

Life cycle data conversion to international standard

Both the result of an LCA study as well as the cost and time to perform the study is highly dependent on availability of LCI data. The Swedish Life Cycle Center – CPM maintains a public, online database – CPM LCA Database. To enhance the availability of this data a tool will be developed that translates inventory data in the CPM LCA Database to the established format of the International Life Cycle Data System (ILCD).

This project aims to increase the availability of product-related environmental data that can be used to assess and improve the environmental performance of products. This is done by developing a conversion function that translates the data sets in CPM LCA Database to the international standard format ILCD.

Product and environmental data is essential to calculate the products and services environmental performance, for example through carbon footprints or full life cycle assessments (LCA). The availability of data is often one of the biggest obstacles to making such assessments and data collection is the most time consuming part of a study. It has evolved over the years a number of databases in different countries with different orientations, and the amount of data stored in various formats. In order to harmonize development, the European Commission Joint Research Center initiated ILCD; an international platform for life cycle data (The International Life Cycle Data System). ILCD has developed a data format that has established itself as the de-facto world standard for environmental data for products and processes.

As more and more organizations are interested in making various forms of environmental impact calculations, the products demand for data also increases. Today, the main supply of data is dominated by a few commercial entities. Several smaller open databases available (including CPM LCA Database), and several initiatives are also used to build databases at national or sectorial level. The free data sets are mainly used by SMEs, students and others who are unable to invest in commercial databases. Databases in itself constitute an important infrastructure for archiving and making available data from the Swedish research and industry and can also communicate data internationally.