

AusLCI will benefit industry, government and society

AusLCI Portal Structure

The AusLCI web based portal will provide a one-stop-shop for Australian life cycle inventory information. Methodologies, guidelines and protocols developed by AusLCI for collection and quality of LCI data will be available for download, along with specific sector product LCI datasets. AusLCI will assist sector groups in gathering and publishing their product data and will facilitate expert advice to companies, the community and government.

Applications & Benefits

The AusLCI portal will enable rigorous LCA techniques to be used to:

- assess and quantify the effort required to offset CO₂-e emissions and hence drive reduction, thereby assisting in the development of an effective response to climate change;
- provide a common denominator for comparing the potential environmental impact of structures, products and services;
- connect modules that enable effective supply chain management;
- make informed decisions, when driving process efficiencies, making purchases, furthering environmental goals and quantifying impacts;
- benchmark products and services against industry standards, this will drive development, improvement, innovation and economic return;
- demonstrate product environmental credentials, to increase product appeal to buyers, such as a product's carbon footprint; and
- provide a rigorous and scientific basis for product disclosure requirements.

www.auslci.com.au



User registration

Methodologies, guidelines and protocols

Uploading of product LCI data for inclusion

Downloading of product LCI datasets

The widespread adoption of LCI and LCA will bring Australian industry more into line with leading international practices and standards in environmental responsibility; this will be an important consideration for Australian export industries. The next phase of the AusLCI initiative will strengthen the existing strong partnership between Government, the research community and industry – providing a low risk, well supported, internationally recognised system for environmental improvement.

AusLCI will be delivered through collaboration and partnerships within and across stakeholder groups in industry, government and professional, scientific and academic institutions

Structure

AusLCI is currently housed under the Australian Life Cycle Assessment Society (ALCAS), and is overseen by a specific AusLCI Database Committee that reports to the ALCAS Committee of Management. The AusLCI Database Committee oversees a range of technical and industry sector subcommittees.

Support

Recognising the need for a single national Australian life cycle inventory (LCI) collection approach the AusLCI initiative has been strongly supported by representatives from a wide range of government departments, organisations, institutes and companies including:



- Australian Steel Institute
- Building Products Innovation Council
- Bureau of Rural Science
- Cement, Concrete & Aggregates Australia
- Commonwealth Scientific Industrial Research Organisation
- Dept of the Environment, Water, Heritage & the Arts (now DCCEE)
- Dept of Environment Climate Change & Water NSW
- Dept of Primary Industries NSW
- Ecospecifier
- Edge Environment
- Energetics
- Environment Protection Authority Victoria

- Environment Protection Authority Qld
- Good Environmental Choice Australia
- Industry & Investment NSW
- JTP Australia
- Life Cycle Strategies
- Natural Resources & Water Qld
- PE Australia
- Plastics and Chemicals Industries Assoc
- RMIT University
- Sustainability Victoria
- TPC Solutions
- University of New South Wales
- University of Qld
- Zero Waste SA

Further information

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Relevant Websites: www.alcas.asn.au or www.auslci.com.au



Collaboration & Business Development Opportunities Towards a National LCI Database for Australia



For a low carbon future we need a comprehensive and robust way of assessing the impact and environmental performance of materials, products, systems and services.

Life Cycle Assessment (LCA) is the best technique to do this.

Life Cycle Assessment (LCA)

LCA provides a key tool, in the new climate change framework, in assisting in the planning of our cities, land use, agricultural practices, the types of infrastructure we invest in and the industry we encourage – it provides a broad and comprehensive measure and understanding of the potential environmental impact of our actions, both locally and globally.

LCA scientifically evaluates the total environmental burdens over the entire life cycle from the ‘cradle’ - extracting and processing raw materials through manufacturing, transportation, use, re-use and recycling and finally disposal - the ‘grave’.

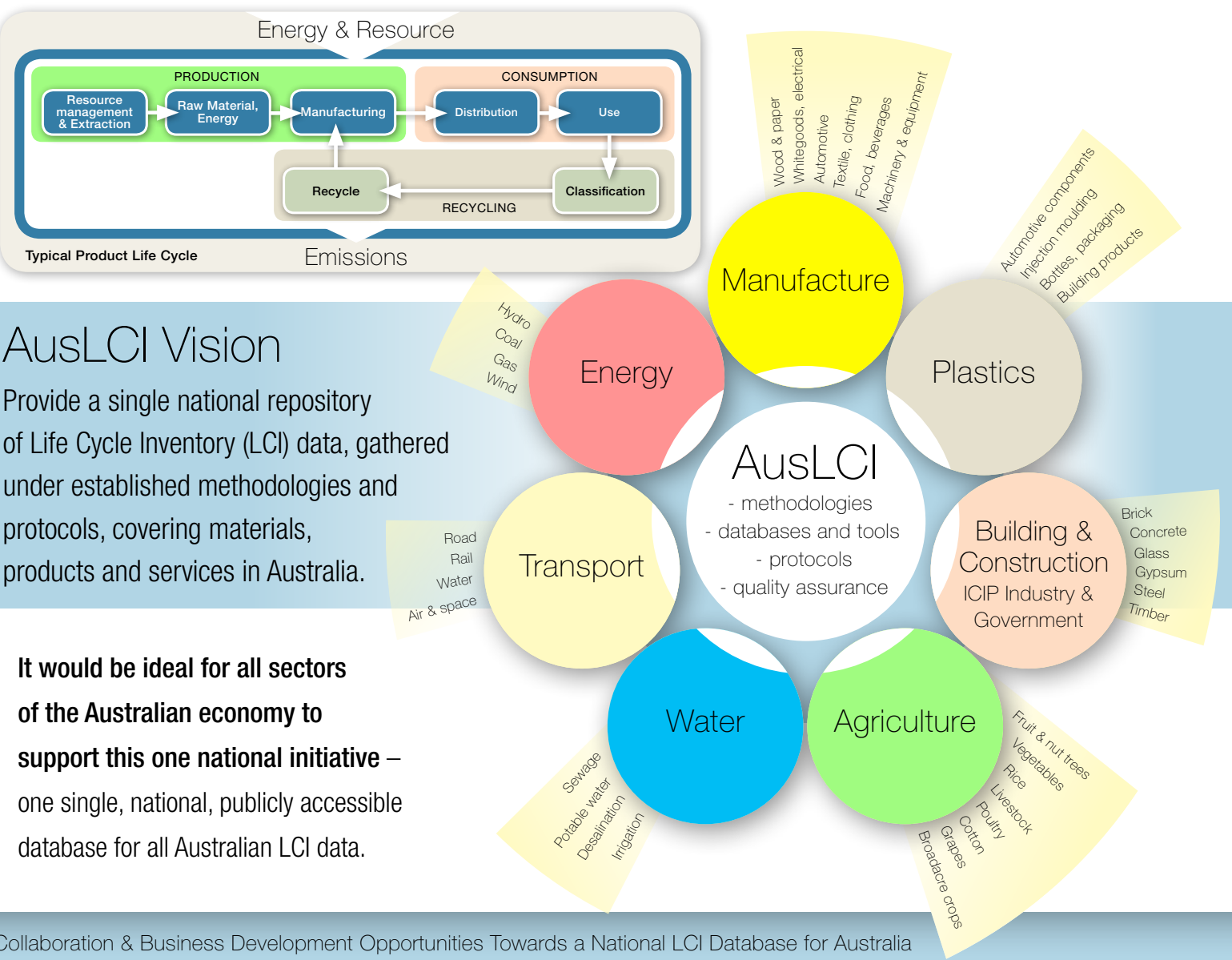
LCA is used in many countries around the world, including: the USA , UK, Germany, the Netherlands, Switzerland, South Korea and Japan. In these countries government and industry have worked closely in partnership to collect consistent national data.

In Australia, where there has been a dramatic recent growth in interest in LCA, there has also been a united call for a single national Australian life cycle inventory (LCI) collection approach.

The Australian Life Cycle Inventory (AusLCI) initiative aims to address this need. The AusLCI initiative to date has been strongly supported by

industry, scientific and professional institutions, Australian Government agencies and five state government related agencies.

These bodies are convinced that an agreed national methodology and database of common source data are essential to enable the widespread adoption of the LCA technique in Australia, and that its adoption will drive improved decision making on environmental performance of materials, products, systems and services necessary if Australia is to meet its carbon (CO2-e) emissions reduction targets.



AusLCI data sets are valuable in making decisions to minimise environmental impacts and support life cycle thinking

Priorities and goals

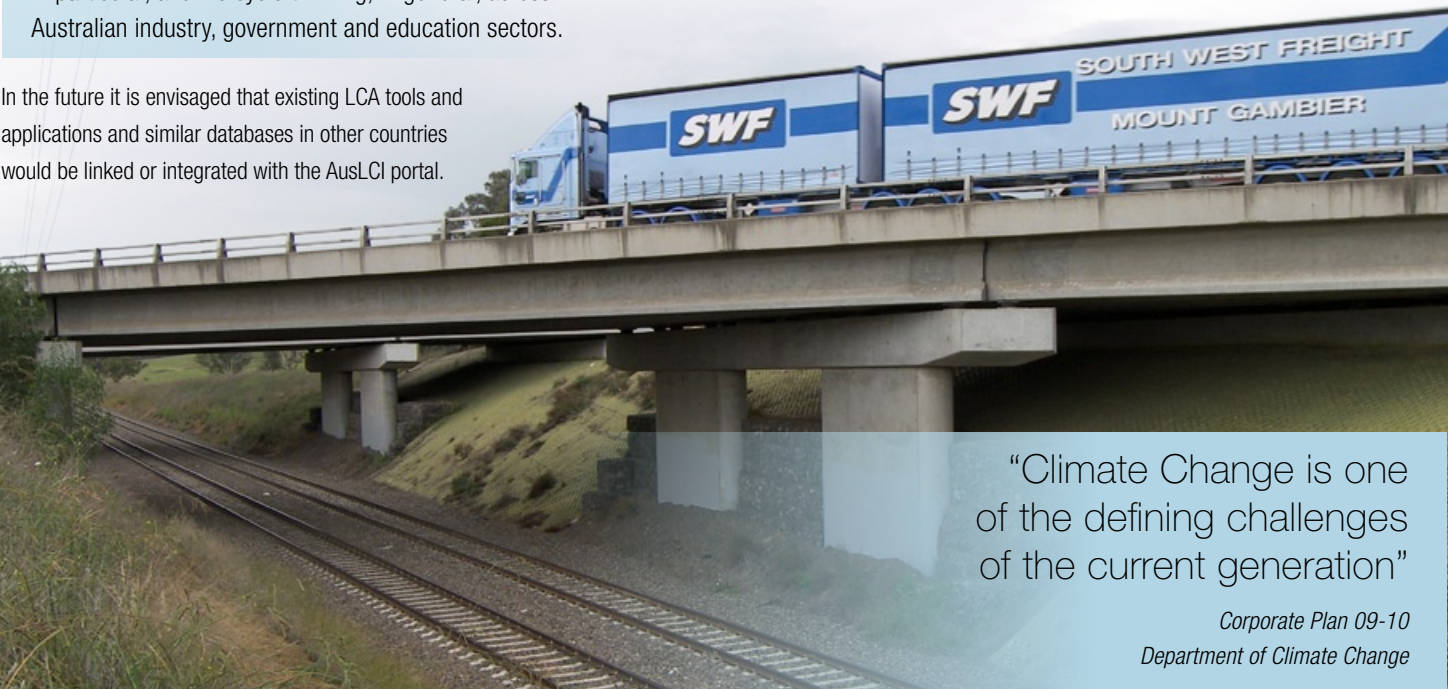
The immediate priorities are to:

- finalise Australian methodologies and protocols for recording Australian LCI data and build and manage a database to host the datasets from industry groups;
- facilitate a wider range of industry sector groups to start collecting and publishing LCI data for their sectors; and
- secure start up funding and investment from government to enable the AusLCI portal to become operational to demonstrate its value, and to explore suitable business models for future financial sustainability.

Overarching goals are to:

- produce a comprehensive Australian portal that is recognised as best practice and which supports decision-making for the use and application of LCI data in Australia;
- have the AusLCI portal recognised and used as a significant enabler for the development of sustainability and environmental policy and legislation;
- educate and drive the adoption of life cycle assessment, in particular, and life cycle thinking, in general, across Australian industry, government and education sectors.

In the future it is envisaged that existing LCA tools and applications and similar databases in other countries would be linked or integrated with the AusLCI portal.



“Climate Change is one of the defining challenges of the current generation”

Corporate Plan 09-10
Department of Climate Change

Value proposition

The AusLCI portal will provide an indispensable source of Australian data and information for:

- undertaking Life Cycle Assessments which are relevant to Australian conditions, and
- life-cycle thinking that supports decision-making and environmental responsibility.

Consumers and the general public – who have a growing sense of environmental responsibility – can have confidence in the rigour of product declarations made using the LCA method and AusLCI data.

Industry can innovate for competitiveness and efficiency, while reducing the environmental footprint of its products and operations. LCI data provides the starting point for analysing the ‘hot spots’ using LCA and targeting these areas for improved environmental performance.

For Government, the AusLCI portal will provide an accepted, rigorous and scientifically based assessment and analytical tool – a significant contribution to the new climate change science framework.

Why cross-government support is critical

Government involvement and investment

Broader Government involvement will assist in ensuring that the approach for one single national portal and repository for LCI data across all Australian industries is achieved.

Cross-government establishment funding is needed to hasten the development of AusLCI protocols and methodologies, the actual national database and the initial population and maintenance of Australian LCI data; detailed project activities, timetables and budget requirements have been developed and are available from the ALCAS Secretary.

AusLCI provides a strong resource sharing partnership opportunity between Government and industry – it will benefit all Australians, now and into the future.



Why AusLCI is of interest to government

- **Developing policy, strategy and regulations related to sustainability, environmental impact, carbon and climate change** – AusLCI will provide accessible, trustworthy and scientifically based data and consistent methodologies allowing nationally comparable analysis.
- **Supporting agreed and accepted methods and protocols for consistent comparisons across industries** – With AusLCI, different industry sectors and industry groups will have more confidence in undertaking benchmarking and comparative assessments of environmental and carbon emission impacts.
- **Guiding ‘sustainable procurement’** – AusLCI data can be used by all levels and agencies of Government, and industry, in ‘sustainable procurement’s’ whole-of-life environmental minimisation decision making processes. LCA techniques provide equitable assessment of materials, products and services in government tendering and purchasing processes.
- **Revealing the exposure of industry and consumers to scope 3 carbon emissions** – Australian industry and consumers have no current basis for understanding their exposure to carbon price rises through the materials, products and services that they consume. AusLCI carbon data will reveal this exposure to these scope 3 carbon emissions.
- **Promoting public awareness, education and choice on environmental and carbon emission impacts** – Public awareness, information & choice: AusLCI methodologies and data will provide an ideal basis for future development of LCA based product declarations including labelling. Promote green education & jobs: the continuing need to collect, maintain and update LCI data across industry over time will encourage the development of ‘green curriculum’ and career programs to meet the demand for appropriately skilled and educated workforce to support a ‘green collar’ economy.
- **Safeguarding ‘Public Good’** – Consistent and comparable LCI data is critical in eliminating ‘green-wash’. AusLCI will provide the overarching framework, reducing the costs associated with developing data and methodology on a project by project basis.

