

Overview:

Tracking of versions

version	comment	date
1.0	Introduction of version numbers and tracking of versions. Addition of information blocks concerning submitted verification documents, type of reports (initial, intermediate or final reports), verifiers must only be listed with their names, no institutions in system of individual persons.	2022-01-24
2.0	Supplementary regulations for the application of the "market-based" approach in the modelling of electricity data and gas data. Note: These regulations were proposed to the ECO Platform by Bau EPD GmbH and are being discussed among experts in the Technical Working Group (TEWOG) of the ECO Platform. Until the final text is published by ECO Platform, the checklist is to be applied in this version.	2022-08-24
3.0	Changes to residual mix calculation and obligation to M-Dok 19a, addition of green power splitting in a plant/1power contract.	2023-01-27
4.0	Reference to c-PCR to be applied	2023-09-20
5.0	Adaptation in accordance with ECO Platform Standards December 2023 and June 2024, changes regarding the newly published EN 15941, changes to eco-budgeting requirements, Chapter 10 was split and allocated to other chapters, instructions for the preparation of the verification report	2024-11-06

Scope of this document:

This document is based on the ECO Platform Standards (Version 1.0 from December 2023 and June 2024). The checklist points from the original Eco Platform verification checklist have been regrouped. At the end of the document an overview matrix showing the assignment in the respective numbering systems can be found to facilitate comparison.

Additional criteria of Bau EPD GmbH following decisions of the PCR panel are included.

The document must be used as a template for the verification report. Verifiers may add additional issues but must not shorten the list. Comments to this checklist points as well as additional comments must be handled in M-document 19a. The document on hand must be used for the final report.

For a transition period until October 2022 both versions EN15804:2012+A2:2019+AC:2022 and EN15804:2012+A1:2013 are valid. The EPD must be verified against either one complete version. The version must be stated. In rare cases Bau EPD GmbH is asked for mutual recognition of still valid EPD as per EN 15804+A1. The checkpoints will therefore stay until 2027 latest.

Instructions for preparing the verification report:

The chapter 'Overview' must be deleted.

The header of the template is to be replaced in the verification report by:

Verification report [unique keyword for verified EPD]

Creator

Date: [date], version number: v1.0 (or consecutive)

From the footer of the template in the verification report

C:\Users\Sarah\NextBauEPD\Bau EPD GmbH\006 - QM PKR PGF\PKR Allgemein-MS-HB+M-Docs\English-MS-HB and M-Docs\BAU-EPD-M-DOCUMENT-19-template-verification-report-checklist-for-verification-A1+A2-version5.0-date-2024-11-06-English-Website.docx

- the path to the template must be deleted;
- the creator 'SR' must be replaced by the correct abbreviation:
- 'Check/release: FG' must be deleted.

Report on verification

of the Austrian Bau-EPD Ltd. (Bau-EPD GmbH) Environmental Product Declaration
EPD-Company-YYYY-00 for **Product** by **Company/Holder of Declaration**

As per EN 15804:2012+A2:2019+AC:2022

As per EN 15804:2012+A1:2013

Initial report Date:

Intermediate report Nr. Date:

Final report Date:

List of data packages submitted for the evaluation:

Inventory documents, project report, EPD documents, additional documents, **DATE**

Verification statement:

We hereby confirm as independent verifiers that the Environmental Product Declaration EPD-20XX-Y prepared for product XXX of company XXX and the related project report have been examined in detail.

No relevant deviations from the applicable requirements according to ÖNORM EN 15804 as well as CEN TR 16970 (as far as its interpretations have been adopted by the ECO Platform) as well as the general programme guidance (for A2: MS-HB and M-documents, for A1 according to the basic document, LCA rules-PKR Part A) and corresponding product category rules on the appropriate standard basis (PKR Part B - XXX - X.Y.Z) of Bau EPD GmbH were found. All checkpoints from the ECO Platform checklist were positively ticked off. The documentation of the verification process (comments of the verifiers, answers and improvements of the assessment team) is available at the verifier team and will be kept for at least 10 years.

The company-specific data were checked for plausibility and consistency. The owner of the EPD is responsible for its factual integrity.

The project report on the LCA and other environmentally relevant aspects is filed with the Bau EPD GmbH team (Programme operator, verifier, LCA-practitioner). M-Document 19a was used and is attached to the report.

This verification report was prepared on the basis of Bau EPD M document 19 A1+A2 - Verification report template incl. checklist. Version number: 5.0. as of 2023-11-06.

The report is accompanied by additional comments based on Bau EPD M-Document 19a Template Verification Report Additional Comments, Version 1.0. as of 2022-01-24.

Name and signature of

External verifier 1 – Name/Institution

Place and date

External verifier 2 – Name/Institution

Place and date

C:\Users\Sarah\NextBauEPD\Bau EPD GmbH\006 - QM PKR PGF\PKR Allgemein-MS-HB+M-Docs\English-MS-HB and M-Docs\BAU-EPD-M-DOCUMENT-19-template-verification-report-checklist-for-verification-A1+A2-version5.0-date-2024-11-06-English-Website.docx

Verification of the project report:

Checklist:

This checklist is applicable for EPDs according to both current versions of the core PCR: EN15804:2012+A1:2013 and EN15804:2012+A2:2019.

Where differences occur in requirements or references, the checklist is divided, to accommodate these.

Clauses that are therefore not relevant can be crossed out.

The following issues must be checked. 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 a (c-)PCR). Most issues are mandatory to check, some can be optional. If the issue is in line with the requirements and/or accepted by the verifier, the box “done” can be 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 (M-Document 19a is referenced below the checklist).

Note: Comments must be made using M-Doc 19a. Therefore, in M-Doc 19 template file the verification column is filled with a default “checked and approved” to save time.

Equivalent to Clause X in ECO Platform Verification Checklist	Found in Chapter / Clause/ Page X	1	General information - availability	Mandatory / Optional	Reference	Checked and approved or Checked with remark
1.1		1.1	Commissioner of LCA study, LCA practitioner	M	EN15804+A1/EN15804+A2 ch.8.2	checked and approved
1.2		1.2	Date of issue of LCA report	M	EN15804+A1/EN15804+A2 ch.8.2	checked and approved
1.3		1.3.1	Statement that the Life Cycle Assessment study has been performed in accordance with the requirements of EN 15804 and applicable PCRs (date and version. The applicable c-PCR of CEN TC 350 shall be listed here in particular, if there is one. If there is a technical justification for a procedure other than that described in the c-PCR, this must be noted here.	M	EN15804+A1/EN15804+A2 ch.8.1/8.2 + applicable PCR	checked and approved
1.4		1.3.2	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	checked and approved
1.3		1.4	Specification of the characterisation factors used (source version)	M		

1.5		1.5	Any other independent verification of the data given in the LCI/LCA documentation?	O		checked and approved
1.6 EEE		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+A2/EN 50693	
Equivalent to Clause X in ECO Platform Verification Checklist	Found in Chapter / Clause / Page X	2.	Study goal – availability of info	Mandatory / Optional	Reference	Checked and approved or Checked with remark
2.1		2.1	Reasons for performing the Life Cycle Assessment	M	EN15804+A1/EN15804+A2 ch.8.2	checked and approved
2.2		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? Excel-Sheet for data transfer provided?	M	EN15804+A1/EN15804+A2 ch.8.2	checked and approved
Additional Bau EPD GmbH		2.3	If the product is a base material: Can the LCA be used in a Product-EPD?	V		checked and approved
2.3		2.4	Target group (B2B, B2C, ...)	M	EN15804+A1/EN15804+A2 ch.8.2	checked and approved
Additional Bau EPD GmbH		2.5	Type of EPD: cradle to gate, cradle to grave etc.	M		checked and approved
		3.	Analysed product system			
Equivalent to Clause X in ECO Platform Verification Checklist	Found in Chapter / Clause / Page X	3.1	Product description – availability of info	Mandatory / Optional	Reference	Checked and approved or Checked with remark
4.1		3.1.1	Composition of the product 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.	M	ISO 14025	checked and approved

4.2		3.1.2	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; PCR part B	checked and approved
4.3		3.1.3	Flow diagram of main production processes and visualization of system boundaries; Level of detail: see 3.1.1 ECO Platform LCA calculation rules, MS-HB and cPCR	M	ISO 14025	checked and approved
Equivalent to Clause X in ECO Platform Verification Checklist	Found in Chapter / Clause/ Page X	3.2	Specific LCA Rules	Mandatory / Optional	Reference	Checked and approved or Checked with remark
Additional Bau EPD GmbH		3.2.1	The specific rules for LCA for certain product groups (to be found in the respective product c-PCR (PCR Part B documents) are fulfilled.	M	PCR B	checked and approved
Equivalent to Clause X in ECO Platform Verification Checklist	Found in Chapter / Clause/ Page X	3.3	Functional unit / Declared unit – availability of info	Mandatory / Optional	Reference	Checked and approved or Checked with remark
3.1		3.3.1	Functional / Declared unit, including relevant technical specification as required in “ECO Platform LCA calculation rules and specifications for EPDs” resp. MS-HB and C-PCR	M	EN15804+A1: ch.6.3.1-6.3.2 or EN15804+A2: ch. 6.3.1-6.3.3 and/or applicable PCR or additional specific requirements for certain product groups	checked and approved
3.2		3.2.2	Indication of a clear factor for recalculation into kg	M	PCR B-parts Bau EPD GmbH	checked and approved

3.3		3.3.3	<p>If product groups (similar products from one manufacturer and/or from different production plants) are formed as averages:</p> <ul style="list-style-type: none"> Description of type of average Description of calculation rules for the formation of averages (The scope of the study must be described clearly, the calculation approach for building average values must be shown transparently. Indication of production mass per product, if possible) Representativeness of averages: Description of the approach for building the average (market situation, cost shares, average on product level, average on site level...). The main drivers must be located to justify that the average is representative. Verifiers must check if A) a qualitative description of the assumptions and approach (i.e. because of lack of data) or B) a sensitivity analysis has been carried out. In no sensitivity analysis has been made, this is to justify. 	M	EN15804+A1/EN15804+A2 : ch.8.2	checked and approved
Equivalent to Clause X in ECO Platform Verification Checklist	Found in Chapter / Clause/ Page X	3.4 +A1	System boundaries in accordance with the modular design of the EN 15804+A1	Mandatory / Optional (Not applicable if EN15804+A2 is used)	Reference	Checked and approved or Checked with remark
5.1+A1		3.4.1+A1	<p>Description of the LC stages/modules declared.</p> <p>Omissions of life cycle stages declared.</p>	M		checked and approved
5.2+A1		3.4.2+A1	Comprehensive declaration of modules A1 to A3 as a minimum requirement, if necessary as an aggregated module A1- A3	M	EN15804+A1 ch. 6.3.4	checked and approved
5.3+A1		3.4.3+A1	<p>A1 to A3: System boundary</p> <ul style="list-style-type: none"> Description of all processes the modules cover System boundary to nature (e.g. between forest and technosphere in wood production) Use of secondary materials and secondary fuels and waste produced Specification of the “end-of-waste state” for material leaving A1-A3 as waste If part of the energy calculation: Reference to the contract/certificate of green electricity. Note: up to further decision green electricity can only be calculated and shown in a second set of results marked as additional information No offsetting allowed 	M	EN15804+A1 ch. 6.3.4.2 and applicable c-PCR	checked and approved

C:\Users\Sarah\NextBauEPD\Bau EPD GmbH\006 - QM PKR PGF\PKR Allgemein-MS-HB+M-Docs\English-MS-HB and M-Docs\BAU-EPD-M-DOCUMENT-19-template-verification-report-checklist-for-verification-A1+A2-version5.0-date-2024-11-06-English-Website.docx

5.5+A1		3.4.4+A1	A4 to A5 (optional module): Description of all processes the modules cover	M	EN15804+A1 ch.6.3.4.3 and applicable PCR	checked and approved
5.6+A1		3.4.5+A1	Accounting losses in the modules in which they arise (e.g. A4, transport to construction site)	M	EN15804+A1 ch.6.3.4.1	checked and approved
5.7+A1		3.4.6+A1	B1 to B5 (optional module): Description of all processes the modules cover	M	EN15804+A1 ch.6.3.4.4 and applicable PCR	checked and approved
5.8+A1		3.4.7+A1	B6 and B7 (optional module) Description of all processes the modules cover	M	EN15804+A1 ch.6.3.4.4 and applicable PCR	checked and approved
5.9+A1		3.4.8+A1	C1 to C4 (optional module): Description of all processes the modules cover	M	EN15804+A1 ch.6.3.4.5 and applicable PCR	checked and approved
5.10+A1		3.4.9+A1	C3 (optional module): Waste treatment Materials for recycling Impacts of recycling processes to achieve end of waste Justification of the "end-of-waste state": Existing purpose Existing market or demand Compliance with technical requirements and legal guidelines Fulfills limit values for Substances of Very High Concern (SVHC)	M	EN15804+A1 ch.6.3.4.5 + annex B.1 and applicable PCR	checked and approved
5.11+A1		3.4.10+A1	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.6.3.4.6	checked and approved
5.12+A1		3.4.11+A1	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 and 6.4.3.3	checked and approved
5.13+A1		3.4.12+A1	D (optional module): Is the calculation of the net flows documented, described transparently and is it plausible, particularly regarding: losses during collection and pre-processing; inputs in modules A1 to A3 (and A4 to B5, if applicable); processing losses over the whole life cycle, including life cycle stages A, B and C; the reaching of the end-of-waste state by all waste flows considered for module D?	M	EN15804+A1 ch.6.4.3.3	checked and approved
5.14+A1		3.4.13+A1	D (optional module): No benefits or loads of allocated co-products	M	EN15804+A1 ch.6.4.3.3	checked and approved
Equivalent to Clause X in ECO Platform Verification Checklist	Found in Chapter / Clause/ Page X	3.4 +A2	System boundaries in accordance with the modular design of the EN 15804+A2	Mandatory / Optional (Not applicable if EN15804+A1 is used)	Reference	Checked and approved or Checked with remark

C:\Users\Sarah\NextBauEPD\Bau EPD GmbH\006 - QM PKR PGF\PKR Allgemein-MS-HB+M-Docs\English-MS-HB and M-Docs\BAU-EPD-M-DOCUMENT-19-template-verification-report-checklist-for-verification-A1+A2-version5.0-date-2024-11-06-English-Website.docx

5.1+A2		3.4.1+A2	Description of Life Cycle stages/modules declared. Omissions of the life cycle stages declared Visualization of system boundaries. For level of detail, see ECO Platform LCA calculation rules or MS-HB and C-PKR.	M	EN15804+A2 ch. 5.2	checked and approved
5.2+A2		3.4.2+A2	Comprehensive declaration of modules A1-A3, C and D as a minimum requirement. If necessary, A1-A3 can be reported as an aggregated module. A1-A3 must, if declared separately, also be reported in an aggregated column to facilitate comparison The minimum requirement can be omitted – are the requirements for exemptions met? Only products which fulfill all three of the conditions below shall be permitted to be exempt from this requirement: —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 —the product or material is no longer identifiable at end of life as a result of a physical or chemical transformation process, and —the product or material does not contain biogenic carbon. NOTE 1 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	checked and approved
5.2 EEE		3.4.2+A2 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 the project report. Requirements regarding B6 fulfilled as given in the ECO Platform LCA calculation rules and specifications for EPDs	M	Eco Platform LCA calculation rules and specifications for EPDs ch. 4.2	
5.3+A2		3.4.3+A2	A1 to A3: System boundary <ul style="list-style-type: none"> • Clear description of what the modules cover; • System boundary to nature (e.g. in the case of forests between nature and technosphere); • Use of secondary materials and secondary fuels and waste produced (check end-of-waste state); • Specification of the “end-of-waste-state” for material leaving A1-A3 as waste; • Fulfilment of requirements regarding offsetting 	M certificates optional	EN15804+A2 ch. 6.3.5.2 and applicable c-PCR	checked and approved
5.5+A2		3.4.4+A2	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	checked and approved
5.6+A2		3.4.5+A2	Accounting losses in the modules in which they arise (e.g. A4, transport to construction site)	M	EN15804+A2 ch. 6.3.5.1	checked and approved

5.7+A2		3.4.6+A2	B1 to B5 (optional module, thus if covered): Clear description and content of modules	M	EN15804+A2 ch. 6.3.5.4 and applicable PCR	checked and approved
5.8+A2		3.4.7+A2	B6 and B7 (optional module, thus if covered): Clear description and content of modules	M	EN15804+A2 ch. 6.3.5.4 and applicable PCR	checked and approved
5.9+A2		3.4.8+A2	C1 to C4: Clear description and content of modules	M	EN15804+A2 ch. 6.3.5.5 and applicable PCR	checked and approved
5.10+A2		3.4.9+A2	C3 (optional modules): Detailed description in particular of: <ul style="list-style-type: none"> • Waste treatment • Materials for recycling • Impacts of recycling processes to achieve end of waste • Justification of the “end-of-waste state” <ul style="list-style-type: none"> ○ Existing purpose ○ Existing market or demand ○ Compliance with technical requirements and legal guidelines Fulfills 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	checked and approved
5.11+A2		3.4.10+A2	C4: Is the complete waste disposal process included in this module? Is its inclusion described transparently and is it plausible? Carefully check the correct allocation for deposition of biogenic material.	M	EN15804+A2 ch. 6.3.5.5 and ch. 6.3.5.6	checked and approved
5.12+A2		3.4.11+A2	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	checked and approved
5.13+A2		3.4.12+A2	D: Check if the net flow calculation is done correctly taking into consideration relevant factors, e.g.: <ul style="list-style-type: none"> • Processing losses over the whole life cycle (including collection and pre-processing); • Inputs in Modules A1 to A3 (and A4 to B5 if necessary); • 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	checked and approved
5.14+A2		3.4.13+A2	D: No benefits or loads of allocated co-products	M	EN15804+A2 ch. 6.3.6.5 and ch.6.4.3.3	checked and approved

Equivalent to Clause X in ECO Platform Verification Checklist	Found in Chapter / Clause/ Page X	4.	Life Cycle Inventory Analysis	Mandatory / Optional	Reference	Checked and approved or Checked with remark
		4.1	Development of scenarios at product level in modules A4-A5-B-C-D			

10.1		4.1.1	Statement that the scenarios included are currently in use and are representative for one of the most likely scenario alternatives. For the End of life modules 100% scenarios shall be given. Additional declaration of representative mixes for the relevant region is permissible.	M	EN15804 ch. 6.3.8 CEN TR 16970 Ch.6.3.8 Applicable PCR	checked and approved
10.2		4.1.2	Documentation of the relevant technical information, e.g. recycling or reuse rates, with references?	M		checked and approved
Additional Bau EPD GmbH		4.1.3	Manufacturing data should be reproducible, e.g. by available data management systems Random checks could be carried out, or based on importance; some data could be checked in the verification.	O		checked and approved
10.3		4.1.3	Default values in CEN TC c-PCR are preferred. Deviations from these values must be justified.	M		checked and approved
		4.1.5	M-Dok 37 (Module C and D)' must be observed for modelling the disposal phase.	M		Checked and approved
Equivalent to Clause X in ECO Platform Verification Checklist	Found in Chapter / Clause/ Page X	4.2	Criteria for excluding inputs and outputs	Mandatory / Optional	Reference	Checked and approved or Checked with remark
7.1		4.2.1	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 OR EN15804+A2: ch. 6.3.6 and ch. 8.2 and applicable PCR	checked and approved
7.2		4.2.2	List of excluded processes available?		EN15804+A1/EN15804+A2 ch. 8.2	checked and approved

4.3 Data collection, selection and quality of foreground and background data, validity of data sets

Eco-Platform rules (in italics) - have not yet been revised at ECO Platform level, the new rules apply at Bau EPD GmbH (not in italics)

Equivalent to Clause X in ECO Platform Verification Checklist	Found in Chapter / Clause/ Page X	4.3	Data collection/ selecting of foreground and background data, validity of data	Mandatory / Optional	Reference	Checked and approved or Checked with remark
8.1		4.3.1	Selection and use of background data (specific and/or generic) justified and validity demonstrated?	M	EN15804+A1: ch. 6.3.6 OR EN15804+A2: ch. 6.3.7 And - EN 15941 applicable PCR	checked and approved

8.2		4.3.2	<p>Data collection, including data quality issues, according to LCA rules:</p> <ul style="list-style-type: none"> Assessment period for each module considered in the Life Cycle Assessment (e. g. one year average, etc.) <ul style="list-style-type: none"> Appropriateness of background data (temporal, geographical, technological) Other assumptions concerning background data, e.g. about data gaps 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. Assumptions concerning other relevant background data where relevant for the system boundary 	M	<p>ISO 14044:2006, section 4.3.2; Documentation ISO 14040</p> <p>And EN15804+A1 ch. 6.3.6 Or EN15804+A2 ch. 6.3.7 + ch. 6.3.8</p>	checked and approved
9.1		4.3.3	<p>Validity of data</p> <ul style="list-style-type: none"> Represent a reference year within 10 years for generic data Represent a reference year within 5 years for specific data Specific data based on 1 year average, unless an exception is justified 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 Technical coverage of data complies with physical reality <p>Integrity of generic data records, system boundary and cut-off criteria for generic data records validity demonstrated</p>	M	<p>EN15804+A1 ch. 6.3.7 Or EN15804+A2 ch. 6.3.8</p> <p>and EN15941 and applicable PCR</p>	checked and approved
9.2		4.3.4	<p>Documentation on generic data:</p> <ul style="list-style-type: none"> name of the (generic) data record, its source (database, bibliographic source, etc.), year of data collection and its representativeness <p>Handling missing data Assessing data quality (time, geographical and technological representativeness). For 15804+A2: document data quality for all data sets contributing to at least 80% each of the core impacts.</p> <p>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!</p>	M	<p>EN15941 and applicable PCR</p> <p>If using EN15804+A2, additionally annex E, see 10.3</p>	checked and approved

EN 15941- Innovations based on resolutions of the PKR committee 06/11/2024 for EPD and project report together:

C:\Users\Sarah\NextBauEPD\Bau EPD GmbH\006 - QM PKR PGF\PKR Allgemein-MS-HB+M-Docs\English-MS-HB and M-Docs\BAU-EPD-M-DOCUMENT-19-template-verification-report-checklist-for-verification-A1+A2-version5.0-date-2024-11-06-English-Website.docx

Equivalent to Clause X in ECO Platform Verification Checklist	Found in Chapter / Clause / Page X	4.3	Data collection/ selecting of foreground and background data, validity of data	Mandatory / Reference Optional	Checked and approved or Checked with remark
		4.3.1	Conformity with EN 15941 Statement that the information on data quality complies with EN 15941.		Checked and approved
		4.3.2	Description of the temporal, geographical and technological representativeness of the product data The information on temporal, geographical and technological representativeness corresponds to the minimum requirements of EN 15941. Note 1: For sector EPDs, additional information is required for geographical and technological representativeness Note 2: The minimum information given in the PCR, section 5.2 Description of the temporal, geographical and technological representativeness of the product data.		Checked and approved
		4.3.3	Explanations on averaging For EPDs that cover an average environmental quality for several products or several locations, the averaging process must be explained. In Chapter 7 LCA: Interpretation, the range of values and the variation of the impact assessment must be described. The results in the core indicators for the environmental impacts of the individual products or sites should not differ significantly. If major differences in the impacts are identified for the assessed sites and/or products, a reference must be made here to additional explanations in Chapter 7, e.g: Information on the range of values and the variation of the impact assessment for the individual products can be found in Chapter 7 LCA: Interpretation.		Checked and approved
		4.3.4.	Assessment of the data quality of the life cycle inventory data		Checked and approved
		4.3.4.1	Summarised assessment of data quality in the EPD - Source of the life cycle inventory datasets is indicated together with their age - It is stated which table from EN 15804:2012+A2:2019, Annex E was used to assess the data quality of the authoritative data. - Note when using authoritative data with critical assessment of representativeness is given. - In EPD voluntary: justification for the quality level of the data and for the selection of the data set.		Checked and approved

		4.3.4.2	<p>Documentation and evaluation of the raw data and the life cycle inventory in the project report</p> <ul style="list-style-type: none"> - Raw data: Source, sampling method, calculations for averaging - Assessment of the data quality of the raw data and the life cycle inventory determined for the EPD based on one of the two systems described in EN 15804:2012+A2:2019, Annex E 			Checked and approved
		4.3.4.3	<p>Documentation of the generic and specific data used in the project report</p> <p>The generic and specific data used in the modelling of the EPD, in particular all data sets of the life cycle inventory or an upstream or downstream EPD, are documented in the project report. For the relevant data, the documentation includes the following:</p> <ul style="list-style-type: none"> - temporal coverage, e.g. year or years of collection of raw data and statistics, reference year of the life cycle inventory, validity of the EPD, etc. - geographical scope; - Technological scope; - their source, including the year of publication. - Precision, consistency, completeness - Deviations from the requirements of EN 15804 			Checked and approved
		4.3.4.4	<p>Assessment of the data quality of the authoritative data in the project report</p> <p>The assessment of the data quality of the authoritative data according to 7.1 and EN 15804:2012+A2:2019, 6.3.8.3 is given in the project report. It is stated which table from EN 15804:2012+A2:2019, Annex E was used for the assessment of the data quality of the authoritative data.</p> <p>If authoritative data with a critical assessment of representativeness is used, the following information is provided</p> <ul style="list-style-type: none"> - Indication that data with critical evaluation was used - Description of any data adjustments - Relevance of these data sets with regard to the contribution to the results of the core indicators. - Justification for the quality level of the data and for the selection of the data set. <p>Note: M-Doc 13A2 contains an Annex 3 Description of the data quality of relevant data in accordance with the ILCD data format.</p>			Checked and approved

		4.3.4.5	Review of the mass balance in the project report Documentation of the complete mass balance for the relevant modules and processes. - Documentation of all input and output flows - Description of uncertainties if mass balance is not balanced - Documentation of water balance (as part of the mass balance or separate water balance) - Documentation of the truncated input and output flows - Documentation of the correction calculations in the case of allocations, including consideration of inherent material properties (biogenic carbon, energy content, etc.) - Proof that the inputs are sufficient to generate all outputs, including waste, process emissions and biogenic carbon emissions.			Checked and approved
		4.3.4.6	Documentation to support any statement contained in the EPD in the project report Any statement contained in the EPD is substantiated (e.g. by certification).			Checked and approved

Equivalent to Clause X in ECO Platform Verification Checklist	Found in Chapter / Clause/ Page X	4.4	Energy Mix	Mandatory / Optional	Reference	Checked and approved or Checked with remark
6.1		4.4.1	Selection of the power mix in accordance with the location of the production site(s) Is the reference year for the datasets documented?	M	CEN TR 16970 + CEN TR 15941 and applicable PCR	checked and approved
Info		Info	Terms & Definitions Definitions for the terms "Guarantee of Origin (GO)", "Consumption Mix" and "Residual Electricity Mix" are provided in EN 15941 and ISO 14067		EN 15941, ISO 14067	

6.2		4.4.2	Electricity (rules in addition to ISO 14067 and EN 15941)	Mandatory	Reference	Checked and approved
6.2.1		4.4.2.1	Are contractual instruments (e.g. GO) used for modelling electricity (i.e. market-based approach)? If yes/applicable: Validity period of certificates for contractual instruments (date of purchase must coincide with the period of production and primary data collection on site) in accordance with the PCR? Is the documentation on the purchased electricity available for EPD verification? Is detailed documentation on the purchased electricity available for EPD verification? If it is a reissue/renewal of an existing EPD, is the evidence of electricity purchase also available for the last 5 years of validity of the previous EPD?	M	Applicable PCR	checked and approved

			Note: In the case of EPDs with a market-based approach, the programme operator carries out random checks to ensure that the energy mix is also procured over the entire validity of the EPDs. Evidence for all 5 years must be submitted to the verification team at the latest when new EPDs are issued/renewed.			
6.2.2		4.4.2.2	Requirements of EN15941:2022 fulfilled?	M	EN15941	checked and approved
6.2.3		4.4.2.3	<p>Tracking, Traceability</p> <p>Case 1: Manufacturer produces energy on site (is physically linked to plants nearby):</p> <p>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?</p> <p>Note 1: Attention: LCA-models for CO₂ 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.</p> <p>Case 2: Electricity provider chosen from national state with legislation for electricity labelling:</p> <p>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</p> <p>Case 3: Electricity provider chosen from national state with registry</p> <p>Check on documentation as required in the ECO Platform LCA calculation rules and specifications for EPDs</p> <p>Case 4a: 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</p> <p>Case 4b: 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</p>	M	ISO 14067 EN 15941	checked and approved checked and approved checked and approved
6.2.4		4.4.2.4	If a PO decides that contractual instruments cannot be used for modelling electricity, the national consumption mix shall be used (except	M	Applicable PCR	checked and approved

C:\Users\Sarah\NextBauEPD\Bau EPD GmbH\006 - QM PKR PGF\PKR Allgemein-MS-HB+M-Docs\English-MS-HB and M-Docs\BAU-EPD-M-DOCUMENT-19-template-verification-report-checklist-for-verification-A1+A2-version5.0-date-2024-11-06-English-Website.docx

			for Australia, Brazil, Canada, China, India, and USA sub-national consumption mix shall be used).			
6.2.5		4.4.2.5	Reporting and communication done as required in EN 15941	M	Pr EN 15941 LCA calculation rules and specifications for EPDs ch. 3.3.4	checked and approved
6.2.6		4.4.2.6	Is the contractual situation clear? If not, has a sensitivity analysis been reported? Conclusions from it plausible?	M	ISO 14067 LCA calculation rules and specifications for EPDs 3.3.4	checked and approved
6.2.7		4.4.2.6	<p>Handling of residual mixes as required in the ECO Platform LCA calculation rules and specifications for EPDs</p> <p>In all cases the verifier has to check:</p> <p>How was the Residual Mix modelled?</p> <p>Were applicable datasets used from background databases used or was an AIB-method followed or a 'self-modelling' performed?</p> <p>In the case of AIB-method: The method shall be referenced as required in the ECO Platform LCA calculation rules and specifications for EPDs.</p> <p>In the case of self-modelling: The modelling shall be documented comprehensively.</p> <p>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)?</p> <p>Addition Bau EPD GmbH:</p> <p>Available data sets from the GaBi/Ecoinvent database used can be adopted and the AIB method implemented therein must be documented (both in the EPD and in the project report). Self-modelling can be carried out if no data sets are available on the market or for other reasons. Transparent and comprehensible documentation is mandatory.</p> <p>The following rules apply to the 'self-modelling' of residual mixtures:</p> <p>The modelling of residual mixtures must be carried out according to the latest AIB guidelines using the latest method.</p> <p>- https://www.aib-net.org/facts/european-residual-mix</p> <p>In any case, the verifier must check</p> <p>How was the residual mixture modelled?</p>	M	ISO 14067 LCA calculation rules and specifications for EPDs 3.3.4	checked and approved checked and approved

			<p>Were suitable data sets from GaBi/Ecoinvent used or was it modelled by the verifier?</p> <p>In the case of self-modelling:</p> <ul style="list-style-type: none"> - Is the description of the calculation transparent and logical, are the results plausible? - How were the transmission losses modelled? Transmission losses must be taken into account. - How did the LCA operator deal with the AIB share of 'renewable unspecified' / 'fossil unspecified' quantities (if applicable in the modelling)? Information: The databases indicate the amount per country. The recommended method is to scale known energy sources to 100%, alternatively a worst-case scenario for both. - How has the LCA practitioner dealt with the regional declaration of electricity imports and exports? If these cannot be extracted from the shares of the various energy sources, the energy must be calculated using the energy source-specific electricity data records of the respective nation state (= state in which the energy is consumed) and other countries of origin of the energy supply must not be taken into account. This must be documented. - How have technologies that are not available in the respective country been dealt with? <p>Rule for upstream data and supply chain: It is possible to use EPD in systems (e.g. ETICS or wall systems) with different approaches (ceiling with market-based energy approach and other components with consumption mix)</p> <p>Regulations and procedures for upstream data are left to the database operators. The country consumption mix must be used for upstream products; both can be used for specific EPDs instead of generic data.</p> <p>In the EPD, emission factors per kWh of the modelled residual mix compared to the national mix for the core indicators of EN 15804+A2-LCIA must be specified in the project report.</p> <p>The GWP should be sufficient for a quick plausibility check.</p>			
6.3		4.4.3	Biogas			
6.3.1		4.4.3.1	If a PO allows the calculation of Biogas (based on a market-based approach), the biogas-calculation shall be handled in analogy green electricity. The tracking must be done as transparent as possible.			

			(References to EN 15941 are preliminary, based on the recent draft version and may be subject to change.) Is the modelling of biogas in line with the ECO Platform Calculation Rules for Biogas?			
6.3.2		4.4.3.1	Additional information for transparency given as stated in the ECO Platform LCA calculation rules and specifications for EPDs •	M	LCA calculation rules and specifications for EPDs ch. 3.3.4	checked and approved

Equivalent to Clause X in ECO Platform Verification Checklist	Found in Chapter / Clause/ Page X	4.5	Allocations	Mandatory / Optional	Reference	Checked and approved or Checked with remark
11.1		4.5.1	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 ch.4.3.4	checked and approved
11.2		4.5.2	Presentation and justification of allocations in the use of secondary materials or secondary fuels as raw materials	M	EN15804+A1/EN15804+A2 Ch. 6.4.3 and 8.2 and applicable PCR	checked and approved
11.3		4.5.3	Presentation and justification of allocations in the plant (allocation between different products/production lines in a plant)	M		checked and approved
11.4		4.5.4	If applicable: Presentation and justification of allocation of multi-input processes (e.g. landfilling or incineration)	M		checked and approved
12.5 + 5.4+A1		4.5.5+A1	Co-product allocation correctly applied? A1 to A3: Allocation of co-products: Selection of the allocation factors for co-product allocation Justification of selected allocation method (economic, physical) Justification of specific allocation processes (e.g. if data are not available to allocate according to the EN15804 rules) 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 Presentation of the energy and material flows as a result of deviating allocation processes No declaration of loads and benefits in Module D from allocation of co-products in A1-A3	M	EN15804 ch. 6.4.3.2 + annex B.1 CEN TR 16970 ch.6.4.3.2 ff	checked and approved

11.5+5.4+A2		4.5.5+A2	<p>Co-product allocation correctly applied?</p> <p>A1 to A3: Allocation of co-products:</p> <ul style="list-style-type: none"> • Selection of the allocation factors for co-product allocation and justification of allocation method; • Justification of specific allocation processes (e.g. if data are not available to allocate according to the EN15804 rules); • Presentation of the energy and material flows in case of deviating allocation processes; • No declaration of loads and benefits in Module D from allocation in A1-A3. <p>With the following exception:</p> <p>If a co-product allocation is not reasonably possible in the foreground data, e.g.</p> <ul style="list-style-type: none"> - if a co-product allocation of production waste (e.g. in the case of scrap, if no internal recycling is carried out) makes it impossible to consistently record the net quantity for offsetting, - if exported energy from the thermal utilisation of waste in a waste incineration plant can no longer be linked to the production process for an allocation, <p>no closed loop calculation can be made, so the flows that leave the product system in modules A1-A3 must be declared as outputs, as is usual for the C-modules. The benefits and loads without allocation can be declared outside the product system in module D as additional information (see ISO 21930-7.1.7.2.7).</p>	M	<p>EN15804+A2 ch. 6.4.3.2 CEN TR 16970 ch. 6.4.3.2</p>	checked and approved
11.5.1		4.5.6	<p>Economic allocation for processes producing co-products 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</p> <ul style="list-style-type: none"> • Economic allocation has been used to assign impact to these low value co-products. • 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. <p>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.</p>	M	<p>EN 15804, CEN/TR 16970, EN 16908 and ECO Platform decision</p>	
11.6		4.5.7	<p>Documentation of allocation factors used and their (independent) sources</p>	M		

11.7		4.5.8	<p>Allocation process for reuse, recycling and recovery, check specifically:</p> <ul style="list-style-type: none"> • End-of-waste state, Consistency with other scenarios of waste management • Conventional average technologies and practices • Specification and justification of end-of-waste state where applicable • If applicable (module D): Selecting substituted processes in accordance with the PCR or (if no PCR is available) representative actual processes <p>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- see applicable PCR B parts</p> <ul style="list-style-type: none"> • If applicable (substitution in Module D): Calculation of net flows • Conservative approach, i.e. choice of those scenarios and calculation rules that reflect the highest environmental impacts in comparison to other choices <p>Note: Modules C and D are optional when using EN15804+A1 and mandatory according to EN15804+A2</p>	M	EN15804+A1/EN15804+A2 ch.6.4.3.3 and applicable PCR	checked and approved
11.8		4.5.9	<p>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.</p> <p>If the allocation principles are not followed, or it is unknown whether or not they are followed, conservative assumptions should be done, for example by modifying the generic data.</p>	M	Applicable PCR	checked and approved
11.9		4.5.10	<p>If applicable: transparent documentation of the calculations of biogenic carbon content of product and packaging in CO₂-eq. The conversion factor shall be stated</p>		EN 15804+A2: ch.7.2.5 (table 9)	checked and approved

Equivalent to Clause X in ECO Platform Verification Checklist	Found in Chapter / Clause/ Page X	5.	Environmental Parameters	Mandatory / Optional	Reference	Checked and approved or Checked with remark
13.1		5.1.1	Parameters of the Life Cycle Inventory Analysis and Life Cycle Impact Assessment	M	EN15804+A1/EN15804+A2 ch. 7.2.2 EN15978 ch.12.5	checked and approved

13.2		5.1.2	<p>Presentation of the parameters describing: EN15804+A1:</p> <ul style="list-style-type: none"> • environmental impacts (7 parameters), • the use of resources (10 parameters), • the waste categories (3 parameters) • output material flows (4 parameters) <p>EN15804+A2:</p> <ul style="list-style-type: none"> • Core environmental impacts (13 indicators), • 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. • the use of resources (10 indicators), • the waste categories (3 indicators) • output material flows (4 indicators) • biogenic carbon content (in product and packaging) <p>Note: The sum of GWP fossil + GWP Land use and land use change must be equivalent to GWP Total</p> <p>Justification in case of constraints/indicators not declared given and plausible?</p>	M	<p>EN15804+A1/EN15804+A2 ch. 6.5, 7.2.3 – 7.2.5 Table 4</p> <p>Note: the requirements differ between the standard revisions, although chapter numbers align</p>	checked and approved
13.3		5.1.3	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		checked and approved
13.4		5.1.4	Selection of correct characterization factors and elimination of long-term emissions (> 100 years)	M	<p>EN15804+A1/EN15804+A2 ch.8.2 and annex C</p> <p>and applicable PCR</p> <p>Note: the characterisation factors differ between the standard revisions, although chapter numbers align</p>	checked and approved
13.5		5.1.5	Justification of characterization factors applied in case of input/output flows that are not on the list of characterization factors of the EN15804 and applicable PCR	M		checked and approved
13.6		5.1.6	<p>Information on the environmental impacts in the project report:</p> <p>Reference to characterization models and factors</p> <p>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</p>	M	<p>EN15804+A1/EN15804+A2 ch.8.2</p> <p>Note: the requirements and characterization factors differ between the standard revisions, although chapter numbers align</p>	checked and approved
Additional Bau EPD GmbH		5.1.7	Check on plausibility considering results of comparable studies with regards of the listed material and energy flows (i.e. similar products from other EPD programs...)	M		checked and approved

Additional Bau EPD GmbH		5.1.8	Calculation of the primary energy used as raw material (PERM, PENRM) (The amount of primary energy used as a raw material is calculated by multiplying the mass by the lower calorific value of the raw material in question).	M		checked and approved
Equivalent to Clause X in ECO Platform Verification Checklist	Found in Chapter / Clause/ Page X	5.2	Interpretation	Mandatory / Optional	Reference	Checked and approved or Checked with remark
14.1		5.2.1	Interpretation of the results based on a dominance/contribution analysis of selected indicators Bau EPD GmbH: separate declaration of Module D in Interpretation (separate picture in addition to pictures for Life Cycle) and statement that benefits and loads are beyond the system boundary	O		checked and approved
14.2		5.2.2	Is the relationship between the results of the LCI and the results of the LCIA plausible? Examples: <ul style="list-style-type: none"> Relationships are checked, e.g. wood-mass balance, input-material, compare with order of scale/order of magnitude. 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... Check orders of scale/magnitude, especially for indicators that are changed manually. Currently, the following results shall be the same: Coherence of primary energy (n.e.) with ADPF values. Check allocations, consistency with physical flows	M	EN15804+A1/EN15804+A2 ch.8.2	checked and approved
14.3		5.2.3	Assumptions and restrictions as regards the interpretation of results in the EPD, in terms of both methods and data	M	EN15804+A1/EN15804+A2 ch.8.2	checked and approved
14.4		5.2.4	In the case where an EPD is declared as an average environmental performance for a number of 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 CEN TR 16970 ch. 7.1.	checked and approved
14.5		5.2.5	Interpretation of the influence of data quality. An assessment of data quality should be provided if the data quality differs for significant data.	M	EN15804+A1 ch. 6.3.7 and 8.2 Or EN15804+A2 ch. 6.3.8, ch. 8.2 + annex E and ISO 14040	checked and approved
14.6		5.2.6	Comprehensive transparency as regards value decisions, justifications and expert opinions, i.e. transparency to avoid misinterpretation.	M	EN15804+A1/EN15804+A2 ch.8.2	checked and approved

C:\Users\Sarah\NextBauEPD\Bau EPD GmbH\006 - QM PKR PGF\PKR Allgemein-MS-HB+M-Docs\English-MS-HB and M-Docs\BAU-EPD-M-DOCUMENT-19-template-verification-report-checklist-for-verification-A1+A2-version5.0-date-2024-11-06-English-Website.docx

Equivalent to Clause X in ECO Platform Verification Checklist	Found in Chapter / Clause/ Page X	6.	Life cycle modelling information	Mandatory / Optional	Reference	Checked and approved or Checked with remark
12.1		6.1	Transparent presentation of Life Cycle Assessment modeling (for example by tables, screenshots from Life Cycle Assessment software programs etc.)	M	EN15804+A1/EN15804+A2 ch.8.4	checked and approved
12.2		6.2	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?	M	EN15804+A1/EN15804+A2 ch.8.4	checked and approved
12.3		6.3	Assignment of process data to the Life Cycle Assessment modules plausible?	M	EN15804+A1/EN15804+A2 ch.8.4	checked and approved
12.4		6.4	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	M		checked and approved
12.5 see Extra point 7						checked and approved
12.6			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 <u>cannot be used in connection with ECO 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.	M	See LCA calculation rules and specifications for EPDs ch. 3.2 based on ECO Platform position paper from January 2023	
Equivalent to Clause X in ECO Platform Verification Checklist	Found in Chapter / Clause/ Page X	7	Plausibility and consistency of data (mass balance, energy balance)	Mandatory / Optional	Reference	Checked and approved or Checked with remark

13.5		7.1	<p>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.:</p> <p>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)</p> <p>CO and CO2 emissions coherent with the mass input of fossil energetic resources?</p> <p>Are the energy indicators coherent with the energy resources used?</p> <p>Add. Bau EPD: Check of the sum of non-renewable and renewable parts or between feedstock and fuel parts</p>		EN15804+A1/EN15804+A2 ch.8.4	checked and approved
Additional Bau EPD GmbH		7.2	The data appears plausible in comparison to public data of related products or reference values (that means the data results show the same dimensions resp. deviations are explainable).	M		checked and approved
Additional Bau EPD GmbH		7.3	The figures of the environmental parameters seem plausible with reference to the data of the inventory analysis (i.e. relatively high AP in case of use of coal)	M		checked and approved
Additional Bau EPD GmbH		7.4	Figures of correlating environmental parameters seem plausible (i.e. PEI non-renewable and ADP fossil)	M		checked and approved
Equivalent to Clause X in ECO Platform Verification Checklist	Found in Chapter / Clause/ Page X	8.	Documentation of additional information	Mandatory / Optional	Reference	Checked and approved or Checked with remark
15.1		8.1	<p>If additional information is given, check the documentation:</p> <ul style="list-style-type: none"> Laboratory results/measurements listed in the content declaration Laboratory results/measurements listed in the functional/technical performance 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.) Laboratory results/measurements pertaining to the declared emissions in indoor air, soil or water during the use stage <p>All declared information is in line with requirements in the PCR</p>	M	EN15804+A1/EN15804+A2 ch.8.3	checked and approved
15.2		8.2	Where relevant: ensure that information additional to EN15804 is verifiable e.g. by reference to standards or other publicly accepted test requirements.	M	Applicable PCR	checked and approved

C:\Users\Sarah\NextBauEPD\Bau EPD GmbH\006 - QM PKR PGF\PKR Allgemein-MS-HB+M-Docs\English-MS-HB and M-Docs\BAU-EPD-M-DOCUMENT-19-template-verification-report-checklist-for-verification-A1+A2-version5.0-date-2024-11-06-English-Website.docx

Additional Bau EPD		8.3	Certificates: If applicable: Selecting allowable certificates in accordance with the PCR?	M	Applicable PCR	checked and approved
Equivalent to Clause X in ECO Platform Verification Checklist	Found in Chapter / Clause/ Page X	9.	Documentation for calculating the reference service life (RSL)	Mandatory / Optional	Reference	Checked and approved or Checked with remark
16.1		9.1	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 justify and give sources for the lifespan taken into account. The lifespan shall be representative for the declared product and the calculation of the lifespan shall be documented and, if relevant, follow the PCR. Attention: Check whether there is a c-PKR that specifies a reference service life as default. This must be used if no manufacturer-specific data has been collected in accordance with EN 15804.	M	EN15804 ch.6.3.3	checked and approved

Dialogue between verifier/programme operator and EPD owner/practitioner as per M-document 19a:

index	Initials	Document	Chapter, figure, table...	Type	Comment of verifiers documentation of non-conformities	Answer of author of LCA/EPD documentatio	Statement Verifier	If column H is not market "done"
1	verifier 1	project report EPD 1	number, reference	ed	Text			
2	verifier 2	project report EPD 2	number, reference	ge	Text			
3	verifier 2	EPD Document 1	number, reference	te	Text			

Verification of the EPD document:

Checklist:

This whole section is mandatory to verify. The format of an EPD must comply with EN 15804 ch.7 and EN 15942. Bau-EPD GmbH provides a corresponding format template on the webpage. All data that is included in the master Excel Table (that is based on the ITM information transfer matrix) should somewhere be documented in the EPD.

Note:

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 (both revisions/amendments – A1 and A2 respectively) and EN 15942 this includes:

- A statement of the applied background database and software, (Attention, for MLC/GaBi it is not sufficient to use "MLC/GaBi 20xx" but with a sub-designation such as "MLC/GaBi 20xx SP XX")
- A statement that the applied allocation method for post-consumer waste is cut-off
- A statement which version of Characterization factors was used
- Energy mix (consumption mix or marked based approach
- A description of representativity in average EPD,
- A table for declaring biogenic carbon to be applied when the program operator includes this in the PCR,
- A place for additional impact or LCI indicators,
- A place for additional environmental information dependent on the applicable PCR

All EPD of Bau EPD GmbH follow this list of content.

Equivalent to Clause X in ECO Platform Verification Checklist	1.	Formal requirements	Reference	Checked and approved or Checked with remark
1.1	1.1	<p>EPD include as general information:</p> <p>On the front page/title page/cover page:</p> <ul style="list-style-type: none"> Text "Environmental Product Declaration in accordance with ISO 14025 and EN 15804", prominently visible in the EPD Publisher and Program Operator name, logo Name of declared product Declaration owner/holder / Name Date of issue + validity (5 years)/date of expiry + date of update if relevant EPD identification (registration number of the EPD on programme operator level and on ECO Platform level). Logo of ECO Platform <p>In other chapters of the EPD:</p> <ul style="list-style-type: none"> Declaration owner/holder / Name and address of manufacturer/association Publisher name, address, logo, website Electricity mix (consumption mix or market-based approach) Statement that "EPD of construction products may not be comparable if they do not comply with EN15804" In Bau EPD GmbH documents extended to: "EPD of construction products of the same product group from different Program Operators may not be comparable." Geographical area, i.e. market range, where the product is produced, where it may be applied and where the end-of-life is assumed 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); Names of manufacturer(s) or resellers when the EPD declares an average of several manufacturers and addresses at least at country and city level). 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 Type of EPD, stages omitted if not full LCA Product composition Table 2 from EN 15804 	EN15804+A1/ EN15804+A2 ch. 7.1 ECO Platform List of content to declare in an ECO EPD (ECO Platform Audit and Verification Guidelines)	checked and approved
1.2	1.2	<p>PCR name</p> <p>PCR version (MM YYYY)</p> <p>If applicable: c-PCR (complementary PCR from product TC)</p>	Applicable PCR-B, Applicable PCR from European Product TC	checked and approved
1.3	1.3	Demonstration of verification: external independent verification, name of third-party verifier	EN15804+A1 /EN15804+A 2 ch.7.1 Table 2	checked and approved
1.4	1.4	Information on the validity: Does it correspond with the specifications in the project report?		checked and approved

1.5	1.5	Appropriateness of logos of the company, programme operator and ECO Platform. Appropriateness of pictures.	ECO Platform List of content to declare in an ECO EPD (ECO Platform Audit and Verification Guidelines)	checked and approved
1.6	1.6	For EEE-construction products: Statement that this EPD follows additional requirements for construction products considered as Electronic or Electric Equipment	M	
		Product		
Equivalent to Clause X in ECO Platform Verification Checklist	2.1	Product description	Reference	Checked and approved or Checked with remark
Additional Bau EPD GmbH	2.1.1	General product description Information about the period of data collection (calculated time period of manufacturing processes)		checked and approved
2.1	2.1.2	The product description is in line with the project report, and clearly enough described to identify the declared product unambiguously? Name and location of production site(s).	ECO Platform List of content to declare in an ECO EPD (ECO Platform Audit and Verification Guidelines)	checked and approved
2.2	2.1.3	If applicable: Explanations on calculations of averages within a product group, and representativeness: 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; 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; 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 ECO Platform List of content to declare in an ECO EPD (ECO Platform Audit and Verification Guidelines)	checked and approved

2.3	2.1.4	Specification / identification (picture, name, model) Unambiguous identification of the product(s), by standards, concessions or other means	EN15804+A1/ EN15804+A2 ch.7.1 ECO Platform List of content to declare in an ECO EPD (ECO Platform Audit and Verification Guidelines)	checked and approved
Additional Bau EPD GmbH	2.1.5	Information about „Conditions of delivery and delivery status“	EN15804+A1/ EN15804+A2 ch.7.1	checked and approved
2.4	2.1.6	Indication of the intended use Application and technical functions of the product	EN15804+A1/ EN15804+A2 ch.7.1 ECO Platform List of content to declare in an ECO EPD (ECO Platform Audit and Verification Guidelines)	checked and approved
2.5	2.1.7	Relevant technical data (additional information is possible) including RSL if applicable (Average values or range in case of product groups)		checked and approved
2.6	2.1.8	The test standards to which the technical data refers.		checked and approved
Equivalent to Clause X in ECO Platform Verification Checklist	2.2	Description of the Life Cycle	Reference	Checked and approved or Checked with remark
2.7	2.2.1	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, substances that are listed in the latest “Candidate List of Substances of Very High Concern for authorization” if their content exceeds the limits for registration	EN15804+A1/ EN15804+A 2 ch.7.1	checked and approved
2.8	2.2.2	Description of the manufacturing process / all manufacturing processes if several locations are involved	EN15804+A1/ EN15804+A 2 ch.7.1	checked and approved
Additional Bau EPD GmbH	2.2.3	Information about packaging material		checked and approved
Additional Bau EPD GmbH	2.2.4	Description of the life cycle stages not declared can be found.		checked and approved
Equivalent to Clause X in ECO Platform Verification Checklist	3	Life Cycle Analysis Rules	Reference	Checked and approved or Checked with remark
	3.1	Methodical assumptions		

C:\Users\Sarah\NextBauEPD\Bau EPD GmbH\006 - QM PKR PGF\PKR Allgemein-MS-HB+M-Docs\English-MS-HB and M-Docs\BAU-EPD-M-DOCUMENT-19-template-verification-report-checklist-for-verification-A1+A2-version5.0-date-2024-11-06-English-Website.docx

3.1	3.1.1	Information on the declared / functional unit corresponds with the specifications of the PCR (if available) and project report? Including conversion factor to 1 kg	Applicable PCR	checked and approved
3.2	3.1.2	Indication of the EPD type and declared/undeclared modules through a table of modules (A1: MND=Module not declared, A2: ND=Not declared) EPD types applicable in EN15804+A1: <ul style="list-style-type: none"> - cradle-to-gate - cradle-to-gate with options - cradle-to-grave EPD types applicable in EN15804+A2: <ul style="list-style-type: none"> - cradle-to-gate with modules C1-C4 and module D - cradle-to-gate with options, modules C1-C4 and module D - cradle-to-grave and module D - cradle-to-gate (exemption requirements apply) - cradle-to-gate with options (exemption requirements apply) 	EN15804+A1/ EN15804+A2 ch. 7.2.2 Note: the requirements differ between the standard revisions, although chapter numbers align	checked and approved
3.3	3.1.3	EPD contains a (simple) flow diagram in accordance with the modular approach	EN15804+A1 /EN15804+A2 ch. 7.2.1	checked and approved
3.4	3.1.4	Description of the system boundary (can be simplified, as a picture or in wording), including the assignment of the analysed processes to the life cycle modules		checked and approved
3.5	3.1.5	Indication of the key assumptions and estimates for interpretation which are not depicted elsewhere in the EPD	.	checked and approved
3.6	3.1.6	Presentation of the application of cut-off criteria in accordance with the project report		checked and approved
3.7	3.1.7	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 (ECO Platform Audit and Verification Guidelines)	checked and approved
3.8	3.1.8	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 (ECO Platform Audit and Verification Guidelines)	checked and approved
3.9	3.1.9	Information on the data collection period and resulting averages	ECO Platform List of content to declare in an ECO EPD (ECO Platform Audit and Verification Guidelines)	checked and approved
3.10	3.1.10	Presentation of the allocations of relevance for calculation in accordance with the minimum requirements of the PCR		checked and approved

3.11	3.1.11	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 <u>cannot be used in connection with ECO EPDs</u> .	See ECO Platform LCA calculation rules and specifications for EPDs (V1) based on ECO Platform position paper from January 2023	
Equivalent to Clause X in ECO Platform Verification Checklist	3.2	LCA: Scenarios and additional technical information	Reference	Checked and approved or Checked with remark
4.1	3.2.1	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	checked and approved
4.2	3.2.2	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 Note: the requirements differ between the standard revisions, although chapter numbers align	checked and approved
Additional Bau EPD GmbH	3.2.3	A1-A3 product stage: Description A1 – A3 If required in the PCR-B-part: Energy- and water demand for manufacturing Information about quantities and qualities of emissions, waste water and waste		checked and approved
Additional Bau EPD GmbH	NEW	Data quality	Reference	Checked and approved or Checked with remark
		Conformity with EN 15941 Statement that the information on data quality complies with EN 15941.	EN 15941	checked and approved

		<p>Description of the temporal, geographical and technological representativeness of the product data</p> <p>The information on temporal, geographical and technological representativeness corresponds to the minimum requirements of EN 15941.</p> <p>Note 1: For sector EPDs, additional information is required for geographical and technological representativeness</p> <p>Note 2: The minimum information given in the PCR, section 5.2 Description of the temporal, geographical and technological representativeness of the product data.</p>	EN 15941	checked and approved
		<p>Explanations on averaging</p> <p>For EPDs that cover an average environmental quality for several products or several locations, the averaging process must be explained.</p> <p>In Chapter 7 LCA: Interpretation, the range of values and the variation of the impact assessment must be described. The results in the core indicators for the environmental impacts of the individual products or sites should not differ significantly. If major differences in the impacts are identified for the assessed sites and/or products, a reference must be made here to additional explanations in Chapter 7, e.g:</p> <p>Information on the range of values and the variation of the impact assessment for the individual products can be found in Chapter 7 LCA: Interpretation.</p>		checked and approved
		Assessment of the data quality of the life cycle inventory data:		
		<p>Summarised assessment of data quality in the EPD</p> <ul style="list-style-type: none"> - Source of the life cycle inventory datasets is indicated together with their age - It is stated which table from EN 15804:2012+A2:2019, Annex E was used to assess the data quality of the authoritative data. - Note when using authoritative data with critical assessment of representativeness is given. - In EPD voluntary: Justification for the quality level of the data and for the selection of the data set. 	EN 15804	checked and approved
Equivalent to Clause X in ECO Platform Verification Checklist	3.3	LCA: Results	Reference	Checked and approved or Checked with remark
5.1	3.3.1	Description of the declared / functional unit		checked and approved
5.2	3.3.2	<p>Identification of the declared/undeclared modules: Table of Modules/indicators, illustrating the type of EPD</p> <p>ND = module not declared</p> <p>Full declaration of all indicators of EN 15804 required according to the modular approach</p> <p>Result Table contains:</p> <p>No blank cells, hyphens or other symbols.</p> <p>The value 0 only for parameters that have been calculated to be 0, or below a limit value (former MNR/MNA).</p> <p>Footnotes shall be used to explain any limitation to the result value.</p> <p>If according to EN15804+A2:</p> <p>Additional indicators included or marked as Not Declared ("ND") in table or as text</p>	<p>EN15804 +A1 ch.7.2.3, 7.2.4, 7.2.5 and ch.7.5</p> <p>ECO Platform List of content to declare in an ECO EPD (ECO Platform Audit and Verification Guidelines)</p>	checked and approved

5.3	3.3.3	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	ECO Platform List of content to declare in an ECO EPD (ECO Platform Audit and Verification Guidelines)	checked and approved
5.4	3.3.4	The declared indicator and other quantitative results shall be identical with the respective values in the project report		checked and approved
5.5	3.3.5	In case of product averages: description of the range / variability of the LCIA results–this may be qualitative information	EN15804+A1 /EN15804+A 2 ch.7	checked and approved
5.6	3.3.6	Deletion of module columns which are not declared (permissible for the Results part) if programme allows	Program operator rules	checked and approved
5.7	3.3.7	Formatting the table framework and parameter addressed in accordance with the specifications of the PCR or the Program Operator rules	Program operator rules	checked and approved
Equivalent to Clause X in ECO Platform Verification Checklist	3.4	Interpretation of the LCA results	Reference	Checked and approved or Checked with remark
Additional Bau EPD GmbH	3.4.1	Interpretation of the indicator values in a dominance analysis		checked and approved
Equivalent to Clause X in ECO Platform Verification Checklist	4.	Evidence for tests or certificates, depending on requirements in PCR	Reference	Checked and approved or Checked with remark
6.1	4.1	Additional information is provided to indoor air or soil / water, if applicable	EN15804+A1 /EN15804+A 2 ch.7.4	checked and approved
6.2	4.2	Other additional environmental information if relevant for a country.	ECO Platform List of content to declare in an ECO EPD (ECO Platform Audit and Verification Guidelines)	checked and approved
6.3	4.3	Declaration of the relevant evidence. Information where to find this evidence	EN15804+A1 /EN15804+A 2 ch.7.2 and applicable PCR, existing program rules	checked and approved

6.4	4.4	Energy mix approach: Reporting is done as required in EN15941. Market-oriented approach or country-specific consumption mix (reference to second EPD document in case of double reporting). Bau EPD GmbH: Market-oriented approach, reference on the cover page of the EPD	EN15941	checked and approved
6.5	4.5	Additional rules for transparency: <ul style="list-style-type: none"> In EPD the emission factors of carbon footprint of the applied electricity mix shall be declared in XX kg CO2e/kWh. 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. 	ECO Platform LCA calculation rules and specifications for EPDs, List of content to declare in an ECO EPD EN15941	
Equivalent to Clause X in ECO Platform Verification Checklist	5.	References	Reference	Checked and approved or Checked with remark
7.1	5.1	Full indication of all referenced sources (excluding standards already quoted in full and standards concerning evidence)		checked and approved
Equivalent to Clause X in ECO Platform Verification Checklist	6.	Annex	Reference	Checked and approved or Checked with remark
8.1	6.1	An Annex may contain all additional information required for specific national use in different countries.	ECO Platform List of content to declare in an ECO EPD (ECO Platform Audit and Verification Guidelines)	checked and approved

Dialogue between verifier/programme operator and EPD owner/practitioner as per M-document 19a:

index	Initials	Document	Chapter, figure, table...	Type	Comment of verifiers documentation of non-conformities	Answer of author of LCA/EPD documentatio	Statement Verifier	2. answer LCA practitioner
1	verifier 1	project report EPD 1	number, reference	ed	Text			
2	verifier 2	project report EPD 2	number, reference	ge	Text			
3	verifier 2	EPD Document 1	number, reference	te	Text			

Overview matrix showing the assignment of ECO-Platform checklist points to BAU EPD GmbH checklist points:

Part 1: Project report

Eco Platform	Bau EPD	Eco Platform	Bau EPD	Eco Platform	Bau EPD	Eco Platform	Bau EPD
1		2		3		4	
1.1	1.1	2.1	2.1	3.1	3.3.1	4.1	3.1.1
1.2	1.2	2.2	2.2	3.2	3.3.2	4.2	3.1.2
1.3	1.3	2.3	2.4	3.3	3.3.3	4.3	3.1.3
1.4	1.4						
1.5	1.5						
1.6	1.6						
5		6		7		8	
5.1	3.4.1	6.1	4.4.1	7.1	4.2.1	8.1	4.3.1
5.2	3.4.2	6.2	4.4.2	7.2	4.2.2	8.2	4.3.2
5.3	3.4.3	6.3	4.4.3				
5.4	4.5.5						
5.5	3.4.4						
5.6	3.4.5						
5.7	3.4.6						
5.8	3.4.7						
5.9	3.4.8						
5.10	3.4.9						
5.11	3.4.10						
5.12	3.4.11						
5.13	3.4.12						
5.14	3.4.13						
9		10		11		12	
9.1	4.3.3	10.1	4.1.1	11.1	4.5.1	12.1	6.1
9.2	4.3.4	10.2	4.1.2	11.2	4.5.2	12.2	6.2
		10.3	4.1.4	11.3	4.5.3	12.3	6.3
				11.4	4.5.4	12.4	6.4
				11.5+5.4	4.5.5	12.5	7
				11.6	4.5.6	12.6	6.5
				11.7	4.5.7		
				11.8	4.5.8		
				11.9	4.5.9		

C:\Users\Sarah\NextBauEPD\Bau EPD GmbH\006 - QM PKR PGF\PKR Allgemein-MS-HB+M-Docs\English-MS-HB and M-Docs\BAU-EPD-M-DOCUMENT-19-template-verification-report-checklist-for-verification-A1+A2-version5.0-date-2024-11-06-English-Website.docx

13		14		15		16	
13.1	5.1.1	14.1	5.2.1	15.1	8.1	16.1	9.1
13.2	5.1.2	14.2	5.2.2	15.2	8.2		
13.3	5.1.3	14.3	5.2.3	15.3			
13.4	5.1.4	14.4	5.2.4	15.4			
13.5	5.1.5	14.5	5.2.5	15.5			
13.6	5.1.6	14.6	5.2.6	15.6			

Part 2: EPD-Document

Eco Platform	Bau EPD	Eco Platform	Bau EPD	Eco Platform	Bau EPD	Eco Platform	Bau EPD
1		2		3		4	
1.1	1.1	2.1	2.1.2	3.1	3.1.1	4.1	3.2.1
1.2	1.2	2.2	2.1.3	3.2	3.1.2	4.2	3.2.2
1.3	1.3	2.3	2.1.4	3.3	3.1.3		
1.4	1.4	2.4	2.1.6	3.4	3.1.4		
1.5	1.5	2.5	2.1.7	3.5	3.1.5		
		2.6	2.1.8	3.6	3.1.6		
		2.7	2.2.1	3.7	3.1.7		
		2.8	2.2.2	3.8	3.1.8		
				3.9	3.1.9		
				3.10	3.1.10		
				3.11	3.1.11		
5		6		7		8	
5.1	3.3.1	6.1	4.2	7.1	5.1	8.1	6.1
5.2	3.3.2	6.2	4.3				
5.3	3.3.3	6.3	4.4				
5.4	3.3.4	6.4	4.5				
5.5	3.3.5	6.5	4.6				
5.6	3.3.6						
5.7	3.3.7						