

Live LCA

1st US Industrial Interest Group Workshop

October 10th, 2017 – Ann Arbor, MI



Vision

Climate: 9,2 t-CO₂
Energy: 46.461 kWh
Saving potential: 488 €

Climate: 8,7 t-CO₂
Energy: 39.765 kWh
Saving potential: 312 €

Climate: t-CO₂
Energy:

Executive Summary

Climate Change, Digitalization, Industry 4.0, Internet of Things are drivers of change that generate new challenges as well as new opportunities for producing industries. The Live LCA solution will provide quantified sustainability information and cost transparency for each specific product and any production step. This results in improved economic and environmental performance.

Combining LCA and MFCA

The Live LCA solution will combine the methods Life Cycle Assessment (LCA, product view) and Material Flow Cost Accounting (MFCA, production view) and include live data for energy use, material consumption and waste generation.

Live Data and Full Cost Transparency

This enables full transparency where energy and material costs arise within the production system as well as live and automated LCA. This combination is the basis for energy and material efficiency, risk assessments, sustainability improvements and product development.

Industrial Interest Group

Purpose of the Industrial Interest Group is to learn from the experience of different industry sectors, collect requirements and get feedback on intermediate results.

Benefits

- Inter-industrial exchange of experience: learn from each other
- Get early insight into concepts and results of the project
- Influence the development to see the own requirements reflected in the solution

Expectations

- Willingness to share experiences, learnings and current challenges
- Commitment to actively participate in workshops, online meetings and/or personal interviews

Methods & Objectives

Evaluate the energy efficiency and the environmental impacts for each manufactured product and each process step within the production and along the product life cycle. This evaluation will be based on existing data in a company, e.g. from energy monitoring systems, production planning systems, etc.

Live LCA has been started to meet these objectives:

- Quickly access Life Cycle Information, e.g. EPD for specific products or orders
- Increase the use of live data from production monitoring system to replace generic data
- Systematically identify improvement potentials in energy and material use and environmental performance
- Improve internal collaboration and communication for sustainable innovation
- Include primary use phase life cycle information to enable life cycle innovation

Agenda

Tuesday, October 10th, 2017; Ann Arbor, MI (venue: tba.):

- 1:00 pm Get together at lunch
- 1:30 pm Introduction
- 1:45 pm Introduction to the Live LCA Project
- 2:15 pm Workshop Session 1: Which use cases do participants see for instantly available product-specific life cycle information?
- 3:00 pm Coffee break
- 3:15 pm Workshop Session 2: Which internal data sources do the participating companies see as relevant to be accessed or linked to the Live LCA solution?
- 4:00 pm Workshop-Session 3: How and what kind of sustainability information is used during the design and development of products today?
- 4:45 pm Summary & Outlook

Register now: <http://tinyurl.com/LiveLCA-IIG-WS>