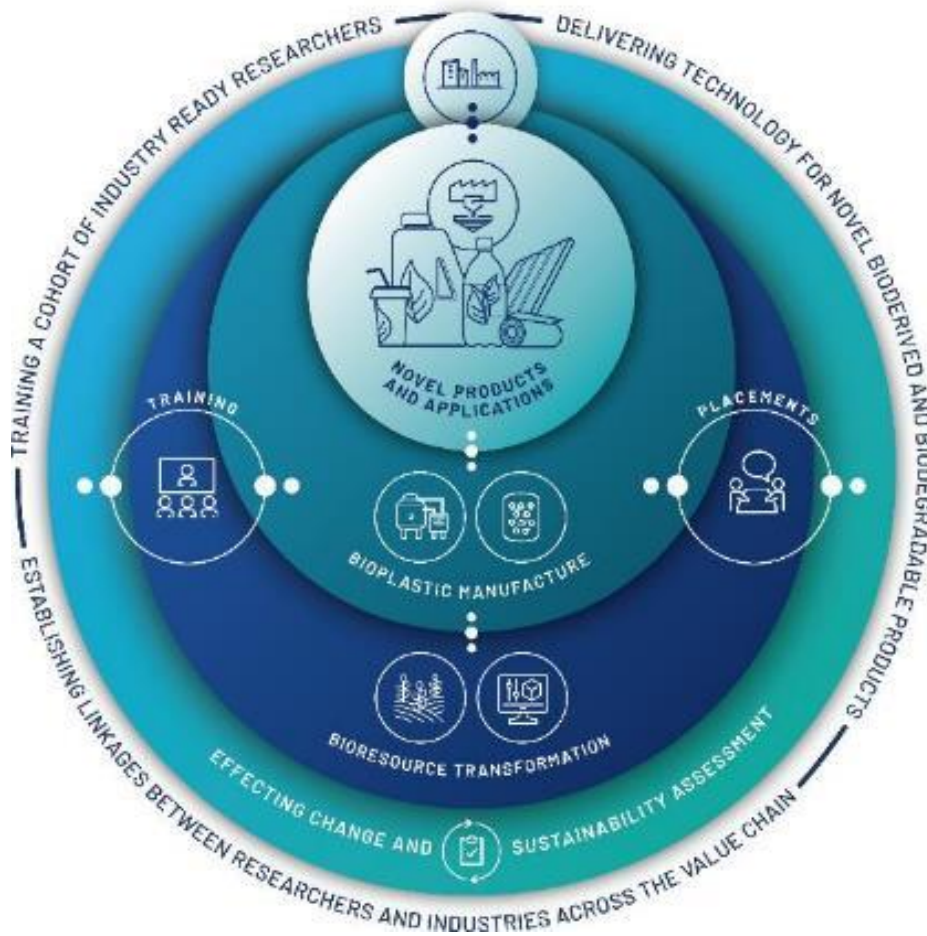
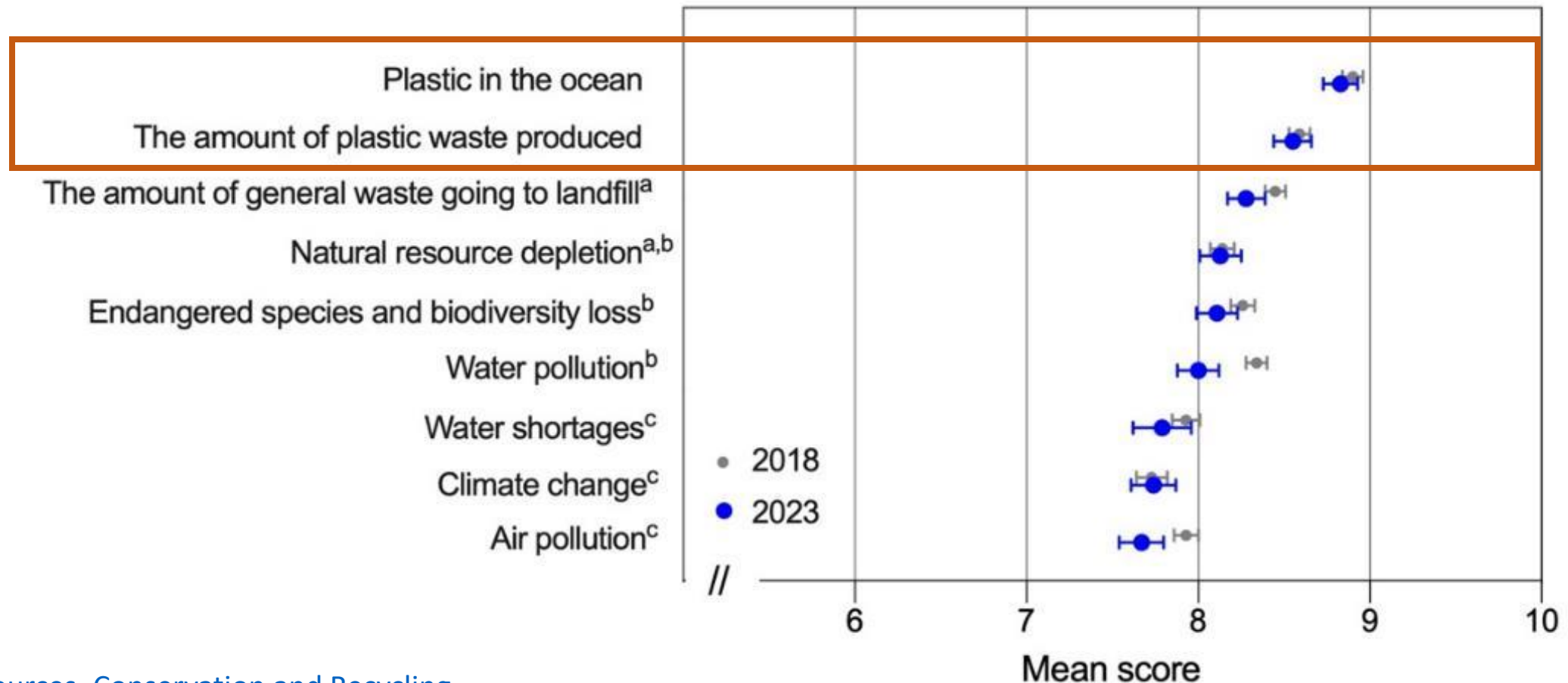


ARC Training Centre for Bioplastics and Biocomposites

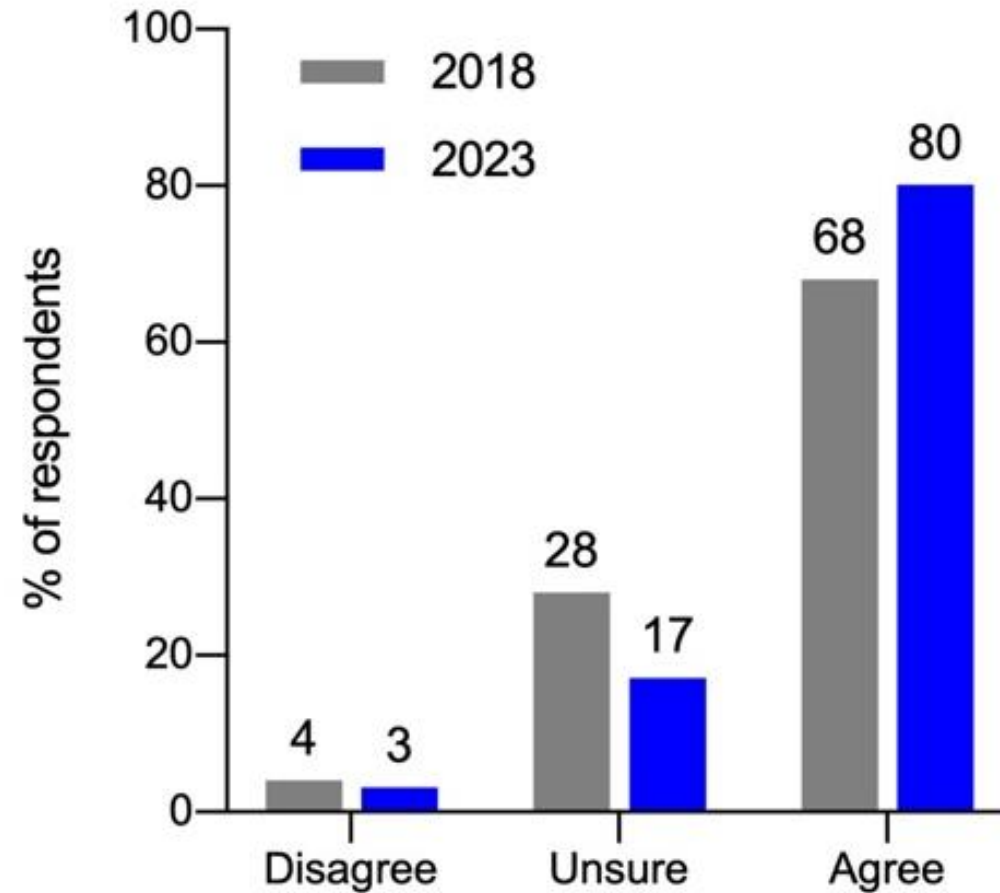


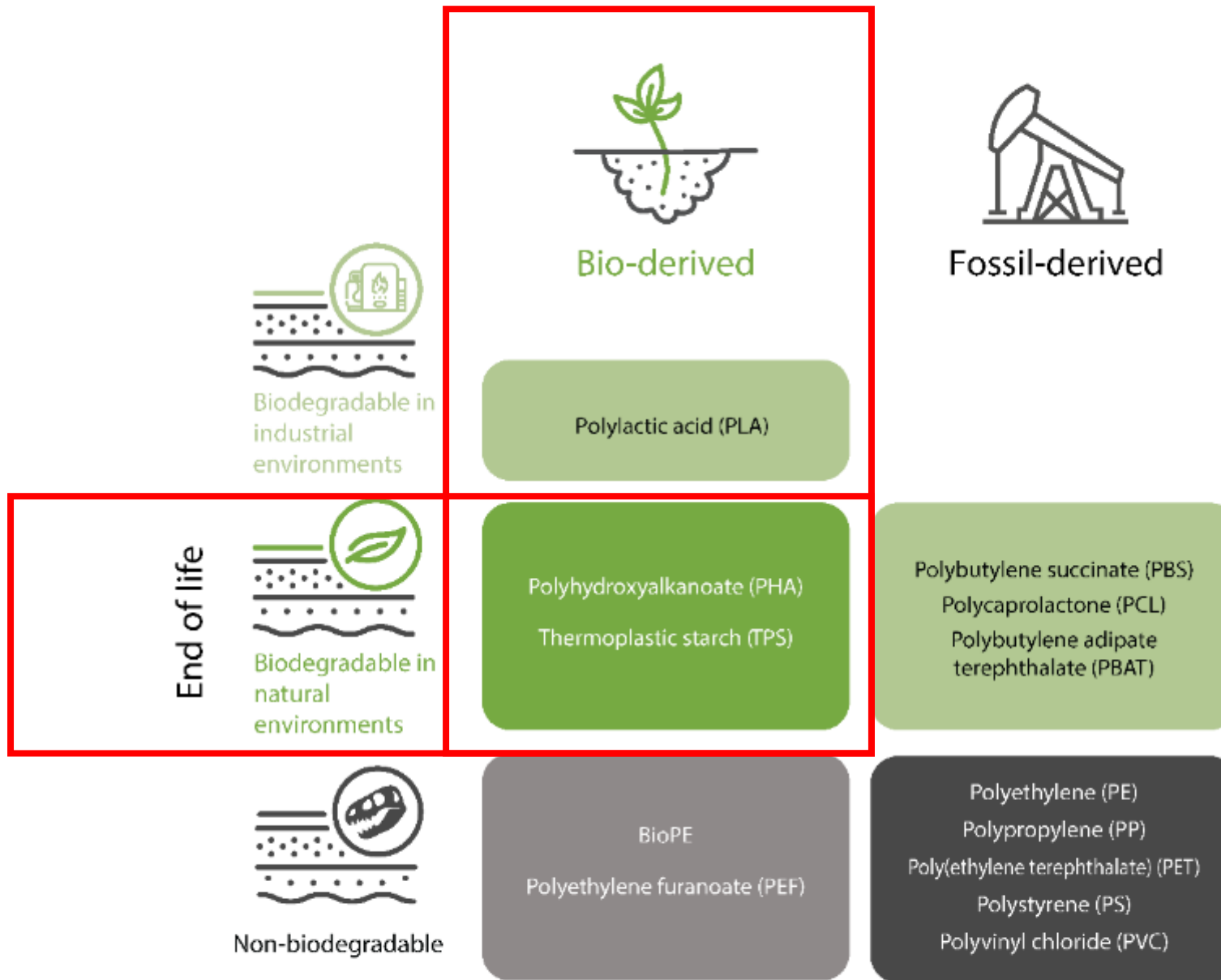
- **Deliver advances in technology** for the development of bioplastic and biocomposite products for the new bioeconomy
- **Train a cohort of industry ready researchers**, laying the foundations for accelerated growth in Australia's bioplastics and biocomposites industry
- **Establish linkages between leading research groups and partner organisations** to strengthen the capabilities of Australian industry to service rapidly growing local and international markets in bio-derived and biodegradable products

Public attitudes towards plastics and biodegradable plastics in Australia are surprisingly constant in a changing world



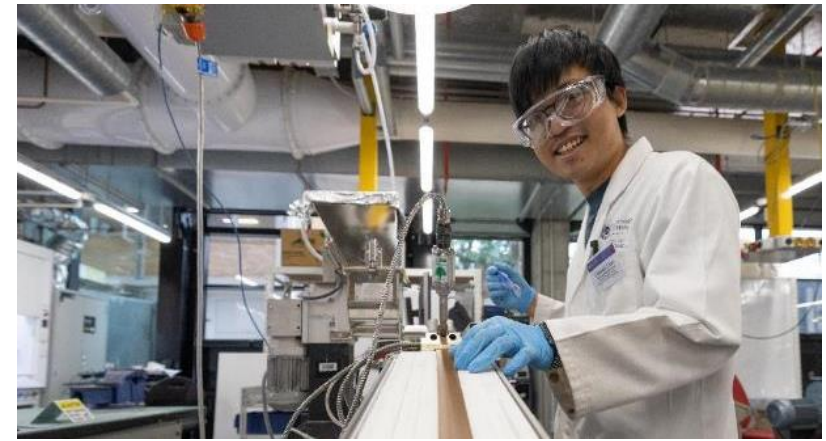
I would like more of the plastic items I use to be biodegradable



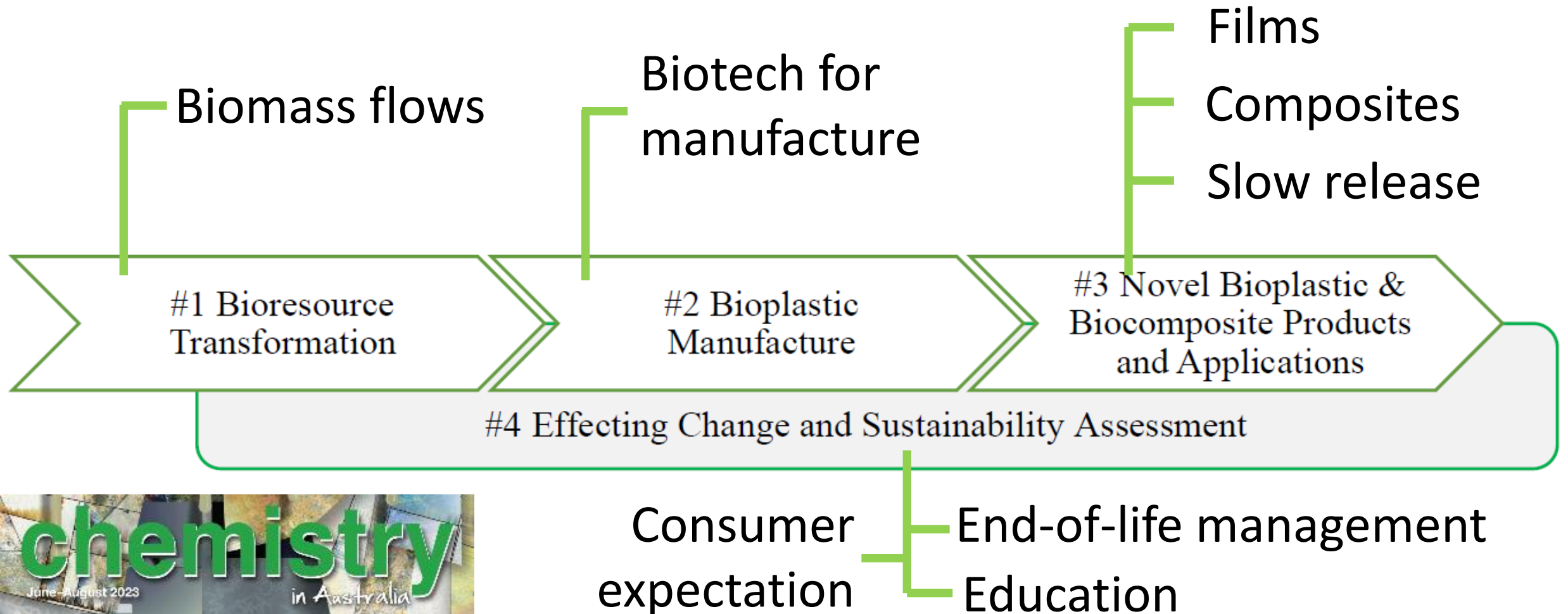




Launched: July 2023



Bioplastics and Biocomposites – advancing our transition to a sustainable plastics future



Train a cohort of industry ready researchers, laying the foundations for accelerated growth in Australia's bioplastics and biocomposites industry

Training a cohort of experts in:

- ***biotechnology for bioplastic production,***
- ***polymer engineering for material development,***
- ***behavioural science for product uptake,***
- ***environmental science for end-of-life considerations***

*– many with hands on experience in polymer processing - and **all** very much **aware of the technical, social and economic dimensions** to transitioning to a sustainable plastics future.*



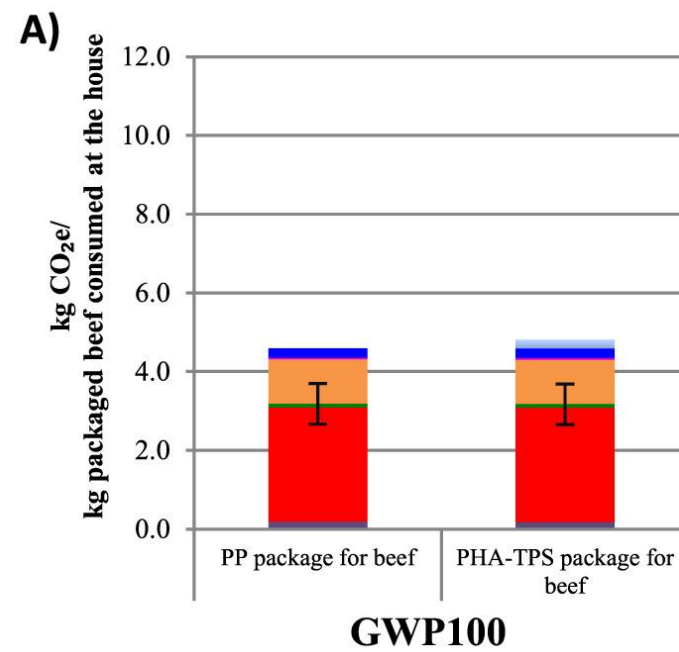
**4 Year PhD with 12 months
placement with industry**

**Induction covering:
Values and well-being
Intellectual Property
Data Management
Risk and Safety**

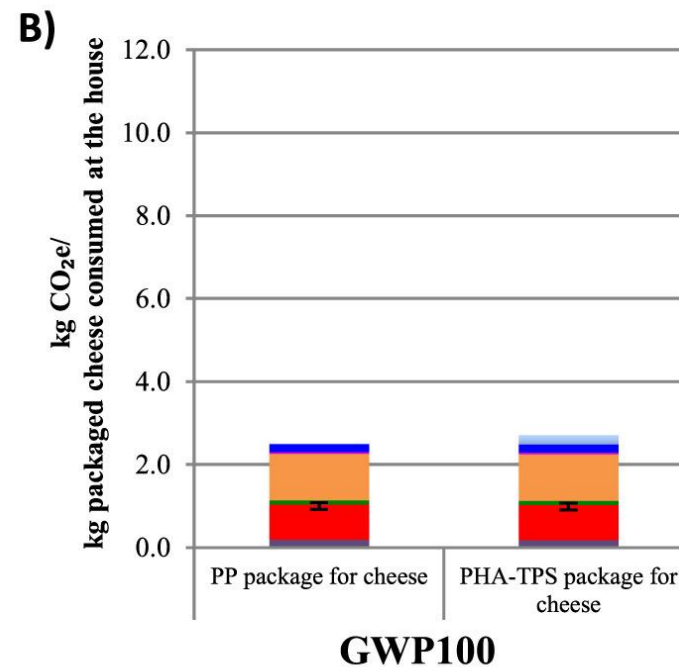
**Development program covering:
Knowledge and Intellectual Abilities
Personal Effectiveness
Research Governance and Organisation
Engagement, Influence and Impact**



A quick message on bioplastics, life cycle assessment and food packaging...



- Landfill of the packaging
- Landfill of the food*
- Use phase (truck transport and storage at the store and the house)
- Use phase (car transport from the store to the house)
- Packaging factory operations
- Production of the food*
- Production of the packaging



[Journal of Cleaner Production](#)
[Volume 180](#), 10 April 2018,
Pages 325-334

A quick message on bioplastics, life cycle assessment and food packaging...

- Food waste dominates a food packaging LCA regardless of the packaging material.
- Food packaging matters to reduce food waste (e.g. focus on high barrier properties).
- **A biodegradable packaging could provide GHG benefits through increasing the amount of food waste available for biological processing (e.g. anaerobic digestion with subsequent biogas processing).**

Biodegradability of plastics: Discussion paper

A joint collaboration between
Corrs Chambers Westgarth
and the University of
Queensland



Biodegradable plastics present a potential solution to some of the issues relating to plastic wastes.



Challenges: scope and role in an increasingly circular economy are not straight forward.



There is unlikely to be a simple or singular solution. A multi-faceted approach is required.

Upcoming Event Notice



Biodegradable Plastics: The Problems and the Solutions

The plastics problem

Background to biodegradable plastics
Current policy and legislative landscape
Potential solutions

Where: Brisbane

When: November 2024

Contact: centreforbioplastics@uq.edu.au



THE UNIVERSITY
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AUSTRALIA



Thank you