

ALCAS Corner (Australian LCA Society)

The Third Australian Conference on Life Cycle Assessment

Conference Report

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The Third Australian Conference on 'Life Cycle Assessment – Life Cycle Decision-making for Sustainability' was held on the Gold Coast in Queensland, Australia, from July 17th until July 19th, 2002. By all reasonable measures, the conference was a resounding success and represented a quantum move forward since the last LCA conference held in Melbourne in February 2000. The conference had approximately 85 people attending from 14 countries, including all over Australia.

The conference was opened by the Queensland Environment Minister who made mention of how LCA was being used in Queensland to identify the **benefits of Ethanol** as an automotive fuel. This opening plenary had three key industry players talking about how LCA was being used in their industry.

On the first plenary session, HENRY KING from Unilever in the UK spoke about **Unilever's use of LCA** and how it has been incorporated within their overall business strategy; he described some of the tools Unilever were using in assessing sustainability of their operations. JOHN PULLEN from Alcoa World Alumina spoke on how the Aluminium industry was progressing with LCA, and on some of the practical applications and methodological issues they face. PAUL GIBSON from Australian Country Choice outlined plans for using LCA along the meat industry supply chain.

The second plenary session gave the academics a chance to take the stage and look at challenges and directions for LCA. GJALT HUPPES from CML focussed on the emerging development of **Integrated Systems Analysis and Hybrid Input-Output LCA**. These approaches will help to produce decision-making tools which better reflect some of the realities in the economy and allow the incorporation of scenario development in assessing future technologies.

GREG NORRIS from Sylvatica looked at expanded horizons for LCA and talked about the **differing contexts between developed and developing economies**. He proposed a number of measures which could be built into Life Cycle Assessment, including human health pathways that related to Gross Domestic Product and employment in developing economies.

The third plenary session in the afternoon included two **government agencies**. The first issued the structure in Queensland for including LCA in overall policy context. The second from the Victorian EPA spoke about current activities to use ecological footprints for communicating messages on the life cycle impacts of consumption. Thereupon, the director of the Australian Environmental Labelling Association addressed the use of LCA in the establishment of the Australian Ecolabelling Program.

The final session of the day was an **open stage** – a chance for the audience members to take the stage and present short ideas or

questions. The main thrust of the discussion was concerned with the question of how LCA addresses the broad issues of sustainability, and how far it should be stretched in this direction.

The second day of the conference was broken up into parallel sessions looking at methodology issues. A UNEP/SETAC supported workshop was held in the morning looking at data issues, and the idea of a Standard Data Protocol for Australian LCA data was raised and received some support. GREG NORRIS outlined the structure of the **UNEP/SETAC Life Cycle Initiative**, and in particular the inventory data section.

The second session of the UNEP/SETAC LCI Initiative workshop focussed on **LCA in the food industry** with presentations on sustainable agriculture, pig and poultry LCA, grains LCA and LCA and Life Cycle Costing uptake in the food packaging chain.

The other methodology session on the second day looked at **Input-Output applications, allocation methodologies, substance flow analysis and material flow analysis and assessment of LCA of water and waste water**.

The final session on day two was a plenary session that focussed on **land use and biodiversity assessment**. WIJNAND BROER from CREM in the Netherlands presented the Integral Biodiversity Impact Assessment System (IBIS) and discussed how it differs from LCA. ANDREW FEITZ (UNSW) presented a method for evaluating salinity potentials, and PHILLIP SUTTON (Green Innovations) talked about the challenges of communicating biodiversity issues through the supply chain.

The third day of the conference was dedicated to case studies, predominantly in the **building and energy areas**. The building session included case studies on domestic and commercial buildings, and applications of life-cycle thinking in asset management.

The energy case studies covered electricity production, fuel production and co-generation. There was also an assessment of thermal cutting processes presented in this session.

The final plenary discussion session focused on how to move forward with improvements to **LCA infrastructure and application** in Australian and elsewhere around the world. There seems to be some confusion as to the most appropriate applications for LCA, and many people are looking for LCA to expand and cover social and economic issues. Many in the LCA fraternity, however, warned against this, arguing that other tools that focus more on site-specific and application-specific assessments may be more appropriate than LCA for social and local impact assessment.

As usual, more questions rather than answers came out of the conference; however, the general level of awareness has increased around the major methodological issues and direction in LCA, such as the use of Input/Output data, and attributional versus consequential approaches in LCA.