

Promoting the use of EPD data

Summary of the pilot report 2/2023, the CO2 DataHub project

Name of the pilot	Promoting the use of EPD data
Project team	Vastuu Group Oy and VTT Technical Research Centre of Finland
Participants	Saint-Gobain Finland Oy, Uponor Oy, Granlund Oy, Rakennustieto Oy and Finnish Electrotechnical Trade Association (STK)

Finland aims for carbon neutrality by 2035.

The CO 2 DataHub research and development project supports this goal by developing methods for the gathering, evaluation and data-based management of carbon dioxide emissions in the supply chains of companies and cities.

National and international emission reduction goals will probably become more detailed in the near future with respect to calculations and reporting, and emission regulation will become stricter. This will also lead to increased use of EPD data. The pilot studied the challenges related to the use of EPD data. Solutions already exist for some of the challenges, while others require more development. The pilot studied the question particularly from the perspectives of Saint-Gobain and Uponor. These pioneer companies have several EPDs and possess emission data. The data produced are only useful if they are easy to use.

Solutions were sought for the improvement of digital and automatic usability, so that the correct EPD and the required data contained in it could be found as easily as possible. The automation of calculation requires solutions that make automatic use of the data easier and enable the preparation of calculations even with less expertise. During the project, material manufacturers sent a clear message that the emission data they produce should be available for use as easily as possible when the materials are used.

It may be challenging to find the correct EPD, as the product identifiers vary and there may be several EPD versions available for the same product with different standards. In addition, you must be able to choose the geographically most suitable EPD and choose between

generic and specific EPDs. You must also know whether to use the EPD for a finished product, material or semifinished product.

Missing unit conversions may also complicate calculations. For instance, calculating the amount of duct insulation for ducts of varying sizes and lengths may require manual calculation, if the required unit conversion coefficient is not available. Currently, all the above require expert skills and prevent digital use of EPD data. Environmental product declarations are available in EPD data banks, in which individual documents can be searched for manually. The examination of integration opportunities has shown that there are challenges related to the interface abilities of the data banks and the ability for sharing data.

The existing EPD versions were taken into account in the conclusions of the pilot, and more detailed specifications and additions were proposed to them. An individual UUID code is used as the identifier of an EPD that is in a structured format, and the latest EPD related to a product can be found with this code. Global Trade Item Number (GTIN) product identifiers defined by the manufacturer were recommended for product identification. These identifiers are needed for both the product and the EPD.

According to the preliminary information received in January 2023, the ILCD+EPD format will be changed, enabling the saving of Global Model Number (GMN) identifiers as part of EPD data, in addition to GTIN codes. It is already possible to specify the country of origin and the product's genericity or specificity in digital EPDs, and elaborations were proposed with respect to these. Classification is needed for unit conversions and for separating products, semifinished products and materials. The challenges related to two EPD standards being simultaneously in effect were not included in this pilot.

The pilot case report was prepared in co-operation by VTT Technical Research Centre of Finland and Vastuu Group Oy. In accordance with the principles specified by the project steering group, the full report is only available to the organisations that participated in the research and development project.

Further information:

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