

# Best Practice Working Group

LCANZ Summit 2023

[www.lcanz.org.nz](http://www.lcanz.org.nz)

**LCANZ** Life Cycle Association New Zealand

# About BPWG

A screenshot of the LCANZ website's 'Best Practices' page. The page features a navigation bar with 'Log in' and a search box, and a main content area with a grid of article cards. Each card includes a title, a date, and a brief summary of the article's content.

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## Best Practices

- Submission to Climate Change Commission's Draft Advice consultation**  
Tuesday 30, March 2021  
Following a consultation process with our members, LCANZ submitted a position statement to the Climate Change Commission's Draft Advice consultation. [...]
- Submission to MfE Consultation: Reducing the impact of plastic on our environment**  
Sunday 6, December 2020  
Following a consultation process with our members, LCANZ completed a submission to the MfE Consultation: Reducing the impact of plastic [...]
- Submission to MBIE Consultation: Building for Climate Change**  
Monday 12, October 2020  
Following a consultation process with our members, LCANZ submitted a position statement to the MBIE Consultation: Building for Climate Change. [...]
- Future work: Making Comparisons**  
Thursday 24, September 2020  
Development of LCANZ position and best practice guidance has been proposed by members, timely with the release of Commerce Commission [...]
- In development: EPD101 white paper**  
Thursday 24, September 2020  
LCANZ's next white paper will be an introduction to EPDs. If you have specialist knowledge and expertise in this area, [...]
- Future work: NZ-specific life cycle inventory datasets**  
Thursday 24, September 2020  
The LCANZ BPWG has identified a gap in this area and is happy to provide a letter of support if [...]
- LCIA Recommended Indicators**  
Wednesday 1, March 2017  
Life Cycle Impact Assessment (LCIA) Life Cycle Impact Assessment (LCIA) translates resource use and emissions into potential environmental impacts. In [...]
- LCT, LCA and transitioning to a Circular Economy white paper**  
Saturday 1, August 2020  
Life Cycle Thinking (LCT) and Circular Economy (CE) are complementary concepts that can help shape a more sustainable world. CE [...]
- In development: Member Case Studies relevant to 'LCT, LCA and transitioning to a Circular Economy' white paper**  
Saturday 1, August 2020  
LCANZ welcomes member case studies relevant to 'LCT, LCA and transitioning to a Circular Economy' white paper. These will be [...]

## Current working group members

- Kimberly Robertson, (co-chair)
- Kelly McClean (co-chair)
- Jeff Vickers
- Adam Schofield
- Shreyasi Majumdar
- Joanne Duncan
- Rahul Chopra

# Purpose



***To provide best practice guidance for users of life cycle thinking in Aotearoa New Zealand***

- BPWG undergoing a reset - wider representation sought from corporate, academics, government, designers and LCA practitioner users
- Commitment - quarterly meetings to support agreed best practice guidance activities and consultation submission contribution
- Currently developing work plan – input from members welcome

# Circular Economy

**LCANZ**  
Life Cycle Association of New Zealand

July 2020

## LCT, LCA and transitioning to a Circular Economy

This mapping process instinctively uses a LCT approach. However, it is important to note that the CE scope is typically broader than a single product line. In practice, this means aligning materials to either 'biological' or 'technical' cycles (see diagram, pg 2), such as developing and scaling reusable models or utilising a waste stream as an input into the manufacturing process. Design for effective re-use, recycling or composting at the end-of-life should be core to product or service development, including consideration taken to maintain material quality and avoid 'downcycling'. Mandatory product stewardship schemes proposed in New Zealand will benefit from both CE and LCA input at the design phase to help deliver successful outcomes.

CE is also influencing policy and strategic direction at the executive leadership and board level in New Zealand – impacting infrastructure investment, new business models, product redesign and sustainability reporting. New Zealand's first CE Summit, organised by Sustainable Business Network and WasteMINZ, was held in 2018 and was followed by the Ellen McArthur Foundation and Ministry for the Environment's Ōhanga Āmiorio Pacific Summit in 2019. In 2020, the economic response to the Covid-19 pandemic has the potential to accelerate major infrastructure investment. The concepts of CE and LCT will be essential in helping to provide a framework to reshape the economy into a low-carbon and low-waste sustainable economy. Quantifying impact change over time is critical.

The New Zealand life cycle community has a key role to play in this transformation, to ensure that the best decisions are made system-wide. It is crucial that environmental impacts and burdens are not simply shifted but rather any potential trade-offs are identified. We need to help promote the importance of using LCA and LCT in decision-making, system design, and transition work towards a Circular Economy to realise reduced impacts across the economy and society.

Life Cycle Thinking (LCT) and Circular Economy (CE) are complementary concepts that can help shape a more sustainable world. CE provides a strategic framework for closed-loop material flows and a gateway to LCT, whilst Life Cycle Assessment (LCA) complements CE by assessing environmental impacts, thus providing evidence critical for effective decision-making.

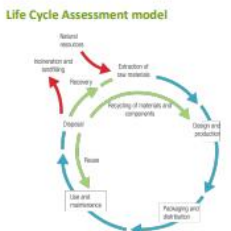
Interest from government and industry to transition Aotearoa New Zealand from a linear 'take-make-dispose economy' to a CE and improve our overall performance as a sustainable society has increased significantly in recent years.

The broad accessibility of CE is particularly positive as it is an easy concept for everyone to understand, however it is not well understood that life cycle thinking is key to understanding material flows (see definitions, pg 2).

Transitioning to a CE presents a significant shift in sustainable practice where collaborative systems design is needed to identify opportunities to 'close the loop' and change tack. This typically involves mapping material flows, supply chains and end-of-life pathways, which can drive change across multiple, connected organisations.

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### Life Cycle Assessment model



**System visualisation:**  
LCA and CE both use a circular representation of the life cycle of a product but with a slightly different view. LCA clearly outlines the life cycle steps, while CE emphasises the processes and systems that keep materials in circulation.

### Circular Economy model

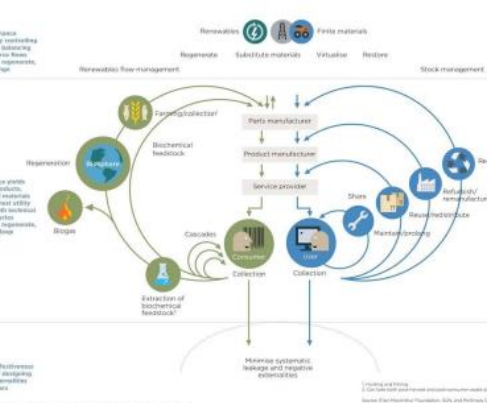
OUTLINE OF A CIRCULAR ECONOMY

**PRINCIPLE 1**  
Renewable and circular material inputs by restoring finite stocks and balancing renewable resource flows. REDUCE, REUSE, REPAIR, RECYCLE, RECOVER.

**PRINCIPLE 2**  
Circular resource flows by increasing products, components and materials as well as the system utility at all levels to close material and biological cycles. REPAIR, REUSE, REPAIR, REPAIR, REPAIR, REPAIR.

**PRINCIPLE 3**  
Reduce system inefficiencies by recycling and designing out negative externalities. ALL RESOURCES COUNT.

OUTLINE OF A CIRCULAR ECONOMY – biological and technological flows



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## CE white paper

- Released by BPWVG July 2020
- Overview of life cycle thinking, life cycle assessment and circular economy differences and synergies
- Life cycle community identified as having a key role in CE decision making support

# Circular Economy



## Challenges

- NZ Specific data gaps - update LCI data
- LCA Cost and time - data collection
- Narrow focus of LCA goal and scope - product vs system
- Missing impacts - include environmental leakage of microplastics and marine pollution, regenerative impacts

# Circular Economy



## Opportunities

- New audience for Life Cycle approaches
- LCA applicable to CE - understanding hotspots, inclusion of MCI, systems level assessment
- Greater involvement and support - apply global best practice in NZ

# Thank you!



## Wider representation needed

Please reach out to Kimberly or Kelly if interested in contributing to BPWG as a corporate, academic, government or design user rep