

# 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.*

# WHY AN LCI DATABASE?

## A decision-making aid for sustainable production and consumption

Scientific evidence on climate change and its deleterious impact continues to grow, compelling governments, businesses and consumers to act and ensure a healthy environment for future generations.

In recent years, many governments and businesses have demonstrated leadership in sustainability. Governments on all three levels have employed regulation, procurement policy and financial incentives to influence community and industry to embrace sustainable practices. Regulation has provided the initial push to overcome the inertia for change, while financial incentives have urged organisations and communities to embrace sustainability issues. Governments' purchasing power has led to 'green supply chains' in many jurisdictions.

For their part, 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, and 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.

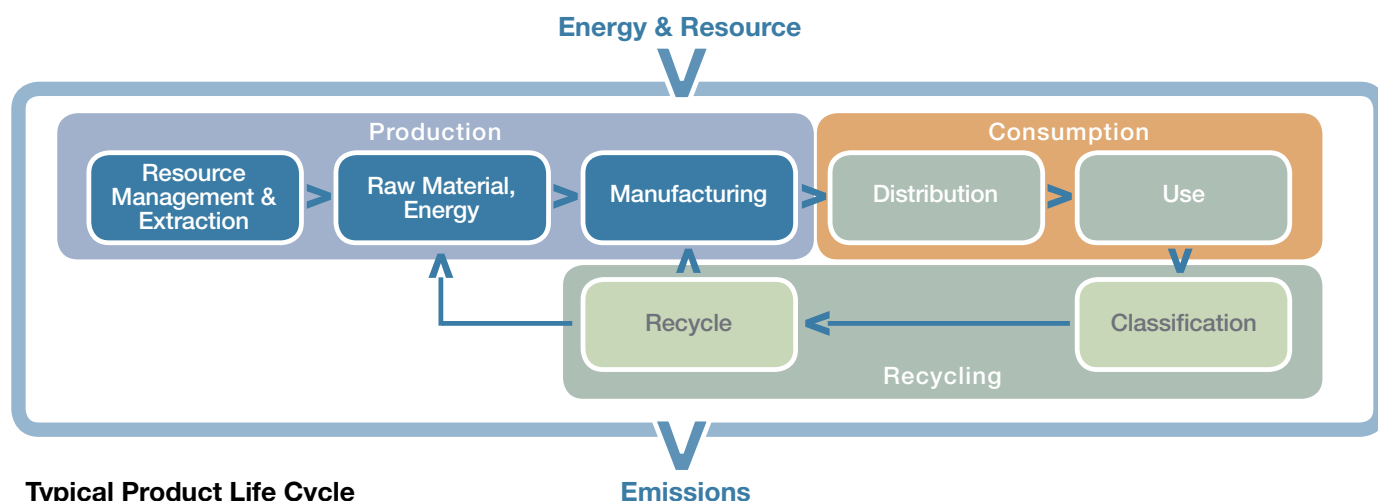
Government and industry leadership will be required to channel this heightened awareness into appropriate action. Together, they must ensure that decisions and actions are based on transparent and comprehensive data on the environmental performance of products and services in the market.

## Integrity of data

A national database providing information on a product's environmental impact – from its raw materials and production to the end of its productive use – based on widely accepted **life cycle assessment (LCA)** methodology will be a critical tool to inform business, government and consumer decision making.

To fulfil this role, the AusLCI database will be managed by an organisation which has the technical capability to ensure data integrity. Consistent guidelines, principles, methodologies and tools will be developed and applied to acquire and transform information into life-cycle inventory (LCI) data. This process will ensure:

- **Informed decision-making.** Comprehensive cradle-to-grave data will assist operation, design and purchasing decisions.
- **Data consistency and credibility.** Industry needs a consensus-based, ISO 14040-compliant methodology that can be credibly promoted to consumers, government, client businesses, investors and insurers.
- **Opportunities for value-added tools.** LCI data can provide the basis for developing innovative tools e.g. planning tools, product declarations, etc.
- **Prevention of misinformation.** Life-cycle information helps counteract misinformation gathered from single or poorly-defined criteria for assessment.





# WHY SUPPORT A NATIONAL LCI DATABASE?

AusLCI will be Australia's contribution to a global initiative to promote sustainable consumption and production, the two spheres of influence of industry and government.

The initiative began with the life-cycle partnership between the United Nations Environmental Programme (UNEP) and the Society of Environmental Toxicology and Chemistry (SETAC), who joined together to work towards the development of globally accessible national LCI databases. A number of countries have taken up the challenge and for Australia, the benefits of developing a national database are obvious.

## **Government: better informed environmental policy and regulations**

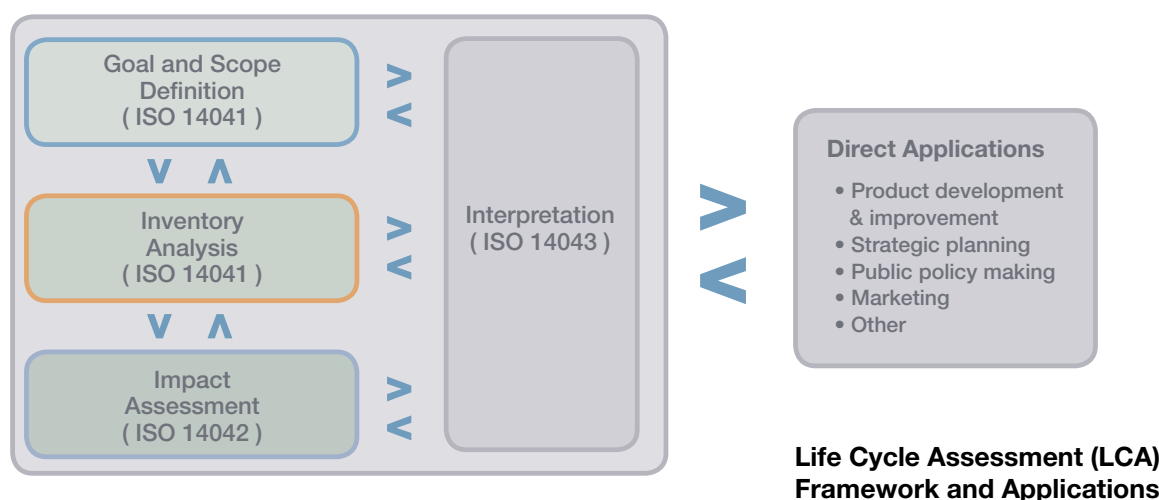
Policy and regulatory tools are used by governments to help their stakeholders make complex environmental choices that often result in competing or conflicting outcomes. These tools include Environmental Product Declarations, Environmental Labelling Programs, and legislation requiring minimum levels of environmental performance.

- AusLCI data will be comprehensive and will be collected through a consistent methodology to bring environmental data to the level of economic data which underpins most government policy and programs.
- AusLCI will improve Australia's economic competitiveness by providing credible evidence of the environmental credentials and performance of Australian products.
- AusLCI will require significant initial funding to rapidly develop to a point where it will become self-sustaining.
- AusLCI data will be pivotal to a raft of commercially viable programs that will support innovation and transformation in all industry sectors.

## **Business: aligning imperatives with environmental objectives**

Businesses are increasingly using their environmental credentials as a competitive edge. However, there is risk of market misinformation or misrepresentation, based on incomplete or inconsistent assessment of the environmental attributes of different products.

- Comprehensive data collected through a consistent LCA methodology will ensure that every major product in every industry is fairly represented in the database, thus providing level playing field among industry players.
- The AusLCI database will enable companies to benchmark their products against industry averages and identify specific competitive edges that they could communicate to their markets.
- Benchmarking will help companies identify new opportunities for process and product improvement, or assess potential risks, and find innovative ways to mitigate them.
- Accessible industry-wide information can lead to collaborations between companies to further their goals of sustainable production. For example, one industry's waste could be another industry's raw material.



## Participating Organisations



AusLCI is being spearheaded by CSIRO and ALCAS. Other foundation organisations behind the initiative are Sustainability Victoria, RMIT Centre for Design, EPA Victoria, and Plastics & Chemical Industries Association (PACIA).



Other supporting organisations include the Forest and Wood Products Research and Development Corporation (FWPRDC), BRANZ and CRC-CAST.

## How to get involved

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

- Participation in technical committees developing AusLCI guidelines and standards
- Conversion and upgrade of existing LCI data to meet AusLCI requirements
- Collection and contribution of new LCI data that meet AusLCI requirements
- Participation in strategic, business and technical workshops/meetings, among others.
- Provision of financial contributions - and/or assistance in seeking funding - for the initial establishment phase of the initiative

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

Dr Greg Foliente (Organisational matters)

Dr Rajah Tharumarajah (Technical matters)

CSIRO Sustainable Ecosystems  
PO Box 56, Highett, Vic 3190 Australia

T: (03) 9252 6000 F: (03) 9252 6249

E: Greg.Foliente@csiro.au or Rajah.Tharumarajah@csiro.au

**Visit [www.AusLCI.com](http://www.AusLCI.com) for the latest news and further information.**