

LIFE CYCLE MANAGEMENT: A WEALTH OF BUSINESS VALUE



‘Sustainable development must be economically sustainable. Through innovation and creativity, businesses can achieve greater shareholder value (or returns on investments) as they align with broader environmental and societal values.’

Paul Tebo

former global VP Safety, Health, Environment of DuPont

‘Life Cycle Management provides a tool to very effectively measure the impacts of our decisions – and from that provides us with the points of leverage to be innovative, to improve our products so that they are more sustainable.’

Francis Pamminger

Yarra Valley Water

‘To continue protecting and improving the Victorian environment, EPA will drive the uptake of life cycle management to ensure greatest environmental gain.’

Mick Bourke
EPA Chairman

The life cycle concept

Every activity a business performs has an impact – on a social, economic and environmental level. Often these impacts are not obvious or immediate. Many are hidden or indirect and only become evident when you take a step back and examine the complete life cycle of your products and services.

‘Life cycle’ is the term used to reflect and describe all the stages or activities that go into making, selling, using, transporting and disposing of a product or service – from initial design and throughout the supply chain. In this way of thinking, a product or service is evaluated or designed with a goal of reducing potential environmental impacts over its entire life cycle.

Life cycle management

Life cycle management (LCM) is simply life cycle thinking in practice. It has been developed as a business approach for managing products and services across the total life cycle. By learning how to more effectively manage this cycle, a company or organisation can uncover a wealth of business, environmental and social value.

Life cycle management can add value by:

- improving decision making
- providing a means of integrating environmental improvements with economic benefits
- identifying mutual opportunities between companies that interact with the product or service at different stages of the life cycle
- conceptualising and structuring work that may already be happening to improve efficiency and reduce risks
- systematically integrating product sustainability in company planning, product design and development, purchasing decisions and communication programs.

Drivers for life cycle management

Multinational companies and small businesses alike are adopting life cycle approaches in response to a range of drivers such as:

- government regulation and co-regulatory schemes
- supply chain risk and future requirements
- customer and consumer demand
- competitive advantage
- access to new and/or emerging markets
- reputation and image management
- opportunities to reduce costs
- employee interest and engagement
- emerging technical innovation.

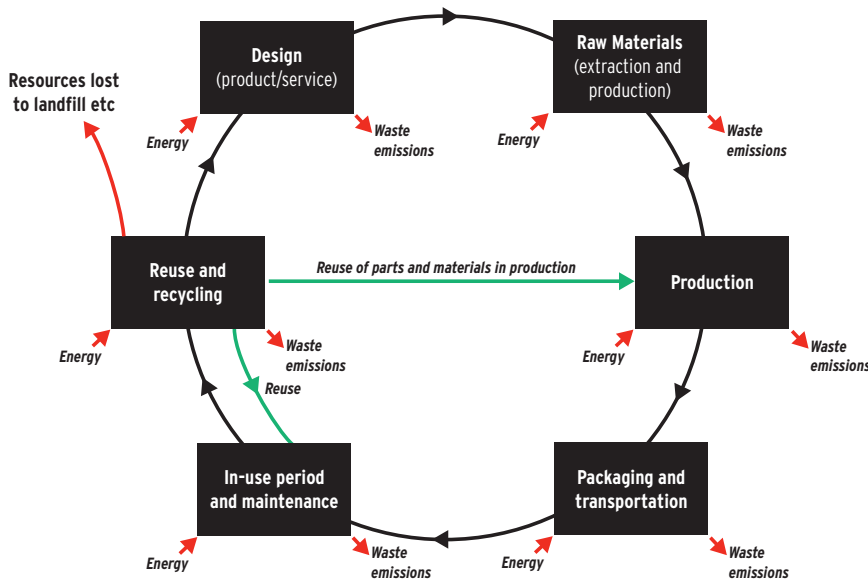
A framework for business

LCM is all about making more informed business decisions – chances are that life cycle considerations are already influencing the daily decisions you are making in your business. The LCM framework therefore helps business to analyse and understand the various life cycle stages of the business, product or service. You can then identify the potential economic, social or environmental risks and opportunities at each stage, and establish proactive systems to pursue the opportunities and manage or minimise the risks.

Life cycle management across your business

Strategic management: Strategic planning can be influenced by incorporating LCM into corporate policy. It can support planning and decision making, incorporate innovation and adaptation, enhance relationship building and workplace culture.

Product design and production: This is the stage when the environmental impact across the product life cycle can be best influenced. LCM



The life cycle of a business activity

Making it happen

LCM is a dynamic, flexible process – organisations may start with small goals and get more ambitious over time.

Things to bear in mind:

- Any organisation, large or small, can implement LCM. It can and must be tailored to suit the organisation.
- Many levels of an organisation should be involved, even though it may start in one part of the business (perhaps just one product in one portfolio).
- LCM involves influencing action beyond facility boundaries, including elements of (or all) products, services and stakeholders, and the entire supply chain.

can optimise product and service design, help identify which products to manufacture, and takes into account recycling considerations.

Procurement: Influencing the supply chain is an integral part of managing products and services across the life cycle. Examples of areas which could be influenced include: selection of suppliers; their location and their alignment with your values; sources of energy to use; transportation options; type and amount of packaging used; and management of waste.

Management accounting: Accounting for environmental impacts and costs assists internal decision makers to identify opportunities for change and areas of future exposure to risk.

Marketing and communications: Creating meaning around Life Cycle Management and demonstrating the value it delivers to customers, suppliers, and stakeholders.

Key business benefits

Greater cost efficiencies: Design or process changes can reduce material and energy consumption, emissions and wastes.

Improved strategic decision making: More complete financial assessment of investment options and asset management.

Better product or service design and value: Designing a product that consumes less energy, water or resources during its service life

Identification of new business opportunities and markets: In some markets, life cycle information is becoming a requirement to do business.

Improved market position and image: A framework to inform and educate consumers and stakeholders on sustainability initiatives

Improved risk management: Provides a framework for anticipating future scenarios and helping businesses adapt, ahead of time.

Enhanced workplace culture: A proactive approach to environmental management and sustainability is a drawcard for a growing proportion of employees.

Business support

Life cycle management is supported by a range of tools that provide you with vital quantitative and qualitative information, data and learnings that you can feed back into your organisation to improve your performance and to create a culture of life cycle thinking.

These include:

Qualitative life cycle tools

- Life cycle mapping for products, services and your business.
- Identifying your inputs and outputs.
- Design checklist.
- Engaging your suppliers.
- Setting priorities.

Quantitative tools

- Life cycle assessment.
- Ecological Footprint.

Where to get further information

EPA Victoria can help you identify the right approach to develop life cycle capability in your organisation.

For further information (including the above tools) see www.epa.vic.gov.au/lifecycle or contact the Life Cycle Unit on (03) 9695 2722 or via email on: lifecycle.management@epa.vic.gov.au.