

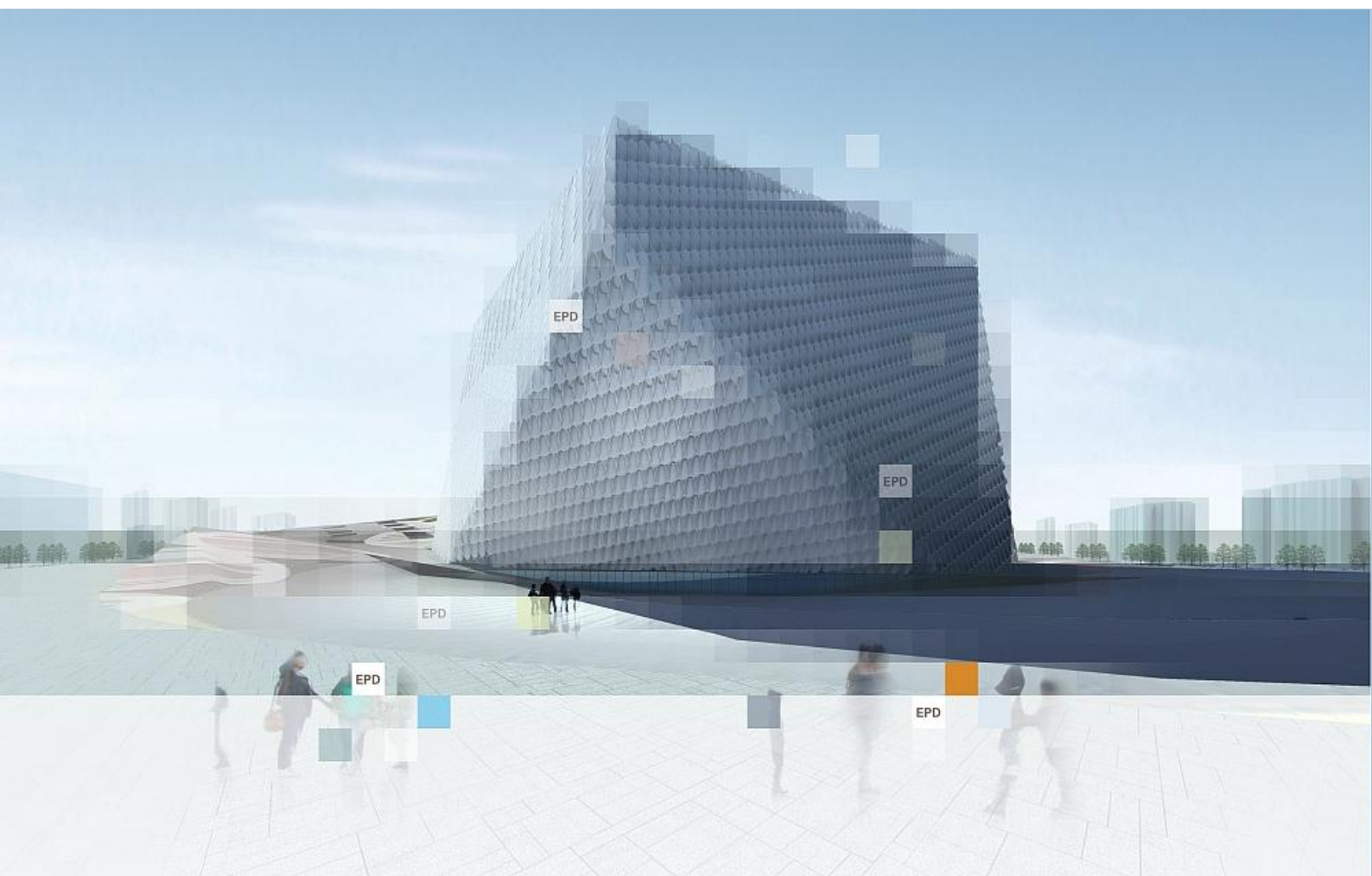
# The preparation of environmental product declarations (EPDs)

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## General Programme Instructions for the Preparation of EPDs at the Institut Bauen und Umwelt e.V.

Version 1.1

[www.bau-umwelt.de](http://www.bau-umwelt.de)



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1.0	Fundamental revision and update with the implementation of the newly created verification regulations, as well as renaming the SVA as the SVR. This document supersedes the previous “General Principles” (status: 04 April 2013).	31 October 2015
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## Preface

Building and the environment belong together. Building shapes the environment. But buildings are comprised of material-dense and energy-intensive manufactured products that represent a major encroachment of humans into the environment.

The necessity of expanding these possible environmental impacts from products (e.g. the release of poisonous materials into air, water and soil) to include raw material extraction or possible recycling processes as well is now embodied in the European Construction Products regulation (CPR). The consideration of this environmental baggage that a product brings with it and which determines, together with its functionality, the environmental quality in the building, is an indispensable part of the sustainable optimisation of buildings.

An environmental product declaration (EPD) is an instrument of information transfer that supplies exactly this basic information about the quality of the environment resulting from poor building products.

The preparation of an EPD provides the opportunity to examine specific specialised manufacturer knowledge about their products via independent third parties, and so creates an up-to-date, credible source of information for architects and planners.

With EN 15804+A1 (Sustainability of Buildings - Environmental Product Declarations - core rules for the product category of construction products), the CEN/TC 350 "Sustainability of Buildings" technical committee offers a foundation for uniform information quality in Europe. This standard follows a consistently horizontal orientation, which is why it can be used for all building products and services. It specifies the basic algorithm for an environmental assessment, specifies how interior air quality and emissions in soil and water are documented, and beyond that, regulates the basis on which the validation of data records is to be carried out.

The current document is the basis for the conformity of the EPDs prepared in the IBU programme with this European standard, and echoes the essential contents of EN 15804+A1. Thus, it is guaranteed that future IBU EPDs will correspond to internationally recognised standards and can be used across borders. The programme instructions in the current document are a necessary basis for the creation of environmental product declarations, and the regulations contained therein are indispensable and directly applicable to the contractual relationship between the respective manufacturer and Institut Bauen und Umwelt e.V.

In order to ensure the recognition of EPDs on an international level, a European platform, known as ECO Platform, was established. All programme operators involved agree on uniform quality standards in the ECO Platform group, with the goal of reaching mutual recognition of data sets in accordance with EN 15804+A1.

This will enable an important step toward qualitatively high-value, as well as uniform, product and service information. On a long-term basis, that means more acceptance and credibility for environmental product declarations, and, with that, overall promotion of the sustainable development of the national and international building and real estate industry.



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IBU Managing Director



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IBU Chairman of the Board

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## Index of Abbreviations

EPD	Environmental Product Declaration
IBU	Institut Bauen und Umwelt e.V.
LCA	(Environmental) Life Cycle Assessment
PCR	Product Category Rules
PCR Part A	Calculation Rules for the Life Cycle Assessment and Requirements on the Project report also PCR guidance text Part A
PCR Part B	PCR guidance text for building-related products and services Part B: Requirements on the EPD for [name of the product] also PCR guidance text Part B
SVR	Advisory Board (formerly SVA)
VC	Verification Committee

## 1 General rules

### 1.1 Area of applicability

The General Programme Instructions regulate services in the context of the execution and preparation of environmental product declarations (EPDs) of the Institut Bauen und Umwelt e.V. according to ISO 14025 with a client, in particular

- compliance with the rules of the Institut Bauen und Umwelt e.V. programme and
- verification by independent third parties in accordance with EN 15804+A1 and ISO 14025.

### 1.2 Goals of the IBU programme

The goal of the IBU programme is the promotion of sustainable building construction through the creation, dissemination and use of EPDs. Independently tested, reliable and consistent environment-related information based on life cycle assessments for building-related products and services will be made available for communication between companies, as well as between companies and professional users.

The IBU EPD programme is internationally oriented. The focus of the programme lies in supporting members in German-speaking countries. IBU members receive particular support in the development and marketing of EPDs.

IBU supports the harmonization of EPDs in Europe. The EPDs of the IBU contain the European core EPD, in accordance with EN 15804+A1. IBU ensures the compliance of its PCR guidance texts with this European standard, and provides for the necessary updates of its documents.

The European core EPD is compatible with the European platform for EPDs for building products, the ECO Platform.

### 1.3 Scope of the IBU programme

The Institut Bauen und Umwelt e.V. (IBU) programme promotes the development and dissemination of type III environmental product declarations (EPD, Environmental Product Declaration), in accordance with DIN EN ISO 14025 and EN 15804+A1 for building-related products and services.

Building-related products include materials, products, components, kits or structural systems produced for the construction or use of a building or structure.

Building-related services include, for example, the supply of heat, or cleaning and maintenance work.

The programme is open to all interested parties, in particular, companies that manufacture building products or building-related products. Participation in the IBU programme is voluntary.

### 1.4 Contractual basis and commissioning

The basic contractual bases are:

the IBU General Terms and Conditions and Programme Rules (General Programme Instructions, PCR Part A and PCR Part B), as well as the Articles of Association (statutes and membership fee regulations) in its currently applicable version.

The client contracts the services of the Institut Bauen und Umwelt e.V. The contract is for the verification of an environmental product declaration (EPD). EPDs to be verified are prepared

using the online tool at <https://epd-online.com>. Contracts are awarded, unless otherwise agreed, using the IBU Online Tool (<https://epd-online.com>).

Each time a client contracts the services of the IBU, the client recognises the abovementioned basic contractual elements as binding.

For participation in the EPD programme, charges related to the current applicable membership fee regulations are to be paid by the client.

## 1.5 Normative bases of the IBU programme

Environmental product declarations that are developed within the framework of this programme are in accordance with international standard ISO 14025 type III environmental product declarations. Building products and building-related services are specially declared in accordance with norm EN 15804+A1.

## 1.6 Form of organization and entities of the IBU programme

The Institut Bauen und Umwelt e.V. is the programme operator and is organised as a registered association with:

- a general meeting
- a board of directors and
- an association's registered office

The powers and responsibilities of the general meeting, the board of directors and the association's registered office are stipulated in the IBU statutes.

The standard compliance of the programme and the agreement of the EPDs with the PCR guidance texts are ensured by the Advisory Board (SVR) (see chapters 3 and 5).

## 1.7 Standard documents

The following documents are standard for the preparation of EPDs in the context of the IBU programme:

- the General Programme Instructions of the IBU
- the PCR guidance text Part A: "Calculation Rules for the Life Cycle Assessment and Requirements on the Project report "
- documents for the product subgroup-specific PCR guidance text Part B: " Requirements on the EPD for ", which are made available for building products with similar requirements and functionalities ("product subgroups")
- the compilation of the decisions of the SVR intended for the public
- the General Terms and Conditions (AGB) of the IBU
- the Articles of Association of the IBU (statutes and membership fee regulations)

The IBU makes templates available for the preparation of specific PCR guidance texts for their respective product subgroups and for EPDs.

## 1.8 The inclusion of interested parties

The PCR guidance texts that are reviewed and approved by the SVR are made broadly available publicly and for commentary, in accordance with ISO 14025.

This is accomplished by means of the publication of the documents in the IBU database system at <https://epd-online.com>. There is an opportunity to comment in the Internet-based forum.



## 1.9 Language

The reference language of the IBU programme is German. All important programme documents will also be made available in English. The translation of EPDs into additional languages is being supported.

## 2 Program operator

### Tasks of the programme operator

The programme operator is the Institut Bauen und Umwelt (IBU) e.V. As programme operator, the IBU fulfils the following tasks:

- prepares the General Programme Instructions of the IBU, and maintains and communicates them
- is the first point of contact for manufacturers who want to develop an EPD
- is responsible for the support of the working groups who prepare textual elements, which the European PCR (Product Category Rule, product category rule) interprets according to EN 15804+A1 for defined product subgroups from industries of the building sector, and implements into specific PCR guidance texts (see Chapter 5.2)
- administers confidential manufacturer data
- assigns the advisory board, as an independent third party, with the examination of the PCR guidance text, and organises its meetings (see chapter 3.3)
- is responsible for the maintenance of the PCR guidance text according to the directive of the SVR
- maintains the templates and the compilation of the resolutions of the SVR intended for the public, in accordance with the directives of the SVR
- makes all source documents and templates available to the public on its website
- assigns the SVR, or the verifier certified by the SVR as an independent third party, the EPD verification
- is responsible for the organization of the inclusion of interested parties in the form of an open consultation and issues invitations (see chapters 1.8 and 5.2/5.3)
- publishes the verified EPDs on its web page
- EPD quality assurance
  - In addition to the verification, for every EPD document submitted to the IBU to be verified, a written and oral preliminary test is performed by a specialist agency
  - Following the verification of the EPD document, the President of the IBU conducts a final review

## 3 The advisory board (SVR)

### 3.1 Composition of the SVR

Between 8 and 11 voting members, who are natural persons, belong to the advisory board (SVR). The SVR consists of members from the environmental and building authorities, building construction, testing facilities, standardisation, science and environmental associations.

The SVR appoints its members itself, upon recommendation of the IBU or SVR; the president of the IBU subsequently appoints the members. The SVR ensures that an appropriate mixture of perspectives and competencies of the interested parties are present in the group. The members eligible to vote are neutral and impartial.

A member belongs to the SVR for a consulting period of 5 years. Re-elections are possible.



The members of the SVR personally participate in the meetings. A representative may only vote in exceptionally justified cases.

The chair of the SVR is determined by its members. The chair assumes the leadership of the SVR meeting and functions as a mediator in the event of disputes.

The chair of the verification committee must be a member of the SVR (see chapter 4).

Involvement in the SVR is pro bono.

## 3.2 Competencies of the members of the SVR

The members of the advisory board exhibit the following competencies:

- general background knowledge in relevant branches of the building sector and product-related environmental aspects
- general basic knowledge of life cycle assessments
- knowledge of relevant standards and standards for environmental labelling, environmental declarations and life cycle assessments
- knowledge of the legal environment in the area of application of EN 15804+A1
- knowledge of the IBU EPD programme

## 3.3 Tasks of the SVR

The advisory board (SVR) is responsible for the compliance of the IBU General Programme Instructions with ISO 14025. The SVR determines conventions or methods for the interpretation and advancement of the General Programme Instructions and the PCR guidance text Parts A and B in accordance with ISO 14025 and EN 15804+A1.

The SVR reviews the PCR guidance texts Parts A and B and their compliance with EN 15804+A1, with the goal of making available comparable and consistent EPDs in the IBU EPD programme.

In Part A, the conformity of the algorithm for the life cycle assessment and the requirements for documentation of the life cycle assessment are reviewed with EN 15804+A1 in a background report, particularly with respect to the:

- determination of the scope and goal of the life cycle assessment study on which the EPD is based
- determination of the functional or declared unit
- selection of the modules to be declared, their system boundary, and the assignment of processes to modules
- horizontal allocations and calculation rules
- product-group-specific rules for the life cycle assessment

In the various B sections, specific requirements for the environmental product declarations of the different product groups are reviewed, including:

- compliance with EN 15804+A1 and the valid Part A, with regard to the information on the area of applicability and the representability of the EPD
- the completeness and suitability of the requested data, with regard to the description of the product and its application
- compliance of the data for the life cycle assessment with the guidelines in EN 15804+A1
- the completeness of the supplemental technical information for the life cycle assessment

- the completeness and suitability of transportation, installation, use and end-of-life scenarios
- ensuring that the supplemental information has a solid scientific rationale

The SVR transfers the task of EPD verification to selected verifiers, who must be independent of the manufacturers, institutions, or persons that created the life cycle assessment. The task of assigning verifiers for the verification is the responsibility of the respective IBU association's registered office. The verification of the EPDs is to be carried out independently by the verifiers assigned. The advisory board ensures the quality of the verification in that it:

- reviews the qualification requirements formulated in its General Programme Instructions in a personal discussion with the verifiers
- carries out two supervised verifications. Supervision means that the applicants carry out two verifications independently and are accompanied by experienced verifiers (who have conducted at least 20 verifications). The supervision phase is introduced as soon as the SVR invites the new verifiers to a personal discussion in the context of an SVR meeting
- advises the verifier who performed the supervision on their report at the end
- ensures that the verifiers are trained in appropriate and continuously-used procedures
- determines which measures will be considered as further training

The verifiers are appointed and registered by the IBU – at the recommendation of the SVR.

The SVR is given the opportunity to examine the verification documents, i.e. background report, EPDs, and certificates. It has veto power regarding the publication of EPDs.

The SVR summarises specific resolutions and decisions for the public in a document that is thematically organised and continuously updated. The IBU association's registered office makes each current set of SVR decisions that are meant for the public accessible in an appropriate way. Information from the verifications is included as soon as it can be described as a general explanation or reference.

The SVR is the final decision-making body for the settlement of disputes.

## 4 The verification committee

The verification committee (VC) is comprised of a minimum of two, and maximum of five voting members, who are natural persons, and who have performed at least 20 verifications independently within the context of the IBU programme. The VC appoints its members itself. The IBU has the right to nominate.

The VC appoints a chair from its own ranks.

### 4.1 Tasks of the verification committee

The goal of the VC's work is the advancement of a transparent and reliable verification process. The work of the VC is an internal IBU matter. The VC:

- is the point of contact for verifier questions that arise from the verification process
- holds an annual meeting once per year, to which all verifiers are invited. In the meeting, questions as to the verification practice and the further training of verifiers are clarified
- compiles draft proposals for questions for which the SVR is responsible. The authority of the SVR is derived from its tasks; the SVR is, in particular, responsible for ques-

tions that impact fundamental aspects of the interpretation of PCR Parts A and B, as well as the General Programme Instructions or its changes

- clarifies questions that arise from the verification process in coordination with the IBU association's registered office, if they do not fall under the responsibility of the SVR.

Participation in the annual VC meeting is obligatory for all verifiers, and is considered proof of continuing training.

Beyond that, continuing training is offered by the IBU, and participation is likewise obligatory for all verifiers. Should a verifier repeatedly refuse to participate in continuing training, he/she can be restricted from performing verifications within the context of the IBU EPD programme.

## **4.2 Support of the verification committee through the IBU association's registered office**

The IBU association's registered office documents the questions and decisions of the VC and makes them accessible to the verifiers

The draft proposals of the VC for the SVR are collected by the IBU association's registered office, put together in a document, and passed on to the SVR

Relevant VC questions and decisions can be made publicly accessible in an appropriate way by the IBU association's registered office in consultation with the VC

## **5 Procedures for elaboration and revision of the PCR guidance texts**

### **5.1 Definition of the product subgroups**

In a product subgroup, building products, building-related products or services with similar characteristics and functionalities for which uniform demands can be made of the contents of the EPD are summarised.

The product subgroups for which Part B of the PCR guidance texts are formulated are defined on the basis of an IBU suggestion, in coordination with the SVR. This definition specifies the range of validity of the PCR guidance texts Part B.

### **5.2 Drafting the PCR guidance texts**

The IBU programme contains the following PCR guidance texts:

- the uniformly valid PCR guidance text Part A for all product subgroups: "Methodology for the life cycle assessment and requirements of the background report"
- the product subgroup-specific PCR guidance texts Part B: "EPD Requirements"

The PCR guidance text Part A is created and maintained by the SVR. The inclusion of interested parties is ensured as set forth in chapter 1.6.

The PCR guidance texts Part B that are specific to the product subgroups are created by working groups. A working group for the elaboration of a specific PCR guidance text Part B for the relevant product subgroup can constitute itself.

The working group includes only IBU members, and if necessary, external experts who are confirmed by the IBU. The working group is registered with the IBU. It prepares the draft of the specific PCR guidance text Part B for the relevant product subgroups and submits these to the SVR for review and approval.

For the development of a new specific PCR guidance text Part B for certain product subgroups, the template that the IBU has made available must be adopted. In this template, all generally accepted requirements based on the EN 15804+A1, as well as the basic contents of the EPD that are applicable for all product subgroups are defined. Only the requirements, and if necessary, example texts that are specific to a product subgroup, will be newly developed and are retained in the appropriate locations in the template.

Minutes of an SVR meeting in which a draft of a new specific PCR guidance text Part B for a certain product subgroup was discussed will include the SVR resolution concerning SVR accreditation, as well as the agreed-upon changes.

The changes in the draft documents approved by the SVR are entered into their respective documents by the IBU.

The inclusion of interested parties is ensured as set forth in chapter 1.8.

The PCR guidance texts approved by the SVR become the property of the IBU.

### **5.3 Validity and revision of the PCR guidance texts**

All PCR guidance texts (Parts A and B) are valid for 3 years.

The timely revision of the PCR guidance texts is the responsibility of the SVR. The SVR or its designee prepares the necessary draft documents for all revisions to the PCR guidance texts.

Minutes of an SVR meeting in which a revision of a PCR guidance text was discussed will include the SVR resolution regarding its accreditation, as well as the agreed-upon changes.

The changes in the PCR guidance texts approved by the SVR shall be entered into the respective documents by the IBU.

### **5.4 Accessibility of valid PCR guidance texts**

The programme operator maintains a publicly accessible list of all valid PCR guidance texts that were compiled about the programme. The list and the documents are freely accessible in the IBU database system (<https://epd-online.com>).

## **6 IBU environmental product declarations (EPD)**

### **6.1 Structure of an EPD and additional information**

The EPD is modularly constructed. At minimum, an IBU EPD contains the contents (core EPD) specified in EN 15804+A1. The basis of every EPD is the specific PCR guidance texts Part B for the respective product groups.

The core EPD can be supplemented with the specified additional information in accordance with the specified guidelines in the respective PCR guidance texts (IBU EPD).

The IBU EPD contains the following mandatory additional information:

About the product:

- Delivery condition
- Putting into circulation/application rules
- Production
- Environment and health during production
- Product processing/installation

- Packaging
- Status of use
- Environment & health during use
- Unusual effects (fire, water, mechanical destruction)
- Re-use phase
- Disposal

About the LCA calculation rules:

- Estimates and assumptions
- Cut-off rules
- Background data
- Data quality
- Temporal representativeness of data
- Allocation

Other:

- Interpretation of the LCA results (in written form)
- Evidence (if relevant for the product group, e.g. VOCs)

## 6.2 Types of EPDs and class formation

With the IBU, both individual manufacturers and groups of manufacturers can declare their products as follows:

### 1. Manufacturer declaration:

- 1a) Declaration of a specific product from a manufacturer's factory
- 1b) Declaration of a specific product averaged from several factories of one manufacturer
- 1a) Declaration of an average product from a manufacturer's factory
- 1b) Declaration of an average product averaged from several factories of one manufacturer

### 2. Declaration of a group of manufacturers:

- 2a) Declaration of a specific product averaged from several factories of several manufacturers
- 2b) Declaration of an average product averaged from several factories of several manufacturers, e.g. with "association EPDs"

A classification of the products to be declared – i.e. the declaration of several average products – can clearly reduce the expenditure for the production of EPDs for a manufacturer. In principle, it is left to a manufacturer to create a meaningful classification for its products under conditions where:

- the classification is described transparently and understandably.
- The larger the variance between the products that are to be covered by an average EPD, the less the average represents the intended typical product. The selection of products that are covered by the average EPD should be shown in such a way that the resulting average EPD contains appropriate information for the products covered by the EPD regarding the use of the EPD in a building or a building site certification process.
- The values that correspond to the rules to be documented that can be derived from the life cycle assessment (e.g. by conversions of the density, volume, etc.), or
- an "average" or "representative" product is declared, or

→ the product with the highest environmental impact ("worst case") is declared.

### 6.3 Life cycle assessment information of an EPD

The information based on the life cycle assessment of an EPD can contain the following in accordance with EN 15804+A1:

- only the product stage: this kind of EPD covers the supply of the raw materials, the transportation and the production with its associated processes. This EPD is designated as "from the cradle to the factory gate" and is based on the information modules A1 to A3
- the product stage and selected further life cycle stages: this EPD is called "from the cradle to the factory gate with options" and is based on information modules A1 to A3 plus further optional modules, e.g. the disposal modules C1 to C4. Information module D may be included in this EPD
- the life cycle of a product according to the system boundaries of the EN 15804+A1, section 6.3.4: in this case, the EPD covers the product stage, the installation in the building, the application and maintenance, replacement, demolition, waste management for reuse, reclamation, recycling and disposal. This EPD is called "from the cradle to the grave". All information modules A1-C4 are considered. Information module D may be included in this EPD.

NOTE 1 Information modules may supply information for which there is no EPD, e.g. for a purification process.

NOTE 2 An information module may contain: the values of the predetermined parameters and the technical information that supports their quantification, relevant technical information for further calculations on environmental quality, or scenarios for the further computation of environmental quality.

NOTE 3 It is possible to produce an EPD for a material or a preparation (e.g. cement), for a product (e.g. a window), for a building-related service (e.g. a cleaning service as part of the maintenance) and to produce an assembled structural element and/or a building component.

Finally, the details for the calculation of the life cycle assessment of the individual information modules and for the declaration of additional technical information are specified for the IBU guidance texts Parts A and B.

The owner of the EPD determines the module for which the corresponding aforementioned definitions are made available in its EPD life cycle assessment information.

### 6.4 Creation of the EPD and the corresponding project report

The contents of the EPD are compiled by the manufacturer according to the requirements of the generally valid PCR guidance text Part A, and for the relevant product subgroup standard PCR guidance text Part B. The IBU supports the manufacturer in questions as to the declaration system as well as, if desired, with the neutral selection of a suitable consulting company ("life cycle assessor") for the collection of data and computation of the life cycle assessments.

### 6.5 Data confidentiality

Specific life cycle inventory analysis data for the life cycle assessment upon which an EPD is based are documented for verification in the background report of the life cycle assessment. These data are confidential. For the verification of the EPD, they are made accessible to the SVR and the selected verifiers, who are obligated to handle the data in strict confidentiality.



In the EPD, only aggregated data from the life cycle inventory analysis and impact assessment, as well as additional technical information, are published, including that listed in the selected parameters of EN 15804+A1 or PCR documentation.

## 6.6 Ownership, responsibility and liability for the EPD

The authorization for the use of an EPD is incumbent on the owner of the EPD (ownership declaration). Changes in the layout and contents of the EPD are in principle inadmissible. Exceptions are possible only with agreement of the IBU.

A manufacturer or a group of manufacturers are the owners and holders of the respective EPD, for whose data and contents they are liable and responsible. Beyond that, they are liable for all available data, and certify the completeness and correctness thereof in writing. In the case of data misuse or manipulated information, the IBU reserves for itself the right to revoke the EPD (s) in question, as well as to take further legal action. In the case of serious offences, an expulsion from the association may take place.

## 6.7 Rights of the client based on verification

In the case of positive verification, the IBU will issue the association's trade mark and the validity of the EPD:

The verification of an environmental product declaration issued by the IBU confirms:

- the standard conformity, e. g. with the ISO 14025, EN 15804+A1
- conformity with PCR Part A and B of the IBU
- the areas of application of the products/product groups

While the EPD is valid, clients are entitled to:

- following successful verification of their products, to label products that fall under the area of applicability of the verified EDP with the IBU EPD trade mark, in accordance with trade mark regulations
- advertise and market their products in print or other media using the declaration in its original format

Other forms of client advertising that refer to the activities of the IBU are to be approved by the IBU.

## 6.8 Duties of the client based on verification

While the EPD is valid, clients are obligated to:

- Inform the IBU promptly of any intended transfer of their company to another company or to a different company owner. In the event of a change in company name or legal form, the client will have to conclude a new verification contract and the EPD will be updated. If the only difference is a change of address within the same country, it will not be necessary to conclude a new verification contract.
- accept that IBU is entitled to share information received with respect to the verification process to fulfil its statutory and regulatory reporting duties, and that IBU is entitled to share information, documentation, etc., including the contract with the client and the contractual subject at the request of the accrediting agency. In particular, this includes information about the execution of the verification process, the granting and revocation of permits, attestations, certificates, etc., as well as occurrences and precautions taken to protect itself from risks directly or indirectly related to the verified EPDs.



The transfer of an EPD from the original owner to a third party is only possible through the involvement and consent of the IBU. If the client does not want to publish an EPD under his own name, this must be documented in a contract coordinated with the IBU.

It is likewise possible that, e.g., a raw material supplier may hold an EPD together with a customer, or will create a sample declaration for one. The naming of both manufacturers on the EPD is permissible.

## **6.9 Maintenance of a publicly accessible list of valid EPDs**

The programme operator maintains a publicly accessible list of all valid EPDs prepared within the framework of the programme. The list may be viewed on the IBU Internet site. With the consent of the manufacturers, within the framework of this programme, the EPDs are published on the IBU Internet site [www.bau-umwelt.com](http://www.bau-umwelt.com), and in the IBU database system <https://epd-online.com>.

The IBU reserves the publication of EPDs for itself as information for a possible accreditation centre, consumer centre or other interested parties. This does not require separate consent from the client. Furthermore, upon request, the IBU may pass on the content of an EPD to a third party or any other person on the IBU Internet sites and in the database system <https://epd-online.com>.

## **7 Verification procedure of an EPD**

### **7.1 Basis for the verification of an EPD**

Verifications are carried out by the IBU only for EPDs. EPDs can only be verified if they were prepared according to the programme rules (General Programme Instructions, PCR Part A and PCR Part B) of the IBU. The verification of an EPD takes place according to the principles of ISO 14025, and is done through a verifier approved by the advisory board (SVR) as an independent third party.

For a client to be issued an EPD, the conclusion of a verification contract with the IBU is required (see chapter 1.4). Upon issuance of the verification contract, the client accepts the Principles, the membership fee regulations and the IBU trade mark in its most current version.

Because the owner of a declaration may only be the manufacturer of the product, the order for the verification must either be issued by the intended declaration owner himself, or by his legally authorised representative. With a legally binding power of attorney, the IBU may proceed with the order acceptance.

In the case of a change in the verification basis, a transition period of six months will be granted in which EPDs already begun will be reviewed according to the previously valid verification basis. Following the expiration of this deadline, EPDs may no longer be submitted for verification according to the previous rules.

### **7.2 Object and requirements of the verification of an EPD**

The verification begins via an independent third party, in accordance with ISO 14025, upon receipt of the verification order by the database system. The verification of an EPD includes a review for completeness, plausibility, consistency, and the transparency of the computations and data in the background report and the EPD regarding the guidelines from the PCR documentation.

In the first step, the assigned and designated verifier reviews the documents received (or downloaded) for verifiability (completeness). If the submitted documents are not verifiable,

the verifier sends information to the person responsible for the project, with the request to complete the documents. Should the documents still be incomplete or unverifiable after being returned to the verifier, written notice is given to the IBU association's registered office and the verification is stopped. The client is notified about this by the association's registered office. In the event that the verification is stopped, the client is responsible for the verification costs that have been incurred up to that point. The IBU will invoice the client for these costs.

The verification takes place along these lines with a risk-based approach. An review of the accuracy of the data provided by the manufacturer that goes beyond the plausibility test, the reliability of the life cycle assessment software used, the correct use of the evaluation methods in the life cycle assessment software used, as well as an additional plausibility check as to the correct use of manufacturer data in the life cycle assessment software are explicitly not the object of the verification.

The independent verification of the life cycle assessment and life cycle inventory analysis data, the information modules and the additional environmental information must at minimum confirm:

- the conformity of the data quality and algorithms of the life cycle assessment with the PCR guidance text Parts A and B that it is based on
- that the evaluation of the data quality covers validity, accuracy, completeness, representability, consistency, reproducibility and sources of possible uncertainties
- the plausibility of the calculation model for the LCA-based data
- the quality, in particular the suitability of additional environmental-related information
- the quality of supporting information

### **Process of a system verification**

The preparation of EPD can be significantly simplified by using a predetermined, default LCA model. Such default LCA models are called „EPD-system“. A manufacturer applying such an EPD-system will not need to develop a new LCA each time, but rather only inserts his specific production data or possibly further defined and required information into the EPD-system and thus arrives at the LCA of his product. The default model as well as the applied upstream and downstream background data shall be appropriate for the product.

Each EPD from an EPD-system shall be verified individually. Verification of EPD, which have been calculated by an EPD-system, are expected to be simplified as well. Since the manufacturer uses the same LCA model for each EPD, the model will not have to be verified each time. It is required however to verify the EPD-system through a system verification before it is applied.

### **Type 1 system verification**

- The system comprises a calculation algorithm which is explicitly specified.
- The data inventory selection is limited and specified.
- The analysis tables are pre-set and cannot be changed.
- The manufacturer can enter product-specific foreground data.
- A background report is drawn up for initial verification of the system which outlines the system as a whole and contains a specific example.
- Each additional EPD drawn up by the manufacturer is submitted to the verifier for inspection. The verifier's signature is added specifically for each EPD.
- In order to examine additional EPDs, the input values for the primary system must be submitted as well as the tables of results. In individual cases, it may be necessary to supply additional data. This is specified when the system is verified for the first time.
- The manufacturer confirms for each EPD drawn up that the system examined for the first time has not been modified.

### 7.3 Chronological sequence and the documents to be submitted

The contact point for organisational questions regarding verification is the IBU association's registered office.

For faster processing, the verification of an EPD should be registered at the IBU, the programme operator, 3 weeks before completion, if possible.

For the verification, the following documents, at minimum, must be delivered to the programme operator by the manufacturer (or from a person/organisation assigned by the manufacturer):

- EPD
- background report
- if necessary, the documentation for specific aspects of the life cycle assessment, e.g., regarding the purchase of renewable power, etc.
- copies of certificates relate to the applicable PCR guidance text Part B

The IBU association's registered office will give the client an initial response from the verifier within 4 weeks following the assignment of the verifier.

In addition to the verification, with a verification order, the programme operator will perform quality control of the EPD (see chapter 2).

### 7.4 Verification report

The verifier documents the verification process in a verification report. The verification report is compiled according to the IBU report template.

The verification is finalised with the delivery of the verifier's final verification report to the IBU.

The verification report may be viewed by the client upon request.

### 7.5 Verifier requirements

The advisory board appoints verifiers who are registered by the IBU. The minimum requirements to be appointed as a verifier include:

- optimally, a university degree in engineering or another natural science (university or technical college),
- knowledge of product-related environmental aspects in the building sector, evidenced by:
  - at least 3 years of environmental-related professional experience in the building sector or a related vocational field, or
  - at least 3 years of professional experience in building-related environmental analysis or environmental management
- process and product knowledge in the industries that the IBU covers with the EPD,
- expertise in life cycle assessment methods and knowledge of the standards concerned; qualification: 3 life cycle assessments in different product categories and proof of the independent use of LCA computing programmes (e.g. with GaBi, Umberto, SimaPro, etc.)
- knowledge of the critical review of life cycle assessments or the verification of (not IBU) EPDs; qualification: 3 critical examinations of life cycle assessments or 3 EPD verifications with programmes the IBU has agreed to mutually recognise (or equivalent)
- knowledge of applicable standards in the area of environmental labelling and declaration

- knowledge of the IBU's EPD programme and its set of rules; qualification: at least 2 supervised EPD verifications.

## 7.6 Determination of the expiration of the verifier application

Process for future verifier applications:

- The documents submitted at the association's registered office are examined for completeness.
- Complete documents are submitted to the SVR, and if there is basic eligibility, the applicant is invited to an introduction before the SVR.
- Only after a successful introduction before the SVR can the applicant begin the two verifications under supervision of an experienced IBU verifier (at least 20 reviewed EPDs). The supervised report on the verifications is submitted to the SVR. The SVR decides on acceptance as an IBU verifier.

## 7.7 Independence of the verification

The verifiers are, in relation to the manufacturers, their EPD, and with regard to the life cycle assessment person or facility, independent third parties. The respective verifier is assigned by the IBU office. If, on the basis of an assumed bias, the client does not agree with the decision of the IBU association's registered office with respect to the verifier assigned, he or she may submit a written objection to the association's registered office. In the complaint, the assumed suspicion must be justified clearly. At the time a substantiated complaint is submitted, the association's registered office shall stop the verification order with the verifier for the duration of the investigation. Should the investigation reveal a bias on the part of the verifier, the office may assign another verifier. A complaint must be filed at the association's registered office within five working days after the assignment of a verifier. The IBU has sole responsibility for remunerating verification work.

## 7.8 Arbitration in the event of differences between external verifiers and the client

Should a client object to an independent verifier's decision (in accordance with chapter 9.5), the SVR will make a final decision after hearing both sides.

# 8 Validity of the EPD

## 8.1 Validity period

Following its verification, the EPD is valid for 5 years from the date of issue.

The SVR is authorised to limit the EPD validity period for individual EPDs or for individual product subgroups, e.g.:

- continued testing requirement ambiguity with the required verification
- for the issuance of EPDs that are based on an older background report, e.g. in the context of the subsequent declaration of a manufacturer in the context of an "association EPD" (see chapter 6.2)
- for the retroactive issuance of an EPD under the name of a manufacturer's trading partner

## 8.2 Recalculation and re-examination of the EPD in the event of technological changes or other circumstances

A manufacturer may update a background report, life cycle assessment and/or EPD at any time and have it re-verified. An EPD must be re-evaluated and updated before the expiration of its validity period as soon as it becomes necessary to consider technological changes or other circumstances which would change its contents and accuracy.

NOTE A reasonable change in the environmental impact of a product with regard to a reporting requirement that must be communicated to the verifier amounts to  $\pm 10\%$  for every one of the defined parameters of the EPD. Such a change can require the updating of the EPD.

## 8.3 Extension of an EPD's validity

In principle, the background report and life cycle assessment, as well as the EPD, must be revised following expiration of an EPD's validity.

An EPD does not have to be recalculated after 5 years if EN 15804+A1 and the applicable PCR guidance text of Parts A and B as well as the basic EPD data have not changed significantly.

Should a manufacturer desire to have its EPD newly certified following the expiration of the validity period, he or she must communicate this to the association's registered office of the IBU. The IBU reviews whether:

- changes in EN 15804+A1 or the applicable PCR guidance text of Parts A and B have taken place since the original certification, and
- based on the information in the background report, the data in the life cycle assessment, including the background data records, is not more than 10 years old, and
- there is a certification from the manufacturer that no noteworthy changes in the process have taken place since the original certification

Should the points above apply, the validity of the existing EPD may be extended by the IBU association's registered office by five years, and the verifier, as well as the SVR will be informed accordingly. Otherwise, the life cycle assessment, background report and/or EPD must be adjusted and verified again.

## 8.4 Restriction, expiration and nullification of declarations

Restriction: Restriction of the use of the IBU trade mark within the scope of the EPD

EPDs in connection with the IBU trade mark expire when:

- the period of validity stated on the EPD has expired
- the client removes the EPD from the market of its own volition before the validity expires

The IBU may restrict the use of EPDs in connection with the IBU trade mark or declare them invalid and revoke permission with immediate effect:

- due to arrears on payments of more than six (6) months subsequent to the due date, despite the member being reminded of the payment obligation
- when facts were not or were incorrectly seen and evaluated, or were not recognisable at the time of verification, and these facts would have prevented verification. These include matters such as erroneous data, false statements, etc.

- when existing EPDs are also applied to non-declared products, representing misuse of the trade mark, which undermines the trust necessary to continue collaboration
- when the EPDs or the IBU trade mark are used to create misleading or otherwise impermissible advertising

The IBU has the right to revoke EPDs from clients without notice and to exclude them from further participation in the IBU EPD programme if they alter or forge EPDs.

Before declaring an EPD restricted or invalid, IBU will give the client the opportunity to state its position, unless the required measures are too urgent to allow time for such a hearing. There will be no hearing when the reason for the declaration of invalidity is that the EPD has expired.

Clients automatically lose their right to continue using EPDs with the IBU trade mark if restrictions are placed on the EPD, if it expires on a certain date due to termination, or if it is temporarily declared invalid.

The IBU is entitled to publicise the fact that it has restricted or revoked an EPD that it has declared one invalid, or that one has expired. Upon request, particularly if its rules and regulations are breached, it can share the name and address of the client, the type of breach and the reason why the EPD was declared invalid, as well as other related information, with potential accrediting agencies.

The IBU is not liable for any disadvantage the client may experience because an EPD has not been granted, has expired, has been declared invalid, or has been revoked, or from the publication of such measures.

## **9 Further provisions**

### **9.1 IBU membership**

The publication of an EPD in the IBU programme requires that the manufacturer or the owner of the EPD be an IBU member. The membership is governed by the Articles of Association.

### **9.2 Programme operator fees**

The cost rates for the programme operator's services shall be published by the programme operator.

The IBU reserves the right to bill at cost for subsequent changes to EPDs that have already been published.

### **9.3 Avoidance of abuse of programme and trade mark**

The generally applicable laws for the protection of intellectual property, as well as the applicable regulations for the IBU trade mark, apply. If the programme operator learns of abuse regarding the programme and/or trade mark, he or she must pursue it in accordance with Articles of Association.

The IBU publishes information about the abuse of the EPD assigned by the IBU, as well as the association's trade mark, on its Internet sites under the heading "news".

In the event of offences against the rules of the IBU programme and/or incorrect EPDs, the IBU may correct or revoke an EPD at any time. The IBU reserves the right to publish the EPDs that were declared invalid and revoked. This it does not require the consent of the client.



## 9.4 Breaches of programme regulations and standard documents

If it is established that the client has culpably breached the programme regulations and standard documents, in addition to declaring the EPD invalid, as set forth in 8.4, IBU is entitled to demand a penalty from the client up to the amount of EUR 25,000 for each breach of contract.

This particularly applies to

- illegal use of EPDs or
- impermissible advertising with EPDs and the IBU trade mark

In addition, the IBU reserves the right to terminate the client's membership without notice and with immediate effect, and to declare the client's other, existing EPDs invalid as soon as the IBU feels that its confidence in the client's reliability and willingness to observe the terms of the contract has been shaken, based on the client's breach of the IBU General Programme Instructions, Articles of Association, General Terms and Conditions or Verification Rules.

Should the client fail to fulfil its obligations as set forth in 6.8, the IBU may take action accordingly. This may also mean informing the interested general public to minimise damage in the market.

The IBU reserves the right to demand compensation from the client for expenses arising from the client's breach of the PCR guidance texts, General Terms and Conditions, Articles of Association or the General Programme Instructions.

Such expenditures may include:

- required research
- opinion statement of the verifier
- raising the issue with the SVR and reaching a decision there

IBU will bill the client for the expenses of these types of measures at cost.

## 9.5 Appeals and complaints

An appeal is the client's request that the IBU review its verification decision.

A complaint is the client's expression of dissatisfaction with the IBU with respect to its activities.

Only a written appeal or complaint may be filed to with the management of the IBU against verification decisions.

With regard to appeals, the IBU will provide a justification in writing. If the justification provided is not acceptable to the client, and should an agreement not be reached with IBU management, other legal options are available to the client.

## 9.6 Liability

In the event of material and financial loss caused by negligence, the IBU and its agents are only liable in the event of a breach of a material contractual obligation; the amount of liability is nevertheless limited to the foreseeable damage or loss typical for such contracts at the time the contract was concluded. Liability is excluded for slightly negligent conduct in the fulfilment of immaterial contractual duties.

This aforementioned limits on liability do not apply to damage or loss arising from deception, or intentional or grossly negligent conduct by the legal representatives of IBU or its vicarious agents, nor does it apply to damage or loss arising from the breach of duties if IBU warranted



their fulfilment, nor to damage or loss arising from injury to life, body or health, nor to damage or loss for which IBU is liable according to the German Product Liability Act.

If it has breached a cardinal duty, IBU is also liable in cases of slight negligence. Cardinal duties in the sense of this agreement include material contractual duties whose fulfilment is crucial to the proper performance of the contract in the first place and whose compliance the client is entitled to rely on. The claim for compensation of damage or loss if IBU breaches a cardinal duty is limited to the damage or loss which is a typical possible result of the breach of contract and which is foreseeable at the time the contract is concluded (typically foreseeable damage or loss), provided none of the cases mentioned in the previous paragraph apply.

IBU's liability is limited to EUR 1,000,000 per event of damage or loss.

The IBU is not liable for damages based on inaccuracies arising during the transfer of the data required for the verification procedure. Furthermore, IBU's liability is excluded if the client is not the legal owner of all documentation and information submitted to the IBU for the verification procedure, and if these are not free from the claims of third parties.

The statute of limitations for damage claims is dependent upon the legal provisions.

## **9.7 Coming into effect and maintenance of this document**

This document comes into effect with the agreement of the board of directors of the IBU and the SVR on 01 November 2015.

All previous regulations will expire at the stated time.

The maintenance of this document is incumbent on the association's registered office of the IBU. Any changes require the agreement of the board of directors of the IBU and the SVR.

Focusing on details.  
Seeing the big picture.

