Fundamentals of Life Cycle Assessment

As the name implies, Life cycle assessment (LCA) evaluates the entire life cycle of a product, process, activity, or service, not just simple economics at the time of delivery. For example, the total environmental impact of a product is a factor, which is sometimes oversimplified. Stakeholders under the LCA concept go beyond the immediate customer and extend to society as a whole, which may be concerned about such issues as natural resource depletion or the impact of degradation on the environmental. Responses to this greater awareness include "greener" products and processes. Companies concerned with LCA, consider environmental performance of products and processes to be a key issue. Many companies have found it not only responsible but also advantageous to explore ways of moving beyond compliance using pollution prevention strategies and environmental management systems to improve environmental performance. In many cases, LCA leads to better business practices.

What you will learn:

- From an overview of several case studies (LCA on biorenewables vs fossil fuels, mechanical-chemical-bio pulping processes, chlorine vs UV disinfection technologies and other examples), the fundamentals of LCA
- Life Cycle Assessment - Accounting principles for use in sustainability such as life cycle assessment in process, product, or service design.
- Industrial Ecology - Principles of human health, ecological systems, and management applied to analyses of products, processes, and services.
- Green Chemistry and Engineering - Examples of pollution prevention systems that approach sustainability.
- Environmental Assessment Methodologies - Generation of unified taxonomy of environmental impacts for analyses of products, processes, and services.
- How to conduct or manage someone conducting an LCA

Who should attend: Decision makers and analysts from consulting companies, federal facilities, industry organizations, or academia and anyone in 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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