NEWSLETTER
MAY 2008

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ALCAS Committee News
Welcome to the May edition of the ALCAS Newsletter.

New ALCAS Website
The ALCAS website (www.alcas.asn.au) is currently being re-designed and will be fully functional by mid June. The intention is that this will be the ‘one-stop-shop’ for all LCA related activities within Australia. Comments are welcome and can be forwarded to Dr Sean Shiels (sean.shiels@epa.vic.gov.au).

Call for Articles & Event Promotion
The ALCAS newsletter a useful medium to promote and foster the appropriate use of LCA in Australia in order to increase awareness of LCA among stakeholders including industry, academia, government, practitioners and the public.

If you have an article or would like to promote something happening within or outside Australia then please contact Dr Sean Shiels (sean.shiels@epa.vic.gov.au) for further information.

Reminder - SB08
Early Bird registrations for SB08 are closing soon on 30 May 2008. ALCAS members are reminded to register listing ALCAS as their auspicing society for a discounted rate.

For further information on SB08 see the Conferences and Events section on page 11 of this newsletter.
The AusLCI Initiative continues to develop, with a number of key events taking place in recent months.

Technical Issues Management Workshop

This workshop allowed the chairs of the relevant Technical Committees and Sub-committees to raise and discuss technical issues regarding the development of AusLCI. The workshop's primary goal was to drive the technical committees' work for the immediate six-month period of 2008 integrating their workings with the research funded by the Building Product Innovation Council’s (BPIC) ICIP Grant and the AusLCI Business Plan recently developed by Deloitte.

The outputs from the workshop were also used to guide the development of an activity plan to deliver on the initial pilot project/proof of concept, which will run from June to December 2008. Consequently issues of development, activities, timelines, workshops, ISC inputs, budgets and other possible funding sources were discussed. The key finding are summarised below.

Data Guidelines Committee
(Chair Mr Tim Grant 0408 104 97)

This group has met twice to review the Data Guidelines and is currently compiling a data guidelines report which will document the methodology and protocols for collection data for the AusLCI Initiative.

The draft data guidelines will be completed soon and two workshops are planned possibly during the month of June, they are likely to be held in Sydney and Melbourne. These workshops are to engage the broader industry in the development of the data guidelines.

Allocation Sub-committee
(Chair Mr Rob Rouwette
03 9925 9082)

There have been three meetings of this group. The group has compiled a research document scoping and reviewing the various methods for allocation within LCAs that are used by CSIRO, BRANZ, University of Queensland and RMIT. This document will support a decision by the Data Guidelines Committee regarding the adoption of a methodology for the AusLCI initiative.

“The AusLCI Initiative continues to develop with a number of key events taking place in recent months.”

The reasons behind the choice need to be clear and publicly available to ensure industry buy in. The decision surrounding the allocation methodology to be adopted by AusLCI has obvious implication for the Data Guidelines component of the project.

However, the vast majority of the data guidelines can be completed and the allocation component added later. It is paramount to the success of the project that a single methodology applicable for all industrial sectors is adopted.

Quality Assurance Sub-committee (Chair Dr Rajah Tharumarajah
03 9252 6000)

This group is reviewing a draft QA document and will distribute the findings to the Technical Coordination Group (TCG), and also if necessary the Interim Steering Committee (ISC). The group is also investigating the data quality indicators that may be used for the AusLCI project.

The data documentation and quality assurance component of AusLCI has been developed from the EcoSpold and ISO 14048 standards with a leaning more towards the latter. The majority of the documentation and quality assurance
aspects for AusLCI are ‘piggybacking’ off work carried out for the Timber LCI project. Data is expected to be collected on a unit process basis and then aggregated.

**Database Development Committee**  
(Chair Dr Rajah Tharumarajah  
03 9252 6000)

A preliminary database for the AusLCI Initiative is up and running and the group are investigating whether the European platform can be used for data collection for the AusLCI project.

There are a number of issues surrounding the development of the database and user interface for the AusLCI project and the purchase of an ‘off the shelf’ database may be more appropriate for the initial stages of the project.

A Database and User-Interface Development workshop is being planned to review/modify the user requirements for the BPIC project on web page/database for hosting the LCI data.

**Inventory Review Committee**  
(Chair Dr Paul Koltun 03 9252 6000)

This group is in the process of reviewing draft data guidelines for peer review. Whilst the EcoInvent peer review process was seen to provide a useful structure for AusLCI there was extensive disagreement about the type of peer review to be adopted by AusLCI.

This focused on whether it was a ‘process’ only or full ‘data checking’ peer review. Discussions have also focused on whether it is beneficial to have a relatively low standard set for data inclusion into AusLCI and that population of datasets was more important than having very high quality data.

The issues raised essentially mirror those raised under Quality Assurance & Documentation.

**Life Cycle Impact Committee**  
(Chair Dr Greg Peters 02 9385-5097)

This group has recently highlighted the importance of horizons for impact assessment and proposes to investigate those indicators that fulfil some short-term goals. The group have also discussed the role of LCA data in assessing Biodiversity impacts since impact categories (e.g. eutrophication) need review and consideration in the Australian context.

The key impact category requiring alteration for Australian environments is the Human Toxicity Potential since the impact is heavily dependent upon population densities. It has been suggested that a range of other impact models (CML, Traci, etc) should be reviewed to identify which would best suit Australian conditions.

During the Technical Committee Workshops it was decided that some workshops are planned on the trial biodiversity methodology and develop ‘Best Practice Guidance for Impact Assessment in LCA’.

**Sector Working Groups**

The Agricultural Sector Working Group (SWG) had its kick-off meeting in May. The SWGs role is to engage stakeholders including data users and data providers through the AusLCI Initiative. They are responsible for representing, planning and guiding the activities in their sector under the AusLCI Initiative; for example, identifying technologies to include, the inventories to populate and ensuring coordination between the AusLCI Initiative and other sector projects developments.

The Issues addressed during the kick-off meeting included: a review of funding & potential sources; review of LCA in the agricultural sector and potential contributions to AusLCI; and, identification of other stakeholders to engage.
The key output from the meeting was to develop a discussion document, addressing issues such as: regional/climatic variations and the impact they have on agricultural systems; land use management styles and how they alter a study’s output; allocation methodologies; and, the scoping of the SWG on agriculture activities and the boundaries and interdependencies with other SWGs (e.g. chemicals, manufacturing, food processing). This discussion document will further define the role of the SWG for Agriculture.

Current members of the group include Sean Shiels (Chair, EPA Victoria), Ian Russell (CSIRO), Brad Ridoutt (CSIRO), Marguerite Renouf (University of QLD), Simon Winter and Wahidul Biswas (Curtin University).

For further information about any of the above and/or queries regarding membership of the Technical Committees and the associated Sub-committees please contact the relative chair, and for queries regarding the Sector Working Groups (SWG) please contact Dr Sean Shiels (sean.shiels@epa.vic.gov.au)

ALCAS Delivery of BPIC ICIP Activities

ALCAS has been asked to assist with a number of activities under the BPIC “Buildings and the Environment - Full Life Cycle Assessment” ICIP Grant, including the organisation and delivery of:

• a series of LCIA Information Sessions
• a range of Communications Activities, and
• a selection of Technical Roundtables.

LCIA Information Sessions

LCIA Information sessions are currently being planned for delivery in the last two weeks of June and will be delivered in Canberra, Sydney, Melbourne, Brisbane, Hobart, Adelaide and Perth.

The information sessions will be targeted at government and industry representatives and their aim is to fully inform the attendees on the benefits and advantages that life cycle assessment can provide.

The session will cover:

1. An Introduction to LCA:

   • What is LCA
   • The big picture overview of how is LCIA is being embraced internationally
   • Why LCA is important – for different industry sectors, for government
   • What are the benefits it provides – for different industry sectors, for government
   • How does it work (a simple overview)
   • Why is it important to develop consistent LCI and LCA data & protocols

2. An Overview of the AusLCI National Database Initiative:

   • What is the AusLCI initiative and where has it come from
   • Why it is important that LCI information be made available through a national publicly accessible database
   • Who is currently involved (sectors, organisations)
   • Overview of the current AusLCI structures (ISC, Technical sub-committees)
   • Overview of proposed AusLCI activities and outputs - LCI guidelines & protocols, database platform, on-going data inclusion, access and oversight process
   • Proposed activity & output timelines
   • Possible future AusLCI administrative frameworks
   • What do different sectors needed to be doing to start developing their own LCI data
   • What do different sectors need to do to participate in the AusLCI process
3. BPC ICIP Building & Construction Sector program:

- Why is LCA important to the Building & Construction (B&C) sector
- What is the BPIC/ICIP project and who is involved
- Overview of key activities under the BPIC/ICIP project
- Learning to date of key issues (methodology, allocation)
- Processes and key activities sectors need to be involved with
- Proposed outputs (normalisation, weightings, eco-points, B&C LCA protocol)
- Plan & timetable going forward
- Possible future implementation of LCA into national B&C environmental tools and BCA Sustainability goal

Details on the information sessions will be circulated in early June.

Communications Activities

ALCAS will also undertake a number of communications activities for the AusLCI BPIC ICIP project including development of the public section of the AusLCI website, production of a series of information flyers and newsletters and provision of PR and professional magazine articles on the project.

Technical Roundtables

ALCAS will also facilitate and deliver a series of roundtables to allow broader technical comment on topics such as LCI Guidelines, Data Collection Requirements, Allocation Methods & Rules, and later, Impact Assessments and Weightings and LCA Protocols. Information on the roundtable sessions will be circulated to ALCAS members prior to each event.

About ALCAS & LCA

The Australian Life Cycle Assessment Society (ALCAS) is a professional organisation for people interested in the practice, use, development and interpretation of Life Cycle Assessment (LCA).

The society is a not for profit organisation with individual and corporate members.

The purpose of the society is to promote and foster the responsible development and application of LCA methodology in Australia and internationally, and to represent the Australian LCA community in the international arena.

The society is also aimed at making a positive contribution to Ecologically Sustainable Development (ESD).

Membership

The benefits of ALCAS membership include:

- Discounted access to ALCAS events such as conferences and roundtables
- 50% discount on subscriptions to the International Journal of Life Cycle Assessment, where ALCAS has a column
- Quarterly ALCAS newsletter with information on ICA developments, events and committee news.

For further information visit: www.alcas.asn.au
When conducting LCA studies, we often want to use a single parameter as a proxy for a wide range of impacts. Traditionally, we have latched onto embodied energy as that parameter. However, when comparing full LCA studies with weighted results expressed as ecopoints, embodied carbon-dioxide is generally a better proxy for a wider range of issues.

Ironically, embodied energy itself is not a very meaningful parameter if you are already measuring all the consequences of energy in your LCA – embodied carbon dioxide, acidification, ozone depletion, VOC precursor emissions, particulate emissions, other toxic and ecotoxic emissions. The remaining purpose for embodied energy is only as a measure of fuel resource depletion, but even there it is a poor measure because it mixes together rapidly depleting oil & gas (decades of reserves) with solid fuels which are depleting much more slowly (centuries of reserves).

But what is our work on embodied carbon going to be used for, and is it appropriate?

Carbon Accounting

LCA is the only legitimate way to do carbon accounting at both the macro level and at the company/organization level. It is the only way to ensure that companies are responsible not only for their on-site operations but also for their purchasing and sourcing (i.e transport) decisions for feedstocks.

For product manufacturers, this process correctly accounts for that product cradle to gate, and the gate is the point at which the exchange of money marks the exchange of responsibility for the product. Or is this good enough – extended producer responsibility suggests that organizations have responsibility for their product beyond the point of sale. From an LCA perspective, it now becomes very difficult to determine either the geographic or temporal boundaries of an assessment.

Carbon Neutral Claims

Carbon neutral claims are springing up all over the place on products, but how are these claims justified. The best of these are based on a product cradle to gate assessment. It is not uncommon for misleading claims to be made based on gate to gate assessments and often with deliberate cynicism revealed in the small print.

At present, there are guidelines, but no formal mechanisms for auditing and certifying these claims and the ACCC is starting to notice and require a life cycle approach. LCA practitioners should have a key role in helping organizations measure their carbon footprints, innovate and reduce, and then as third parties audit and certify these claims. Does ALCAS have a role administering such a scheme?

Carbon Trading

Many carbon neutral claims are reliant on the purchase of carbon credits and the lack of controls in the wild west frontier of carbon trading is alarming. LCA should have a role in determining what is a permissible carbon trade, bringing to bear all the disciplines of physical and temporal boundary setting and inventory analysis.

The AusLCI project with its comprehensive engagement of industrial sectors should emerge as the vehicle for making these measurements consistently throughout all industrial sectors. Also, how many of the carbon trading companies employ LCA experts?
In my casual questioning of colleagues in this field I think it is virtually none. Hence, carbon trading schemes are based on very shallow assessments (sometimes ones that sensitivity analysis would prove to be justified). Several other things concern me about these carbon trades:

**Additionality** – a carbon trade is only supposed to be counted if it promotes additional carbon emission reduction that would not have otherwise happened. According to IPPC, we have a decade to turn the supertanker of world trade in goods and services around. This means that Governments will HAVE to legislate to achieve the required reductions.

Energy efficiency and comprehensive transfer to renewable energy sources will have to be mandatory. So, from my perspective energy efficiency and renewable energy should not be counted as additional or worthy of carbon credit – they must just must happen for us to avoid dangerously unpredictable, perhaps runaway climate change.

I suppose it might be OK to use carbon trading to accelerate the uptake of these measures in the short term, but the dangerous complacency that this breeds in the industries that ultimately have to change dramatically and soon, simply means that they face an even more intractable problem in another 5 years when too little has been achieved and the carbon price has now rocketed to the levels that it should be already. Failure means that nature will wreak horrible revenge because nature will not be conned by bogus carbon trades or clever politics or marketing.

**Forestry** - Old growth forest is carbon neutral – plantation forest is carbon sequestering, especially if the wood products are used in building structures for at least 100 years and especially if at the end of their life they are reused, or burnt with heat recovery and cogeneration to offset other fossil fuel sources. Alternatively, this wood may go to landfill and the emerging evidence is that a large proportion of landfilled wood and wood products will retain its carbon content in the landfill almost indefinitely. Moreover, over this use life, 2 further crops of carbon sequestration can have occurred.

So, it seems to me that plantation forestry is the only legitimate basis for a carbon trade longer term. Ironically though, plantation forest is horrible for ecology and intensely resisted by environmental groups. We must preserve ecological diversity but also compromise to a degree to permit some plantation forest as one mitigating strategy for the wholesale global damage to ecology through climate change.

**Nuclear** - Australia has the minerals to develop and use nuclear energy, but is this the solution for reducing carbon emissions? The problem remains the disposal of nuclear wastes which after 50 years still has not been resolved.

If we do have to store nuclear wastes safely in concrete facilities for 30,000 years, then the embodied carbon implications of this storage and maintenance could be very significant and some have estimated that taking all of this into account, nuclear could even be a net higher carbon emitting energy source than fossil fuel burning – more work needed.

In addition, we have seen that facilities designed for 1 in 1,000 year failures have not delivered on that promise.
Climate Change is a critical issue that can only be addressed through innovation and collaboration.

EPA Victoria business clients are now regularly seeking support and advice on climate change. In response, EPA established a Carbon Innovators Network – a network for business leaders and climate change experts. EPA helps organisations strategically and practically address their carbon emissions and, in doing so, transform climate change from a business cost to a business opportunity.

**Benefits of joining EPA's Carbon Innovators Network**

As a member of the Network, companies will have access to:

- discussion forums with key climate change innovators
- public recognition opportunities for highlighting their innovative carbon management strategies
- tailored business support and advice from EPA as required
- opportunities to determine the tools and resources EPA develops
- opportunities to partner with other Network members on specific carbon innovation projects.

**What is required of Network members?**

We recognise that Network members will have a variety of interests and experience. Where members see value in their involvement, we would like them to:

- participate in discussions on business management issues related to climate change
- provide feedback to EPA on proposed tools and resources
- make recommendations regarding initiatives – forums, training, tools, guidance – that members would like EPA to undertake.

**Network programs and initiatives**

EPA’s goal is to respond to business needs and emerging issues in the field of carbon management. As such, we are aiming for two-way communication between EPA and Network members, and to tailor Network activities to member interests and needs.

Programs and initiatives intended to be run through the Network are:

- regular e-newsletters capturing current climate change news, progress on Network initiatives, case studies, regulatory information and other interesting news items
- further development of the Carbon Management Principles (developed by EPA during its own process towards carbon neutrality) and development of any business tools required to support and/or implement carbon management actions
- industry and topic-specific roundtable events designed to provide a more informal environment to facilitate discussion between Network members
- business forums designed to facilitate larger scale networking opportunities and provide information on profiling particular organisations or topics, with a broader climate change focus.

**To become a Network member or for further information please email**
carbon.innovators@epa.vic.gov.au
**or visit our website**
www.epa.vic.gov.au/carboninnovators
2008 Conferences and Events

World Sustainable Building Conference SB08

ALCAS has been invited to become an Auspicing Society for the upcoming World Sustainable Building Conference SB08 which will be held in Melbourne between the 21-25 of September 2008. The theme of SB08 is Connected, Viable, Liveable. A multifaceted technical program is planned which will utilise four streams:

- Academic and Practice
- Special Forum - including presentations for the Sustainable Building Challenge (SBC)
- Industry Stream
- Public Policy Stream, focussing on policy, regulations, incentives and government.

As an Auspicing Society, ALCAS members are eligible to register for the conference at the discounted ‘Academic’ rate of $995, (with the option of $895 for early bird). This is a saving of $100 per delegate. You just need to nominate ALCAS as your affiliation on your registration.

Other benefits to ALCAS also include:

- A $1,000 payment to ALCAS for every 20 registrations by its Members.
- Acknowledgment of ALCAS support on the SB08 web site and a link to the ALCAS site.
- Acknowledgment of ALCAS in the delegate handbook distributed at the conference.
- The opportunity to insert a promotional item of ALCAS in the conference satchel of the SB08 Melbourne conference.

To keep up to date with all the details bookmark http://www.sb08.org/

AIP National Conference 12-13 June 2008

The Australian Institute of Packaging’s National Conference will be held at Luna Park, Sydney from the 12th to the 13th of June 2008. Following a number of highly successful topical seminars over the past few years, the AIP will deliver a holistic program about the latest packaging technology related issues in the delivery of products to consumers with the theme of Climate of Change: Towards a sustainable packaging industry.

International Conferences and Events 2008

SETAC Europe 18th Annual Meeting, Warsaw, Poland, 25 - 29 May 2008

5th SETAC World Congress, Sydney, Australia, 3 - 7 August 2008

Development including Product Life Cycle Management, Chengdu, China, 4 - 6 August 2008

SETAC North America 29th Annual Meeting, Florida, USA, 16 - 20 November 2008
Application for membership to the
AUSTRALIAN LIFE CYCLE ASSESSMENT SOCIETY

I ____________________________________________________________
(name and occupation)

of _________________________________________________________
(address)

desire to become a member of the Australian Life Cycle Assessment Society

on behalf of ___________________________________________________
(organisation - for organisational membership only)

In the event of my admission as a member, I agree to be bound by the rules of the Society for the time being in force.

Signature of Applicant __________________________________________

Date ________________

Tick membership type:  Organisational □  Individual □

_________________________________________________________________

I ___________________________________________ a member of the society,

nominate the applicant, who is personally known to me, for membership of the society.

Signature of Proposer __________________________________________

Date ______________________________

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