

# ECO PLATFORM

## LCA Calculation Rules and Specifications for EPDs

(hereafter: LCA Calculation Rules)

Version 2.0 (December 2024)



Table 1: Version of this document

Version Number	Date	Summary of changes
V 01	20.12.2023	Excluding LCA rules into separate document
V1.1	20.06.2024	<ul style="list-style-type: none"> <li>• Editorial update incl. new version numbering and update of ECO Platform documents</li> <li>• Clarification: definition “owner vs. holder”</li> </ul>
V2.0	20.12.2024	<ul style="list-style-type: none"> <li>• Restructuring of the document to reduce complexity and improve readability</li> <li>• Removal of the recommendations reg. CEN TR 16970 until Task Group results on mandatory requirements are finalized</li> <li>• Significant restructuring and detailed clarifications in chapter 2.5</li> </ul>

<b>1</b>	<b>INTRODUCTION .....</b>	<b>4</b>
1.1	GENERAL INFORMATION .....	4
1.2	GOAL .....	4
<b>2</b>	<b>LCA CALCULATION RULES AND SPECIFICATIONS .....</b>	<b>5</b>
2.1	Functional unit	5
2.2	Composition of the product	5
2.3	System boundary	5
2.4	Mass balance	6
2.5	Pooled energy resources with contractual instruments	6
2.5.1	Electricity rules	6
2.5.2	Biogas rules	12
2.5.3	Additional information for transparency for energy	13
2.6	Specific allocation rules	13
2.6.1	Allocation procedures for processes producing co-products used in cement and concrete and other construction products	13
2.7	Data quality information	13
2.8	Use of Ecoinvent datasets	14
2.9	Characterisation factors	14
2.10	Products using energy in module B6 of the use stage and permanently installed into building or infrastructure (defined by the manufacturer)	14
2.10.1	Other requirements for products using energy in module B6 of the use stage and permanently installed into building or infrastructure (defined by the manufacturer)	14
2.11	Biogenic carbon content	15
2.12	Statement of location and number of sites in EPD	15
2.13	Additional information	16
2.14	List of content of the EPD	17

# 1 INTRODUCTION

## 1.1 General Information

This document is part of the ECO Platform Standards. An EPD complying with the ECO Platform Standards is an ECO EPD. See “ECO Platform Standards – General Remarks” for a list of all related documents.

The European standard EN 15804+A2 is the basis for the ECO Platform Standards. ISO 21930 can additionally be taken as a basis for an ECO EPD, as long as the requirements in EN 15804+A2 and the ECO Platform Standards are also fulfilled.

The ECO Platform Standards have been developed to be applied to products using energy in module B6 of the use stage and permanently installed into building or infrastructure (defined by the manufacturer) that are considered as construction products but is not limited to construction products only.

Verification of an ECO EPD shall ensure that the EPD is in compliance with referenced ECO Platform Standards.

The ECO Platform members have committed to mutually recognize the EPD when they are verified according to the ECO Platform Standards, as providing a common level of quality based on ISO 14025 and EN 15804+A2.

PCRs according to EN 15804+A2 published as EN standards by CEN shall have prevalence over any other PCR, unless technically or legally justified. The content of a national and/or programme operator-related PCR should refer to the corresponding CEN c-PCR.

## 1.2 Goal

The objective of this document is to provide common life cycle assessment (LCA) calculation rules, and specifications of existing rules (e.g., in EN 15804+A2), agreed upon within ECO Platform.

## 2 LCA CALCULATION RULES AND SPECIFICATIONS

### 2.1 Functional unit

The functional unit of a construction product shall comply with EN 15804+A2, ch. 6.3.2.1 and any requirements in the relevant cPCR.

### 2.2 Composition of the product

The level of detail that is required is the following:

- 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.

### 2.3 System boundary

An ECO EPD with the “ECO EPD verified” logo can be one of the types listed in EN 15804+A2, ch. 5.2.

A comprehensive declaration of modules A1-A3, C and D as a minimum requirement, with exceptions mentioned in EN 15804+A2 chapter 5.2.

The following are the minimum requirements unless a CEN/TC c-PCR says otherwise:

#### A1-A3 modules

- As for energy, the market-based approach as per ISO 14067 and EN 15941 can be calculated, but no other methods of offsetting or insetting are allowed.
- Presentation of the energy and material flows as a result of deviating allocation processes.
- No declaration of loads and benefits in module D for flows that have been allocated as co-products.

#### B modules

- B6 (energy consumption) shall be added in the calculation of EPD of final products which are consuming energy, directly or indirectly<sup>1</sup>. B6 shall be presented separately to let users of the EPD accommodate the calculation when appropriate.
- If there is no c-PCR available the programme operator may provide a justified use scenario to apply for each family of products (or product category) that it covers within its programme, together with the related calculation formula when appropriate. Usually this will be done through a PCR publication.
- When an existing regulation applies to the calculation of B6 at the geographical scope that the EPD states it covers, the “justified use scenario” to calculate B6 shall be the more demanding regulation applying to the entire scope (see also ch. 2.10.1).

#### C modules

- C4: The degradation of a product’s biogenic carbon content in a solid waste disposal site, declared as GWP biogenic, shall be calculated without time limit. Any remaining biogenic carbon is treated as an emission of biogenic CO<sub>2</sub> from the technosphere to nature.

---

<sup>1</sup> “Indirectly” refers to products that store or transport energy, such as cables consuming energy through dissipation/losses, but not, e.g., windows or thermal insulation.

## 2.4 Mass balance

Mass balance approaches (MBA) and/or “book and claim” methods as per ISO 22095 (e.g. BMB (biomass balance) and/or recycled content allocation (attribution) approaches) shall not be used in connection with ECO EPDs. Note for pooled energy resources chapter 2.5 applies.

## 2.5 Pooled energy resources with contractual instruments

Contractual instruments can include energy attribute certificates, renewable energy certificates (RECs), guarantees of origin (GOs) or green energy certificates.

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.

### 2.5.1 Electricity rules

Rules on the use of contractual instruments are defined as per ISO 14067 and EN 15941, and described in the table below, which elaborates more specific situations.

- If a PO decides that the programme shall accept contractual instruments, such as guarantees of origin (GOs) or power purchase agreements (PPA), then to reduce double counting, all EPDs in the programme shall follow the rules of this document with respect to electricity generation using the market-based approach, particularly the requirements regarding registries, contractual instruments and those shown in Table 2 and Table 3 below.  
The results using the requirements for the location-based approach may additionally be communicated in the EPD, either as additional information or in an annex.
- If a PO decides that contractual instruments, such as guarantees of origin (GOs) or power purchase agreements (PPA), cannot be used with respect to electricity generation, all EPDs in the programme shall follow the rules of this document for the quantification of the LCA with respect to electricity generation using the location-based approach, particularly the requirements shown in Table 2 and 3.  
The results using the requirements for the market-based approach may additionally be communicated in the EPD, either as additional information or in an annex.

#### **Definition for the term “reliable and transparent book and claim registry”:**

Contractual instruments can only work with a reliable and transparent book and claim registry to avoid double counting. The ECO Platform definition of a “reliable and transparent book and claim registry” is as follows:

The registry must be run by an independent organisation and must cover one geographical region and be the only one there. Within this clearly defined geographical (not necessarily national) region, energy producers shall only be allowed to declare their produced kWhours in the mentioned registry, not in many different registries on the globe that may not be connected to compare who is declaring what where. Double counting shall be avoided by that rule.

The use of single, reliable and transparent book and claim registry for a country or region means that the national or regional residual mix can be calculated and provided, and this is covered by case 3a) in Table 2 below if the residual mix is published, and Case 3b) if no residual mix is published.

#### **Use of Contractual Instruments**

The validity of contractual instruments shall be followed up over the validity period of the EPD. POs shall have a procedure of assuring proof of contractual instruments on a regular basis.

For all cases where contractual instruments are used, they shall be provided with tracking numbers.

To check on double counting: used tracking numbers must be cancelled in the relevant registry. If there is no registry, then the contractual instrument shall not be considered valid.

Documentation shall be checked on the following information, contractual instruments shall be provided with the following aspects:

**Mandatory Aspects:**

- Energy provider
- Manufacturer
- Electricity mix, attributes of electricity
- Energy amounts
- Time periods for issue and validity

**Optional Aspects**, justification must be provided if information is not available:

- Addresses of power plants
- Tracking numbers
- Information on (direct) coupling yes/no

**Note 1:** Concept (direct) coupling: The linkage certifies that the GO is linked to the underlying electricity and that the energy producer (plant) actually delivers it together with the electricity to the energy provider.

**Note 2:** Proof from external verification bodies (accredited bodies) may contain less information than listed above so further checks may be necessary.

**Note 3:** Tracking numbers are in most cases deleted automatically in national systems, sometimes energy providers can deliver excel files to check on energy amounts versus number of certificates.  
Solution: show proof for tracking or documentation of justification why tracking was not possible.

Sometimes only 100% renewable energy products are deleted from registry. Mixes of renewable energy and non-renewable energy are sometimes not deleted. (Example: energy providers may only state that they have certain amounts of renewables in the mix, but no GOs available).

Tracking numbers could sometimes only be provided from national energy control bodies. These systems are fully digitalized, and the “book and claim” method is fully automatized. Energy providers book and within seconds the energy amounts are cancelled in the AIB system. That is done MWh per MWh and proof documentation in form of Excel sheets etc. This kind of proof shall only be demanded and checked by verifiers in case of justified doubt about all other documents delivered by energy providers/certification bodies.

If there are no tracking numbers and contractual instruments are not transparent, then there shall be no acceptance of the contractual instruments, and the residual mix shall be used.

**Intermediate conclusion if GOs are available but without confirmation of cancelling:**

Proof that manufacturers have asked for cancellation confirmation is sufficient throughout the period of validity of the EPD, e.g. through annual checks.

**Table 2 Requirements for use of market-based or location-based approaches**

	Situation regarding contractual instruments for the market-based approach	Foreground data [see Note 1]	
		Market-based approach – foreground data	Location-based approach – foreground data
<b>Case 1a)</b> Manufacturer produces energy on site and uses it	No contractual instruments have been sold	Own generation mix	Own generation mix
	Contractual instruments have been sold	Residual mix	
<b>Case 1b)</b> Manufacturer produces electricity on site and exports it	Renewable electricity is exported with or without contractual instruments	Account for consumed electricity as for Case 1a) above. Any imports to have residual mix, unless contractual instruments have been purchased in which case, contractual instrument mix	Account for consumed electricity using own generation mix, imports to have consumption mix
<b>Case 1c)</b> Direct connection	with contractual instruments	Contractual instrument mix [direct connection mix]	Direct connection mix
	without contractual instruments, no contractual instruments sold	Direct connection mix	
	Contractual instruments sold to others	Residual mix	
<b>Case 2</b> National state with mandatory electricity labelling, e.g. Austria, Switzerland		Supplier mix, see Note 2	
<b>Case 3a)</b> National state or region with single registry and published residual mix, e.g. EU, UK	with contractual instruments	Contractual instrument mix	Consumption mix
	without contractual instruments	Residual mix	
<b>Case 3b)</b> National state or region with a “single reliable and transparent book and claim registry” outside EU, with no published residual mix	with contractual instruments	Contractual instrument mix	Consumption mix
	without contractual instruments	Consumption mix minus all renewables [conservative]	



	Situation regarding contractual instruments for the market-based approach	Foreground data [see Note 1]	
		Market-based approach – foreground data	Location-based approach – foreground data
<b>Case 4a)</b> National state in the EU without no registry or more than one registry	In the EU, all countries are only covered by the AIB registry.		
<b>Case 4b)</b> National state with no registry	There are no contractual instruments	Consumption mix [but check with ECO Platform whether any contractual instruments have previously been provided in the country, in which case, the case 4c) must be used.	Consumption mix
<b>Case 4c)</b> National state with one or more registries but no “single reliable and transparent book and claim registry”, outside EU, e.g. Turkey, US	with contractual instruments	Contractual Instrument mix	Consumption mix
	without contractual instruments	Consumption mix minus all renewables [conservative]	

**Note 1** Foreground data can sometimes also include A4 and A5 (e.g. ready-mix concrete).

**Note 2** For Case 2, energy providers must deliver proof of origin (Mandatory: contract papers with name and address of contract partners; optional for the time being: addresses of plants, sites). Energy amounts from contracts/accounting documents must correspond to energy consumption in LCA.

**Table 3 Recommendations for background data in the market-based and location-based approaches**

	Market-based approach - background data	Location-based approach – background data
Background data - actual use known, e.g. sector EPD where data collection from manufacturers provided evidence of use of own generation/direct connection/use of contractual instruments	Actual mix including own generation/direct connection/contractual instruments/residual as relevant	Actual mix including own generation/direct connection/consumption mix
Background data – actual situation not known	Pragmatically, although generic datasets based on the actual mix (own generation/direct connection/contractual instruments/residual) should be used, background datasets based on consumption mix may be used where consistent databases are not available. Use of consumption mix in the background data should be stated in the EPD when the market-based approach is used.	Consumption mix
Background data is black box – the user cannot see how much electricity has been modelled	Background data based on consumption mix may be used but should be stated in the EPD when the market-based approach is used.	Consumption mix
Background Data – upstream data, e.g. EPD	For products where electricity used in upstream processes has a significant influence on LCA results, checks shall be made of the approach used to model electricity in this upstream data to check it follows the same approach as the EPD Programme, or is conservative. Justification required in the EPD, if the information on the approach used is not available.	
Background Data – downstream data	Consumption mix.  Only if the manufacturer has direct control over a process in any of the B and/or C modules (which, e.g., may be the case for construction services or for recycling), may the generation of electricity used in this process be modelled with a contractual instrument or the residual mix.	Consumption mix

### Reporting Communication

Reporting an additional set of results in the project report is recommended based on the electricity modelling approach (market-based or location-based) not used for the main results.

If an additional set of results is declared in the project report, there are several options for declaration of these results in an EPD:

- not to provide the additional results in the EPD
- to provide an annex to the EPD with the second set of results
- to declare two result tables in the EPD with the set of results which doesn't follow the PCR in relation to the market- or location-based approach clearly labelled as additional
- and optionally, additionally to provide an interpretation of the different results in the EPD.

If any additional reporting is undertaken in relation to electricity, results must be clearly labelled in the EPD so the user is clear what is provided.

**Note 3:** In some countries, parts of the electricity from renewable energy sources might be sold/exported as renewable electricity without being excluded from the supplied mix. For this reason, in such cases a sensitivity analysis applying the relevant consumption grid mix shall be conducted and reported in the project report to demonstrate the difference in results of the electricity tracking instruments.

### Calculation of the consumption mix for electricity

The consumption mix is national (or sub-national) production plus imports and excluding exports. The national consumption mix shall be used, except for Australia, Brazil, Canada, China, India, and USA, where sub-national consumption mix shall be used.

### Calculation of residual mixes of electricity

Available datasets from background databases can be taken. Transmission and distribution losses shall be considered as for consumption mix. If no datasets are available or applicable the calculation of the residual mix shall be done as follows:

For countries that are members in the AIB-system, the AIB methods shall be used for calculating the residual mix.

The method implemented within the LCA (year and name of document) shall be referenced (in EPD as well as in project report).

Modelling of European residual mixes<sup>2</sup> shall follow the latest AIB method.

For countries which aren't members of the AIB-system, and where the residual mix has not been integrated into background databases, modelling based on the calculated residual mix and datasets for each generation mix shall be carried out, accounting for transmission and distribution losses as for consumption mix.

Transparent and trackable documentation is mandatory in the project report for the electricity purchased in the A3 processes.

**Note 4:** This document does not formulate explicit rules on which electricity mixes to use for upstream data of supplied materials, see the recommendations for background data in table 3 above.

---

<sup>2</sup> <https://www.aib-net.org/facts/european-residual-mix>

## 2.5.2 Biogas rules

If contractual instruments for biogas are accepted by the POs, the requirements for a market-based approach are:

### Biogas from the gas network

Biogas contractual instruments shall be used for modelling biogas when the supplier is able to guarantee that the contractual instrument meets the requirements for tracking and traceability, see EN 15941 E.2.1. For gas purchased without the contractual instrument the residual mix shall be applied.

### Biogas from a directly connected supplier

Life cycle data for the biogas supplied may be used if there is a dedicated pipeline or supply between the organisation and the biogas plant from which the life cycle data is derived, and no contractual instruments have been sold to a third-party for that consumed biogas. Otherwise, the residual mix shall be used.

### Internally generated biogas

For internally generated and consumed biogas, where no contractual instruments have been sold to a third-party, the life cycle data for the biogas shall be used for that product. Otherwise, the residual mix shall be used.

### Residual gas mix

As long as the AIB system does not provide guidance and/or data sets for residual gas mixes and the background databases also do not give appropriate data sets, the residual mix must be calculated following the AIB guidance for green electricity as closely as possible. Conservatively, it would be 100% natural gas.

**Note 1:** For tracking and traceability, the rules of green electricity apply accordingly.

**Note 2:** For biogas it is not always clear at which geographical point in the gas grid the biogas is put into the pipe system nor are the pipe systems connected in a way as electricity grids are connected. Until further notice a physical connection of gas grid systems is not required to accept GOs for biogas.

**Note 3:** The above rules are meant only for input as energy carrier (not as feedstock).

If the PO does not accept contractual instruments for biogas, then for the location-based approach, the consumption mix shall be used for gas from the gas network, and biogas from a directly connected supplier and/or internally generated biogas shall be modelled based on the supplied gas.

## Reporting Communication

Reporting an additional set of results in the project report is recommended:

- Market-based approach: using GOs and residual mix,
- Location-based approach: using the actual consumption mix (= national/sub-national production + imports – exports),
- If an additional set of results is declared in the project report, options are:
  - not to provide the additional results in the EPD
  - to provide an annex to the EPD with the second set of results
  - to declare two result tables in the EPD with the set of results which doesn't follow the PCR in relation to the market- or location-based approach clearly labelled as additional
  - and optionally, additionally to provide an interpretation of the different results in the EPD.

If any additional set of results is declared in relation to in relation to biogas, results must be clearly labelled so the user is clear what is provided.

### 2.5.3 *Additional information for transparency for energy*

#### **Mandatory:**

- The use of the location-based or market-based approach must be reported for any results in the EPD,
- To clarify EN 15941, if electricity accounts for more than 30 % of the total energy use in stage A1-A3, provide in the EPD the GWP-total of the electricity in kg CO<sub>2</sub>e/kWh used in foreground processes and any other processes in the direct control of the manufacturer;
- To clarify EN 15941, if gas accounts for more than 30 % of the total energy use in stage A1-A3, provide in the Project Report, the GWP-total of the applied specifically gas mix in kg CO<sub>2</sub>e/MJ of any gas purchased with contractual instruments or biogas used in the foreground manufacturing processes, and any other processes which the manufacturer has direct control over,
- Justification shall be given in the project report if any information is not provided;
- If the market-based approach has been used, for foreground manufacturing processes and any other processes which the manufacturer has direct control over, the EPD shall declare how the electricity or biogas used has been modelled, e.g. using a residual mix, electricity backed up by a contractual instrument, onsite generation, direct connection etc.
- Any use of contractual instruments for modelling biogas or electricity shall be reported in the EPD.

## 2.6 **Specific allocation rules**

To avoid inconsistencies through diverging interpretation of the provisions for the definition of allocation rules, specific rules for the allocation in certain situations have been defined. For the sake of consistency, these rules shall apply to all ECO EPDs that are affected by these allocation rules.

### 2.6.1 *Allocation procedures for processes producing co-products used in cement and concrete and other construction products*

Until a consistent approach is in place in standardization, all ECO Platform POs are required to use economic allocation for the processes producing co-products for use in cement and concrete, for example:

- steel production and granulated blast-furnace slag or crystallised basic oxygen furnace slag;
- coal fired electricity generation, fly ash and artificial gypsum, and other processes producing artificial gypsum;
- silicon metal and ferro-silicon alloys and silica fume and
- aluminium-oxide-containing sources arising from aluminium and alumina production.

For these co-products, economic allocation shall be used even if their contribution to the overall revenue of the process is very low (below 1%), to understand the impact, even if small, connected to these co-products. Economic allocation should use market prices, averaged over a period in time as defined in ISO 14044 Amd2:2020 (chapter D4.3).

When assessing the impact of the high value co-products such as steel, electricity, silicon etc, economic allocation to these low value co-products used in cement and concrete can be omitted as a conservative choice. Other forms of allocation, for example, physical partitioning, system expansion or physical allocation, shall not be used to assign impacts to these low value co-products used in cement and concrete when assessing these high value co-products for use in ECO EPDs.

Where these co-products used in cement and concrete are used in other construction products, within ECO EPDs, the same rules of allocation shall apply.

## 2.7 **Data quality information**

Data quality information according to EN 15941 shall be included in the EPD.

## 2.8 Use of Ecoinvent datasets

For ECO EPD, the cut-off [100:0] LCA methodology shall be used. For example, if ecoinvent is used, the LCA-method cut-off by classification or cut-off, EN 15804+A2 are the only accepted methods for LCA calculation.

## 2.9 Characterisation factors

ECO EPD shall use the latest version of characterisation factors released by JRC for use in EPD to EN 15804+A2. A period of transition is allowed, to give time for LCA tools to implement the new characterisation factors. This period shall be one year from the release of the updated characterisation factors.

If earlier versions of characterisation factors are identical or conservative, then EPD based on earlier versions can be used. On this basis, an EPD based on JRC EF 3.0 can be used as an input to an EPD based on JRC EF 3.1. However, EF3.0 results based for the optional indicators for eco-toxicity (freshwater), human toxicity, cancer and human toxicity, non-cancer effects, cannot be justified to be identical or conservative in relation to EF 3.1, and therefore EF3.0 results for these indicators shall not be declared in an EPD based on EF 3.1 (but they may be included in the project report)<sup>3</sup>.

## 2.10 Products using energy in module B6 of the use stage and permanently installed into building or infrastructure (defined by the manufacturer)

This chapter presents specific requirements which apply to EPDs of products using energy in module 6 of the use stage, where the products are permanently installed into the building or infrastructure as defined by the manufacturer.

Specific rules shall be provided, when relevant, into the PCR or sub-category PCR.

Specific rules are provided, when relevant, for products which are not used in the construction sector by the ECO EPD Programme Operators.

The EPD for products using energy in module B6 of the use stage and permanently installed into building or infrastructure (defined by the manufacturer) that are considered as construction products shall be developed in compliance with:

- EN 15804+A2
- ECO Platform Standards
- Programme operator PCR and sub-category PCR
- and should, if using electricity, consider the requirements of EN 50693 where possible.

### 2.10.1 Other requirements for products using energy in module B6 of the use stage and permanently installed into building or infrastructure (defined by the manufacturer)

#### Regulatory perspective

When an EPD is said to be applicable to a local context (ex. country specific EPD), the more demanding regulation applying to the local context shall be applied for the calculations of the EPD (ex. recycled content, recovered content, by-product content), if the EPD application requires it.

---

<sup>3</sup> The characterisation factors for, for example, GWP in EF 3.1 are identical or lower than EF 3.0, but for the toxicity indicators many are higher.

Therefore, if the country regulation is less demanding than the applicable European regulation, then the European regulation shall apply; if the local regulation is more demanding than the applicable European regulation, then the country regulation shall apply, if the EPD application requires it.

### **Allocation rules**

Information regarding specific allocation rules (e.g. rules, factors, interpretation) which are not described either in EN 15804+A2 or in the applicable c-PCR shall be included in the EPD.

### **Communication of interpretation**

The information shall be provided in the background report, and the verifier shall have access to it. They are usually not mentioned in the EPD, which is in line with EN 15804+A2.

### **Modules B**

B6 is mandatory for EPDs of products using energy in module B6 of the use stage and permanently installed into building or infrastructure (defined by the manufacturer), directly or indirectly (ex. a cable is consuming energy through dissipation/losses in the cable when electricity goes through it).

Such products shall also include any maintenance (B2), repair (B3) and replacement (B4) processes required to achieve the stated service life of the products, as well as emissions in use (B1) if relevant.

It is recognized that it may be difficult to separate maintenance, repair and replacement processes and the connected aspects and impacts into these separate modules, but all relevant processes to achieve the declared service life shall be assigned to one or more of these modules, and the description of the processes in each module shall be described in the EPD.

Technical information for the relevant declared B module(s) shall be provided in the EPD.

### **Module B6**

B6 shall be presented separately to let users of the EPD accommodate the calculation when appropriate. If there is no c-PCR available the programme operator may provide a justified use scenario to apply for each family of products (or product category) that it covers within its programme, together with the related calculation formula when appropriate. Usually this will be done through a PCR publication.

## **2.11 Biogenic carbon content**

In EN 15804+A2 Table 9 makes the calculation of biogenic carbon in kg C mandatory; where the mass of biogenic carbon content in the product is above 5%, the conversion factor to kg CO<sub>2</sub> equivalents shall also be given.

If the packaging contains more than 5% biogenic carbon, the uptake of this biogenic carbon, as biogenic CO<sub>2</sub>, in module A3 (or A1-A3 if aggregated) shall be balanced-out by an equal amount of emission of biogenic CO<sub>2</sub> in module A5. Then module A5 shall, also in EPDs which otherwise have an A1-A3 scope, be included for this “balancing-out reporting”. Unless module A5 is fully included, this “balancing-out reporting” for module A5 shall be included in the declared A1-A3 results; if this is done, the EPD shall describe that the A1-A3 results includes the “balancing-out reporting” of the biogenic CO<sub>2</sub> of packaging released in module A5.

If the packaging contains less than 5% biogenic carbon, this “balancing-out” of biogenic carbon may be done directly in module A3 (or A1-A3 if aggregated) instead.

## **2.12 Statement of location and number of sites in EPD**

For an EPD from a manufacturer or reseller, the location of all the manufacturing sites for which the EPD is representative shall be listed in the EPD at least at country and city level.

## 2.13 Additional information

Guidance and requirements on additional information, that is not part of the EPD-content as per EN 15804+A2 can be found in ISO 14025.

In ECO EPD any kind of additional information has to be verified.

Additional information can be put into the main part of the EPD (i.e. in separate chapters, separate tables) or put into annexes to EPD documents. An annex is considered as a part of the EPD and must be fully verified together with the EPD. Additional information shall not be put into the same tables of existing mandatory results according to EN 15804+A2.

An EPD may declare additional environmentally relevant information not derived from the LCA. Any additional environmental information declared shall be derived using appropriate methods and be specific, accurate, not misleading, and relevant to the specific product and be substantiated as part of the project report and verified as part of the EPD verification and quantitative information is preferred over qualitative information. All the quantitative information on emissions shall be provided with testing results from third-party testing laboratories or links to the studies underlying the flows.

Any use of non-EN 15804+A2 indicators shall provide the reference to where the methodology is provided.

Examples for allowed content elements of additional information:

- site and address lists
- extensions for mutual recognition
- scaling tables or results with different toppings for i.e. insulation slabs...
- the release of dangerous substances into indoor air, soil, and water during the use stage,
  - instructions for proper use of the product, e.g., to minimise energy or water consumption or to improve the durability of the product,
  - instructions for proper maintenance and service of the product, e.g., to minimise energy or water consumption or to improve the durability of the product,
  - information on key parts of the product that determine its durability,
  - information on recycling including, e.g., suitable procedures for recycling the entire product or selected parts and the potential environmental benefits gained,
  - information on a suitable method of reuse of the product (or parts of the products) and procedures for disposal as waste at the end of its life cycle,
  - information regarding disposal of the product, or inherent materials, and any other information considered necessary to minimise the product's end-of-life impacts, and
  - a more detailed description of an organisation's overall environmental work, in addition to the information listed in ISO 14025, Section 7.2.3 on information about EPD owner, such as:
    - the existence of any type of organised environmental activity,
    - information on where interested parties may find more details about the organisation's environmental work.

An EPD may declare additional environmentally relevant information derived from the LCA, for example:

- Additional indicator results using other characterisation methods, for example TRACI as required for the North American market according to ISO 21930.

An ECO EPD (including annexes) shall not include any LCA results violating the LCA rules in EN 15804+A2 or the ECO Platform Standards. Examples of LCA results not allowed in ECO EPDs are results based on a mass balance approach (see Section 2.4), results based on offsets or insets, and results showing the effects of multi-recycling in module D.



All additional information including environmental information derived from LCA shall be clearly marked as such, especially if it is not in the main part of the EPD but in an annex. The format and layout of annexes shall be designed in a way that it is clearly recognizable as additional information and explain the approach used and where the original EPD can be found.

#### **2.14 List of content of the EPD**

The EPD shall include all content included in the “List of content to declare in an ECO EPD” in chapter 2.4 of the Verification Guidelines. A period of transition is allowed, to give time for LCA tools to implement the new characterisation factors. This period shall be 1 year from the release of the updated characterisation factors.