



**Why reducing & recycling
plastic won't be enough on
its own**



CIRCULAR AUSTRALIA

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We acknowledge the Traditional Custodians of the land on which we stand today.

We recognise their continuing connection to land, water and community and pay respects to Elders past, present and emerging.

We support an indigenous voice to Parliament.



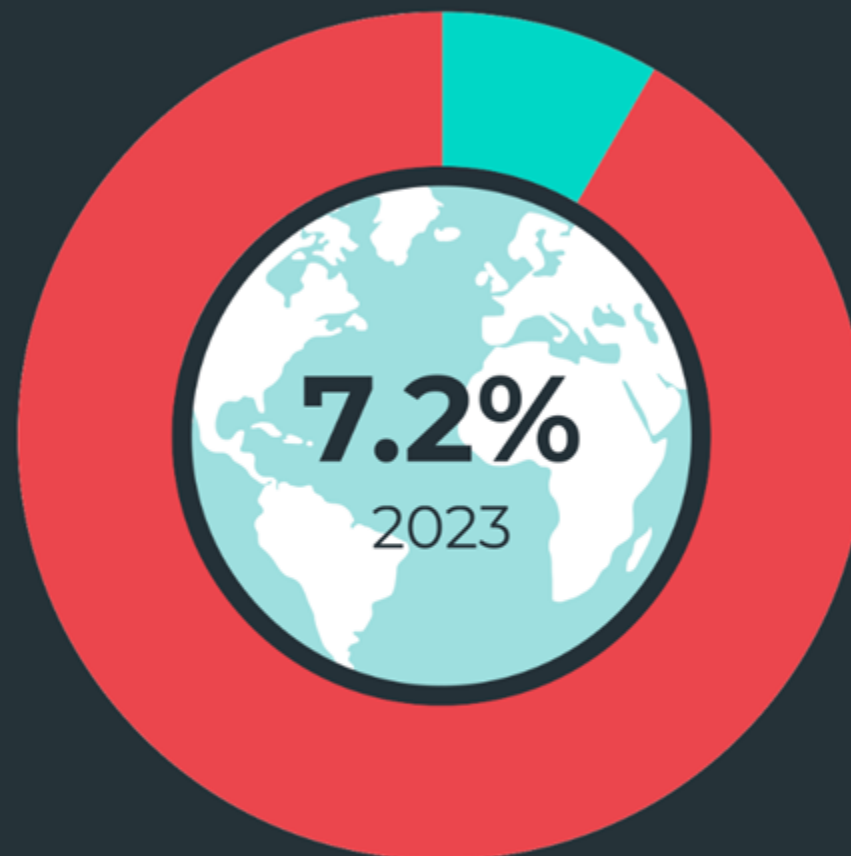
THE GLOBAL ECONOMY IS NOW ONLY 7.2% CIRCULAR

The global situation is getting worse year on year—driven by rising material extraction and use.

Rising material extraction has shrunk global circularity: from 9.1% in 2018, to 8.6% 2020, and now 7.2% in 2023. This leaves a huge Circularity Gap: the globe almost exclusively relies on new (virgin) materials.

This means that more than 90% of materials are either wasted, lost or remain unavailable for reuse for years as they are locked into long-lasting stock such as buildings and machinery.

[How do we measure circularity? ↗](#)



Materials that are cycled back into the global economy after the end of their useful life, otherwise known as secondary materials, account for 7.2% of all material inputs into the economy—this is the Circularity Metric.

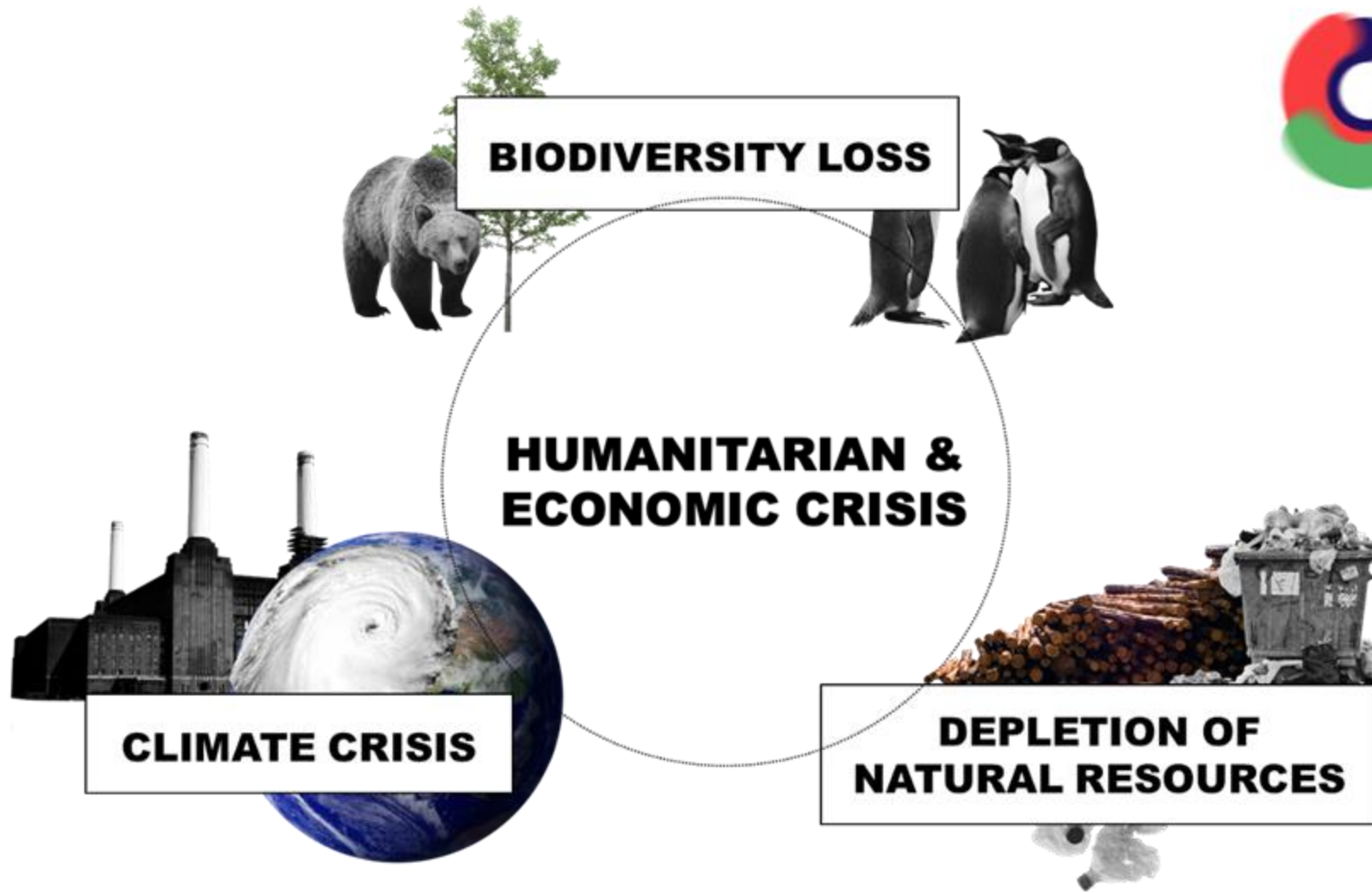
Material Flow Account Australia

A comprehensive material flow account for the Australian economy

Heinz Schandl, James West, Yingying Lu, Tim Baynes and Heming Wang

June 2019

Report for the Commonwealth Department of Environment and Energy



What is the Circular Economy?



The circular economy decouples economic growth from the consumption of finite resources, designing waste out of the system. It is based on three principles:

1. Design out waste and pollution at every stage of production, use and end-of-life..
2. Keep products and materials in use at their highest possible value.
3. Regenerate natural systems for example through water, food, organics recycling, the removal of toxic waste, tree planting.

We support an Australian circular economy that matches environmental goals with social ambitions.

Circular Economy Hierarchy

High

Low

Refuse	Prevent raw materials use (Remove toxic materials/chemicals)
Reduce	Decrease raw materials use
Redesign	Reshape product with circular principles
Reuse	Use product again
Repair	Maintain & repair product
Refurbish	Revive product
Remanufacture	Make new from second hand product
Re-purpose	Reuse product but with other functions
Recycle	Salvage material streams with highest possible value
Recover	Incinerate waste with energy recovery





We cannot recycle our way out of everything

We need to look at this problem in a different way. Instead of trying to work out how to deal with a pile of waste, we need to stop that waste being created in the first place.

Ellen MacArthur Foundation

Breaking the Plastic Model



Plastic is a useful and versatile material but it is wasted & polluting

EVERY YEAR

- USD 80–120 billion worth of plastic is thrown away
- 90 billion tonnes of primary materials are extracted/used globally to make plastic
- 9 cent is recycled
- Substantial economic, social, environmental and health impacts



Breaking the Plastic Model



Refuse: Bans, Extended Producer Responsibility obligations, Single-Use Plastics Directives (SUPD)

Reduce: New circular business models, 'As a Service' Business solutions

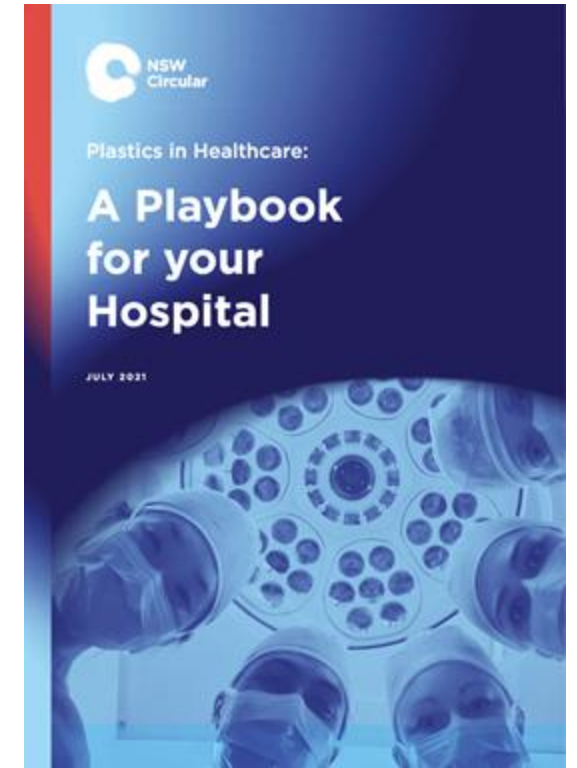
Remanufacture: Convert into into higher value materials

Recycle: Recirculate in the economy at its highest value

Recovery: Last resort and discouraged at scale, phased out.

Breaking the Plastic Model

Circular Plastics in Healthcare



Breaking the Plastic Model: Casestudy Healthcare



- Generate savings by reducing unnecessary use of resources and waste
- Lower environmental impacts by reducing and recirculating healthcare plastic waste
- Create new markets in sustainable healthcare supplies, supporting innovation in the design, manufacture and use of these items.
- Raise economic productivity by extending the productive life of used materials through more accessible recycling options.



Circular Plastics in Healthcare



- Hospitals in NSW are estimated to generate 52,400 tonnes of waste a year - weighing as much as the Sydney Harbour Bridge - which cost the NSW Government at least \$16M to dispose of
- In just three months, more than 80,000 pieces of clinical waste plastic were collected – almost equal to the total amount of plastic food packaging collected in litter clean-ups across Australia in 2018-19.
- By recycling just 40-60 percent of the clinical waste currently incinerated or landfilled, NSW hospitals could create annual savings equivalent to the cost of

Australia's healthcare system has a carbon footprint equivalent to 7% of the nation's total, with supply chains accounting for the majority of the sector's total emissions.

Circular Australia: Peak Body



Why we need a dedicated peak body on circular economy

- 1. Represent the many diverse voices**
- 2. Transition brokering across sectors & systems**
- 3. Collaborating to scale**
- 4. Evidence-based data on economics, definitions & metrics**
- 5. Supporting innovation & sandpits**
- 6. Best practice preventing Greenwashing and Circular Washing**

UNEP Plastic Break Ads



<https://www.youtube.com/watch?v=-DEc16dEMns>

Circular Australia Taskforces



**NATIONAL
CIRCULAR ECONOMY
COUNCIL**

State & Federal
Governments



**Finance & Investment
Taskforce**



**Industry
Taskforce**



**Precincts and
Infrastructure
Taskforce**

Industry
Government
Research



Australian Circular Economy Forum

Sydney
Monday,
26 June 2023

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IMPACT 

Please reach out!



Thank you

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