



Circular Design

Turning ambition into action



CIRCULAR AUSTRALIA

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Circular Australia



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? ↗](#)

Images attributed to Circular Gap Report



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.

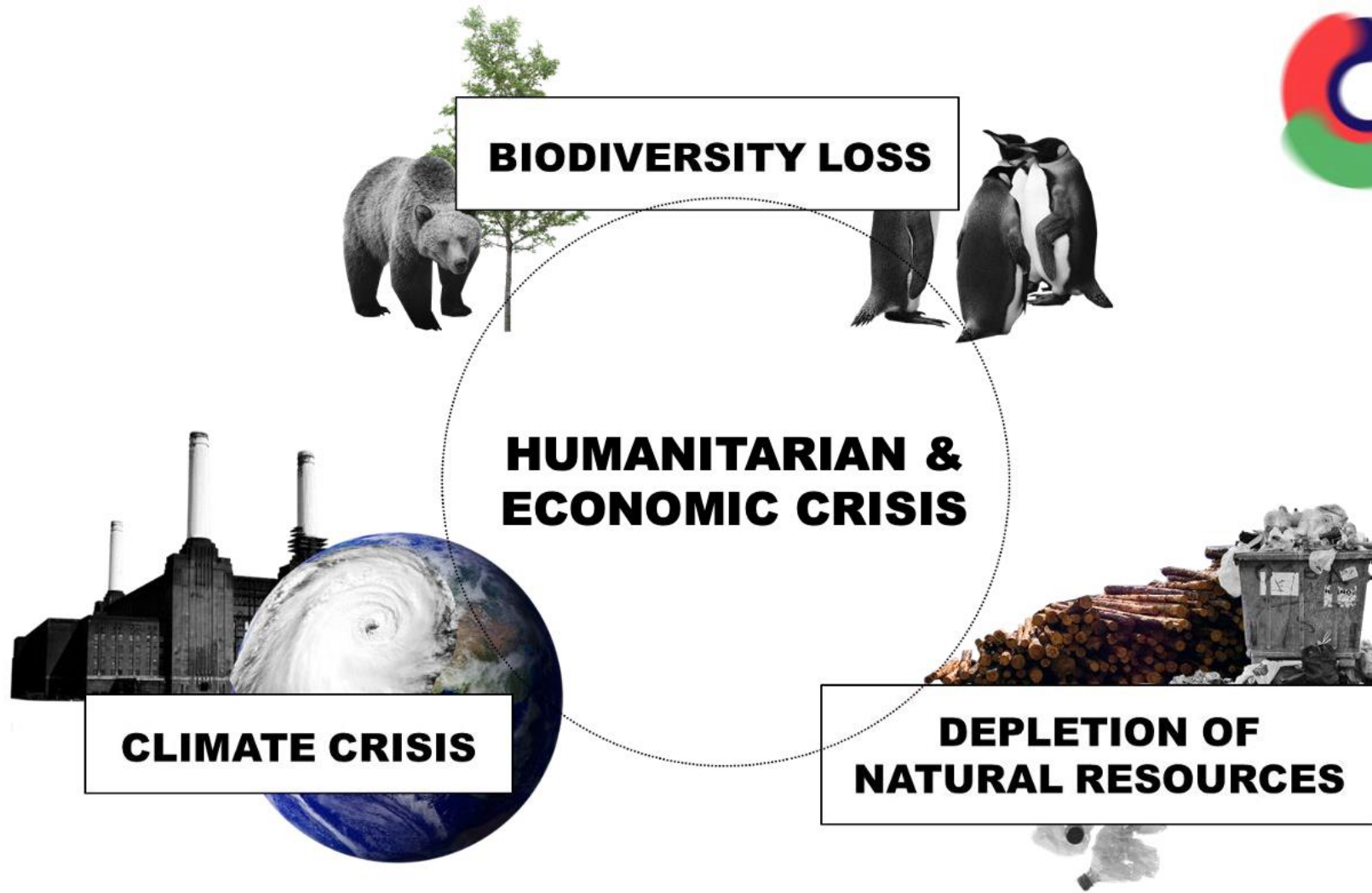
Australia's Circularity rate



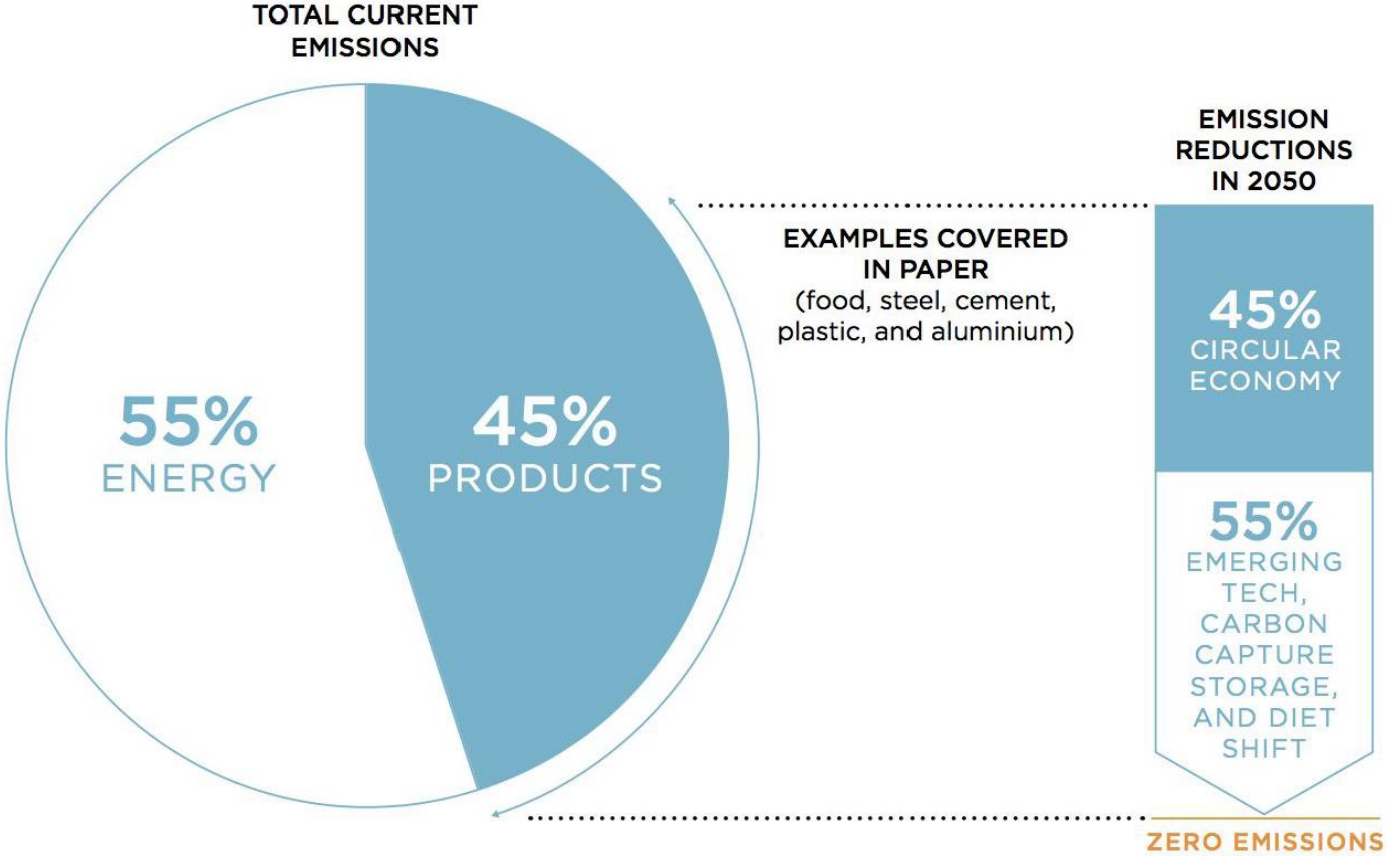
Australia's circularity rate is between 3.5% and 8.6%

A CSIRO Report to the Commonwealth Department of
Environment and Energy in 2019





Tackling 45% of overlooked emissions



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



**Circular
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Australia has a target to develop a Circular Economy by 2030 and is developing a roadmap



A \$2 trillion economic opportunity



\$1.9 trillion

Australian
estimated
economic boost
over the next 20
years from circular
solutions



100,000s

number of new full
time jobs the
circular economy
can generate in
Australia

**\$15B National
Reconstruction
Fund**

Made in Australia
Re-Made in Australia
Buy Australian



**Circular
Australia**

Key sectors catalysing the \$2T Australian Circular Economy

What are some of the key sectors that will catalyse the CE in Aust?

Infrastructure

Infrastructure development presents a significant opportunity to deploy recovered materials. This delivers multiple benefits: from reduced waste transport costs and landfill fees, environmental benefits of reusing low-impact materials, to harvesting the commercial value and demand for sustainability certifications such as Green Star ratings

Regional precincts

Special Activation Precincts such as Parkes (which will be Australia's first UNIDO Eco-Industrial Precinct embedding the principles of circular economy and sustainability) are ideal for embedding circular economy in precinct planning.

Households

Households can not only reduce their carbon footprints and household expenditure by reducing their waste. They also play an important role in driving consumer demand for circular markets through consumer demand, community expectations and behaviour change.

Manufacturing

The circular economy can be the key to not only at building up Australia's manufacturing self-sufficiency, but our materials sufficiency. Thriving local recycling industries in critical materials can potentially offer more secure and sustainable access to input materials. This can mitigate the economic and environmental costs of mining virgin materials, and also increase the productive lifecycles of materials already in circulation.

Driving circular action



● Develop more case-studies and data

- De-risk going circular by getting more case-studies and data in the precincts and infrastructure space – this includes cost benefit analysis data
- Development of a portal or tool to communicate this data – potentially leveraging the national Waste and Resource Recovery Data Hub
- Case studies are a powerful way to convey what is possible and the lessons that can be learned from individual positive and negative experiences
- Potential examples identified by the Precincts and Infrastructure Taskforce include GoGet car-sharing, Northern Territory infrastructure investment; TechCentral Sydney

Driving circular action



● Place-based innovation

- Focussing on a place-based approach to Circular Economy innovation, with concentrated projects using micro-manufacturing and place-based innovation
- This responds to the opportunity/challenge of scaling resource streams so that innovative projects can become viable
- Governments can play a critical role in identifying these locations and fostering legislative reform to enable streamlined innovation and collaboration (scale also helps government justify, in particular locations, piloting new approaches to overcome regulatory burden)
- Draw upon the experience of developing Circular Economy precincts in Australia (including Wagga Special activation Precinct and Sydney Water's Wianamatta South Creek project) - embodied carbon, bioeconomy and local logistics could also be potential focus areas

Driving circular action



● Empowering the coordinators

- Focussing on the 'human role' of individuals who are empowered to coordinate businesses, community and government in particular locations
- Government has a role fostering these 'cat-herders' at both an individual level and a collective level (ie. across the country, creating a community of practice, connecting people geographically and thematically)
- Lessons can be learned from the role of Economic Development Officers within individual local government areas in curating industry clusters and making introductions between businesses, customers and communities
- Similarities with the former NSW Renewable Energy Precincts Program and its place-based approach brokering relationships between government and other stakeholders



Mission

Our mission is to fast track the circular economy in Australia to 2030.



Vision

An Australian circular economy driving job creation and economic prosperity, reducing emissions and improving the environment.

Circular Australia Strategic Priorities



Circular Metrics & Economics

The case for circular economy

We will provide transparent and open circular economy evidence to the market, with metrics.



Circular supply chains

How we create it

We will help deliver new circular economy markets, infrastructure and services.



Collaboration

Making it happen

We will work collaboratively to remove barriers and scale the circular economy.



Training & Accreditation

Building capability

We will help organisations get up-to-date circular economy knowledge, skills and verification.

Collaboration: Circular Australia Taskforces



National Circular Economy Council

Australian State and Territory Government Council





What will your circular economy strategy be to get us to 2030?