

**B-EPD program** • reference document

# VERIFICATION CHECKLIST & REQUIREMENTS FOR THE LCA STUDY AND PROJECT REPORT

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## CONTENTS

1	Introduction .....	3
2	requirements regarding the project report including Calculation rules for the LCA .....	4
2.1	General information.....	4
2.2	Functional unit / declared unit.....	5
2.3	Product description - availability of information .....	6
2.4	System boundaries in accordance with the modular design of EN 15804.....	7
2.4.1	Modules A1 to A3.....	7
2.4.2	Modules A4 to A5.....	8
2.4.3	Modules B1 to B7 .....	9
2.4.4	Modules C1 to C4 .....	9
2.4.5	Module D.....	10
2.5	Transparency and completeness of the system boundaries.....	11
2.6	ENERGY mix.....	11
2.7	Criteria for excluding inputs and outputs & data collection .....	12
2.8	Development of scenarios at product level in modules A4-A5-B-C-D .....	13
2.9	Selecting data / background data .....	14
2.10	Allocations.....	15
2.11	Life cycle modelling information.....	16
2.12	Parameters of the Life cycle inventory analysis and life cycle impact assessment .....	17
2.13	Interpretation.....	19
2.14	Documentation for calculating the reference service life (RSL).....	19
3	Requirements regarding the EPD.....	20
3.1	Formal requirements .....	20
3.2	Product Description .....	21
3.3	LCA rules .....	22
3.4	LCA: Scenarios, additional technical information and results.....	23
3.5	Evidence for tests or certificates, references.....	23

# 1 INTRODUCTION

This document contains the checklist for the verification of EPDs according to the B-EPD program rules. At the same time it is also the set of rules for the project report awaiting the horizontal PCR document.

The filled in checklist has to accompany the attestation of verification when entering an EPD in the database.

The verifier must verify two documents based on the checklist:

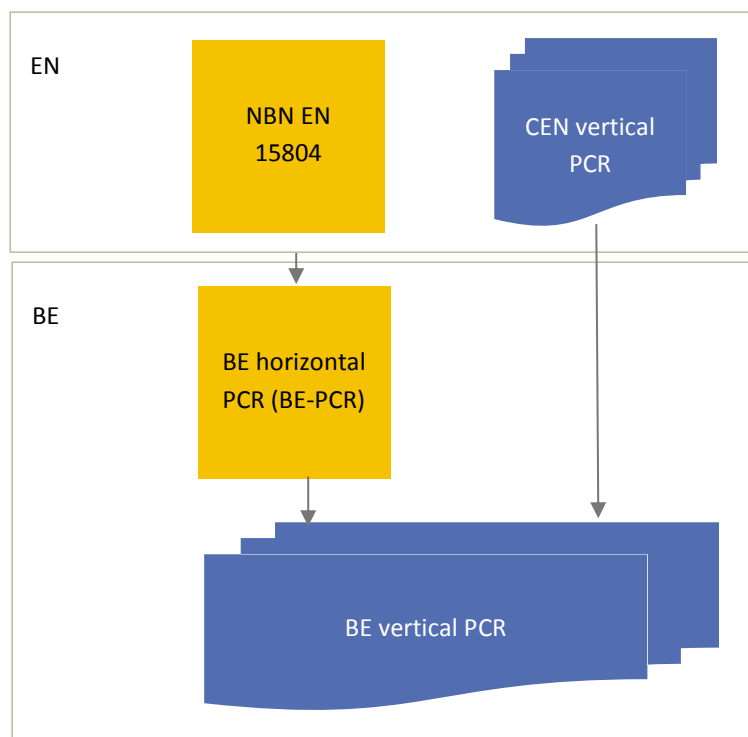
- 1) The verifier has to verify the content and completeness of **the project report**.

*According to the EN 15804 the project report is the systematic and comprehensive summary of the project documentation supporting the verification of an EPD. The project report shall record that the LCA based information and the additional information as declared in the EPD meet the requirements of this European Standard. It shall be made available to the verifier with the requirements on confidentiality stated in EN ISO 14025. The project report is not part of the public communication. The project report shall contain any data and information of importance for the data published in the EPD and as required in this European Standard. Special care is necessary to demonstrate in a transparent way how the data and information declared in the EPD results from the LCA study and how the reference RSL has been established.*

- 2) the verifier has to verify the information **in the EPD**.

The EPD is more general and is used for public communications, whereas the project report contains confidential and specific information that is not destined for any public communication.

Throughout the checklist reference is made to PCR documents. Whenever this term is used, it refers to **all** relevant existing PCR documents. This means that the verifier has to see if there is a Belgian PCR and for every issue whether or not there is an additional requirement in that PCR.



## 2 REQUIREMENTS REGARDING THE PROJECT REPORT INCLUDING CALCULATION RULES FOR THE LCA

The check consists of checking if the item is described in the LCA project report and if it is in line with the requirements and guidelines in the applicable reference (EN 15804, applicable PCR, other standards).

Any deviations from the requirement should be reported by the verifier.

If the issue is in line with the requirements and/or accepted by the verifier, the tickboxes can be checked.

The project report shall clearly indicate which information requests remained unanswered.

### 2.1 GENERAL INFORMATION

	Item to be checked / requirements	Reference document / Additional information	Described in the project report & conform to requirements
1.	Both the commissioner of the LCA study and the LCA practitioner are identified. <ul style="list-style-type: none"> <li>- full name</li> <li>- company name and address</li> <li>- contact details (telephone, email address)</li> </ul>	EN15804 §8.2.	<input type="checkbox"/>
	The production sites within the scope of the EPD must be clearly identified. Per site it must be clear if it is a subcontractor and if site specific data were used.		<input type="checkbox"/>
2.	The project report is dated and mentions the date of the LCA study.	EN15804 §8.2.	<input type="checkbox"/>
3.	A statement that the LCA study is in conformity with at least <ul style="list-style-type: none"> <li>- EN 15804:A1</li> <li>- The relevant Belgian PCR documents (both horizontal and vertical)</li> </ul> Any additional PCR documents used are identified.	EN15804 §8.2.	<input type="checkbox"/>
4.	A statement <ul style="list-style-type: none"> <li>- that LCA calculations have been done in accordance to CML-IA 4.1 (october 2012)</li> <li>- the characterization factors used are those of CML version 4.1</li> </ul>	EN15804 §8.2. and annex C	<input type="checkbox"/>
5.	The reasons for carrying out the LCA are clearly mentioned The intended applications of the study shall be clearly mentioned in the project report (e.g. EPD, product improvement, product comparison, use at building level)	EN15804 § 8.2.	<input type="checkbox"/>
6.	The target group of the EPD (B2B, B2C, ...) is indicated.	EN15804 § 8.2.	<input type="checkbox"/>

#### Observations and deviations

Space for the verifier to write down special observations or comments, e.g. in case of non-approval.



## 2.2 FUNCTIONAL UNIT / DECLARED UNIT

	Item to be checked / requirements	Reference document / Additional information	Checked and approved
7.	<p>The functional unit/declared unit of the project report shall be in line with the one from the PCR.</p> <p><i>The functional unit must also refer to a function (“what”), the extent of the function or service: “how much”; The expected level of quality: “how well”; The duration/life time of the product: “how long”. Standardized test methods must be used to express the performance.</i></p>	<p>EN15804 § 6.3.1/6.3.2.</p> <p>BE-PCR</p> <p>Applicable PCR</p>	<input type="checkbox"/>
8.	<p>The reported modules must be in line with the Royal Decree. (from 2017 on also A4 and C2, C3, C4, module D; raw materials and intermediate products are exempted from the latter 4)</p>	<p>EN15804 (Figure 1) and §5.2.</p>	<input type="checkbox"/>
9.	<p>If the EPD represents a group of products the project report must include and motivate</p> <ul style="list-style-type: none"> <li>- The detailed calculation rules for the creation of the averages</li> <li>- The representativeness of the averages</li> </ul> <p>This is regarding similar products from one manufacturer and/or from different production plants and can be done via an average value, worst case, ...</p> <p><i>E.g. Examples of average calculations are main representative product, non-weighted average of products on the market, weighted average of products on the market, median value. The report shall provide information and justifications on the data considered to calculate the average. It shall specify the different technologies covered by the sites where manufacturer specific data were collected, the location country where manufacturer specific data are coming from, etc. In case of weighted average, the report shall give explicit information on the criteria used for weighting: e.g. production volume, ...</i></p>	<p>EN15804 § 8.2.</p> <p>In case of an average based on a sample of few sites, this sample shall be representative of the other sites/companies included in the EPD from a technological and geographical point of view.</p> <p>BE-PCR</p>	<input type="checkbox"/>

### Observations and deviations

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## 2.3 PRODUCT DESCRIPTION - AVAILABILITY OF INFORMATION

	Item to be checked / requirements	Reference document / Additional information	Checked and approved
10.	<p>The composition of the product (as defined in the functional/declared unit; thus including composition of the accessory materials and packaging material) mentioned in the project report shall be quantitative, by listing all the materials and/or subcomponents. When the quality level of a defined component is known, this shall be reported.</p> <p><i>Note: It should be settled before verification how confidential information is dealt with</i></p>	<p>ISO14025 (7.2.1 i) EN 15804 8.2 d 1) Note: Examples of known quality levels can be - CEMI, CEMII or CEMIII in case of cement; - In case of steel specify the type of alloy used.</p>	<input type="checkbox"/>
11.	<p>A description of technical and functional characteristics of the product. This can be done by means of the Declaration of Performance related to the CE-marking.</p>	<p>Applicable PCR</p>	<input type="checkbox"/>
12.	<p>A description of the intended use of the product in the building</p> <p><i>Note: Exemption possible for raw materials and intermediate products</i></p>	<p>Applicable PCR</p>	<input type="checkbox"/>
13.	<p>A flow diagram of the main production processes and a visualization of the system boundaries. The flow diagram shall decompose the production process when the process consists out of several steps. It shall not be a generic flow diagram mentioning only the life cycle stages (production, transport, use stage, end of life), but shall be more detailed so the verifier can have a good understanding of the production process. All steps in the production process which have a significant contribution to the environmental impact must be included.</p> <p><i>Note: It should be settled before verification how confidential information is dealt with</i> <i>Note: in case of nested information modules, the rules of the BE-PCR shall be applied</i></p>	<p>EN15804 § 7.2. and ISO14025 BE-PCR A5</p>	<input type="checkbox"/>

### Observations and deviations

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## 2.4 SYSTEM BOUNDARIES IN ACCORDANCE WITH THE MODULAR DESIGN OF EN 15804

### 2.4.1 MODULES A1 TO A3

	Item to be checked / requirements	Reference document / Additional information	Checked and approved
14.	A comprehensive declaration of the modules A1 to A3 as minimum requirement, if necessary as an aggregated module A1-A3	EN15804 § 6.3.4. and Figure 1 BE-PCR A7	<input type="checkbox"/>
15.	A clear statement that the system boundaries for modules A1 to A3 are according to EN15804.  A description of the allocation principles and procedures: - A clear description of what the modules cover - The relation of the system boundaries with the natural compartment (ecosystems): where do the raw materials come from and where to the outputs go to. <i>E.g. in the case of wood production it shall be clear what the source of the wood is (Brazilian tropical forest...), for lime it shall be clear that this comes from mines.</i> - The use of secondary materials and fuels and the produced waste (check the end-of-waste state)  Offsetting by CO2 certificates not allowed.	EN15804 § 6.3.4.2., Figure 1, and applicable PCR	<input type="checkbox"/>
16.	Regarding allocation of co-products: - A specification of the 'end-of-waste state' if a production waste is considered as a coproduct for the allocation  - A justification of specific allocation processes (e.g. if data are not available to allocate according to the EN15804 rules)  - An indication of the energy and material flows as a result of the allocation of processes. This one shall explain clearly which upstream energy and material flows are allocated to the main product and which ones are allocated to the coproduct(s).  - No declaration of loads and benefits from coproducts from A1-A3 in Module D  - In case economic allocation is used, allocation should be based on revenue (=price x output) not only on price	EN15804 § 6.3.4.2. + annex B1+6.4.3.2  and applicable PCR	<input type="checkbox"/>
17.	The description of the system boundaries in the project report shall be plausible. The plausibility of the geographic representativeness shall also be checked	EN15804 § 6.3.4.2., Figure 1, and applicable PCR	<input type="checkbox"/>

#### Observations and deviations

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## 2.4.2 MODULES A4 TO A5

	Item to be checked / requirements	Reference document / Additional information	Checked and approved
18.	Module A4 is declared (mandatory).	EN15804 § 6.3.4.3. and §7.3 Royal Decree of 22 May 2014	<input type="checkbox"/>
19.	A clear description of the content of the modules in line with the EN 15804  The geographical representativeness of these scenarios shall be stated.	EN15804 § 6.3.4.3. and §7.3.  BE-PCR  Applicable PCR  Royal Decree of 22 May 2014	<input type="checkbox"/>
20.	The scenario is clearly described and plausible	EN15804 § 6.3.4.3. and § 7.3.  applicable PCR  Royal Decree of 22 May 2014	<input type="checkbox"/>
21.	The losses are accounted for in the modules in which they occur and shall be in line with EN15804  <i>E.g. losses during transport to the construction site shall be accounted in module A4</i>	EN15804 § 6.3.4. and ch 7.3.  Royal Decree of 22 May 2014  BE-PCR	<input type="checkbox"/>

### Observations and deviations

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### 2.4.3 MODULES B1 TO B7

	Item to be checked / requirements	Reference document / Additional information	Checked and approved
22.	The scenario and system boundaries are clearly described in words and the tables of the EN 15804 are filled in.  The geographical representativeness of these scenarios shall be stated.  For the use phase the Belgian electricity mix shall be used.	EN15804 § 6.3.4.4. and § 7.3.  BE-PCR A21  Applicable PCR	<input type="checkbox"/>
23.	The description of the system boundaries and scenarios is plausible	Royal Decree of 22 May 2014	<input type="checkbox"/>

#### Observations and deviations

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### 2.4.4 MODULES C1 TO C4

	Item to be checked / requirements	Reference document / Additional information	Checked and approved
24.	Module C2, C3 and C4 are declared in a comprehensive way (mandatory).		<input type="checkbox"/>
25.	The EOL scenario and system boundaries are clearly described in words and the tables of the EN 15804 are filled in.  The geographical representativeness of these scenarios shall be stated.	EN15804 § 6.3.4.4. and § 7.3.  BE-PCR  Applicable PCR	<input type="checkbox"/>
26.	The description of the system boundaries and scenarios is plausible	Royal Decree of 22 May 2014	<input type="checkbox"/>
27.	C4: A motivation and justification of the 'end-of-waste state' that is in line with the EN15804 <ul style="list-style-type: none"> <li>- Existing purpose</li> <li>- Existing market or demand</li> <li>- Compliance with technical requirements and legal guidelines</li> <li>- Fulfills the limit values for SVHC</li> </ul>	EN15804 § 6.3.4.5. and § 7.3. + annex B1 and applicable PCR	<input type="checkbox"/>
28.	C4: The used allocations in module C4 of the project report shall be clearly described. Careful check needed.  Credits from energetic utilization (waste treatment with energy recovery, use of landfill gas etc.) of waste shall be reported in Module D and not in module C4.	EN15804 § 6.3.4.5. and § 6.3.4.6.	<input type="checkbox"/>

#### Observations and deviations

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## 2.4.5 MODULE D

	Item to be checked / requirements	Reference document / Additional information	Checked and approved
29.	A comprehensive declaration of module D in line with the EN15804 is mandatory.	EN15804 § 6.3.4.6.  Royal Decree of 22 May 2014	<input type="checkbox"/>
30.	The project report must contain a justification of the system boundaries and the module content must be in line with EN15804  <i>Note: The recovery rates which are taken into account shall be in line with the Belgian context. The BE-PCR contains a rule on quantification of benefits from exported energy</i>	EN15804 § 6.3.4.6.  BE-PCR A19 and applicable PCR	<input type="checkbox"/>
31.	The net flow calculation in the project report shall be in accordance with the EN 15804.  <i>Note: Special attention needs to be given to following: processing losses shall be taken into account inputs in modules A1 to A3 (and A4 to B5 if necessary) shall be taken into account  The correct inclusion of impacts of the recovery process shall be used.  The functional equivalence (and its implication on the chosen avoided model) shall be checked.</i>	EN15804 § 6.3.4.6. and 6.4.3.3.	<input type="checkbox"/>
32.	The project report shall indicate if module D is calculated by excluding any benefits or loads of allocated co-products according to the EN15804  No benefits from coproducts from stage A1 to A3 shall be accounted in module D.  Coproducts shall be allocated and not studied through system expansion.	EN15804 § 6.4.3.3.	<input type="checkbox"/>

### Observations and deviations

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## 2.5 TRANSPARENCY AND COMPLETENESS OF THE SYSTEM BOUNDARIES

	Item to be checked / requirements	Reference document / Additional information	Checked and approved
33.	<p>Transparent and complete description of the system boundaries:</p> <ul style="list-style-type: none"> <li>- Representativeness (temporal, geographical, technological);</li> <li>- The assessment period for each module considered in the LCA (e.g. one year each, etc.);</li> <li>- Omissions of life cycle stages and processes;</li> <li>- Assumptions concerning other background data where relevant for the system boundary.</li> </ul>	<p>ISO14040 &amp; EN15804 § 8.2. &amp; 6.3.4</p> <p>And applicable PCR</p>	<input type="checkbox"/>

### Observations and deviations

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## 2.6 ENERGY MIX

	Item to be checked / requirements	Reference document / Additional information	Checked and approved
34.	<p>The selection of the power mix for foreground processes shall be in accordance with specifications from BE-PCR</p> <p>The BE-PCR contains a rule on the green energy mix.</p> <p>Transparent and complete description of the assumptions with regard to energy and electricity production incl. year of reference. It shall also be transparent which electricity/energy model is applied as avoided product if energy recovery is included in the optional module D;</p>	<p>CEN TR 15941 and applicable PCR</p> <p>BE-PCR</p>	<input type="checkbox"/>
35.	the validity of the green certificates shall be checked in the project report	Applicable PCR	<input type="checkbox"/>

### Observations and deviations

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## 2.7 CRITERIA FOR EXCLUDING INPUTS AND OUTPUTS & DATA COLLECTION

	Item to be checked / requirements	Reference document / Additional information	Checked and approved
36.	<p>Description of the application of the cut-off criteria and the assumptions made.</p> <p>If applicable, it is important that it is justified why some life cycle stages and/or processes are not taken into account.</p> <p>Conservative assumptions in combination with plausibility considerations and expert judgment can be used to demonstrate compliance with the cut-off criteria. (EN 15804 6.3.5)</p>	<p>EN15804 §6.3.5. and § 8.2. and applicable PCR</p> <p>BE-PCR</p>	<input type="checkbox"/>
37.	<p>The project report shall follow the cut-off rules from the EN15804 <i>Special attention to infrastructure in the BE-PCR.</i></p>	<p>EN15804 § 6.3.5</p> <p>BE-PCR</p>	<input type="checkbox"/>
38.	<p>The cut-off rules shall only be applied to data that are not available. Cut-off is a limit for what can be excluded. But it shall not be an incentive to exclude parts of the product that are known.</p> <p>In BE-PCR A20 additional information is given regarding processes that are allowed to be excluded (e.g. employee transport) and on those which sometimes have to be taken into account (e.g. infrastructure).</p>	<p>BE-PCR A20</p>	<input type="checkbox"/>
39.	<p>A list of all excluded processes clearly indicated as being exhaustive.</p>	<p>EN15804 § 8.2</p>	<input type="checkbox"/>
40.	<p>Data collection, including data quality issues, shall be done according to LCA rules</p> <p><i>An EPD describing a specific product shall be calculated using specific data for at least the processes the producer of the specific product has influence over. Generic data may be used for the processes the producer cannot influence e.g. processes dealing with the production of input commodities, e.g. raw material extraction or electricity generation, often referred to as upstream data;</i></p> <p><i>A specific EPD covering all life cycle stages (cradle to grave) may be calculated using generic data for some downstream processes e.g. waste incineration. For the sake of comparability the calculation of the use stage shall be based on the same additional technical information as is required in 7.3 EN 15804</i></p>	<p>ISO 14044:2006 section 4.3.2.; Documentation ISO 14040</p> <p>EN 15804 6.3.6 + 7.3</p> <p>BE-PCR</p>	<input type="checkbox"/>

### Observations and deviations

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## 2.8 DEVELOPMENT OF SCENARIOS AT PRODUCT LEVEL IN MODULES A4-A5-B-C-D

	Item to be checked / requirements	Reference document / Additional information	Checked and approved
41.	<p>A statement that the scenarios are representative for one of the most likely scenario alternatives</p> <p><i>Until a horizontal guidance document from national Belgian authorities is available, the "Environmental profile of building elements: Towards an integrated environmental assessments of the use of materials in buildings" document from OVAM shall be used as default scenario for the end of life scenarios.</i></p> <p>Concerning modules C and D, considered scenarios shall reflect the Belgian situation (applies to modules C1 to C4).</p>	<p>EN15804 § 6.3.8. Applicable PCR BE-PCR</p>	<input type="checkbox"/>
42.	<p>A4: The transport scenario in the project report shall be defined according to the EN 15804 and the Royal Decree.</p> <p>Unless a specific scenario is declared and justified, the default scenario shall consider that the construction site is located in Brussels (for companies located outside Belgium).</p>	<p>EN15804 § 7.3.2. Royal Decree of 22 May 2014 Applicable PCR BE-PCR</p>	<input type="checkbox"/>
43.	<p>C1 to C4: The considered scenarios in the project report shall reflect the Belgian situation.</p> <p><i>Unless better data or further guidance document from national Belgian authorities is available, the "Environmental profile of building elements: Towards and integrated environmental assessments of the use of materials in buildings" document from OVAM should be used as default scenario for the end of life scenarios.</i></p>	<p>EN15804 § 7.3.4. Royal Decree of 22 May 2014 Applicable PCR BE-PCR</p>	<input type="checkbox"/>
44.	<p>Documentation of the relevant technical information, e.g. recycling or reuse rates, with reference to literature source shall be provided in case one deviates from the default scenarios in the BE-PCR</p>	/	<input type="checkbox"/>

### Observations and deviations

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## 2.9 SELECTING DATA / BACKGROUND DATA

	Item to be checked / requirements	Reference document / Additional information	Checked and approved
45.	<p>The selection and use of generic data and background data shall be justified and its validity is demonstrated.</p> <p><i>The justification might be either the compliance with a requirement from a PCR or a statement that generic data come from one of the major LCA databases publicly available and commonly used in Europe (GaBi database, eecoinvent, Okobau, ELCD) + version.</i></p>	<p>EN15804 § 6.3.6. CEN / TR 15941 and Applicable PCR</p>	<input type="checkbox"/>
46.	<p>Manufacturer specific data shall be less than 5 years old and shall be based on a 1 year average</p> <p><i>Check if one year average data are representative of an average year for manufacturing. Take following issues into consideration:</i></p> <ul style="list-style-type: none"> <li>- What was the data used to calculate the one year average: data extrapolated over punctual measurements or continuous measurement? In case of punctual measurements, report it in the verification report.</li> <li>- Check if the maintenance over years has been included. E.g. the structural maintenance of production equipment</li> </ul>	<p>EN15804 § 6.3.7. CEN TR EN15941 and Applicable PCR</p>	<input type="checkbox"/>
47.	<p>The background datasets shall be less than 10 years old;</p> <p><i>Background dataset age refers to the age of manufacturer specific data used to build this dataset. This age is a different one (older) than the one of the dataset release. If the generic data provider has reviewed these manufacturer specific data and proven they are still valid during last 10 years, the age considered is the date of this data review.</i></p>	<p>EN15804 §6.3.7  BE-PCR</p>	<input type="checkbox"/>
	<p>A time period of 100 years shall be used. If relevant, longer reference period must be used and the results are reported separately.</p>		<input type="checkbox"/>
	<p>The used generic datasets shall be in line with the reality of production processes from a technological point of view. If different process technologies exist, the background data shall refer to the same technology as the one from the studied production process.</p>		<input type="checkbox"/>
48.	<p>A list with the identification of the (background) data records, their sources (database, literary source, etc.), year of data collection and its representativeness;</p>	<p>CEN TR EN15941 and Applicable PCR</p>	<input type="checkbox"/>
	<p>An explanation of how missing data is handled</p>		<input type="checkbox"/>
	<p>An explanation on how data quality is assessed</p>		<input type="checkbox"/>
49.	<p>The used manufacturer specific data shall be plausible;</p> <p><i>This can be done through comparison with orders of magnitude, element mass balance, etc. and/or by using expert judgement on the matter. Some data must be checked. The verifier reports on his approach.</i></p>	/	<input type="checkbox"/>
50.	<p>The used secondary datasets shall be appropriate</p> <p><i>This can be done through comparison with orders of magnitude, element mass balance, etc. and/or by using expert judgement on the matter. Some data must be checked. The verifier reports on his approach.</i></p>	/	<input type="checkbox"/>

### Observations and deviations

Space for the verifier to write down special observations or comments, e.g. in case of non-approval.



## 2.10 ALLOCATIONS

	Item to be checked / requirements	Reference document / Additional information	Checked and approved
51.	<p>The general allocation principles, according to ISO14044:2006 must be applied. It shall be checked if there is:</p> <ul style="list-style-type: none"> <li>• Avoidance of allocation</li> <li>• No double counting/omissions</li> <li>• Uniform application of the allocation rules etc.</li> </ul> <p>If a process can be sub-divided but respective data are not available, the inputs and outputs of the system under study shall be partitioned between its different products or functions in a way which reflects the underlying physical relationships between them; i.e. they shall reflect the way in which the inputs and outputs are changed by quantitative changes in the products or functions delivered by the system.</p> <p>In the case of joint co-production, where the processes cannot be sub-divided, allocation shall respect the main purpose of the processes studied, allocating all relevant products and functions appropriately. The purpose of a plant and therefore of the related processes is generally declared in its permit and shall be taken into account. (see 12.6)</p>	ISO14044:2006 4.3.4.	<input type="checkbox"/>
52.	The used allocation rules in the project report shall be plausible.	EN 15804 and applicable PCR	<input checked="" type="checkbox"/>
53.	An indication and justification of the allocations used for secondary materials or secondary fuels. Allocation choices are documented	EN15804 §6.4.3. and 8.2. and applicable PCR	<input type="checkbox"/>
54.	An indication and justification of the allocations made at manufacturer plant level. It shall be checked that data from a plant producing several different products have been allocated correctly or that there are specific measurement per product line.  The aim is to have a clear delineation from other products in a plant in order to have product-specific data	/	<input type="checkbox"/>
55.	If applicable, the project report shall contain an indication and justification of the allocation of multi-input processes In case of allocation, it shall be checked what type of allocation has been applied and its plausibility.	/	<input type="checkbox"/>
56.	Allocation of biogenic carbon content as material inherent property shall be allocated according to the BE-PCR	BE-PCR	<input type="checkbox"/>
57.	Carbon emissions from land use change shall be allocated according to the BE-PCR	BE-PCR	<input type="checkbox"/>
58.	Justification of the allocations in reuse, recycling and energetic recovery according to EN15804	EN15804 §6.4.3.3	<input type="checkbox"/>
59.	The project report shall contain an application of the co-product allocation that is in line with EN15804	EN15804 §6.4.3.2	<input type="checkbox"/>
60.	The data on which the allocation is based are documented and justified.	/	<input type="checkbox"/>
61.	The project report shall contain an allocation that is consistent with other scenarios of waste management;	EN15804 § 6.4.3.3. and applicable PCR	<input type="checkbox"/>
	The project report shall indicate that conventional average technologies and practices have been used;		<input type="checkbox"/>



If applicable (module D) : The project report shall contain substituted processes that are in accordance with the PCR or (if no PCR is available) representative actual processes shall be used;		<input type="checkbox"/>
The scenario shall reflect current practice. If not, a conservative approach is used;		<input type="checkbox"/>

Observations and deviations

Space for the verifier to write down special observations or comments, e.g. in case of non-approval.

## 2.11 LIFE CYCLE MODELLING INFORMATION

	Item to be checked / requirements	Reference document / Additional information	Checked and approved
62.	<p>The project report shall contain a transparent indication of the LCA modeling including how different production locations and products were dealt with (how was the (weighted) average calculated, ... including a sensitivity analysis)</p> <p><i>E.g. through screenshots from the LCA software programs, etc.</i></p> <p><i>'Transparent' refers to the fact that the description is clear, does not lack any information and does not contain any inconsistencies.</i></p>	<p>EN 15804 §8</p> <p>BE-PCR</p>	<input type="checkbox"/>
63.	<p>The plausibility and consistency of data shall be indicated</p> <p>The various characteristics that shall be checked are mass balance and energy balance</p> <p>Includes for example:</p> <ul style="list-style-type: none"> <li>- Balances on company level and in the life cycle e.g. Mass balance between reference flow and wastes for cradle to grave data</li> <li>- Mass of non-energetic resources used coherent with the reference flow</li> <li>- CO and CO2 emissions coherent with the mass of fossil energetic resources</li> <li>- Check of the sum of non-renewable and renewable parts or between feedstock and fuel parts</li> <li>- Are the energy indicators coherent with the energetic resources used?</li> </ul>	<p>EN 15804 § 8.4</p>	<input type="checkbox"/>

Observations and deviations

Space for the verifier to write down special observations or comments, e.g. in case of non-approval.





## 2.12 PARAMETERS OF THE LIFE CYCLE INVENTORY ANALYSIS AND LIFE CYCLE IMPACT ASSESSMENT

	Item to be checked / requirements	Reference document / Additional information	Checked and approved
64.	All environmental impact categories in table form for all modules A1 to D in line with the EN15804 Unassessed modules shall be marked as "MND" (= module not declared)	EN15804 §7.2.2. and Figure 1 EN15978 §12.5.  BE-PCR A3	<input type="checkbox"/>
65.	The 7 parameters describing the environmental impact shall be presented The 10 parameters describing the use of resources shall be presented The 3 parameters for waste categories shall be described The 4 parameters concerning output material flows shall be described.	EN15804 § 6.5 - 7.2.3. -7.2.5	<input type="checkbox"/>
66.	The project report shall contain inventory results that are plausible and consistent	/	<input type="checkbox"/>
67.	A selection of correct characterization factors and an elimination of long-term emissions (>100 years)  If important, emissions after 100 years shall also be reported on separately.  The verifier shall check the LCA model to ensure this point.  <i>LCA software has the possibility to either include or exclude long term emissions from the characterization factors. The verifier shall have the demonstration that results refer to CF without long term emissions. This can be done through a screen sharing with the LCA practitioner with recalculation of the results.</i>	EN15804 §8.2. and annex (amendment) and applicable PCR  BE-PCR	<input type="checkbox"/>
68.	Information on the environmental impacts following the requirement of EN15804 § 8.2. This information shall contain: - A reference to characterization models and factors - A statement that the estimated impact results are only relative statements which do not indicate the endpoints of the impact categories, exceeding threshold values, safety margins or risks	EN15804 §8.2.	<input type="checkbox"/>
69.	The project report shall contain following additional indicators according to the Royal Decree of 22 May 2014: - Human toxicity (cancer) - Human toxicity (no cancer) - Particulate matter - Water depletion - Eco toxicity (terrestrial) - Eco toxicity (marine) - Land use related impacts  These indicators shall either be fixed in EN 15804 or are by default the ones from the Product Environmental Footprint. If no method available, no declaration mandatory.	Royal Decree of 22 May 2014	<input type="checkbox"/>

### Observations and deviations

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## 2.13 INTERPRETATION

	Item to be checked / requirements	Reference document / Additional information	Checked and approved
70.	[optional] An interpretation of the results that is based on a dominance/contribution analysis of the selected indicators  Interpretation of results shall be done based on the main contribution to each of the studied indicators. Counter-intuitive results shall be explained.	/	<input type="checkbox"/>
71.	The assumptions and restrictions as regards the interpretation of results in the EPD, in terms of both methods and data shall be clarified in the project report  If reasonable doubts on result reliability exists for some indicators, due to datasets quality or method assessment, the project report shall specify these limitations.	EN15804 §8.2.	<input type="checkbox"/>
72.	The variance from the means of LCIA results must be presented in the project report in case any generic data is provided from several sources or if the results refer to a range of similar products	EN15804 §8.2.  BE-PCR	<input type="checkbox"/>
73.	Data quality assessment  <i>[optional until further notice] Data quality assessment shall be carried out according to the Total Quality Rating document elaborated by the VITO and KUL</i>	EN15804 §8.2. ISO 14040 CEN TR15941 Applicable PCR	<input type="checkbox"/>
74.	Full transparency regarding the value decisions, justifications and expert opinions	EN15804 § 8.2.	<input type="checkbox"/>
75.	The results of the impact assessment are plausible	/	<input type="checkbox"/>

### Observations and deviations

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## 2.14 DOCUMENTATION FOR CALCULATING THE REFERENCE SERVICE LIFE (RSL)

	Item to be checked / requirements	Reference document / Additional information	Checked and approved
76.	The documentation used for calculating the reference service life (RSL) is representative for the declared product	EN15804 § 6.3.3 & Royal Decree of 22 May 2014 Applicable PCR	<input type="checkbox"/>
77.	The RSL shall be defined according to at least one scenario, which is considered as the most common one	Royal Decree of 22 May 2014	<input type="checkbox"/>

### Observations and deviations

Space for the verifier to write down special observations or comments, e.g. in case of non-approval.



### 3 REQUIREMENTS REGARDING THE EPD

The whole section is mandatory to verify.

The rules for the EPD format can be found in the EN 15804 §7 and the EN 1592: everything that is included in the master information transfer matrix (ITM) must be documented somewhere in the EPD.

The verifier must check whether the information in the EPD is in line with the Project report.

#### 3.1 FORMAL REQUIREMENTS

	Item to be checked / requirements	Reference document / Additional information	Checked and conform to project report
78.	The statement: "Environmental Product Declaration in accordance with ISO 14025 and EN15804"	EN15804 §7.1.	<input type="checkbox"/>
	Name of declared product		<input type="checkbox"/>
	Declaration owner / Name and address of manufacturer/association		<input type="checkbox"/>
	Representativeness of geographical area		<input type="checkbox"/>
	Representativeness with regard to which manufacturer(s)		<input type="checkbox"/>
	Date of issue + validity (5 years)		<input type="checkbox"/>
	Indication of the variability in case of an average declaration		<input type="checkbox"/>
	Product composition with at least the main product components and SVHC ("main" includes all parts and substances with a major contribution to at least one impact category)		<input type="checkbox"/>
	Stages omitted, in case of no full LCA		<input type="checkbox"/>
	Reference to the website		<input type="checkbox"/>
79.	Date, title and version of the Belgian PCR document(s) used	Applicable PCR	<input type="checkbox"/>
80.	Reference to the verification and the name of third party verifier	EN15804 §7.1.Table2	<input type="checkbox"/>
81.	A statement indicating its representativeness for the Belgian market	Royal Decree of 22 May 2014	<input type="checkbox"/>
82.	The EPD is in line with the project report		<input type="checkbox"/>

#### Observations and deviations

Space for the verifier to write down special observations or comments, e.g. in case of non-approval.



## 3.2 PRODUCT DESCRIPTION

	Item to be checked / requirements	Reference document / Additional information	Checked and conform to project report
83.	The product description is in line with the product description in the project report and the studied product	/	<input type="checkbox"/>
84.	The product description in the EPD shall make it easy to understand and visualize what kind of product is the subject of the declaration	/	<input type="checkbox"/>
85.	If applicable: The EPD shall contain explanations on calculations of representative values for a product group	EN15804 § 7.1. BE-PCR	<input type="checkbox"/>
86.	The EPD shall contain specifications / identifications (picture, name, model) of the product The EPD shall include a visual representation of the product studied. This one shall help the reader to better understand what product the EPD is about.	EN15804 § 7.1.	<input type="checkbox"/>
87.	The intended use of the product	EN15804 § 7.1.	<input type="checkbox"/>
88.	If applicable, the EPD shall contain relevant technical data including RSL	/	<input type="checkbox"/>
89.	The EPD shall contain the test standards to which the technical data are referred to	/	<input type="checkbox"/>
90.	The indication of the RSL shall be in accordance with the specifications in the PCR	Applicable PCR and RSL	<input type="checkbox"/>
91.	A description of the manufacturing processes shall be given in the EPD. A description of all of the manufacturing processes is required if several locations are involved.	EN15804 § 7.1.	<input type="checkbox"/>

### Observations and deviations

Space for the verifier to write down special observations or comments, e.g. in case of non-approval.



### 3.3 LCA RULES

	Item to be checked / requirements	Reference document / Additional information	Checked and conform to project report
92.	If applicable: the information on the declared / functional unit shall correspond with the specifications of the PCR The functional/declared unit shall be the same as in the project report.	Applicable PCR	<input type="checkbox"/>
93.	If applicable: A reference to the mass of the declared unit For instance, in case a m <sup>2</sup> is a declared unit The mass can be expressed in e.g. gross density or base weight	EN15804 § 6.3.2.	<input type="checkbox"/>
94.	Indication whether it is cradle-to-gate / cradle-to-gate with options / cradle-to-grave	EN15804 § 7.2.2	<input type="checkbox"/>
95.	A flow diagram that is in accordance with the modular approach of EN15804 and the project report  <i>Note: The diagram in the EPD might be a simplified version from the project report.</i>	EN15804 § 7.2.1	<input type="checkbox"/>
96.	A complete description of the system boundaries	/	<input type="checkbox"/>
97.	An indication of the assignment of the analyzed processes to the life cycle modules	/	<input type="checkbox"/>
98.	The key assumptions and estimates for interpretation which are not depicted elsewhere in the EPD	/	<input type="checkbox"/>
99.	How the cut-off criteria where applied	/	<input type="checkbox"/>
100.	The EPD shall mention the sources of all of the used background data	/	<input type="checkbox"/>
101.	Indication of the age of the used background data	/	<input type="checkbox"/>
102.	Period of data collection for manufacturer specific data.	/	<input type="checkbox"/>
103.	The presentation of the allocations of relevance for the calculations are in accordance with the minimum requirements of the PCR	Applicable PCR	<input type="checkbox"/>

#### Observations and deviations

Space for the verifier to write down special observations or comments, e.g. in case of non-approval.

### 3.4 LCA: SCENARIOS, ADDITIONAL TECHNICAL INFORMATION AND RESULTS

	Item to be checked / requirements	Reference document / Additional information	Checked and conform to project report
104.	All assumptions related to the scenarios of the declared modules shall be in accordance with those stated in the project report	EN15804 § 7.3	<input type="checkbox"/>
105.	The RSL and the indication of the scenario on which the RSL is based	EN15804 §7.3.3.2	<input type="checkbox"/>
106.	A description of the declared / functional unit	/	<input type="checkbox"/>
107.	The EPD shall contain an identification of the declared/undeclared modules/ Unassessed modules shall be marked as "MND" (= module not declared)	/	<input type="checkbox"/>
108.	The characterization factors, used to assess the 7 environmental impacts, shall be consistent with the calculation method from NBN EN 15804+A1.	EN15804 §7.2.3, 7.2.4, 7.2.5 and §7.5	<input type="checkbox"/>
109.	Full declaration of all indicators required		<input type="checkbox"/>
110.	In case of product averages, a description of the range / variability of the LCIA results shall be given in the EPD.	EN15804 §7	<input type="checkbox"/>

#### Observations and deviations

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### 3.5 EVIDENCE FOR TESTS OR CERTIFICATES, REFERENCES

	Item to be checked / requirements	Reference document / Additional information	Checked and conform to project report
111.	Additional information (to EN15804) on indoor air quality shall be given in the EPD according to the CEN 16516 standard	CEN 16516 and Royal decree	<input type="checkbox"/>
112.	The EPD shall contain the references of the test reports. These shall be in line with the references indicated in the project report.	EN15804 §7.2 ; applicable PCR,	<input type="checkbox"/>
113.	The EPD shall contain a full indication of all the used referenced sources	EN15804 § 8.3	<input type="checkbox"/>

#### Observations and deviations

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