



3rd International Conference on Life Cycle Management
Zurich, August 27 to 29, 2007

Calcas

*Beyond the boundaries of ISO-LCA, by identifying the supply and demand of science
for addressing sustainability questions*

August 26, 2007

University of Zurich, Switzerland
Time 16.00- 18.00h



The context

LCA approaches, as have developed in the last decades, are part of the broader field of sustainability assessment, often connected to different disciplines, and they consist of models and tools of varied nature and complexity. ISO-LCA with its simplifications has been the driving power for LCA diffusion, but it has limitations regarding empirical mechanisms, spatial/temporal aspects and economic/social parameters

To increase the efficacy of sustainability decision making, LCA is to take into account broader externalities, broader interrelations and different application/user needs.

The project

CALCAS - Coordination Action for innovation in Life Cycle Analysis for Sustainability, a pan-European project (September 2006 – March 2009) financed by the Sixth Framework Programme of the European Commission, aimed at identifying user needs and research needs within sustainability assessment methods, for sustainability driven decision-making; including environmental, economical and social dimensions.

The general objective of CALCAS is to structure the array of LCA approaches and to develop ISO-LCA by:

- “deepening” the present models and tools to improve their applicability in different contexts while increasing their reliability and usability;
- “broadening” the LCA scope by better incorporating sustainability aspects and linking to neighbouring models, to improve their significance;
- “leaping forward” by a revision/enrichment of foundations, through the crossing with other disciplines for sustainability evaluation.

These objectives will be partly accomplished within the CALCAS project, as new practical strategies in LCA, and research lines and as a road map will be formulated, in terms of a number of research lines and a number of exemplary research programmes for sustainability decision support.

During the conference the CALCAS approach and its first results will be presented and discussed, in order to get more inputs from the broad LCM community.

ALL THOSE INTERESTED IN THE TOPIC ARE WELCOME!

PROGRAMME

16.00 CALCAS PROJECT: CHALLENGES AND GOALS *(Paolo Masoni)*

The CALCAS project, Coordination Action for innovation in Life Cycle Analysis for sustainability: its main idea, the general goals and the specific ones, and the innovative aspects of the CALCAS approach.

16.15 ANALYTIC FRAMEWORK *(Gjalt Huppes)*

Life cycle modelling of technology systems has been developed in the realm of LCA, reckoning with technology relations. But for sustainability decision support, increasingly strategic questions need answering, going beyond mere technical mechanisms and involving economic and cultural mechanisms, institutions and, ultimately policy reactions.

16.45 THE CALCAS PROCESS *(Tomas Rydberg)*

The two-stranded approach applied in the project encompasses a supply-side and a demand side. The supply side looks at existing approaches to assessments, and looks at broadening, deepening and leaping forward evolvments of these methods. On the demand-side, the multitude of potential needs and expectations should be covered in the needs survey, that intends to reach out also to new stakeholder groups not to limit the scope to current day LCA-users. We expect a large range of answers, and a main challenge lies in

the process to converge the multitude of research needs with the supply side opportunities.

17.10 DIRECTIONS FOR DEEPENING AND BROADENING LCA *(Gjalt Huppes)*

The directions evolving for deepened and broadened LCA are sketchy. One step is to move from functional unit based analysis to totals in society, with two different routes towards incorporating relevant mechanisms. There are two routes towards incorporating relevant mechanisms, an “ascending” and “descending” approach. For both approaches, some degree of standardisation is required, both to allow systematic development of data bases and practical supporting tools, as for comparability of outcomes between cases.

17.30 DELIVERABLES: FROM RESEARCH PROGRAMMES TO EDUCATIONAL PROGRAMMES *(Sonia Valdivia)*

Starting from the analysis of concepts and methods, the results of the project are at three levels: formulation of research lines and a number of exemplary research programmes for sustainability decision support; the networking, both “cross” among the scientific sectors, and “vertical” between them and users; educational programmes to integrate the results of the CALCAS.

Venue

ETH Main Building, Rämistrasse 101
8092 Zürich, Switzerland
Room HG F 5
Time 16.00- 18.00h

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Read more on CALCAS at: www.calcasproject.net

