

## Application form LCA-PRACTITIONERS for PCR panel

*Gender:*

*The titles and functions used in this document apply to all genders*

The preparation of general guidelines for the LCA calculation as well as process flows, the preparation of product group-specific PCR documents as well as the verification and validation of EPD documents based on them are carried out within the framework of the EPD programme of Bau EPD GmbH, 1070 Vienna.

The PCR Panel is a scientific body which itself decides on the admission of its members and makes recommendations on this to the management of the conformity assessment body. The system is supported by natural, individual persons who can be listed as simple PCR panel members with LCA expertise and/or independent verifiers with experience in the verification of LCA projects at Bau-EPD GmbH as programme operator. Listing is mandatory for verifiers and voluntary for LCA-practitioners. Each person has their own voting rights, if several people from the same institution provide their expertise, the entire institution has only one vote.

In principle, LCAs can be submitted by EPD clients without involving external LCA experts. Employees of manufacturers' internal LCA departments can also be listed if they are suitably qualified, in order to take part in training courses and workshops. However, they do not have voting rights on the PCR Panel.

Active membership of the PCR Panel is recommended for LCA-practitioners who wish to work towards becoming verifiers but is not mandatory. LCA-practitioners can participate in verifications on a voluntary basis; if they have sufficient experience, a verification can be carried out under the supervision of an experienced second verifier.

In order to guarantee the independence of the verification, a verifier shall not work for the same institution that prepared the LCA. Verification is carried out according to the four-eyes principle, whereby the two verifiers shall not belong to the same institution. There are simplifications for ECO Platform EPDs, they only have to be verified by one person (see detailed regulation in the MS-HB).

The procedure of accreditation, auditing and quality assurance of the registered PCR Panel members and verifiers is carried out under the auspices of the programme operator and the PCR Panel itself.

### 1 Qualification criteria and competence requirements

A LCA practitioner registered for the PCR panel shall meet the following qualification criteria, skills and competence requirements:

Technical knowledge of civil engineering, construction techniques, and materials science:

- Knowledge of the relevant production sector, the product, and product-related environmental aspects
- Strong technical expertise in production processes and product-specific knowledge regarding the relevant product group and associated manufacturing cycles
- In-depth knowledge of the fundamental methods of life cycle assessment (LCA) for building products

Knowledge of regulations and methods:

- Knowledge of relevant standards in the fields of LCA (ISO 14040-14044) and EPD (ISO 14025, EN 15804, ISO 21930)
- Knowledge of the relevant regulatory framework for the concept of EPD creation
- Knowledge of type III EPD programmes, with special focus on the program rules of the EPD Programme for which the LCA practitioner is working for, including the ECO Platform rules (as implemented in the EPD Program)
- Experience in critically reviewing LCAs and life cycle assessments, as well as verifying environmental product declarations

Competences (Competence = Capability to practically apply experience and knowledge)

- competence to identify and explain construction techniques and relate each component to the corresponding performance requirements
- competence to identify and explain the regulations applicable to construction products (CPR 305/2011 and 2024/3110), in particular provisions relating to environmental sustainability
- competence to identify and explain the requirements, guidelines, methodological principles, and working procedures applicable to environmental declarations for construction products. This requirement is considered to be met if the following standards can be identified and explained:
  - EN 15804+A2 (and any future revisions)
  - ISO 14020, ISO 14021, and ISO 14025 on the general principles for environmental declarations and the rules for different types of declarations
  - ISO 14040 and ISO 14044 on the rules for life cycle assessment
  - Harmonized standards, European Assessment Documents, and c-PCR for construction products for different product groups
- competence to recognize and explain environmental issues related to the construction sector and construction products, as well as the associated environmental performance information and indicators
- competence to explain the methods used to assess the performance of building components
- recognition of subsystems and process chains; verification along processes, ability to think in a networked manner regarding the individual modules of an EPD in accordance with EN 15804 or ISO 21930, ability to recognize and derive system boundaries
- competence to describe value chains, raw and secondary materials, energy flows, and basic processes for different product families
- competence to define the framework for a life cycle assessment and its various phases, model a complete inventory, calculate prescribed indicators, and report all prescribed information
- competence to assess the correct application of regulatory and normative methodological principles, with regard to: system boundaries, exclusion and demarcation criteria, data allocation, selection, and quality
- competence to analyze the relevance of LCA evidence and evaluate its accuracy
- competence to interpret LCA results and identify influencing factors
- competence to explain the detailed process diagram (mass and energy data) for different product families, identifying by-products and waste
- competence to link each basic process to LCA modules
- competence to critically evaluate the use and end-of-life scenarios for different product families
- competence to select meaningful samples (type and number) from a set of declared data

Additional requirements for the work:

- Documentation of regular and up-to-date advanced training concerning the special sectors of qualification.

- Communication within the program – based on information coordinated or provided by the ECO Platform, if available - about new developments in EPD standards (especially from CEN TC (product-) groups – i.e. CEN TC 350, CENT TC 351...). LCA-practitioners must ensure that their knowledge is up-to-date, in particular, based on information coordinated or provided by ECO Platform

## 2 Evidence, documentation of experience

The applying LCA-practitioner shall provide the programme operator with the following documentation, so that a decision can be made on admission to the PKR Panel:

1. a CV and supporting documents stating compliance with the prescribed qualifications above
2. experiences in the field of LCA/environmental declarations,
3. assignments of similar tasks of verification of LCA and environmental declarations relevant references, as appropriate.
4. Equivalent documents and experience to issue 1.-3. can be audited individually and may also be approved.

I hereby apply for admission to the PCR Panel in the frame of the Austrian EPD Programme and confirm the correctness and completeness of the documentation attached.

|                      |  |
|----------------------|--|
| Name:                |  |
| Institution/Company: |  |
| Telephone:           |  |
| E-mail:              |  |
| List of documents    |  |

### 3 Information: DESCRIPTION OF THE JOB PROFILE FOR LCA-PRACTITIONERS

#### ***Job description of LCA-practitioners (Information for independent verifiers, description of interface, LCA-practitioners can work in-house for EPD clients or can be brought in as external consultants):***

*The content of contracts/employment relationships between the clients (manufacturers of construction materials) and the LCA-practitioners is neither defined by nor influenced or recognized by Bau EPD GmbH. Bau EPD provides a text template as a basis for manufacturers that should be adapted according to the project scope and discussed with LCA-practitioners - BAU EPD M-DOCUMENT 2: Requirements on LCA and EPD – text template.*

*It is recommended to take up the following descriptions of the job profile as parts of the service into the contracts with manufacturers:*















*The following tasks are to carry out by LCA-practitioners to complete an EPD project for Bau EPD GmbH:*

- 1) The LCA-practitioner must give recommendations regarding number and kind of datasets to be created. The datasets must be usable on building level and databases for construction materials and be accepted by the required user applications. For that the process flow described in this document must be executed.*
- 2) The collection sheets for inventory data should be provided and explained to the manufacturers. The manufacturer must provide all necessary data and facts for creation of the LCA model. For this a documentation form is to fill – it is recommended that such templates are provided by the LCA-practitioner. The data collection forms must be accessible for the verifiers and management of Bau EPD GmbH, whereas non-disclosure agreements have to be signed by all project members. All stakeholders must archive the data for at least 10 years.*
- 3) The LCA-practitioner creates the LCA study based on the current PCR corresponding to the product group under study (Product category rules, these are the MS-HB, all applicable documents and PCR B documents). The LCA-practitioner produces a project report based on the calculations as well as the EPD document to be published. In doing so, the minimum requirements on content and format defined by Bau EPD GmbH must be delivered and format templates must be used. It is the LCA-practitioner's choice to use Bau EPD M-DOCUMENT-13-project report template, but it is mandatory to use BAU EPD M-DOCUMENT-14 EPD template. In any case the verifier must receive a data collection paper, inventory analysis, project report with all assumptions and remarks and the EPD document. The LCA-practitioner may decide if the inventory analysis is integrated into the project report or provided in a second file. Anyway, double information shall be avoided. As evidence screenshots from software programmes can be delivered (in representative types and numbers). In addition, each verifier must get access to the software programmes to ask for details and to be able to confirm statements.*
- 4) The background database used by the LCA-practitioner as well as the software and versions of it must be declared in the EPD document as well as in the project report. The use of complementary data sets from different data bases (different sources) shall be justified. The LCA-method must be indicated.*
- 5) A transfer of result data into the document BAU EPD M-Document 8: Excel-file for electronic data transfer is to complete to enable the digital transfer of data to user applications.*

- 6) *The customer or the authorised life cycle assessor must submit M-Dok 27-2 to Bau EPD GmbH (release of the LCA-document status, which is to be gone through in the first verification run).*
- 7) *Upload to a secure platform provided by the conformity assessment body:: after submitting M-Doc 27-2, the customer and/or the LCA-practitioner receive a link to the upload platform, the password is sent by SMS to approved mobile phone numbers. File folders must be created in the upload folder, each of which must be set with the following name: YYYY-MM-DD customer name or YYYY-MM-DD -abbreviation clerk. Files in the folders must be named similarly. Sensible file names make it easier for the verifiers/validators to check and for Bau EPD GmbH to follow the progress of the processes. Verifiers/validators must also place their feedback in INDIVIDUAL subfolders, folder names as follows: YYYY-MM-DD-Name abbreviationVerifier.*

*Bau EPD GmbH places the M-Dok 27-2 in the verifier/validator folder, after which LCA-practitioners can make the first upload.*

*An example of such a comprehensible folder structure (in this example, an error was found after publication and corrections had to be made, but the process is still clearly recognisable):*

-  20230920\_FGS
-  20231105\_AP
-  20231105\_FGS
-  20231114\_final\_AP
-  20231121-SRnLektorat
-  20231211\_M08 Tabellen FG
-  20231212-FGSRnLektoratohneTab1
-  20231213-NKWDP-SR-FGS
-  20231214\_M08 Tabellen FG WDP korrigiert-Tab75korr
-  20231215\_final\_AP
-  20231218 ENERGIENACHWEISE
-  20231218-Lektorat, Freigabe KUNDE
-  BAU-EPD-KUNDE-2023-1-ecoinvent-PRODUKT-20231215-Webseite-oU
-  BAU-EPD-M-DOKUMENT-27-2\_KUNDE\_230921

*Important: the Excel tables M08 for data transmission must be saved in a file folder containing the abbreviation M08.*

*Important: the energy reference certificates for the market based energy approach must be saved in an OWN ORDER with the identifier 'YYYY-MM-DD-ENERGY-CERTIFICATES'.*

*After project completion, Bau EPD GmbH places the published EPD document in MS Word without the verifiers'/validators' signatures in the folder for further use for updates and new issues, labelled: filename-website-oU.*

**No EPD documents from 'summarised project reports' may be uploaded. The EPD template M-Dok 14 must be used.**

**The EPD document labelled 'Filename-Website-oU' can only be used for further processing if the EPD template M-Dok 14 has not changed!!!! This must be checked by balancers before they begin their work.**

#### 4 VERIFICATION/VALIDATION PROCESS, interface information: job profile independent verifier/validator

After signing contracts with Bau EPD GmbH and LCA-practitioner (in rare cases a declaration owner may wish to calculate the LCA by himself and will not contract external consultants, in some cases there may be a co-production or consortium of experts to do so) a team of two verifiers is suggested by Bau EPD GmbH. The first suggestion can be rejected by the client, the second one must be accepted.

Fees for verification as well as validation and declaration/publication will be calculated based on the fee regulation and must be paid in advance.

The client/the LCA-practitioner working for the client will be informed in writing as soon as the data packages can be delivered to the verifiers/validators.

The verifiers and validators receive links and passwords to the project's upload platform.

The verifiers are engaged to do a pre-check of the project report and documents if the dossier is verifiable. If the verifiability is not given, i.e. in case of incompleteness or other lacks, the document is sent back to the LCA-practitioners. They have a one-time chance to complete the documents and prepare again for verification.

If a normal verification is still not possible after the first return flow, the process of verification as well as validation is stopped and costs that have been arising must be paid by the owner of the declaration (1.000,00 € max.). The owner of the declaration, the LCA-practitioners and Bau EPD GmbH will get a note from the verifiers/validators with a statement, why the EPD documentation is not verifiable.

A new verification/validation process can only start if the stopped one has been paid. After that, the whole process of verification/validation starts from the beginning. The costs are the same as agreed on with the client in the contract. After successful verification/validation, the EPD document is checked and lectured again by Bau EPD GmbH and then released.

The LCA-practitioners must create the [BAU EPD M-Document 8: Excel-file for electronic data transfer to Bau EPD GmbH](#).

The verification reports must be delivered following BAU EPD M-Document 19- template verification report including checklist for verification and BAU EPD M-Document 19a template verification/validation report additional comments in the current version. This is mandatory for first reports, intermediate reports and final reports. For EPDs with tool verification, M-Document 19b shall be used.

The EPD document, the project report, and the final version of the inventory analysis will be reviewed by Bau EPD GmbH following the successful completion of the verification and validation process. It will be published by Bau EPD GmbH upon approval by the client.

## 5 WORKSHOPS AND FURTHER EDUCATION

All members of the PCR panel are advised to participate in meetings, workshops and information events organised by Bau EPD GmbH and the PCR advisory board. These workshops are the basis for quality assurance and offer good occasions for mutual exchange of experiences on national and international level. Furthermore, these joint events serve for finding and representing a joint (Austrian) position in discussions with other programme operators and ECO Platform.

## 6 Process coordination EPD data set and user applications

### 1) Client is interested in EPD, contacts Bau EPD GmbH and/or external consultant/LCA-practitioner.

In the consulting process the following questions must be sorted out to calculate internal and external costs and project scope for LCA studies and verification as well as validation (this is a service Bau EPD GmbH can only offer up to a certain level for it is not a consulting institution):

- a) Which markets shall be “entered” (MLC -Ecoinvent), market shares and future perspectives, and the needs of users in those markets
- b) Which construction products and type of production processes (= system boundaries)
- c) Average calculations, ranges yes/no
- d) Number of data sets, number of modules, whereas A1-A3, C resp. D are mandatory, desired user application (mostly Baubook and/or, sometimes EPD are ordered without the intention to transfer the data into user applications)
- e) Are there any existent data sets in user data banks listed (in OEKOBAUDAT only LCA data is found, in Baubook products can be listed without LCA data) that have to be harmonised?
- f) Additional requirements from other EPD Programmes must be considered, if mutual recognition is a client’s goal

Description of interface „first information/detailed consulting“: All consulting services with reference to LCA-results and how to improve those, consulting concerning sustainable investments in the sphere of the client, sensitivity analyses, product comparisons, preparation of data for marketing claims etc. are not offered by Bau EPD GmbH. Such services should be carried out actively by the LCA practitioners.

### 2) Clarifications for filling of tables for data transfer (even if clients do not wish to transfer anything to user applications, the data must be transferred into the ECO Platform EPD Portal and an Excel File is needed for the website of Bau EPD GmbH)

Before starting the work LCA-practitioners have to clarify facts that are important both for OEKOBAUDAT/MLC/GaBi and Baubook/ecoinvent:

LCA-practitioners and manufacturers must check if the way data is provided can be used on building level. Not all building LCA schemes calculate with all indicators and/or all modules. In case of (assembled) construction elements it is to clarify, if all components are calculated and declared either in A1-A3 or A4-A5 (mostly in-situ products, see guidance document to EN 15804, CEN TR 16970). A sensible number of datasets with reference to components that have to be added on building level shall result, so a building LCA can be done easily.

Explicitly for baubook-database:

LCA-practitioner and manufacturer must check if datasets are already displayed in Baubook. It must be compared, if the ordered EPD data sets and the existing products declared in Baubook do correspond!!! (Note: different kind of average calculation must be avoided) If this is not the case, the data sets must be harmonised!

Baubook offers to send overview files of existing data in Excel format.

**Based on the number of data sets/EPD documents/project reports Bau EPD GmbH can estimate costs for verification/validation, declaration and publication and annual fees for participation in the programme.**

**Note: the manufacturer can engage the LCA-practitioner with the following additional tasks:**

- 3) Calculation of results for single components and creation of necessary Exel files for data transfer after successful verification and validation.**

The LCA-practitioner calculates the LCA-results, verifiers check and approve, after that the Excel Files can be generated:

**Naming of data files as below:**

**YYYYMMDD-MLC/Ecoinvent-Bau EPD-Company-EPD Nr-short description product.xlsx**

**Beispiel:**

20140825-Ecoinvent-Bau EPD-MANUFAKTURER-2014-01-PRODUCT\_65kg\_m3\_lose material.xlsx

- 4) Verifiers submit the final verification report, project report, EPD documents and Excel files to Bau EPD GmbH
- 5) LCA-practitioners get the chance to make up with non-conformities, another verification report must be submitted by the verifiers.
- 6) As soon as all non-conformities are solved positively, the final report without open issues is submitted by the verifiers.
- 7) Bau EPD does the editing and decides about certification and publishing of the declaration as well as the forwarding of the data for upload in databases for construction materials or other user scenarios

## 7 Commitment of supporting the programme

Registered LCA-practitioners commit themselves to an active participation in the programming of Bau EPD GmbH by visiting workshops, meetings of the PCR panel as well as delivering comments and feedback to new and/or adapted documents of the programme.

I have read and agree to the job profile and took note of the „guidelines for the verification report“.

Place:                      Date                                      Signature:

The application and support documentation shall be sent to [office@bau-epd.at](mailto:office@bau-epd.at).