

# ECO PLATFORM

### Verification Guidelines for ECO EPD Programme Operators Version 07 (December 2023)







### Table 1: Version of this document

Version Number	Date	Summary of changes
V 07	20.12.2023	Excluding Audit & Verification Guidelines V6 into separate document



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### 1 GENERAL REQUIREMENTS FOR EPD VERIFICATION

### 1.1 Goal and Scope of ECO Platform EPD verification process

The goal of the ECO Platform verification process and verification content is to give guidance to the verifiers, in order to secure a common quality level of the EPD and a consistent approach with regard to EN15804 and CEN/TR 16970. The Verification Guidelines refer to ECO EPDs, in accordance with EN 15804 and agreed interpretations in CEN/TR 16970.

They focus on:

- Qualification and quality control of the verifier,
- Content of the verification.
- **NOTE 1** Verification and appointment of verifiers are dealt with in the individual EPD programmes. The ECO Platform will not strive for a common pool of verifiers for the time being; verifiers should be related to specific EPD programmes as this appears to be more practical e.g. for language issues and local market requirements

### 1.2 Independence

### 1.2.1 Principle

The technical and managerial independence of the verifier from the LCA practitioner and EPD owner (manufacturer, client) shall be guaranteed. Financial pressure on the verifier shall be avoided. Independence is important to avoid influence on the outcome of the

verification.

### 1.2.2 Requirements

The Programme Operator (PO) shall organize the following:

- 3<sup>rd</sup> party verification: independent 3<sup>rd</sup> party verification is mandatory. This means that the verifier is based outside the organizations of the manufacturer (or LCA practitioner).
- Alternatives are possible as long as the independence of the verifier can be proven, and the procedures are in line with the verification requirements of ISO 14025.
- Address the risk of pressure from manufacturer / LCA practitioner on verifier to avoid influence on the outcome.
- Influence or pressure from manufacturer or LCA practitioner on the verifier shall be avoided. The programme operator shall organize the verification procedure and/or backup for the verifier in a way that limits this risk or provides solutions in case pressure occurs.

### harmonised verification procedure among the ECO

Verification Guidelines in order to guarantee

Platform members

**Independence** is important to avoid influence on the outcome of the verification.

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NOTE 2 While the verifier shall work independently and may not influence the manufacturer and/or the LCA practitioner, the latter must answer questions for clarification by the verifier and if needed substantiate claims or meta-information on data. Such clarification often leads to the elimination of errors or improves the background report.

Limiting the risk of pressure can be done in several ways. For example:

- Payment in advance and/or payment independent of the outcome of the verification.
- The programme operator contracts the verifier and manages the verification process; there is no direct contact between the verifier and the commissioner of the EPD.
- The programme operator offers the possibility for verifiers to discuss problems during verification. Further problems should be described in the verification report (which could be disclosed).
- The programme operator has procedure in place to solve potential conflicts between manufacturer/LCA practitioner and verifier.

### **1.3** Qualification of the verifier

### 1.3.1 Principle

Qualifications and competence are important to ensure a certain quality level of the verification and of the EPD. The ECO Platform members strive for the highest level of quality that can currently be expected on the market and which can be mutually recognized.

### 1.3.2 Proof of competence

There are several ways for verifiers to indicate their knowledge and experience, and programme operators may in detail have different ways to assure the verifiers are competent. For example:

- A defined level of practical experience as LCA practitioner or verifier, e.g. number of years of experience or a number of LCA studies,
- Experience with EPD, e.g. having prepared a certain number of EPD,
- Competence in specific construction product sectors,
- Participation in LCA/EPD standardisation work,
- Participation in LCA/EPD networks, platforms, etc.,
- Coaching or supervision by a more experienced LCA practitioner or verifier if experience is missing.
- Competence in audit / verification processes
  - **NOTE 3:** A verifier can be a single person, a team of individual persons or individuals in an organization. Appointment and registration about the way the verifier team is composed should be transparent to ensure independence from the organization to be verified, and to ensure the right competences.

### Qualifications and

**competence** are important to ensure a certain quality level of the verification and of the EPD

**Competence** of verifiers

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### Up-to-date knowledge

The programme operator must ensure that the above-mentioned knowledge and experience is available and up to date at the time of verification. As a minimum the programme operator must communicate – based on information coordinated or provided by the ECO Platform, if available - about new developments in EPD standards (especially from CEN TC product groups) to verifiers and ensure that new developments are included in programme rules and PCR.

There are several ways for the programme operator to ensure that verifiers' competence is up to date, for example by:

- Training by the programme operator,
- Newsletters, publications on website,
- Requiring the verifier to be up to date when accepting a verification, as part of the overall requirements to verifier,
- Selection of verifier for a specific product group verification process, e.g. based on actual CV.

### Appointment and registration

An appointment and registration procedure for verifiers (including an arbitration procedure in case of complaints) shall be part of the programme rules. The appointment and registration can be either organized by the programme operator itself or by a third party.

A list of qualified registered verifiers (can also be the organization as such<sup>1</sup>) should be publicly available or available upon request in case of complaints. Verifiers in person should always be traceable in case of questions. It is up to the programme operator if the registration is open for all interested verifiers or not, as long as the procedure is transparent.

### **1.4** Requirements for verification procedure

### 1.4.1 Principles

Verification of ECO EPD shall ensure that the EPD and project report is in compliance with referenced ECO Platform Standards and declares all required content mentioned in a valid version of the "LCA calculation rules and specifications for EPDs" (see "Technical Guidelines – General Remarks for a list of all referenced ECO Platform standards).

An ECO EPD includes all items stated in the "List of content to declare in an ECO EPD". An ECO EPD may include additional information, as defined in ISO 14025 and EN 15804, based on national requirements or specific market needs. Additional information shall always be verified if included in the ECO EPD.

**Regular training** of verifiers is necessary

Appointment and registration of verifiers

### Verification of the ECO EPD

shall ensure that the EPD is in compliance with EN 15804 and the agreed interpretations of CEN/TR 16970

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<sup>&</sup>lt;sup>1</sup> As "the verifier" can also be a team of verifiers, an organization can secure to deliver the right team for verification. Appointment and registration about the way the verifier team is composed should be transparent to ensure independence from the organization to be verified, and to ensure the right competences.

The verification shall confirm that the verifier could not find any deviation from the compliance of the EPD with the following:

- EN 15804, ISO 14025,
- The ECO Platform rules,
- The ECO Platform list of content.

It shall also confirm that the information given in the declaration is in line with the LCA underlying the declaration and that the methods used to carry out the LCA are scientifically and technically valid.

### 1.4.2 Requirements

### Verification checklist

The programme operator shall provide a checklist to be used by the verifier for the verification report. This checklist must at least contain all issues mentioned in chapter 2 of this document.

### ECO EPD

An EPD carrying the "ECO EPD verified" logo shall be verified through a programme operator that has successfully completed the ECO Platform Audit as established ECO EPD PO. While all content of the above-mentioned ECO Platform content list is required, the format and the design are not prescribed but the programme operator can decide on its own.

### Additional information in the EPD

An EPD carrying the "ECO EPD verified" logo may contain more information than just the information required according to EN15804. Any such additional information should be clearly separated from the EN15804 indicator results, as shown in the "List of content to declare in an ECO EPD" in chapter 2.4 section 5 and 6. Any additional information shall be information required by the respective PCR or judged as relevant by the programme operator and shall be verified according to ISO14025 before being included in the ECO EPD.

### **Control mechanism and arbitration**

If stakeholders (verifier, LCA practitioner, competitor, user of EPD, etc.) have comments, questions or suspect an error in the ECO EPD, this issue should be brought forward to the respective programme operator, not the ECO Platform. For this purpose, the programme operator shall have an arbitration procedure in place to handle disputes and complaints concerning the quality and validity of the EPD.

### Requirements

Verification Checklist - The programme operator shall provide a checklist to be used by the verifier for the verification report.

An EPD carrying the "ECO EPD verified" logo shall be verified through a programme operator that has successfully completed the most recent ECO Platform Audit.

An EPD carrying the "ECO EPD verified" logo may contain more information than just the information required according to EN 15804.

The programme operator shall have an arbitration procedure in place to handle disputes and complaints.

### 2 CORE CHECKLIST FOR VERIFICATION

This checklist presents the items that shall be verified as a minimum. It is presented as a 'tick-box'. The verification report shall provide transparency about discussions and (if applicable) improvements having been made according to the verifier's comments. The programme operator shall integrate these items into its own verification procedures.

The verifier shall by principle not make any recommendations. He/she shall be impartial and not try to influence the EPD according to his/her opinion.

The core checklist is limited to data presented in EPD. Some EPD programmes offer the possibility to verify LCA tools for EPD, but for this version of the Verification Guidelines tool verification is not yet included.

Requirements on Tool Verification are defined in the "Verification Guidelines for automated software systems (tools) for generating and verifying EPDs" which are part of the referenced ECO Platform Standards.

The verifier shall give a statement about the result of the verification, clarifying at minimum:

- Which EPD is addressed,
- That the work concerned is a verification ,
- That the verification has been done by an independent 3rd party,
- That the EPD and project report was verified according to EN 15804 and ECO Platform rules or that the EPD was verified according to EN 15804+A2 and ECO Platform rules
- The PCR and, if relevant, c-PCR, which were applied for the EPD.

### Examples:

I hereby confirm that, following detailed examination as independent 3<sup>rd</sup> party verifier, I have not been able to trace any unjustified deviations, by the Environmental Product Declaration *[declaration number]*, issued for *[product name(s)]* by *[company name]* and by its project report from the requirements outlined in the corresponding product category regulations based on EN 15804 (version to be stated) and those interpretations by CEN TR 16970 agreed by the ECO Platform.

Name of the relevant PCR Guidance<sup>2</sup>

Reference to the use of the ECO Platform checklist

The company-specific data and upstream and downstream data have been examined as regards plausibility and consistency; the declaration owner is responsible for its factual integrity.

The project report on the Life Cycle Assessment and the report(s) on features of environmental relevance are filed at [name of Programme operator].

Place and date

Name and signature of

3<sup>rd</sup> party verifier

>>>

>>>

**Core checklist** for verification of EPDs by approved POs

<sup>&</sup>lt;sup>2</sup> NOTE: CEN TC c-PCR documents, if existing, overrule Programme Operator-related PCR documents for the specific product group. ECO Platform Guidelines may define exceptions to standards and c-PCRs in the document "ECO Platform Calculation rules".

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## 2.1 Verification Checklist for the Life Cycle Assessment and Requirements on the Project Report

This checklist is applicable for EPDs and project reports according to EN15804:2012+A2:2019/AC:2021.

All items in the checklist below must be checked in the verification. Most items are mandatory to check, some are optional. If the issue is in line with the requirements and accepted by the verifier, the box "checked and approved" is ticked.

The verifier shall report any deviations from the requirements. The dialogue between verifier and LCA practitioner should be made transparent as well as any improvements made during the verification process. This can be done separately from the checklist (an example is provided below the checklist).

1	General information	Mandatory/ optional	Reference	Checked and
1 1	Commissioner of LCA study, LCA practitioner	M	EN15804+A2 ch.8.2	approved
1.1	Date of issue of LCA report		EN15804+A2 ch.8.2	
1.2		M		
1.3	Statement that the Life Cycle Assessment study has been performed in accordance with the requirements	М	EN15804+A2 ch.8.1/8.2 + applicable PCR, Joint Research	
	of EN 15804 and applicable PCR (date and version)		Center:	
	and JRC characterization factors (version)		https://eplca.jrc.ec.europa.eu/LC	
			DN/EN15804.xhtml	
1.4	Statement of the version of EN15804+A2:2019 used	М	EN15804+A2 ch.8.2	
	for the study and EPD			
1.5	Any other independent verification of the data given in	0		
	the LCI/LCA documentation?			
1.6	For EEE-construction products:	М	EN15804+A2/EN 50693	
EEE	Statement that this EPD follows additional			
	requirements for construction products considered as			
_	Electronic or Electric Equipment			
2	Study goal	Mandatory/ optional	Reference	Checked and approved
2.1	Reasons for performing the Life Cycle Assessment	М	EN15804+A2 ch.8.2	
2.2	Intended application – (e.g. for EPD, databases,	М	EN15804+A2 ch.8.2	
	publication etc.)			
2.3	Target group (B2B, B2C,)	М	EN15804+A2 ch.8.2	
3	Functional unit / Declared unit	Mandatory/	Reference	Checked and
2.4		optional	EN15004:42	approved
3.1	Functional / Declared unit, including relevant technical specification as required in "ECO Platform LCA	М	EN15804+A2: ch. 6.3.1-6.3.3	
	calculation rules and specifications for EPDs"		and applicable c-PCR	
	calculation rules and specifications for EPDs			
			LCA calculation rules and	
			specifications for EPDs ch. 3.3.1	
3.2	Indication of a factor for the conversion into kg, if		EN15804+A2: ch.6.3.2.1 and	
	applicable	М	ch.6.3.3	
3.3	If product groups (similar products from one	М	EN15804+A2: ch.8.2	
	manufacturer and/or from different production plants)			
	are declared:			
	a. Description of the type of the EPD (e.g., average,			
	representative product or worst-case product);			
	b. Rules for the calculation of the declared results			
	and content.			

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4	Product description	Mandatory/ optional	Reference	Checked and
4.1	Composition of the product	M	ISO 14025	approved
7.1			100 11020	
			LCA calculation rules and	
			specifications for EPDs ch. 3.3.2	
4.2	Description of technical and functional characteristics	М	Applicable European product standard or c-PCR	
	and area of intended application in the building. In case of EPD of product group: at minimum qualitative		standard or C-PCR	
	description of the products included and qualitative			
	description of ranges of functions.			
4.2	Flow diagram of main production processes. Level of	М	EN 15804+A2: ch.7.2.1	
4.3	detail: LCA calculation rules and specifications for EPDs	IVI	EN 15804+AZ: CI.7.2.1	
5	System boundaries in accordance with the	м	Reference	Checked and
+A2	modular design of the EN 15804+A2			approved
5.1	Description of Life Cycle stages/modules declared.	М	EN15804+A2 ch. 5.2	
	Omissions of the life cycle stages declared. Visualization of system boundaries. Level of detail: see		(incl. Figure 1)	
	LCA calculation rules and specifications for EPDs			
5.2	Comprehensive declaration of modules A1-A3, C and D	М		
	as a minimum requirement, unless conditions for		EN15804+A2 ch. 6.3.5	
	excluding C and D in EN 15804+A2 ch. 5.2 are met.		EN 15804+A2 ch. 5.2	
	If necessary, A1-A3 can be reported. separately or as an aggregated module.		LCA calculation rules and	
			specifications for EPDs 3.3.3	
	Suggestion: A1-A3 must, if declared separately, also be			
	reported in an aggregated column to facilitate			
5.2	comparison In addition for EEE-construction products:	м	LCA calculation rules and	
EEE	All modules B shall be calculated for the EPD.		specifications for EPDs ch. 4.2	
	Technical information for the relevant B module(s)			
	shall be provided in the project report.			
	Requirements regarding B6 fulfilled as given in the ECO Platform LCA calculation rules and specifications			
	for EPDs			
5.3	A1 to A3: System boundary	М	EN15804+A2 ch. 6.3.5.2 and	
	• Clear description of what the modules cover;		applicable c-PCR	
	• System boundary to nature (e.g. in the case of	certificates optional		
	<ul><li>forests between nature and technosphere);</li><li>Use of secondary materials and secondary fuels and</li></ul>	optional		
	waste produced (check end-of-waste state);			
	<ul> <li>Fulfilment of requirements regarding offsetting</li> </ul>			
5.4	A4 to A5 optional module, thus if covered: Clear	М	EN15804+A2 ch. 6.3.5.3 and	
	description of system boundaries		applicable PCR	
5.5	Accounting impact of losses in the modules in which they arise	М	EN15804+A2 ch. 6.2.1 and 6.3.5.1 and 6.3.5.3	
5.6	B1 and B7 (optional modules except for EEE-	М	EN15804+A2 ch. 6.3.5.4 and	
	construction products, thus if covered): Clear		applicable PCR	
5.6	description of system boundaries			
5.8	C1 to C4: Clear description of system boundaries	М	EN15804+A2 ch. 6.3.5.5 and applicable PCR	
	C3 Clear description of the declared scenarios, like:	м	EN15804+A2 ch. 6.3.5.5 + table 8	
5.9	CS Clear description of the declared scenarios, like.	111		
5.9	Waste treatment	141	+ ch. 7.2.4.4 + annex B.1	

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	<ul> <li>Impacts of recycling processes to achieve end of</li> </ul>			
	waste			
	<ul> <li>Justification of the "end-of-waste state"</li> </ul>			
	a. Existing purpose			
	b. Existing market or demand			
	c. Compliance with technical requirements and			
	legal guidelines			
	d. Fulfils limit values for Substances of Very High			
	Concern (SVHC)			
5.10	C4:	М	EN15804+A2 ch. 6.3.5.5 and ch.	
	Is the complete waste disposal process included in this		6.3.5.6	
	module? Is its inclusion described transparently and is			
	it plausible?		LCA calculation rules and	
	Carefully check the correct allocation for deposition of		specifications for EPDs ch. 3.3.3	
	biogenic material.			
5.11	D: System boundary and loads and benefits of all	М	EN15804+A2 ch. 6.3.5.6	
	relevant modules shall be clearly described and			
	justified			
	Assumptions with regard to substituted processes in D			
	incl. year of reference (e.g. assumptions with regard to			
	substitution of energy			
	production).			
5.12	D: Check if the net flow calculation is done correctly	М	EN15804+A2 ch. 6.3.5.6 and	
	taking into consideration relevant factors, e.g.:		6.4.3.3	
	• Processing losses over the whole life cycle (including			
	collection and pre-processing);			
	<ul> <li>Inputs in Modules A1 to A3 (and A4 to B5 if</li> </ul>			
	necessary);			
	<ul> <li>The reaching of end-of-waste-state by all waste</li> </ul>			
	flows considered in module D.			
5.13	D: No benefits or loads of allocated co-products	М	EN15804+A2 ch. 6.3.6.5 and	
			ch.6.4.3.3	
6	Power mix			
		Mandatory/	Reference	Checked and
		optional		Checked and approved
6.1	Selection of the power mix in accordance with the		CEN TR 16970 + prEN 15941 and	
6.1		optional		
6.1	Selection of the power mix in accordance with the applicable rules for electricity modelling.	optional	CEN TR 16970 + prEN 15941 and	
	Selection of the power mix in accordance with the applicable rules for electricity modelling. Is the reference year for the dataset documented?	optional	CEN TR 16970 + prEN 15941 and applicable PCR	
6.1 Info	Selection of the power mix in accordance with the applicable rules for electricity modelling. Is the reference year for the dataset documented? Terms & Definitions	optional	CEN TR 16970 + prEN 15941 and	
	Selection of the power mix in accordance with the applicable rules for electricity modelling. Is the reference year for the dataset documented? <b>Terms &amp; Definitions</b> Definitions for the terms "Guarantee of Origin (GO)",	optional	CEN TR 16970 + prEN 15941 and applicable PCR	
	Selection of the power mix in accordance with the applicable rules for electricity modelling. Is the reference year for the dataset documented? <b>Terms &amp; Definitions</b> Definitions for the terms "Guarantee of Origin (GO)", "Consumption Mix" and "Residual Electricity Mix" are	optional	CEN TR 16970 + prEN 15941 and applicable PCR	
	Selection of the power mix in accordance with the applicable rules for electricity modelling. Is the reference year for the dataset documented? <b>Terms &amp; Definitions</b> Definitions for the terms "Guarantee of Origin (GO)",	optional	CEN TR 16970 + prEN 15941 and applicable PCR	
Info	Selection of the power mix in accordance with the applicable rules for electricity modelling. Is the reference year for the dataset documented? <b>Terms &amp; Definitions</b> Definitions for the terms "Guarantee of Origin (GO)", "Consumption Mix" and "Residual Electricity Mix" are provided in prEN 15941 and ISO 14067	optional M	CEN TR 16970 + prEN 15941 and applicable PCR prEN 15941, ISO 14067	approved
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6.2.3	Tracking, Traceability	М	ISO 14067 prEN 15941	
	Case 1: Manufacturer produces energy on site (is physically linked to plants nearby):		LCA calculation rules and	
	Check on electricity amounts from accounts. Check if GOs (or similar) 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 provided?		specifications for EPDs 3.3.4	
	Note 1: Attention: LCA-models for CO <sub>2</sub> figures (or other indicators in the contractual instrument documentation 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.			
	Case 2: Electricity provider chosen from national state with legislation for electricity labelling : Energy mix is found in detail on contracts/bills, registry for proof of origin existing, no residual mix necessary, everything is marked. Check on documentation as required in ECO Platform LCA calculation rules and specifications for EPDs			
	Case 3: Electricity provider chosen from national state with registry Check on documentation as required in the ECO Platform LCA calculation rules and specifications for EPDs			
	<b>Case 4a</b> : Energy provider from national states (or federal states) with no registry (inside EU and EEA).: Check on documentation as required in the ECO Platform LCA calculation rules and specifications for EPDs			
	<b>Case 4b</b> : Energy provider from national states (or federal states) with no registry (outside EU and EEA). Check on documentation as required in the ECO Platform LCA calculation rules and specifications for EPDs			
6.2.4	If a PO decides that contractual instruments cannot be used for modelling electricity, the national consumption mix shall be used (except for Australia, Brazil, Canada, China, India, and USA sub-national consumption mix shall be used).	М	Applicable PCR	
6.2.5	Reporting and communication done as required in prEN 15941:2022	М	prEN 15941 LCA calculation rules and specifications for EPDs ch. 3.3.4	
6.2.6	Is the contractual situation clear? If not, has a sensitivity analysis been reported? Conclusions from it plausible?	М	ISO 14067	

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			LCA calculation rules and	
			specifications for EPDs 3.3.4	
			specifications for EPDS 5.5.4	
6.2.7	Handling of residual mixes as required in the ECO	М	LCA calculation rules and	
	Platform LCA calculation rules and specifications for		specifications for EPDs ch.3.3.4	
	EPDs			
	In all cases the verifier hast to check:			
	How was the Residual Mix modelled?			
	Were applicable datasets used from background			
	databases used or was an AIB-method followed or a			
	'self-modelling' performed?			
	In the case of AIB-method: The method shall be			
	referenced as required in the ECO Platform LCA			
	calculation rules and specifications for EPDs.			
	In the case of self-modelling: The modelling shall be			
	documented comprehensively.			
	Are emission factors per kWh of modelled energy			
	mixes declared, at least for the GWP-indicators, or for			
	core EN 15804+A2-LCIA-indicators (in the project			
	report or by alternative means)?			
6.3	Biogas	М	prEN 15941 annex E2.3	
6.3.1	If a PO allows the calculation of Biogas (based on a	М	prEN 15941 annex E2.3	
	market-based approach), the biogas-calculation shall be handled in analogy to 6.1 green electricity. The		LCA calculation rules and specifications for EPDs ch. 3.3.4.1	
	tracking must be done as transparent as possible.		specifications for Er bs ch. 5.5.4.1	
	(References to prEN 15941 are preliminary, based on			
	the recent draft version and may be subject to			
	change.)			
	Is the modelling of his gas in line with the ECO			
	Is the modelling of biogas in line with the ECO Platform Calculation Rules for Biogas?			
	That of the calculation realist of blogas:			
6.3.2	Additional information for transparency given as	М	LCA calculation rules and	
	stated in the ECO Platform LCA calculation rules and		specifications for EPDs ch. 3.3.4	
	specifications for EPDs			
7	Criteria for excluding inputs and outputs	Mandatory/	Reference	Checked and
	should be cholden in the state of the state	optional	hererenee	approved
7.1	Selection of the cut-off criteria, description of	M	EN15804+A2: ch. 6.3.6 and ch.	
	application of the criteria and assumptions in line		8.2	
	with standard and PCR? (Note: A complete mass			
	balance is normally not possible without high effort.		and applicable PCR	
	This is why cut-off decisions are often based on assumptions about the effect of the flow that has			
	been cut off).			
	List of excluded processes declared?	М	EN15804+A2 ch. 8.2	
7.2			Reference	Checked and
7.2 8	Data collection, electing background data	Mandatory/	Reference	
8	Data collection, electing background data	optional		approved
	Data collection, electing background data Selection and use of background data (specific and/or		EN15804+A2: ch. 6.3.7	
8	Data collection, electing background data	optional		

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8.2	Data collection, including data quality issues, according to LCA rules:	Μ	ISO 14044:2006, section 4.3.2; ISO 14040 section 5 (and 6)	
	<ul> <li>Assessment period for each module considered in the Life Cycle Assessment (e. g. one year average, etc.)</li> <li>Appropriateness of background data (temporal, geographical, technological)</li> <li>Other assumptions concerning background data, e.g. about data gaps</li> </ul>		And EN15804+A2 ch. 6.3.7 + ch. 6.3.8	
	<ul> <li>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.</li> <li>Assumptions concerning other relevant background data where relevant for the system boundary</li> </ul>			
9	Validity of data	Mandatory/ optional		Checked and approved
9.1	<ul> <li>Represent a reference year within 10 years for generic data</li> <li>Represent a reference year within 5 years for specific data</li> </ul>	M	EN15804+A2 ch. 6.3.8 and prEN15941 and applicable PCR	
	<ul> <li>Specific data based on 1 year average, unless an exception is justified</li> <li>Time period of 100 years over which inputs and outputs from the product system shall be accounted for. In case of landfill scenario: longer, if relevant</li> <li>Technical coverage of data complies with physical reality</li> <li>Integrity of generic data records, system boundary</li> </ul>			
9.2	and cut-off criteria for generic data records validity demonstrated Documentation on background data (specific and/or	M	Pr EN15941 and applicable PCR	
9.2	<ul> <li>e name of the data record,</li> <li>its source (database, bibliographic source, etc.),</li> <li>year of data collection and its representativeness</li> </ul>	IVI	EN15804+A2, Annex E	
	Handling missing data Assessing data quality (time, geographical and technological representativeness). Documentation of data quality for all datasets with a major contribution, together contributing to at least 80% of the results of the core environmental impact indicators.			
	Check on plausibility, comparison of indicators with others from datasets verified EN 15804+A2 and applicable c-PCR or comparison of flows and/or indicators of other significant sources of information.			
10	Development of scenarios at product level in modules A4-A5-B-C-D	Mandatory/ optional	Reference	Checked and approved
10.1	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. Declaration of additional representative scenarios for the relevant region(s) is permissible.	M	CEN TR 16970 Ch.6.3.8 Applicable PCR	

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10.2	Documentation of the relevant technical information, e.g. recycling or reuse rates, with references?	М	EN 15804+A2 table 8	
10.3	Default values in CEN TC c-PCR shall be checked on applicability for the product. Deviations from these values must be justified.	М	Applicable c-PCR	
11	Allocations	Mandatory/ optional	Reference	Checked and approved
11.1	General allocation principles applied (avoidance of allocation, no double counting (unless due to a conservative assumption) or 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.)	М	ISO14044:2006 4.3.4	
11.2	Presentation and justification of allocations in the use of secondary materials or secondary fuels as raw materials	M	EN15804+A2. 6.4.3 and 8.2 and applicable PCR	
11.3	Presentation and justification of allocations in the plant (allocation between different products/production lines in a plant)	М	EN15804+A2. 6.4.3 and 8.2 and applicable PCR	
11.4	If applicable: Presentation and justification of allocation of multi-input processes (e.g. landfilling or incineration)	М	applicable PCR	
11.5	<ul> <li>Allocation of co-products:</li> <li>Selection of the allocation factors for co-product allocation and justification of allocation method;</li> <li>Justification of allocation method (e.g. if data are not available to allocate according to the EN15804 rules);</li> <li>Presentation of the energy and material flows in case of deviating allocation method;</li> <li>No declaration of loads and benefits in Module D of flows undergone co-product allocation (which includes any flows leaving A1-A3).</li> </ul>	Μ	EN15804+A2 ch. 6.4.3.2 and applicable PCR	
11.5.	<ul> <li>Economic allocation for processes producing coproducts used in cement and concrete, e.g. blast furnace slag, crystallised basic oxygen furnace slag, fly ash, artificial gypsum, silica fume, aluminium-oxide-containing co-products</li> <li>Economic allocation has been used to assign impact to these low value co-products.</li> <li>Even where the co-product's contribution to the overall revenue of the co-production process is less than 1%, economic allocation has been used to assess the impact, even if small, for low value co-products.</li> <li>When assessing steel, coal-fired electricity, and other processes producing these co-products, physical partitioning and other forms of allocation have not been used to assign impact to low value co-products.</li> </ul>	M	EN 15804, CEN/TR 16970, EN 16908 and ECO Platform decision	
11.6	Documentation of allocation factors used and their (independent) sources	М		
11.7	Allocation process for reuse, recycling and recovery, check specifically:	М	EN15804+A2 ch.6.4.3.3	

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	<ul> <li>End-of-waste state, Consistency with other scenarios of waste management</li> <li>technology representativeness for the region / country</li> <li>Specification and justification of end-of-waste state where applicable</li> <li>If applicable (module D): Selecting substituted processes in accordance with the PCR or (if no PCR is available) representative actual processes</li> <li>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.</li> <li>If applicable (substitution in Module D): Calculation of net flows</li> <li>Conservative approach, i.e. choice of those</li> </ul>		and applicable PCR	
	scenarios and calculation rules that reflect the highest environmental impacts in comparison to other choices			
11.8	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. If the allocation principles are not followed, or it is unknown whether or not they are followed, conservative assumptions should be done, for example	М	Applicable PCR	
11.9	by modifying the generic data. If applicable: transparent documentation of the calculations of biogenic carbon content of product and packaging in CO <sub>2</sub> -eq.	М	EN 15804+A2: ch.7.2.5 (table 9)	
12	The conversion factor shall be stated Life cycle modelling information	Mandatory/ optional	Reference	Checked and approved
12.1	Transparent presentation of LCA modelling (for example by tables, screenshots from LCA software programmes etc.)	M	EN15804+A2 ch.8.4	
12.2	Clear description how specific (company) data are used. Is the assignment of company data to the datasets provided by the LCA software, described transparently and is it plausible?	М	EN15804+A2 ch.8.4	
12.3	Assignment of process data to the LC modules plausible?	М	EN15804+A2 ch.8.4	
12.4	For several locations/products: Presentation of modelling of all manufacturing sites (name and address to at least the country and city level: this applies for manufacturers and organizations providing products for sale/resellers) and products as well as any weighting thereof	М	EN15804+A2 ch 7.1 a) LCA calculation rules and specifications for EPDs 4.3.2	

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12.5	<ul> <li>Plausibility and consistency of data (mass balance, energy balance) This can only be fulfilled with random checks if the effort for a verification shall be reasonable, e. g.:</li> <li>Check on equations and total sums: Mass balance of inputs and outputs, e.g. mass balance of (renewable and non-renewable) material resource (feedstock) inputs and outputs (products/waste/emissions/secondary materials)</li> <li>CO and CO2 emissions coherent with the mass input of fossil energetic resources</li> <li>Are the energy indicators coherent with the energy resources used?</li> <li>BMB (biomass balance) and/or recycled content</li> </ul>	M	EN15804+A2 ch.8.4 See LCA calculation rules and	
	allocation (attribution) approaches like "Mass balance credit method" and/or "Book and Claim" methods as per ISO 22095 <u>cannot be used in connection with ECO</u> <u>EPDs</u> . Biogas used for energy purposes is exempt from this rule, if allowed by the PO, see 6.1. For an entity producing more than one product, pooled energy resources with contractual instruments shall not be virtually allocated to specific products unless a separate energy supply and contract is in place		specifications for EPDs ch. 3.2 based on ECO Platform position paper from January 2023	
13	Indicators of the Life Cycle Inventory (LCI) and Life Cycle Impact Assessment (LCIA)	Mandatory / optional	Reference	Checked and approved
13.1	Presentation of the parameters in tabular form for all modules A1 to D.	M	EN15804+A2 ch. 7.2.2	
13.2	<ul> <li>Presentation of the indicators describing:</li> <li>EN15804+A2:</li> <li>Core environmental impacts (13 indicators),</li> <li>Additional environmental impacts (6 indicators) and coherent disclaimers. Table 4 shall be included in the EPD for the declared additional environmental 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.</li> <li>the use of resources (10 indicators),</li> <li>the waste categories (3 indicators)</li> <li>output material flows (4 indicators)</li> <li>And other environmental performance indicators required by the PCR.</li> <li>Note: The sum of GWP fossil + GWP biogenic + GWP Land use and land use change shall be equivalent to GWP Total</li> </ul>	Μ	EN15804+A2 ch. 6.5, 7.2.3 – 7.2.5 Table 4 Applicable PCR	
13.3	Has the packaging been included in the declaration of the LCI related indicators, e.g. in the quantification of the content of primary energy?	Μ	EN 15804+A2 ch.6.3.5.2 and ch. 7.2.5 (Table 9), also some other chapters regarding modules B and C	
13.4	Selection of correct characterisation factors and elimination of long-term emissions (> 100 years) Version of CF Factors to be stated to facilitate comparison	Μ	EN15804+A2 ch.8.2 and annex C and applicable PCR Note: some CEN TC product c-PCR documents contain additional and/or more appropriate CF Factors missing in the JRC tables.	

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			Note: the characterisation factors differ from time to time. JRC is NOT aligned with the revision timelines of EN 15804. EN 15804 references "the latest version from JRC".	
13.5	Justification of indicators and characterisation methods applied in case they are not among the mandatory indicators/methods of the EN15804 and applicable PCR	M		
13.6	<ul> <li>Information on the environmental impacts in the project report:</li> <li>Reference to characterisation models and factors</li> <li>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</li> </ul>	M	EN15804+A2 ch.8.2	
14	Interpretation	Mandatory/ optional	Reference	Checked and approved
14.1	Interpretation of the results based on a dominance/contribution analysis of elected indicators?	0		
14.2	<ul> <li>Is the relationship between the results of the LCI and the results of the LCIA plausible?</li> <li>Examples:</li> <li>Relationships are checked, e.g. wood-mass balance, input-material, compare with order of scale/order of magnitude.</li> <li>Insight into the model is important, where does the link between life cycle inventory and impact happen in the model. The link happens in the software</li> <li>Check orders of scale/magnitude, especially for indicators that are changed manually.</li> <li>Currently, the following results shall be the same: Coherence of primary energy (n.e.) with ADPF values.</li> <li>Check allocations, consistency with physical flows</li> <li>Assumptions and restrictions as regard the interpretation of results in the EPD, in terms of both methods and data</li> </ul>	M	EN15804+A2 ch.8.2 EN15804+A2 ch.8.2	
14.4	In the case where an EPD is for a product group 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	М	EN15804+A2 ch. 7.1 and 8.2 CEN TR 16970 ch. 7.1.	
14.5	Interpretation of the influence of data quality. An assessment of data quality should be provided if the data quality differs for significant data.	0	EN15804+A2 ch. 6.3.8, ch. 8.2 + annex E and ISO 14040 and prEN 15941	
14.6	Comprehensive transparency as regards value decisions, justifications and expert judgements, i.e. transparency to avoid misinterpretation.	М	EN15804+A2 ch.8.2	
15	Additional information	Mandatory/ optional	Reference	Checked and approved
15.1	<ul><li>If additional information is given, check the documentation:</li><li>Laboratory results/measurements listed in the content declaration</li></ul>	0	EN15804+A2 ch.8.3 Applicable PCR	

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15.2	<ul> <li>Laboratory results/measurements listed in the functional/technical performance</li> <li>Documentation on the declared technical information on individual life cycle stages not taken into consideration in the construction product's LCA (but applicable building assessment (e.g. transport routes, energy consumption during the use stage, cleaning cycles etc.)</li> <li>Laboratory results/measurements pertaining to the declared emissions in indoor air, oil or water during the use stage</li> <li>All declared information is in line with requirements in the PCR</li> <li>Where relevant: ensure that information additional to EN15804 is verifiable e.g. by reference to standards or</li> </ul>	M		
16	other publicly accepted test requirements. Lifespan and reference service life (RSL)	Mandatory/ optional	Reference	Checked and approved
16.1	The RSL shall be declared if the full life cycle A1-C4, or the B-Modules are declared. Note: If it is not possible to declare an RSL, then you have to	M	EN15804+A2 ch. 6.3.4 and normative Annex A	

# 2.2 Communication between involved parties during the verification process

The verifier shall report any deviations from the requirements in the verification report. The dialogue between verifier and LCA practitioner shall be made transparent. This can be done in or separately from the checklist. The format to do so is free to choose. Examples are given below:

**Documentation** of outcome of verification necessary

### Example:

Verification issue number	Description of non-conformity / comment	Response

### Example (partly based on XP TS 14071)

Chapter	Alinea	Type of	Ref. to an Eco	Verifier	EPD owner /	Final verifier
Article	Table	comment (Ed,	check list (or	comment and	LCA	statement
Paragraph		Te <i>,</i> Ge)	programme	recommendat	practitioner	
			rules) section	ion	answer	
Δ	rticle	rticle Table	rticle Table comment (Ed,	rticle Table comment (Ed, check list (or aragraph Te, Ge) programme	rticle Table Comment (Ed, check list (or comment and programme recommendat	rticle Table comment (Ed, check list (or comment and LCA ragraph Te, Ge) programme recommendat practitioner

### 2.3 Verification Checklist and Requirements for the EPD

It is mandatory to verify all the items in this section.

ECO Platform has developed a "Best Practice example" for the EPD format. This document does not show or require a common design; it merely 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 and EN 15942, the mandatory ECO Platform content includes:

- A statement of the applied background database and software, and both its versions
- A statement that the applied allocation method for post-consumer waste is cut-off
- A statement which version of Characterisation factors was used
- Energy mix (consumption mix or marked based approach
- A description of representativity in average EPD,
- A table for declaring biogenic carbon as per EN 15804 and ECO Platform LCA calculation rules and specifications for EPDs
- A place for additional impact or LCI indicators,
- A place for additional environmental information dependent on the applicable PCR

1	Requirements	Reference	Checked and approved
1.1	EPD include as general information: On the frontpage / titlepage / coverpage:	EN15804+A2 ch. 7.1 ECO Platform List of content to	
	<ul> <li>Text "Environmental Product Declaration in accordance with ISO 14025 and EN 15804", prominently visible in the EPD</li> <li>Publisher name, , log,.</li> <li>Name of declared product</li> <li>Declaration owner (holder) / Name</li> <li>Date of issue + validity (5 years)/date of expiry + date of update if relevant</li> <li>EPD identification (registration number of the EPD on programme operator level).</li> <li>Logo of ECO Platform</li> </ul>	declare in an ECO EPD (see above and chapter 2.4 of this document on hand)	
	<ul> <li>In other chapters of the EPD:</li> <li>Publisher name, address, logo, website</li> <li>Name of declared product</li> <li>Declaration owner (holder) / Name and address of manufacturer/association</li> <li>Electricity mix (consumption mix or market-based approach)</li> <li>Statement that "EPD of construction products may not be comparable if they do not comply with EN 15804"</li> <li>Geographical area, i.e. market range, where the product is produced, where it may be applied and where the end-of-life is assumed</li> <li>For EPDs of product group: a statement that the EPD covers a product group and a description of the type of such EPD (e.g., average, representative product or worst-case product);</li> </ul>		

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		•	
	• Names of manufacturer(s) when the EPD declares an		
	average of several manufacturers.		
	• A statement of the applied background database(s)		
	and software, and both its versions		
	• A statement of the LCA-method Cut-off by		
	classification		
	• A statement which version of Characterisation		
	factors was used		
1.2	PCR name	Applicable PCR from European	
	PCR version (MM YYY)	product TCs and or PCR from	
	If applicable: c-PCR (complementary PCR from product	PO	
	TC)		
1.3	Demonstration of verification: external independent	EN15804+A2 ch.7.1 Table 2	
	verification, name of third-party verifier		
1.4	Information on the validity: Does it corresponds with the		
	specifications in the project report?		
1.5	Appropriateness of logos of the company, programme	List of content to declare in an	
	operator and ECO Platform.	ECO EPD (chapter 2.4 of this	
	Appropriateness of pictures.	document on hand)	
1.6	For EEE-construction products:	M	
EEE	Statement that this EPD follows additional requirements		
	for construction products considered as Electronic or		
	Electric Equipment		
2	Product	Reference	Checked and approved
2.1	The product description is in line with the project	List of content to declare in an	
2.1	report, and clearly enough described to identify the	ECO EPD (chapter 2.4 of this	
	declared product unambiguously?	document on hand)	
	Name and location of production site(s).		
2.2	If applicable: Explanations on calculations of averages	EN15804+A2 ch.7.1	
2.2	within a product group, and representativeness:		
	Information on restrictions to the use of the EPD;	List of content to declare in an	
	Useful information in the EPD for the representativity of	ECO EPD (chapter 2.4 of this	
	the average EPD:	document on hand)	
	A technical description of the average product group	document on hand)	
	(such as density or a property like U-value);		
	The number of manufacturing plants included in the		
	EPD; and/ or		
	The names of manufacturing companies or brands or		
	associations;		
	Sampling process if only representative companies/sites		
	are chosen;		
	Geographical coverage;		
	The second of second sets for which the FDD is subscription.		
	The range of products for which the EPD is relevant,		
	even if data from some products has not been used		
2.2	directly in producing the EPD	EN15004.42 - 24	
2.3	Specification / identification (picture, name, model)	EN15804+A2 ch.7.1	
	Unambiguous identification of the product(s), by	List of content to declare in an	
	standards, concessions or other means	ECO EPD (chapter 2.4 of this	
		document on hand)	
2.4		L EN1E004 A2 1 7 1	
<u> </u>	Indication of the intended use	EN15804+A2 ch.7.1	
£. r	Indication of the intended use Application and technical functions of the product	List of content to declare in an	
<u> </u>			
£. f		List of content to declare in an	
2.5		List of content to declare in an ECO EPD (chapter 2.4 of this	
	Application and technical functions of the product	List of content to declare in an ECO EPD (chapter 2.4 of this document on hand)	
	Application and technical functions of the product Relevant technical data (additional information is	List of content to declare in an ECO EPD (chapter 2.4 of this document on hand)	

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	declaration of the assumptions pertaining to the		
4.1	Mandatory for all declared modules beyond A3:	EN15804+A2 ch. 7.3	
4	LCA: Scenarios and additional technical information	2023 Reference	Checked and approved
	allocation (attribution) approaches like "Mass balance credit method" and/or "Book and Claim" methods as per ISO 22095 <u>cannot be used in connection with ECO</u> <u>EPDs</u> .	calculation rules and specifications for EPDs (V1) based on ECO Platform position paper from January	
3.11	requirements of the PCR. BMB (biomass balance) and/or recycled content	See ECO Platform LCA	
3.10	Presentation of the allocations of relevance for calculation in accordance with the minimum		
3.9	Information on the data collection period and resulting averages		
3.8	Indication of the age of background data used (e.g. last update or version of the database)	List of content to declare in an ECO EPD (chapter 2.4 of this document on hand)	
	version. Description of what upstream and/or downstream data has been applied is optional.	ECO EPD (chapter 2.4 of this document on hand)	
3.6	accordance with the project report Source of background data used, name and dated	List of content to declare in an	
3.5	Indication of the key assumptions and estimates for interpretation which are not depicted elsewhere in the EPD Presentation of the application of cut-off criteria in		
	as a picture or in wording), including the assignment of the analysed processes to the life cycle modules	ESC O EPD (chapter 2.4 of this document on hand), best follow ISO 14044 ch. 4.3.2.2	
3.3	EPD contains a (simple) flow diagram in accordance with the modular approach Description of the system boundary (can be simplified,	ISO 14044 ch. 4.3.2.2 List of content to declare in an	
	<ul> <li>cradle-to-gate with options, modules C1-C4 and module D</li> <li>cradle-to-grave and module D</li> <li>cradle-to-gate (exemption requirements apply)</li> <li>cradle-to-gate with options (exemption requirements apply)</li> </ul>		
	<ul><li>EPD types applicable in EN15804+A2:</li><li>cradle-to-gate with modules C1-C4 and module D</li></ul>		
3.2	Indication of the EPD type and declared/undeclared modules through a table of modules (ND=Module not declared)	EN15804+A2 ch. 7.2.2	
3.1	Information on the declared / functional unit corresponds with the specifications of the PCR (if available) and project report?	Applicable PCR	
3	LCA rules	Reference	Checked and approved
2.8	Description of the manufacturing processes / all processes if several locations are involved	EN15804+A2 ch.7.1 and applicable PCR	
	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		
	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.	EN15804+A2 ch.7.1 and applicable PCR	

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	scenarios of the declared modules in accordance with		
	the project report.		
	Information on undeclared modules is optional.		
4.2	If a reference service life is declared in the EPD,	EN15804+A2 ch. 7.3.3.2 +	
	declaration of the scenario on which the RSL is based, in	Annex A	
	accordance with the project report	Applicable PCR	
5	LCA: Results	Reference	Checked and approved
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 ND = module not declared Full declaration of all indicators of EN 15804+A2 required according to the modular approach Result Table contains: No blank cells, hyphens, or other symbols. The value 0 only for parameters that have been calculated to be 0, or below a limit value (former MNR/MNA etc). Footnotes shall be used to explain any limitation to the result value. Additional indicators included or marked as Not Declared ("ND") in table or as text passages,	List of content to declare in an ECO EPD (chapter 2.4 of this document on hand), EN15804+A2 ch.7.2.3, 7.2.4, 7.2.5 and ch.7.5	
5.3	justifications for not declaring indicators as per EN 15804+A2? Biogenic carbon content (in product and packaging) in kg C	EN 15804+A2 chap. 7.2.5	
5.4	Programme operators may allow optional additional impact indicators and LCI indicators. These shall be identified as "additional" to the indicator basket of EN 15804, either in the EPD itself or in an annex	List of content to declare in an ECO EPD (chapter 2.4 of this document on hand),	
5.5	The declared indicator and other quantitative results shall be identical with the respective values in the project report		
5.6	In case of product averages: description of the range / variability of the LCIA results. This may be qualitative information.	EN15804+A2 ch.7	
5.7	Deletion of module columns which are not declared (permissible for the Results part)	List of content to declare in an ECO EPD (chapter 2.4 of this document on hand)	
5.8	Formatting the table framework and parameter addressed in accordance with the specifications of the PCR or the programme operator rules		
6	Evidence for tests or certificates, depending on requirements in PCR.	Reference	Checked and approved
6.1	Additional information is provided to indoor air or oil/water, if applicable	EN15804+A2 ch.7.4	
6.2	Other additional environmental information if relevant for a country.	List of content to declare in an ECO EPD (chapter 2.4 of this document on hand)	
6.3	Declaration of the relevant evidence. Information where to find this evidence	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	

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6.5	<ul> <li>Additional rules for transparency:</li> <li>In EPD the emission factors of carbon footprint of the applied electricity mix shall be declared in XX kg CO2e/kWh.</li> <li>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.</li> </ul>	ECO Platform LCA calculation rules and specifications for EPDs, List of content to declare in an ECO EPD (chapter 2.4 of this document on hand), prEN15941	
7	References	Reference	Checked and approved
7.1	Full indication of all referenced sources (excluding	List of content to declare in an	
	standards already quoted in full and standards concerning evidence)	ECO EPD (chapter 2.4 of this document on hand	
8	, ,		Checked and approved

### 2.4 List of content of the EPD

### Introduction

This document describes the mandatory content to be declared in an ECO EPD. It also serves as a best practice example for the format of an EPD when published as pdf file or printed document. The intention is to give guidance to emerging programmes with respect to the required content and its arrangement and thus improve the readability of the declaration. The example does not include pictures or graphics, because it is up to the programme operator to develop the design according to the needs of the program's market.

The example is structured into sections, which should be seen as a recommendation of using one page per section in that order: e.g. section 1 describes the front page, section 2 the first page etc. However, the amount of information in an EPD can vary considerably, e.g. when the performance of several similar products is declared in one document. Therefore, it is not possible to prescribe the number of pages of an EPD. When the EPD becomes longer than 10 pages, it is advisable to number the clauses.

Some established programmes already have rather fixed table formats embedded in other applications, thus making it difficult to change the format. Therefore, the ECO Platform does not require the implementation of a common format. This document does not claim to support digitalisation of EPDs.

### Section 1

### 1. Pictures, Logos:

- Pictures should relate to the product and the subject of environment.
- Logo of the EPD owner
- Logo of the programme operator
- Logo of ECO Platform

### 2. Compliance statement and identification

The front page of the EPD document shall prominently show the conformity to ISO 14025 and EN 15804+A2. It should also provide all administrative information for understanding which product from which manufacturer is declared, who is the programme operator responsible for the quality of the declaration, how is the EPD identified, for how long is it valid, whether it has been updated and finally whether the EPD conforms to the ECO platform quality requirements. Items addressed are:

- Product name;
- EPD owner's name;
- Programme operator's name; Logo and ECO Platform Logo
- Registration number of the EPD on programme operator level
- Relevant dates of the EPD: date of issue, date of expiry, date of update if relevant.

### List of content of the EPD, a best practice example as guidance for developing a format for a printed EPD

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Not necessarily on front page:

Verification statement according to table 2 in EN 15804+A2

### Section 2

### 3. General information:

- Contact information of EPD owner and programme operator (e.g. name, address, website)
- Regional representativity, such as name and location of production site for specific EPD, for associations this information can be given in an Annex to the EPD
- Unambiguous identification of the product or products, by standards, concessions, product classifications (e.g. CPC) or other means
- Short, transparent description of: Application, technical functions of the product
- Verification signatures in the table from ISO 14025
- Liability + comparability statement
- Identification of the PCR or c-PCR (= complementary PCR from product TC)
- Orientation where more information can be found
- CF-Factor version
- LCA-method: cut-off by classification
- Electricity mix: country consumption mix or market based approach

### 4. Scope and Type of EPD:

The result tables and the table of modules shall

- Only contain values or the letters ND (not declared).
- Contain no blank cells, hyphens
- Use ND only for parameters that are not quantified because no data is available.
  - ND can be used for modules that may be relevant on building level but cannot be declared on product level, namely Modules B3 - B5.
     Footnotes shall be used to explain any limitation to the result value
  - If a module is assessed, then the indicators shall be quantified.
  - If the module is not relevant for a product it should not appear in the result tables. If it does appear in the result table, the parameter results are ND, meaning that they are unknown and not zero. This leaves all options open for a building assessment.
  - Use the value 0 only for parameters that have been calculated to be 0.
  - If no processes can be expected within a declared module, it should be declared with parameter results of value 0, as no mass flows take place. This narrows down the options in a building assessment to a probable scenario. In this case the module should not appear as ND in the table of modules.
- the table of modules illustrating the Type of EPD with respect to the modules considered, e.g. cradle to gate with options. For EPD complying with EN 15804+A2, Modules A1-A3, C1-C4 and D are mandatory (mdt). A4 and A5 as well as all B-Modules are optional (op).

<u>Note</u> that information modules generating any input or output flows considered in the declaration of module D shall also be declared.

- For services declared in A5, A4 is a necessary module, even though this is not mentioned explicitly in EN 15804+A2
- A statement whether the EPD is specific or some kind of average EPD;
- If product groups (similar products from one manufacturer and/or from different production plants) are formed as averages:
  - a. Description of the type of average
  - b. Calculation rules for the formation of averages
  - c. Representativeness of averages in the EPD
- Applied background database description and version, i.e. applied upstream and downstream generic data (i.e. data beyond the manufacturer's influence);
- Applied LCA software or application, including dated version.
- For EPD following EN 15804+A2 a description of the data quality description is provided in the project report. If the EPD includes a statement about the data quality, it should be in Section 2.
- A statement of the LCA-method Cut-off by classification
- A statement which version of Characterisation factors was used
- Electricity mix (consumption mix or marked based approach

### Section 3

### 5. Detailed product description

- Description of the product
- Description of the production processes preferably visualised, application, technical data, condition of delivery
- Product components, main product content, packaging materials, SVHC.
   When other substances causing indoor air pollution or radioactivity are dealt with, this information can be declared in clause 10.
- Declared unit/ functional unit Reference service life (RSL)
- Representativeness of the average when an average EPD is declared. Useful information is:
  - Description of how the selection of the sites/products has been done and how the average has been determined;
  - Information on the most influencing parameters in the LCA;
  - Information on restrictions to the use of the EPD;
  - Useful information in the EPD for the representativity of average EPD is:
  - A technical description of the average product group (such as density or a property like U-value);
    - The number of manufacturing plants included in the EPD; and/ or
    - The names of manufacturing companies or brands or associations;
    - Sampling process if only representative companies are chosen;
    - Description of the relative production volume covered by the EPD;
    - Geographical coverage, (see clause 5 above);
    - 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

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### Section 4

### 6. LCA results – Mandatory impact and LCI indicators for EN 15804

The results of the underlying LCA is provided in this section as environmental impacts, resource use, output flows and additional information on biogenic carbon. All pre-set parameters of EN 15804 are required.

### 7. LCA results – Optional additional impact indicators

A set of optional additional indicators shall be addressed in a mandatory table (see table 5 in EN 15804+A2) in the EPD if complying with EN 15804+A2. If the EPD owner decides to not declare one or any additional indicator from the list in EN 15804+A2, the boxes for those modules are assigned ND = not declared. Any additional indicator not declared must be identified in the table e.g. as an entry of "ND" to the table or as text.

### 8. LCA results – optional biogenic carbon tables

The following table is an example how biogenic carbon could be declared for the different modules. In EN 15804+A2 biogenic carbon indicators are mandatory, information for kg C as per Table 9 to be given. The indicators can be expanded according to this list which is adapted from ISO 21930:2017

RESULTS OF THE LCA – BIOGENIC CARBON per functional or declared unit																		
Parameter	Unit	A1	A2	A3	A4	A5	B1	B2	B3	B4	B5	B6	B7	C1	C2	C3	C4	D
Removals and emissions associated with biogenic carbon content of the bio-based product	[kg CO <sub>2</sub> ]																	
Emissions from calcination and removals from carbonation	[kg CO <sub>2</sub> ]																	
Removals and emissions associated with biogenic carbon content of bio-based packaging	[kg CO <sub>2</sub> ]																	
Net emissions from combustion process of waste from renewable sources in A1-A3 *	[kg CO <sub>2</sub> -Eq.]																	
Gross emissions from combustion of waste, primary and secondary fuels from renewable sources in A1-A3 *	[kg CO <sub>2</sub> -Eq.]																	

\* Example: In cases where the end-of-waste state cannot be defined unambiguously like for combustion of secondary fuels or waste in a cement kiln, the net values are calculated as the GWP [kg CO<sub>2</sub>-Eq.] for the gross emissions, produced by the total renewable input (e.g. secondary fuel and waste input), minus the GWP of the emissions produced by the waste input from renewable sources.

### Section 5

### 9. Calculation rules:

- Declared or functional unit,
- Assumptions,
- Cut off rules,
- Data quality,
- Allocations.

### 10. Scenarios and additional technical information

- Clear description of processes included within system boundary A1-A3,
- Clear description of scenarios included within system boundaries for further modules beyond A1-A3 including but not limited to transport distances, losses in installation, use and end-of-life,
- Additional technical information as appropriate.
- For EPD complying with EN 15804+A2: Declaration of biogenic carbon content at the production gate, see EN 15804 Table 9

### 11. Mandatory additional information on release of dangerous substances to indoor air, oil and water

Additional information regarding the release of dangerous substances into indoor air, oil and water during use stage.

### 12. Other optional additional environmental information

Other relevant additional environmental information.

### Section 6

### 13. References

Bibliographic sources for test descriptions, standards or other documents referenced in the EPD.

### 14. Annex

An Annex may contain all additional information required for specific national use in different countries.

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