

"The end of LCA: Unleashing the consumer power with decentralised network technology"

by Prof. Dr. Bo Weidema, Aalborg University, Denmark

25 April 2017, 12:30 p.m.

The next Science Talk, organized by the Institute of Systems Sciences, Innovation and Sustainability Research, will be given by Prof. Dr. Bo WEIDEMA (Aalborg University, Denmark) on the topic "**The end of LCA: Unleashing the consumer power with decentralised network technology**". His talk will take place on Tuesday, 25 April 2017 at 12.30 pm in the **meeting room of ISIS (Merangasse 18, 1st floor)**.

Duration: **Approximately one hour** including discussion.

The institute usually organizes three guest talks in each semester, covering its main research fields, i.e., systems sciences, innovation and sustainability research.

There is no need to register for the "ISIS Science Talk" and the participation is free of charge.

Bio-sketch

Bo Weidema is professor at the Technical Faculty of IT and Design at Aalborg University, Denmark, specialising in quantitative sustainability assessment, a field in which he has been working for more than 25 years as a business consultant. He is head of the Danish Standards delegation to the ISO TC 207 on environmental management as well as president of the International Life Cycle Academy. He was Executive Manager of the *ecoinvent* database from 2008 to 2012 and its Chief Scientist from 2012 to 2014 and has now initiated the development of the open source database BONSAI for quantitative sustainability assessment information.

Abstract

The purpose of Life Cycle Assessment (LCA) is to provide information on the externalities of producing and consuming products, i.e. those costs (and benefits) that are not included in the product price due to market failures. The expectation is that decision makers (producers or consumers) will then take into account this information in their decisions on choices of suppliers and/or production technologies. But because products are produced in complex supply chains, using LCA information at the level of consumers is difficult, error-prone and requires additional verification of producers and suppliers. In the last few years, a new decentralised digital network technology has entered the scene, which promises solutions to these problems: Distributed Ledger Technology, more informally nicknamed "blockchain" after its core database concept. This lecture will outline how this new technology can combine solutions that ultimately render LCA superfluous, placing consumers in control of the supply chains, forcing businesses to act responsibly and sustainably.

This work is co-authored by Manuel Klarmann of Eaternity.