

# Process of drawing up EPDs; type 1 and type 2 system verification

## **Type 1 system verification**

1. The system comprises a calculation algorithm which is explicitly specified.
2. The data inventory selection is limited and specified.
3. The analysis tables are pre-set and can not be changed.
4. The manufacturer can enter product-specific foreground data.
5. A background report is drawn up for initial verification of the system which outlines the system as a whole and contains a specific example.
6. 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.
7. 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.
8. The manufacturer confirms for each EPD drawn up that the system examined for the first time has not been modified.
9. The original system examined must be archived by the manufacturer and is available for random examination (10 years).
10. The system verification remains valid for 5 years.

## **Type 2 system verification**

This type of system verification only makes sense when the products have a similar or similarly complex design and a large number of EPDs need to be drawn up.

1. The software solution comprises a calculation algorithm which is explicitly specified.
2. The software solution communicates with customer-specific interfaces, e.g. to an ERP system.
3. The background report contains the description of a quality assurance process. The data inventories for input materials and ensuing EoL scenarios can be adapted accordingly by the manufacturer / software designer.
4. The analysis tables are pre-set.
5. In order to draw up EPDs, the manufacturer enters product-specific foreground data and receives the result of the LCA as well as all necessary indicators.
6. A background report is drawn up for initial verification of the system which outlines the system as a whole; initial verification includes at least an EPD.
7. The manufacturer uses the software solution to draw up EPDs; the number range is agreed by the manufacturer and IBU and outlined in the background report.
8. For each EPD, the software solution generates a file containing all of the information used for drawing up the EPD (data logging with time stamp) and which is archived (5 years).
9. The verifier's signature applies for the software solution; this is indicated accordingly on the EPDs.
10. The background report contains a section on outlining regular re-verification and a description of the possibility of random examination by the verifier. The re-verification cycle can be altered as required by IBU / the verifier.
11. Modifications to the calculation algorithm (= changes to the calculation method) and data base system require re-verification. Modifications are supplemented in the background report.
12. The software solution examined must be archived by the manufacturer and is available for random examination (10 years).
13. The system verification/re-verification remains valid for 5 years.
14. Modifications in the PCR documents are integrated in the software solution within a reasonable period and require re-verification.