

Port Energy Agriculture Mining Plastics

# AusLCI

The Australian Life Cycle Inventory Database Initiative



## *Sustainable Products Sustainable Futures*

A national database providing convenient access to authoritative, comprehensive and transparent environmental information on products and services over their entire life cycle.

**A demonstration of government and business leadership in facilitating sustainable consumption and production.**

# Decision Support For Sustainable Production And Consumption

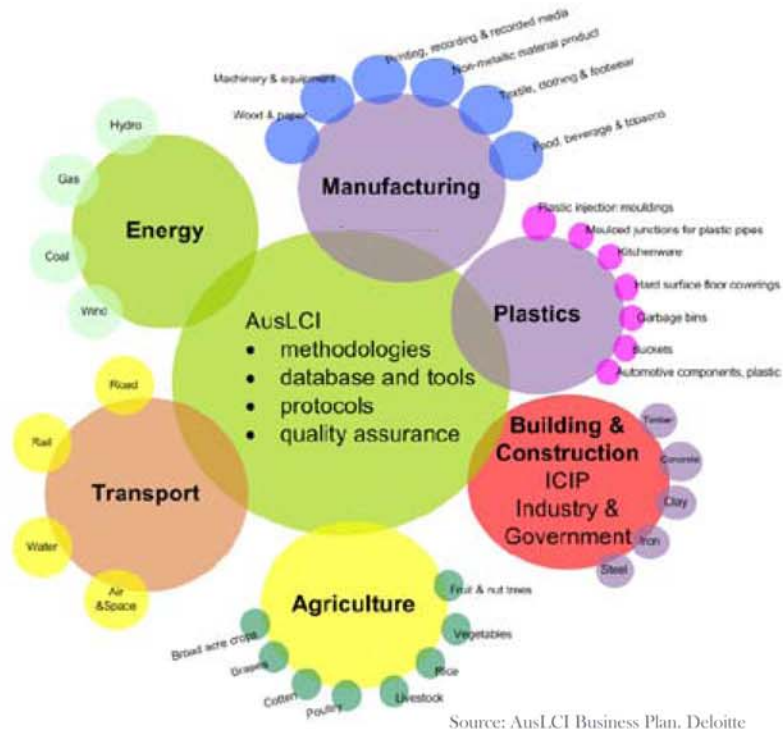
Community interest and scientific evidence on climate change and its impact continues to grow, compelling governments, businesses and consumers to act and ensuring society strives towards sustainable production and consumption.

In recent years, many governments and businesses have demonstrated leadership in sustainability. Governments have employed regulation, procurement policy and financial incentives to influence the community and industries to embrace sustainable practices.

While regulation has provided financial incentives to urge organisations and communities to embrace sustainability issues, industry leaders have sought to differentiate themselves from competitors and demonstrate corporate commitment to sustainability. These leaders acknowledge that a sustainability-focused strategy is essential for business efficiency and profitability.

Consumers are increasingly using their buying power to choose products and services based on their environmental performance. Public awareness of critical sustainability issues has become even more acute after the publication of Sir Nicholas Stern's Report on the Economics of Climate Change. The report presents a convincing argument that unchecked emissions and climate change would have dire consequences not only for the environment but also for the economy.

Government and industry leadership will be required to channel this heightened awareness into appropriate action. Together, they must ensure that decisions and actions are based on transparent and comprehensive data and on the true environmental performance of products and services in the market.



Source: AusLCI Business Plan. Deloitte

## Data to Support Decision-making

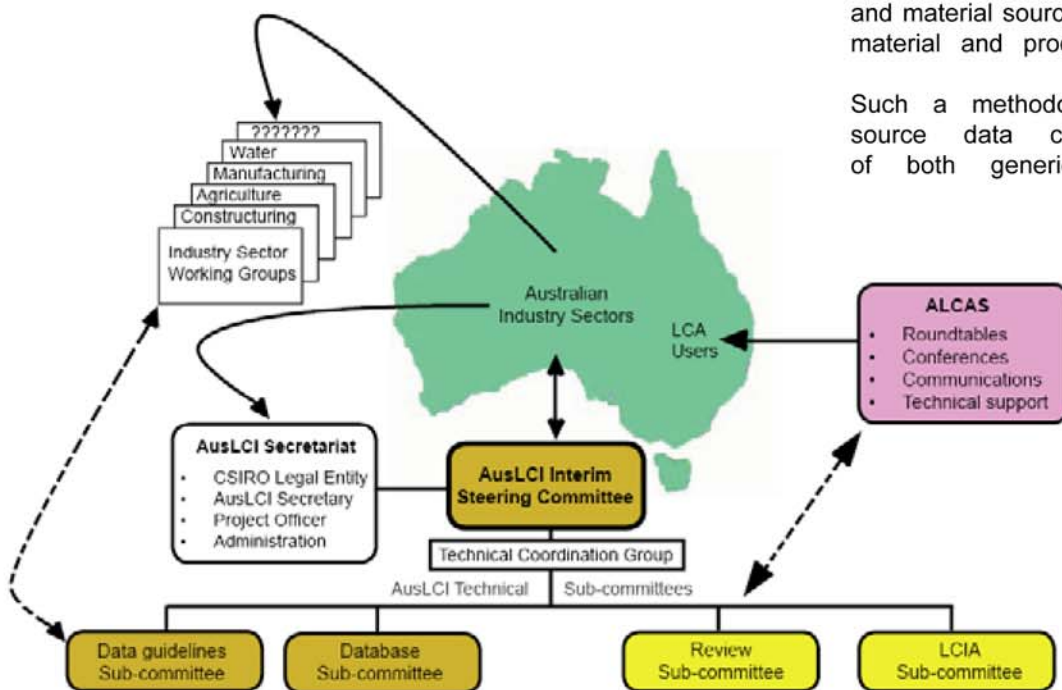
A national database providing information on a product's environmental impact based on the Life Cycle Assessment (LCA) methodology will be a vital tool to inform business, government and consumer decision-making. LCA is generally agreed to be the most comprehensive and robust way of assessing the environmental impact of most materials, products, systems and services over their life cycles.

In order for LCA to be used practically and consistently there needs to be a nationally agreed ISO 14044 compliant methodology which is accepted by major national industry, government and NGO stakeholders. It also requires a single trusted source of Australian specific life cycle "inventory" data for the basic energy and material sources that can be used by downstream material and product manufacturers and suppliers.

Such a methodology and database of common source data can underpin the development of both generic and product specific LCA.

This in turn can provide the foundation for growth in markets informing Environmental Product Declarations (EPDs), Ecolabels, carbon accounting and labelling, and underpin carbon-trading frameworks.

These will assist manufacturers to minimise the impacts of their processes and operations and inform government on policy development as a basis for regulation and incentive programmes.



## The AusLCI Initiative

AusLCI will be Australia's contribution to a global initiative to promote sustainable consumption and production. The initiative will develop a national, publicly accessible database providing convenient access to authoritative, comprehensive and transparent environmental information on a wide range of Australian products and services over their entire life cycle. It will also define and develop consistent guidelines, principles and methodologies for the collection of life cycle inventory data and protocols for LCA processes for different sectors.

### The AusLCI initiative will assist with:

- Providing metrics to enable environmental comparisons of products and services
- Establishing a level playing field for LCA based product comparisons
- Fostering innovation in design and manufacturing
- Promoting education and consensus building
- Integrating LCA with existing environmental tools and applications

### The benefits of AusLCI for industry are that it will allow sectors and companies to:

- Benchmark process and product performance against industry standards
- Quantify impacts to inform purchasing and/or environmental strategy decisions
- Proactively assess and quantify measures to mitigate/offset CO<sup>2</sup> emissions
- Provide a level playing field for building design tools, rating tools, product ecolabels and building rating tools and the decisions they influence
- Demonstrate product environmental credentials
- Provide enhanced data for consumers and respond to consumer concerns
- Obtain market advantage through more informed decision-making

### The benefits of AusLCI for Government include:

- Providing a sophisticated whole life evaluation of the CO<sup>2</sup> emissions associated with different products and services to inform carbon emission, sequestration and trading
- Guiding policy direction and promoting sustainable practices within the Australian economy
- Providing a strong platform for government for funding, education, policy and legislation
- Assisting in decision making i.e. analysis of investment/purchasing decisions
- Providing enhanced educational resources

## AusLCI: Progress to Date

Activities under the AusLCI initiative are well underway with the AusLCI Interim Steering Committee (ISC), the Technical Sub-committees and a number of Sector Working Groups (SWGs) meeting regularly.

### AusLCI Interim Steering Committee (ISC)

The main focus for the ISC has been in setting up the structure and frameworks for the project development and the engagement of stakeholders. The aim is to have as wide an involvement as possible from all Australian industry sectors. A Business Plan has been commissioned by Deloitte and a range of framework and funding options proposing how the AusLCI database might be governed, managed and maintained are being reviewed.

### AusLCI Technical Committees

The AusLCI technical committees convene regularly and their activities will continue to guide the development of AusLCI to deliver on the initial pilot through to full launch. The Data Guidelines Committee is responsible for developing the methodology and protocols for the collection of data for the AusLCI Initiative. The activities of the Allocation Sub-committee, which is scoping and reviewing the allocation methodologies available within LCAs to identify the methodology to be adopted by the AusLCI initiative, and the Quality Assurance Sub-committee, which is reviewing the data quality indicators that will be used for the AusLCI project, both guide the developments of the Data Guidelines Committee. A preliminary database for the AusLCI Initiative is up and running and the Database Development Committee is further developing the database and user interface. The Inventory Review Committee is responsible for reviewing the data guidelines for peer review of inventory data. The Life Cycle Impact Committee, based on reviewing Biodiversity, and other impacts, in the Australian context, will produce a Best Practice guidance document for Impact Assessment in LCA.

### Sector Working Groups

A number of Sector Working Groups (SWG) have been established in recent months. 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 project developments. Established SWGs include agriculture, building & construction, metals, plastics, and, water. AusLCI is currently recruiting for a wide range of other sectors, including, chemical industries, energy, mining & quarrying, transport and waste management.

## How to get involved

AusLCI is supported by a wide range of government, industry and academic organisations.

There are a number of ways to participate in the AusLCI database initiative:

- Participation in technical committees developing AusLCI guidelines and standards
- Participation in Sector Working Groups developing/upgrading inventories for industry sectors
- Participation in strategic, business and technical workshops/meetings
- Provision of financial contributions, and/or assistance in seeking funding for the initiative.

### **To register your interest or to explore options for participation, please contact:**

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