Life Cycle Inventory Analysis

The inventory analysis is the third and often most time-consuming part of an LCA. The analysis is guided by the goal and scope definition, and its core activity is the collection and compilation of data on elementary flows from all processes in the studied product system(s) drawing on a combination of different sources. The output is a compiled inventory of elementary flows that is used as basis of the subsequent life cycle impact assessment phase. This chapter teaches how to carry out this task through six steps: (1) identifying processes for the LCI model of the product system; (2) planning and collecting data; (3) constructing and quality checking unit processes; (4) constructing LCI model and calculating LCI results; (5) preparing the basis for uncertainty management and sensitivity analysis; and (6) reporting.

General information
Publication status: Published
Organisations: Department of Management Engineering, Quantitative Sustainability Assessment, Transport DTU, Technical University of Denmark
Contributors: Bjørn, A., Moltesen, A., Laurent, A., Owsianiak, M., Corona, A., Birkved, M., Hauschild, M. Z.
Pages: 117-165
Publication date: 2018

Host publication information
Title of host publication: Life Cycle Assessment: Theory and practice
Publisher: Springer
DOIs: 10.1007/978-3-319-56475-3_9
Source: FindIt
Source-ID: 2373522936
Research output: Chapter in Book/Report/Conference proceeding > Book chapter – Annual report year: 2017 > Education > peer-review