

## Cradle to Grave

A **life-cycle assessment (LCA)**, also known as **life-cycle analysis**, **ecobalance**, and **cradle-to-grave analysis** is a technique to assess environmental impacts associated with all the stages of a product's life from-cradle-to-grave (i.e., from raw material extraction through materials processing, manufacture, distribution, use, repair and maintenance, and disposal or recycling). LCAs can help avoid a narrow outlook on environmental concerns by:

- Compiling an inventory of relevant energy and material inputs and environmental releases;
- Evaluating the potential impacts associated with identified inputs and releases;
- Interpreting the results to help make a more informed decision.

### Goals and purpose

The goal of LCA is to compare the full range of environmental effects assignable to products and services in order to improve processes, support policy and provide a sound basis for informed decisions.

The term *life cycle* refers to the notion that a fair, **holistic** assessment requires the assessment of raw-material production, manufacture, **distribution**, use and disposal including all intervening transportation steps necessary or caused by the product's existence.

There are two main types of LCA. Attributional LCAs seek to establish the burdens associated with the production and use of a product, or with a specific service or process, at a point in time (typically the recent past). Consequential LCAs seek to identify the environmental consequences of a decision or a proposed change in a system under study (oriented to the future), which means that market and economic implications of a decision may have to be taken into account. Social LCA is under development as a different approach to life cycle thinking intended to assess social implications or potential impacts. Social LCA should be considered as an approach that is complementary to environmental LCA.

The procedures of life cycle assessment (LCA) are part of the **ISO 14000** environmental management standards: in ISO 14040:2006 and 14044:2006. (ISO 14044 replaced earlier versions of ISO 14041 to ISO 14043.)

- Taken from Wikipedia

*Directions:*

*Using the internet find at least 15 products that have had an LCA done for them. Be specific, I do not want to see a corporation URL, rather a specific product within that corporation. Write the name of the product and URL of the website where you found it down on a separate sheet of paper and turn that in.*