period of the certificates for GoOs (date of purchase must be related to period of production and primary data collection on site) in accordance with the PCR and general program rules of the issuing PO<br>Is the GoO document and documentation about the purchased electricity available for the EPD verification? | M | Applicable PCR | | |
| 6.1.3 | Requirements of PrEN15941: 2022 fulfilled? | M | prEN 15941:2022 | | |
| 6.1.4 | **Tracking, Traceability**<br>**Case 1: Manufacturer produces energy on site (is physically linked to plants nearby):**<br>Check on energy amounts from accounts. Check if GoOs are generated and supplied into the market (in case of (partial) supply into market, respective tracking of amounts used for production of products and/or supply into grid. GoO (informing on sort of power mix and origin/site of energy providers) documents must be provided)<br>Note 1: Attention: LCA-models for CO2 figures (or other indicators in GoOs and/or on energy bills may be different from LCA models needed to fulfil EN 15804/ISO 21930 and construction related PCRs/this guidance paper on hand. The figures cannot replace each other.<br>Note 2: if producers sell GoOs from their own renewable plants on site, they must not use the same GoOs themselves! They must buy GoOs from other energy suppliers or declare residual mix figures.<br>**Case 2: Electricity provider chosen from national state with legislation for electricity labelling (e.g. for 2022: Austria):** | M | | | |

| | | | | | |
|---|---|---|---|---|---|
| | Energy mix is found in detail on contracts/bills, registry for proof of origin existing, no residual mix necessary, everything is marked. Task: Energy providers must deliver proof of origin (Mandatory: Contract papers with name and address of contract partners, Optional for the time being: addresses of plants, sites). Energy amounts from contracts/accounting documents must correspond to energy consumption in LCA Note: tracking numbers could sometimes only be provided from national energy control bodies. These systems are fully digitalized and the "book and claim" method is fully automatized. Energy providers book and within seconds the energy amounts are cancelled in the AIB system. That is done MWh per MWh and proof documentation in form of Excel sheets etc. would be thousands of lines. This kind of proof shall only be demanded and checked by verifiers in case of justified doubt about all other documents delivered by energy providers/certification bodies.<br>**Case 3: Electricity provider chosen from national state with registry**<br>As above, GoOs must be provided with tracking numbers, check on double counting: used tracking numbers must be cancelled in registry. (Note: Tracking numbers are in most cases (but not all!) deleted automatically in national systems, sometimes energy providers are able to deliver excel files to check on energy amounts versus number of certificates. Solution: Show proof for tracking or documentation of justification why tracking was not possible<br><br>Documentation shall be checked on the following information, GoO documents must be provided:<br><br>Mandatory:<br>• Energy provider<br>• Client<br>• Electricity mix, attributes of electricity | | | | |

| | | | | | |
|---|---|---|---|---|---|
| | • Energy amounts<br>• Time periods for issue and validity of GoOs<br><br>Optional, justification must be provided if information is not available:<br>• Addresses of power plants<br>• Tracking numbers<br>• Information on (direct) coupling yes/no<br><br>Note: Proof from external verification bodies (accredited bodies) may contain less information than listed above so further checks may be necessary.<br>Note: sometimes only 100% green energy products are deleted from registry. Mixes of green energy and non-renewable energy are sometimes not deleted.<br>(Example: Energy providers may only state that they have certain amounts of renewables in the mix, but no GoOs available):<br><br>Conclusion: A sensitivity analysis shall be carried out, in case that significant amounts of electricity cannot be tracked: No tracking numbers and transparent<br>GoOs: No acceptance -> residual Mix.<br>Solution for ECO Platform: “significant” means “if the change in amounts of electricity lead to more than 10% change in results of GWP total”, see EN 15804.<br><br>Note for upstream data: products with a high percentage of electricity in upstream data should be looked at with attention/check if specific data for upstream processes is available. Justification required, if not available.<br>Intermediate conclusion if GoOs are available but without confirmation of cancelling: proof that manufacturers have asked for cancellation | | | | |

| | | | | | |
|---|---|---|---|---|---|
| | confirmation is sufficient for a period of up to a max. of the validity of the EPD<br><br>Case 4: Energy provider from national state with no registry: No benefit of GoOs, use consumption mix (residual mix would be consumption mix and with that worst case).<br><br>If GoO are accepted and applied:<br>• specific data for energy generation shall be used whenever available<br>o i.e. have the foreground processes (e.g. in module A3) been calculated with the specific data from the supplier of the green electricity?<br>o has the residual mix been used for the quantification of all electricity generation without GoOs for foreground data?<br><br>• *background data:*<br>o has been calculated using the residual mix for the relevant electricity generation without GoO?<br>o a justification has been provided if relevant electricity generation without GoO has not been calculated with residual mix?<br>• Has the consumption mix (= national production + imports – exports), been applied for any modules beyond the modules A1-A3 (i.e. the factory gate), for which no GoOs are used?<br>Note 1: The factory gate can sometimes also include A4 and A5 (e.g. ready-mix concrete).<br>Note 2: Only if the EPD owner has direct control over a particular process in any of the B modules and/or C modules (which, e.g., may be the case for construction services or for recycling), generation of electricity used in this process may be modelled with GoO and residual mix. | | | | |
| 6.1.5 | If a PO decides that GoOs cannot be used for the quantification of the LCA with respect to electricity generation, all EPD shall be calculated applying | M | Applicable PCR | | |

| | | | | | |
|---|---|---|---|---|---|
| | the national consumption mix. | | | | |
| 6.1.6 | Reporting and communication done as required in prEN 15941:2022<br>Reporting an additional quantification in the project report is recommended:<br>• market based approach: using GoOs and residual mix,<br>• location based approach: using the actual consumption mix ( = national production + imports – exports),<br>• If a double quantification is reported in the project report, options are:<br>o to provide 2 EPD<br>o to declare two result tables in the EPD<br>o to declare two scenarios in the EPD<br>o to provide an interpretation of the different results in the EPD | M | prEN 15941 | | |
| 6.1.7 | If the contractual situation is not clear (see last position in ISO 14067) a sensitivity analysis shall be reported in the project report.<br><br>Note: In some countries, parts of the electricity from renewable energy sources might be sold/exported as renewable electricity without being excluded from the supplied mix. For this reason, in such cases a sensitivity analysis applying the relevant consumption grid mix shall be conducted and reported in the project report to demonstrate the difference in results of the electricity tracking instruments. | M | ISO 14067 | | |
| 6.1.8 | Calculation of residual mixes<br><br>Available datasets from used database GaBi/Ecoinvent can be taken and the AIB Method implemented within must be documented (in EPD as well as in project report). Self-modelling can be executed, if no data sets are available on the market or other reasons for doing so exist. Transparent and trackable documentation is mandatory.<br><br>For „self-modelling“ of residual mixes the following rules apply: | M | | | |

| | | | | | |
|---|---|---|---|---|---|
| | Modelling of European residual mixes must follow the latest AIB Guide with the newest method.<br>o https://www.aib-net.org/facts/european-residual-mix<br><br>In all cases the verifier hast to check:<br>How was the Residual Mix modelled?<br>Were applicable datasets used from GaBi/Ecoinvent or was 'self-modelling' utilized?<br><br>In the case of self-modelling: The modelling shall be documented comprehensively.<br><br>Note: this document does not formulate explicit rules on which electricity mixes to use for upstream data of supplied materials.<br><br>LCA-practitioners shall provide emission factors to the verifier per kWh of modelled energy mixes, at least for the GWP-indicators, or for core EN 15804+A2-LCIA-indicators (in the project report or by alternative means). | | | | |
| 6.2 | Biogas | M | prEN 15941 annex E2.3 | | |
| 6.2.1 | If a PO allows the calculation of Biogas (based on a market-based approach), the biogas-calculation shall be handled in analogy to 6.1 green electricity. The tracking must be done as transparent as possible. (References to prEN 15941 are preliminary, based on the recent draft version and may be subject to change.)<br><br>Is the modelling of biogas in line with the following description?<br><br><u>Biogas from the gas network:</u><br>Biogas certificates/GoO shall be used when the supplier is able to guarantee that the biogas meets the requirements for tracking and traceability, see prEN 15941 E.2.1. For gas purchased without the | M | prEN 15941 annex E2.3 | | |

| | | | | | |
|---|---|---|---|---|---|
| | certificates the residual mix shall be applied. If the requirements tracking and traceability are not fulfilled the consumption mix shall be used.<br><br><u>Biogas from a directly connected supplier:</u><br>Life cycle data for the biogas supplied may be used if there is a dedicated pipeline or supply between the organization and the biogas plant from which the life cycle data is derived, and no contractual instruments have been sold to a third party for that consumed biogas. Otherwise, the residual mix shall be used.<br><br><u>Internally generated biogas:</u><br>For internally generated and consumed biogas, where no contractual instruments have been sold to a third party, the life cycle data for the biogas shall be used for that product. Otherwise, the residual mix shall be used.<br><br><u>Residual gas mix:</u><br>As long as the AIB system does not provide Guidance and/or data sets for residual gas mixes and the data bases GaBi/Ecoinvent also do not give appropriate data sets, the residual mix must be calculated following the AIB guidance for green electricity as closely as possible.<br><br>Note1: in 2022, only Austria has established a system for mandatory full declaration of gas production (no residual gas, biogas GoOs are handled with the same automatic “Book-Claim-Cancel in Registry Approach” as green electricity.<br>All other countries may have already installed systems for tracking/national registries.<br>The GoOs and proof documents for cancellation in the system must be shown, else residual gas mix or worst case (= fossil) must be calculated.<br>Alternatively, a sensitivity analysis as stated in prEN 15941 Annex E2.3 must be carried out to avoid double counting. | | | | |

| | | | | | |
|---|---|---|---|---|---|
| | Note2: For biogas it is not always clear at which geographical point in the gas grid the biogas is put into the pipe system nor are the pipe systems connected in a way as electricity grids are connected. Until further notice a physical connection of gas grid systems is not required to accept GoOs for biogas.<br><br>Note3: The above rules are meant only for input as energy carrier (not as feedstock). | | | | |
| 6.3 | Optional: Additional information for transparency:<br>- Provide in the EPD the GWP of the applied electricity mix for A1-A3 in kg $CO_2$e/kWh;<br>- Provide the GWP of the applied gas mix for A1-A3 in kg $CO_2$e/MJ.<br>Justification shall be given in the Project Report if any information is not provided."<br>- Minimum: use of Residual Mix or of modelled energy mix shall be declared. Information if GoOs are used must be declared.<br>-<br>Detailed description of Energy datasets should be provided | O | | | |
| 8 | CRITERIA FOR EXCLUDING INPUTS AND OUTPUTS | MANDATORY / OPTIONAL | REFERENCE | CHECKED AND APPROVED | N/A |
| 8.1 | Selection of the cut-off criteria, description of application of the criteria and assumptions in line with standard and PCR? (A complete mass balance is normally not possible without high effort. This is why cut off decisions are often based on assumptions about the effect of the flow that has been cut off). | M | EN15804+A1: ch. 6.3.5 and ch. 8.2<br>OR<br>EN15804+A2: ch. 6.3.6 and ch. 8.2 | | |
| 8.1 | List of excluded processes? | M | EN15804+A1: ch. 6.3.6<br>OR<br>EN15804+A2: ch. 6.3.7<br>And<br>- EN 15941<br>applicable PCR | | |

| | | | | | |
|---|---|---|---|---|---|
| 9 | DATA COLLECTION, SELECTING BACKGROUND DATA | MANDATORY / OPTIONAL | REFERENCE | CHECKED AND APPROVED | N/A |
| 9.1 | Selection and use of generic data and background data justified and validity demonstrated? | M | EN15804+A1: ch. 6.3.6<br>OR<br>EN15804+A2: ch. 6.3.7<br>And<br>- EN 15941<br>applicable PCR | | |
| 9.2 | Documentation on background data:<br>Name of the (background) data record, its source (data base, literary source etc.), | M | EN 15941 and applicable PCR + EN15804+A2: ch. 6.3.7 | | |
| 9.3 | Data collection, including data quality issues, according to LCA rules:<br>• Assessment period for each module considered in the Life Cycle Assessment (e. g. one year average, etc.)<br>• Appropriateness of background data (temporal, geographical, technological)<br>• Other assumptions concerning background data, e.g. about data gaps<br>• Omissions of life cycle stages, processes<br>• Assumptions regarding energy and electricity production incl. year of reference. It should also be transparent which electricity/energy model is applied as avoided product if energy recovery is included in the optional Module D.<br>• Assumptions concerning other relevant background data where relevant for the system boundary | M | ISO 14044:2006, section 4.3.2; Documentation ISO 14040<br>And<br>EN15804+A1 ch. 6.3.6<br>Or<br>EN15804+A2 ch. 6.3.7 + ch. 6.3.8 | | |
| 10 | DATA VALIDITY | MANDATORY / OPTIONAL | REFERENCE | CHECKED AND APPROVED | N/A |
| 10.1 | • < 10 years for background data<br>• < 5 years for manufacturer's data<br>• Manufacturers' data based on 1 year average<br>• Time period of 100 years, in case of landfill scenario longer if relevant<br>• Technical background complies with physical reality<br>• Integrity of generic data records, system limit and cut-off criteria for generic data records validity demonstrated | M | EN15804+A1 ch. 6.3.7<br>Or<br>EN15804+A2 ch. 6.3.8<br>and<br>EN15941 and applicable PCR | | |

| | | | | | |
|---|---|---|---|---|---|
| | Applicable if using EN15804+A2: does the documentation format follow the current ILCD format and nomenclature? | | | | |
| 10.2 | Documentation on generic data:<br>- name of the (generic) data record,<br>- its source (database, bibliographic source, etc.),<br>- year of data collection and its representativeness<br>Handling missing data<br>Assessing data quality (time, geographical and technological representativeness).<br><br>For 15804+A2: document data quality for all data sets contributing to at least 80% each of the core impacts. Check on plausibility, comparison of indicators with others from datasets verified after the same standards or comparison of flows and/or indicators of other significant sources of information! | M | EN15941 and applicable PCR<br>If using EN15804+A2, additionally<br>annex E, see<br>10.3 | | |
| 10.3 | Generic data (see Table 1,EN 15804) shall include data quality assessment information according to EN ISO 14044:2006, 4.2.3.6. The data quality assessment<br>information shall cover at least the following elements:<br>— time-related coverage.<br>— geography coverage.<br>— technology coverage.<br>It shall be based on either of the two systems described in Annex E. the data quality assessment must cover at least 80% of each core impact.<br>The quality of the life cycle inventory data established for the EPD shall also be assessed accordingly. Random checks could be carried out or based on importance;some data should be checked in the verification. | M | 15804+A2, 6.3.8.3 and<br>Annex E | | |
| 11 | DEVELOPMENT OF SCENARIOS AT PRODUCT LEVEL IN MODULES A4-A5-B-C-D | MANDATORY / OPTIONAL | REFERENCE | CHECKED AND APPROVED | N/A |
| 11.1 | Statement that the scenarios included are currently in use and are representative for one of the most likely scenario alternatives. 100% scenarios shall be given. Additional declaration of representative mixes for the relevant region is permissible. | M | EN15804 + A1, 6.3.8<br>CEN TR 16970<br>Ch.6.3.8<br>Applicable PCR | | |
| 11.2 | Documentation of the relevant technical information,<br>e.g., recycling or reuse rates, with reference to the literature source? | M | | | |
| 11.3 | Default values in CEN TC c-PCR are preferred. Deviations<br>from these values must be justified | M | | | |
| 12 | ALLOCATIONS | MANDATORY / OPTIONAL | REFERENCE | CHECKED AND APPROVED | N/A |

| | | | | | |
|---|---|---|---|---|---|
| 12.1 | General allocation principles applied (avoidance of allocation, no double counting / omissions, uniform application of the allocation rules, sum of inputs and outputs of a unit process after allocation must be equivalent to sum of inputs and outputs before allocation etc.) | M | ISO14044:2006 4.3.4 | | |
| 12.2 | Presentation and justification of allocations in the use of secondary materials or secondary fuels as raw materials | M | EN15804+A1/EN15804+ A2. 6.4.3 and 8.2 and applicable PCR | | |
| 12.3 | Presentation and justification of allocations in the plant (delineation from other products in a plant) | M | | | |
| 12.4 | If applicable: Presentation and justification of allocation of multi-input processes (e.g., landfilling or incineration) | M | | | |
| 12.5 | Co-product allocation correctly applied, see also EN15804+A1 or EN15804+A2 and no. 5.4 in this checklist. | M | EN15804+A1/EN15804+ A2 ch. 6.4.3.2 | | |
| 12.6 | Documentation of allocation factors used and their (independent) sources | M | | | |
| 12.7 | Allocation process for reuse, recycling, and recovery, check specifically:<br>• End-of-waste state, Consistency with other scenarios of waste management<br>• Conventional average technologies and practices<br>• Specification and justification of end-of-waste state where applicable<br>• If applicable (module D): Selecting substituted processes in accordance with the PCR or (if no PCR is available) representative actual processes<br>NOTE: Application of the “polluter pays” principle to the use of waste as substitute for primary fuels or materials is left to the programme operator.<br>• If applicable (substitution in Module D): Calculation of net flows<br>• Conservative approach, i.e., choice of those scenarios and calculation rules that reflect the highest environmental impacts in comparison to other choices<br><br>*Note: Modules C and D are optional when using EN15804+A1 and mandatory according to EN15804+A2* | M | EN15804+A1/EN15804+ A2 ch.6.4.3.3 and applicable PCR | | |
| 12.8 | Justification if generic data is applied which does not comply with the allocation principles, or where this compliance is not known and there are reasons to doubt it. Expert guess of how this influences the indicator results should be provided. | M | Applicable PCR | | |

| | | | | | |
|---|---|---|---|---|---|
| 12.9 | If applicable: calculation of biogenic carbon content in $CO_2$ –e.q. documented in transparent ways? | | | | |
| 12.10 EEE | **For EEE-construction products:**<br>See 5.4 EEE:<br>Information regarding specific allocation rules (rules, factors, interpretation...) which are not described either in EN 15804+A2 or in the applicable PCR shall be included in the project report and in the EPD. | M | EN15804+A2 ch. 6.4.3.2<br>CEN TR 16970 ch. 6.4.3.2 | | |
| 13 | LIFE CYCLE MODELING INFORMATION | MANDATORY / OPTIONAL | REFERENCE | CHECKED AND APPROVED | N/A |
| 13.1 | Transparent presentation of Life Cycle Assessment modelling (for example by tables, screenshots from Life Cycle Assessment software programs etc.) | M | EN15804+A1/EN15804+A2 ch.8.4 | | |
| 13.2 | Clear description how company data are used in which data records in Life Cycle Assessment software programs. Is the assignment of company data to the datasets provided by the LCA software, described transparently and is it plausible? | M | EN15804+A1/EN15804+A2 ch.8.4 | | |
| 13.3 | Assignment of process data to the LC modules plausible? | M | EN15804+A1/EN15804+A2 ch.8.4 | | |
| 13.4 | For several locations/products: Presentation of modelling of all locations and products as well as weighting thereof | M | | | |
| 13.5 | Plausibility and consistency of data (mass balance, energy balance)<br>Balances on company level and in the life cycle. e.g., This can only be fulfilled with random<br>checks if the effort for a verification shall be reasonable,<br>e. g.:<br>• Mass balance of inputs and outputs, e. g. mass balance of material resources (feedstock) input and output (product/waste/emissions/secondary material)<br>• CO and CO2 emissions coherent with the mass input of fossil energetic resources<br>• Check of the sum of non-renewable and renewable parts or between feedstock and fuel parts<br>• Are the energy indicators coherent with the energetic resources used? | M | EN15804+A1/EN15804+A2 ch.8.4 | | |
| 14 | PARAMETERS OF THE LIFE CYCLE INVENTORY ANALYSIS AND LIFE CYCLE IMPACT ASSESSMENT | MANDATORY / OPTIONAL | REFERENCE | CHECKED AND APPROVED | N/A |
| 14.1 | Presentation of the parameters in tabular form for all modules A1 to D | M | EN15804+A1/EN15804+A2 ch. 7.2.2 | | |

| | | | | | |
|---|---|---|---|---|---|
| | Marking unassessed modules as "MNA" (= module not assessed) | | EN15978 ch.12.5 | | |
| 14.2 | Presentation of the parameters describing:<br><br>**EN15804+A1:**<br>• environmental impacts (7 parameters),<br>• the use of resources (10 parameters),<br>• the waste categories (3 parameters)<br>• output material flows (4 parameters)<br><br>**EN15804+A2:**<br>• Core environmental impacts (13 indicators),<br>• Additional environmental impacts (6 indicators) and coherent disclaimers. Table 4 shall be included in the EPD for the declared additional environmental<br>indicators. If additional indicators are not declared, they shall be mentioned in the EPD, e.g., as an entry of "ND" to Table 4 or as text.<br>• the use of resources (10 indicators),<br>• the waste categories (3 indicators)<br>• output material flows (4 indicators)<br>• biogenic carbon content (in product and packaging)<br><br>Note: The sum of GWP fossil + + GWP biogenic + GWP Land use and land use change must be equivalent to GWP Total<br>Justification in case of constraints/indicators not declared? | M | EN15804+A1/EN15804+A2 ch. 6.5, 7.2.3 – 7.2.5 Table 4<br><br>*Note: the requirements differ between the standard revisions, although chapter numbers*<br>*align* | | |
| 14.3 | Has the packaging been included in the declaration of the LCI related indicators, e.g., in the quantification of the content of primary energy | M | | | |
| 14.4 | Selection of correct characterisation factors and elimination<br>of long-term emissions (> 100 years) | M | EN15804+A1/EN15804+A2 ch.8.2 and annex C and applicable PCR<br><br>*Note: the characterisation factors differ between the standard revisions, although chapter numbers align* | | |
| 14.5 | Justification of characterisation factors applied in case of input/output flows that are not on the list of characterisation factors of the EN15804 and applicable PCR. | M | | | |
| 14.6 | Information on the environmental impacts in the project | M | EN15804+A1/EN15804+ | | |

| | | | | | |
|---|---|---|---|---|---|
| | report:<br>• Reference to characterisation models and factors<br>• Statement that the estimated impact results are only relative statements which do not indicate the end points of the impact categories, exceeding threshold values, safety margins or risks | | A2 ch.8.2<br><br>*Note: the requirements and characterisation factors differ between the standard revisions, although chapter numbers align* | | |
| 15 | INTERPRETATION | MANDATORY / OPTIONAL | REFERENCE | CHECKED AND APPROVED | N/A |
| 15.1 | Interpretation of the results based on a dominance/contribution analysis of selected indicators | O | | | |
| 15.2 | Relationship between the results of the Life Cycle Inventory Assessment and the results of the Life Cycle Impact Assessment (LCIA) | M | EN15804+A1/EN15804+A2 ch.8.2 | | |
| 15.3 | Assumptions and restrictions as regard the interpretation of results in the EPD, in terms of both methods and data | M | EN15804+A1/EN15804+A2 ch.8.2 | | |
| 15.4 | In the case where an EPD is declared as an average environmental performance for several products a statement to that effect shall be included in the declaration together with a description of the range/ variability of the LCIA results if significant; The description of the range can be qualitative or quantitative. | M | EN15804+A1/EN15804+A2 ch. 7.1i and 8.2<br>CEN TR 16970 ch. 7.1 | | |
| 15.5 | Interpretation of the influence of data quality. An assessment of data quality should be provided if the data quality differs for significant data. | O | EN15804+A1 ch. 6.3.7 and 8.2<br>Or<br>EN15804+A2 ch. 6.3.8, ch. 8.2 + annex E<br>and<br>ISO 14040 | | |
| 15.6 | Comprehensive transparency as regards value decisions, justifications and expert opinions i.e., transparency to avoid misinterpretation. | M | EN15804+A1/EN15804+A2 ch.8.2 | | |
| 16 | ADDITIONAL INFORMATION | MANDATORY / OPTIONAL | REFERENCE | CHECKED AND APPROVED | N/A |
| 16.1 | If additional information is given, check the documentation:<br>• Laboratory results/measurements listed in the content declaration<br>• Laboratory results/measurements listed in the functional/ technical performance<br>• Documentation on the declared technical information on individual life cycle stages not taken into consideration in the construction | O | EN15804+A1/EN15804+A2 ch.8.3 | | |

| | | | | | |
|---|---|---|---|---|---|
| | product's LCA (but applicable building assessment (e.g., transport routes, energy consumption during the use stage, cleaning cycles etc.)<br>• Laboratory results/measurements pertaining to the declared emissions in indoor air, oil, or water during the use stage | | | | |
| 16.2 | Where relevant: ensure that information additional to EN15804 is verifiable e.g., by reference to standards or other publicly accepted test requirements | M | | | |
| 17 | DOCUMENTATION FOR CALCULATING THE REFERENCE SERVICE LIFE (RSL) | MANDATORY / OPTIONAL | REFERENCE | CHECKED AND APPROVED | N/A |
| 17.1 | The RSL shall be declared if the full life cycle A1-C4, or the B-Modules are declared. Documentation for calculating the reference service life (RSL) shall be representative for the declared product. | M | EN15804+A1 ch. 6.3.3<br>Or<br>EN15804+A2 ch. 6.3.4<br>and normative Annex A | | |

# EXAMPLE DIALOGUE BETWEEN VERIFIER/PROGRAM OPERATOR AND EPD OWNER/PRACTITIONER DURING THE VERIFICATION PROCESS

Any deviations from the requirements should be reported by the verifier, and the dialogue between verifier and LCA practitioner should be made transparent as well improvements made following the verification process. This can be done separate from the checklist. The format to do so is free to choose. Examples are given below:

*Example:*

| Verification Issue Number | Question / Comment | Response |
|---|---|---|
| | | |
| | | |

*Example (partly based on XP TS14071):*

| N. | CHAPTER ARTICLE PARAGRAPH | ALINEA TABLE | TYPE OF COMMENT (ED, TE, GE) | REFERENCE TO ECO CHECKLIST (OR PROGRAMME RULES) SECTION | VERIFIER COMMENT AND RECOMMENDATION | EPD OWNER/LCA PRACTITIONER ANSWER | FINAL VERIFIER STATEMENT |
|---|---|---|---|---|---|---|---|
| 1 | | | | | | | |
| 2 | | | | | | | |
| ... | | | | | | | |

# VERIFICATION CHECKLIST PART B: REQUIREMENTS ON THE EPD

This whole section is mandatory to verify. The rules for the EPD format can be found in the EN15804 Section 7 and the EN15942: everything that is included in the master ITM (information transfer matrix), should somewhere be documented in the EPD. Additional information in the EPD shall be verified too.

The EPD Ireland EPD template is based on the ECO Platform developed voluntary "Best Practice example" for the EPD format. The Best Practice example describes the agreed content of an EPD for members of the ECO Platform. In addition to the EPD content requirements of EN 15804 ch.7 (both revisions/amendments – A1 and A2 respectively) and EN 15942, this includes:

- A statement of the applied background database and software,
- A description of representativity in average EPD,
- A table for declaring biogenic carbon (ISO DIS 21930 rev)
- A place for additional impact or LCI indicators,
- A place for additional environmental information

| 0 | FORMAL REQUIREMENTS | REFERENCE | CHECKED AND APPROVED | N/A |
|---|---|---|---|---|
| 0.1 | Is the ECO Platform EPD Format Best Practice example applied?<br>If not, a simple statement explaining why PO did not follow ECO Platform Best Practice example | Eco Platform Best practice example | | |
| 1 | FORMAL REQUIREMENTS | REFERENCE | CHECKED AND APPROVED | N/A |
| 1.1 | EPD include as general information:<br>• Text "Environmental Product Declaration in accordance with ISO 14025 and EN 15804", prominently visible in the EPD*<br>• Statement that "EPD of construction products may not be comparable if they do not comply with EN 15804"<br>• Publisher name*, address*, logo, website.<br>• Name of declared product*<br>• Declaration owner / Name and address of manufacturer/ association<br>• Geographical area, i.e., market range, where the product is produced, where it may be applied and where the end-of-life is assumed<br>• A statement whether the EPD is a specific or an average EPD. Description of the kind of average.<br>• Names of manufacturer(s) when the EPD declares an average of several manufacturers<br>• Date of issue* + validity (5 years)/date of expiry*+ date of update if relevant* | EN15804+A1/EN15804+A2 ch. 7.1<br>ECO Platform List of content to declare in an ECO EPD | | |

| | | | | |
|---|---|---|---|---|
| | • EPD identification (registration number of the EPD on programme operator level and on ECO Platform level).<br><br>Note: * items shall be declared on the front page of the EPD | | | |
| 1.2 | PCR name<br>PCR version (MM YYYY)<br>If applicable: c-PCR (complementary PCR from product TC) | Applicable PCR from European product TCs | | |
| 1.3 | Demonstration of verification: external[1] independent verification, name of third-party verifier | EN15804+A1/EN15804+A2 ch.7.1 Table 2 | | |
| 1.4 | Information on the validity corresponds with the specifications in the project report | | | |
| 1.5 | Logos (company, Program Operator, ECO Platform) and pictures relate to the product and the subject of environment | ECO Platform List of content to declare in an ECO | | |
| 1.6 | For EEE-construction products: Statement that this EPD follows additional requirements for construction products considered as Electronic or Electric Equipment | M | | |
| 2 | PRODUCT | REFERENCE | CHECKED AND APPROVED | N/A |
| 2.1 | The product description is in line with the project report and the product studied, and clear enough described in the EPD to understand what product is declared. Name and location of production site. | ECO Platform List of content to declare in an ECO EPD | | |
| 2.2 | If applicable: Explanations on calculations of averages within a product group, and representativeness:<br>• Information on restrictions to the use of the EPD.<br>• Useful information in the EPD for the representativity of the average EPD:<br>• A technical description of the average product group (such as density or a property like U-value);<br>• The number of manufacturing plants included in the EPD; and/ or<br>• The names of manufacturing companies or brands or associations.<br>• Sampling process if only representative companies/sites are chosen.<br>• Description of the relative production volume covered by the EPD.<br>• Geographical coverage.<br>• The range of products for which the EPD is relevant, even if data from some products has not been used directly in producing the EPD.<br><br>The range of products for which the EPD is relevant,even if data from some products has not been used directly in producing the EPD. | EN15804+A1/EN15804+A2 ch.7.1<br>ECO Platform “List of content” to declare in an ECO EPD | | |
| 2.3 | Specification / identification (picture, name, model) | EN15804+A1/EN15804+A2 ch.7.1 | | |

[1] EN15804 ch.7.2 Table 2 mentions the possibility of internal or external verification. In the ECO Platform external verification is preferred and advised.

| | | | | |
|---|---|---|---|---|
| | Unambiguous identification of the product(s), by standards, concessions, or other means | ECO Platform List of content to declare in an ECO EPD | | |
| 2.4 | Indication of the intended use. Application and technical functions of the product | EN15804+A1/EN15804+A2 ch.7.1<br>ECO Platform List of content to declare in an ECO EPD | | |
| 2.5 | Relevant technical data (additional information is possible) including RSL if applicable (Average values or range in case of product groups) | | | |
| 2.6 | The test standards to which the technical data are referred to. | | | |
| 2.7 | A description of the main product components and or materials is provided in accordance with the specifications of the PCR (if available) and LCA project report. As a minimum substance that are listed in the latest “Candidate List of Substances of Very High Concern for authorisation” if their content exceeds the limits for registration | EN15804+A1/EN15804+A2 ch.7.1 | | |
| 2.8 | Description of the manufacturing process / all manufacturing processes if several locations are involved | EN15804+A1/EN15804+A2 ch.7.1 | | |
| 3 | LCA RULES | REFERENCE | CHECKED AND APPROVED | N/A |
| 3.1 | Information on the declared / functional unit corresponds with the specifications of the PCR (if available) | Applicable PCR | | |
| 3.2 | Indication of the EPD type and declared/undeclared modules through a table of modules (MND=Module not declared)<br><br>**EPD types applicable in EN15804+A1:**<br>- cradle-to-gate<br>- cradle-to-gate with options<br>- cradle-to-grave<br><br>**EPD types applicable in EN15804+A2:**<br>- cradle-to-gate with modules C1-C4 and module D<br>- cradle-to-gate with options, modules C1-C4 and module D<br>- cradle-to-grave and module D<br>- cradle-to-gate (exemption requirements apply)<br>- cradle-to-gate with options (exemption requirements apply) | EN15804+A1/EN15804+A2 ch. 7.2.2<br>Note: the requirements differ between the standard revisions, although chapter numbers align | | |
| 3.3 | EPD contains a (simple) flow diagram in accordance with the modular approach | EN15804+A1/EN15804+A2 ch. 7.2.1 | | |
| 3.4 | Description of the system boundary (can be simplified, as a picture or in wording) Presentation of | | | |

| | | | | |
|---|---|---|---|---|
| | assignment of the analysed processes to the life cycle modules | | | |
| 3.5 | Indication of the key assumptions and estimates for interpretation which are not depicted elsewhere in the EPD | | | |
| 3.6 | Presentation of the application of cut-off criteria in accordance with the project report | | | |
| 3.7 | Source of background data used name and dated version. Description of what upstream and/or downstream data has been applied is optional. | ECO Platform List of content to declare in an ECO EPD | | |
| 3.8 | Indication of the age of background data used (e.g., last update or version of the database) | ECO Platform List of content to declare in an ECO EPD | | |
| 3.9 | Information on the data collection period and resulting averages | | | |
| 3.10 | Presentation of the allocations of relevance for calculation in accordance with the minimum requirements of the PCR | | | |
| 3.11 | BMB (biomass balance) and/or recycled content allocation (attribution) approaches like “Mass balance credit method” and/or “Book and Claim” methods as per ISO 22095 cannot be used in connection with ECO EPDs. | | | |
| 4 | LCA SCENARIOS AND ADDITIONAL TECHNICAL INFORMATION | REFERENCE | CHECKED AND APPROVED | N/A |
| 4.1 | Mandatory for all declared modules > A3: Presentation of the assumptions pertaining to the scenarios of the declared modules in accordance with the project report. Information on undeclared modules is optional. | EN15804+A1/EN15804+A2 ch. 7.3 | | |
| 4.2 | If a reference service life is declared in the EPD, presentation of the scenario on which the RSL is based, in accordance with the project report | EN15804+A1/EN15804+A2 ch. 7.3.3.2 + Annex A<br><br>Note: the requirements differ between the standard revisions, although chapter numbers align | | |
| 5 | LCA: RESULTS | REFERENCE | CHECKED AND APPROVED | N/A |
| 5.1 | Description of the declared / functional unit | | | |
| 5.2 | Identification of the declared/undeclared modules: Table of Modules/indicators, illustrating the type of EPD<br>MND = module not declared/INA = Indicator not assessed<br>Full declaration of all indicators of EN 15804 required according to the modular approach<br>Result Table contains:<br>• No blank cells, hyphens or other symbols. | ECO Platform “List of content” of an EPD to declare in an ECO EPD (4.4 A part C) EN15804+A1/EN15804+A2 ch.7.2.3, 7.2.4, 7.2.5 and ch.7.5<br><br>ECO Platform List of content to | | |

| | | | | |
|---|---|---|---|---|
| | • The value 0 only for parameters that have been calculated to be 0, or below a limit value (former MNR).<br>• Footnotes shall be used to explain any limitation to the result value.<br>If according to EN15804+A2:<br>Additional indicators included or marked as Not Declared ("ND") in table or as text | declare in an ECO EPD | | |
| 5.3 | Program operators may allow optional additional impact indicators and LCI indicators (like biogenic carbon). These shall be identified as "additional " to the indicator basket of EN 15804 , either in the EPD itself or in an annex. (There are no specific additional requirements for EPD Ireland ) | EN15804+A1<br>EcoPlatform Best Practice Example (in Annex A part C) | | |
| 5.4 | Compliance of the declared values with the information in the project report | | | |
| 5.5 | In case of product averages: description of the range/variability of the LCIA results. This may be qualitative information. | EN15804+A1/EN15804+A2 ch.7 | | |
| 5.6 | Deletion of module columns which are not declared (permissible for the Results part) | ECO Platform List of content to declare in an ECO EPD | | |
| 5.7 | Formatting the table framework and parameter addressed in accordance with the specifications of the PCR or the Program Operator rules | | | |
| 6 | EVIDENCE FOR TESTS OR CERTIFICATES | REFERENCE | CHECKED AND APPROVED | N/A |
| 6.1 | Additional information is provided to indoor air or soil/water, if applicable | EN15804+A1/EN15804+A2 ch.7.4 | | |
| 6.2 | Other additional environmental information if relevant for a country. | ECO Platform List of content to declare in an ECO EPD | | |
| 6.3 | Declaration of the relevant evidence. Information where to find this evidence. | EN15804+A1/EN15804+A2 ch.7.2 and applicable PCR, existing program rules | | |
| 6.4 | Approach Power Mix: Reporting done as required in prEN 15941. Marked based approach or country specific consumption mix (reference to second EPD document in the case of double reporting) | prEN 15941 | | |
| 6.5 | Additional rules for transparency:<br>• In EPD the emission factors of the carbon footprint of the applied energy mix must be declared in XX kg CO2e/kWh.<br>• In EPD: Indication of energy datasets used is mandatory. Minimum: Residual Mix or modelled datasets. Mix of energy carriers should be displayed. Information if GoOs are used must be declared. | | | |
| 7 | REFERENCES | REFERENCE | CHECKED AND APPROVED | N/A |
| 7.1 | Full indication of all referenced sources (excluding standards already quoted in full and standards concerning evidence) | | | |
| 8 | ANNEX | | | |

| | | | | |
|---|---|---|---|---|
| 8.1 | An Annex may contain all additional information required for specific national use in different countries. There are no specific national use requirements for Ireland | ECO Platform List of content to declare in an ECO EPD | | |

## VERIFICATION CHECKLIST PART C: REQUIREMENTS FROM OTHER STANDARDS AND REFERENCES

This whole section is mandatory to verify. It has been added to ensure that e.g. any programme-specific requirements that are not included in Parts A and B are part of the verification.

| 1 | OTHER STANDARDS AND REFERENCES | REFERENCE | CHECKED AND APPROVED | N/A |
|---|---|---|---|---|
| 1.1 | Compliance with other requirements in ISO 14020 | ISO 14020 | | |
| 1.2 | Compliance with other requirements in ISO 14025 | ISO 14025 | | |
| 1.3 | Compliance with other requirements in EN 15804:2012+A1:2013 (if applicable) | EN 15804:2012+A1:2013 | | |
| 1.4 | Compliance with other requirements in EN 15804:2012+A2:2019 ((if applicable) | EN 15804:2012+A2:2019 | | |
| 1.4 | Compliance with other requirements in General Programme Instructions in the EPD Ireland Programme | General Programme Instructions | | |
| 1.5 | Compliance with other requirements in referenced Product Category Rules (PCR) available at www.igbc.ie | Applicable PCR | | |