

A Practical Introduction to Life Cycle Assessment Through An Interactive Discussion, Example Problem, and Software Use

This morning session will bring participants through an interactive session that walks through an example Life Cycle Assessment from start to finish. We will start with a brief powerpoint-based overview of Life Cycle Assessment (LCA). Then, with the instructor using an overhead-displaying professional LCA software, we will go through the following ISO 14040 LCA stages to complete a sample LCA:

- Goal and scope definition
 - Including defining the system boundaries and specifying the functional unit
- Building a life cycle inventory (LCI) model
 - Interpreting the LCI results
- Conducting a life cycle impact assessment (LCIA)
 - Interpreting the LCIA results
- Making changes and communicating the results

After the group LCA “project”, we will look briefly at the Building for Environmental and Economic Sustainability (BEES) software developed by the National Institute of Standards and Technology. BEES produces sets of comparative LCIA *results* on a variety of building materials available to support decisions in a user-friendly fashion, and is an example of the growing field of LCA-based software tools for building designers and architects.

What you will learn:

- How an LCA is actually done, using real LCI data, real LCIA methods, and real LCA software ... maybe even making some real mistakes or questionable assumptions along the way!
- How decisions can be made based on LCI and LCIA results.
- How LCA results are being incorporated into software tools for decision support by professionals who are not LCA experts.

Who should attend: Decision makers and analysts from consulting companies, federal facilities, industry organizations, or academia, and anyone with an interest in learning how to better incorporate Life Cycle Assessment and environmental performance indices into their decision-making processes.

Instructors:

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