



The changing economics of waste.

The back story.

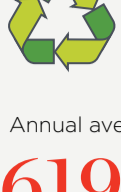
January 2018



China's National Sword Policy imposes strict new rules for contamination levels for

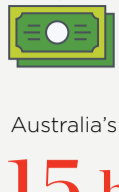
24 types

of solid waste imports¹.



Annual average of **619,000**

tonnes of Australian recyclable materials displaced².



Australia's AUD **15 billion**

waste industry is thrown into chaos³.



Australia's state of waste.

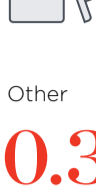
In 2018, Australia exported **4.31 million** tonnes (Mt) of waste⁴.



Metals **2.45**



Paper and cardboard **1.32**



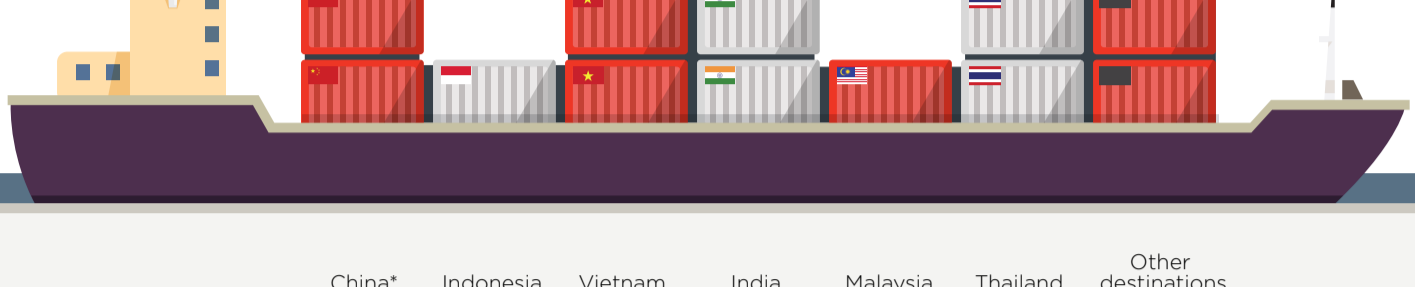
Other **0.32**



Plastics **0.22**

Total cost of AUD 2.8 billion⁵.

Where did it go?



	China*	Indonesia	Vietnam	India	Malaysia	Thailand	Other destinations
2014-15	1,314,385	553,268	395,069	437,955	275,369	346,998	1,202,212
2017-18	745,680	726,729	603,031	509,149	374,613	308,205	1,076,053

Export destinations by volume (million tonnes)⁶.

*Including Hong Kong and Macau.

The packaging problem.

Australia generates an estimated **4.4 million tonnes** of total packaging (glass, paper, metal and plastic) waste a year⁷.

68% of the waste is collected.



56% is recycled.



In 2019/20 it's estimated that state governments will collect around **AUD 1.54 billion** annually from levies charged when rubbish is sent to landfill. About **37%** of that will be spent on reducing waste⁸.



The falling price of plastics.

A total of 3.4 million tonnes of plastics were consumed in Australia in 2017/18⁹.



320,000 tonnes were recycled – recovery up 10% on the previous year.



46% was reprocessed in Australia.



54% was exported.



National plastics recycling rate **9.4%**

China's restrictions have resulted in saturation of some types of scrap plastics in the international commodity market. Prices have fallen sharply from around **AUD 325 per tonne** in 2017 to around **AUD 60 per tonne** from July-October 2019.

Drivers of change.



#1 Container deposit schemes for everyday recycling.

South Australia introduces a scheme in 1977 – return rate is **76.4%** (Beverage containers now make up only 2.8% of litter)¹⁰.

New South Wales Return and Earn scheme – introduced late 2017. **3 billion bottles and cans collected by January 2020**¹¹.

Queensland Container refund scheme launched November 2018 – **1 billion containers deposited** in its first operating year represent a **35% reduction** in litter¹².

Victoria The last Australian state or territory to announce plans for a container deposit scheme, reportedly now scheduled for **2023**¹³.

#2 Government action.

The plan aims for:

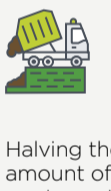
Under a New National Waste Policy Action Plan announced in late 2019, state and territory environment ministers propose a phased timetable **banning Australia's export of waste plastic, paper, glass and tyres to begin in July 2020**¹⁴.



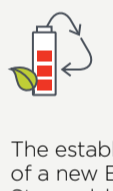
An 80% 'recovery' rate of material across all waste streams.



New rules around government procurement designed to increase demand for recycled products.



Halving the amount of organic waste sent to landfill.



The establishment of a new Battery Stewardship Scheme.

#3 Australia's 2025 National Packaging Targets¹⁷.

100% of all Australia's packaging will be reusable, recyclable or compostable by 2025.

70% of Australia's plastic packaging will be recycled or composted by 2025.

30% average recycled content will be included across all packaging by 2025.

Phase out of problematic and unnecessary single-use plastics packaging.

1500 companies

from multinational corporates to small local businesses committed to the Australian Packaging Covenant in its first year to September 2019.



Watch this space!

Australia's environment ministers propose to outline new expectations for packaging targets.

#4 AUD 150 million is the estimated investment needed from federal and state governments to re-boot Australia's recycling industry and foster a circular economy¹⁸. Prior to the 2019 Federal Election, Prime Minister Scott Morrison announced¹⁹.

AUD 100 million from the Clean Energy Corporation for a recycling investment fund for manufacturing projects using recycled products.

AUD 20 million for a "product stewardship fund" to encourage industry recycling, schemes for products such as batteries, electrical products, solar cells and plastic oil containers.

AUD 20 million in Co-operative Research Centres for studies into plastic recycling and waste.



Every level of government is committed to these changes and the funding is there to have a go... If procurement and government demand recycled content, the opportunities are endless.

Jim Appleby, General Manager, Reconomy.

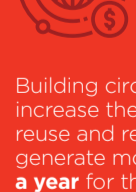
The bottom line.



A 5% increase in the recycling rate could add

AUD 1 billion

to Australia's GDP²⁰.

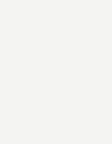
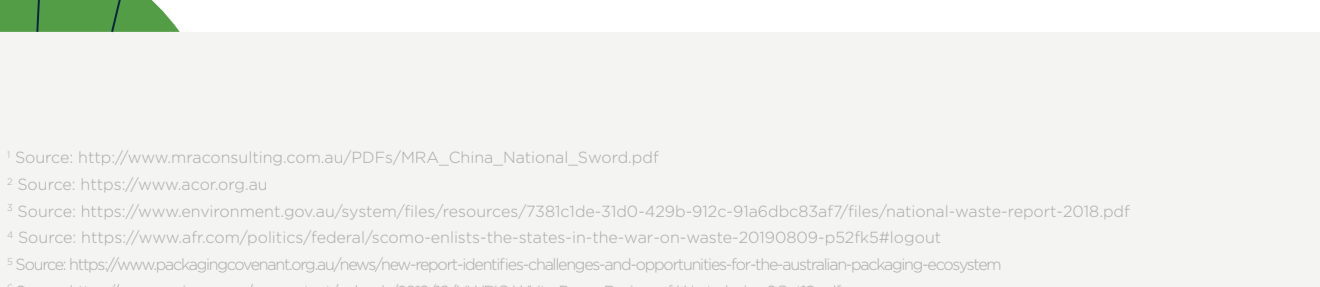


Building circular supply chains to increase the rate of recycling, reuse and remanufacture could generate more than **USD 1 trillion a year** for the global economy by 2025²¹.



By designing out waste and pollution, keeping products and materials in use and regenerating rather than degrading nature systems, the circular economy can be the mechanism by which we achieve global climate targets.

The Ellen MacArthur Foundation²¹.



¹ Source: http://www.mraconsulting.com.au/PDFs/MRA_China_National_Sword.pdf
² Source: <https://www.environment.gov.au/system/files/resources/7381c1de-31d0-429b-912c-91a6d8c83af7/files/national-waste-report-2018.pdf>
³ Source: <https://www.afr.com/politics/federal/scomo-enlists-the-states-in-the-war-on-waste-20190809-p52n55logout>
⁴ Source: <https://www.packagingcovenant.org.au/news/new-report-identifies-challenges-and-opportunities-for-the-australian-packaging-ecosystem>
⁵ Source: <https://www.nwrccom.au/wp-content/uploads/2019/10/NWRCC-White-Paper-Review-of-Waste-levies-9Oct19.pdf>
⁶ Source: <https://www.packagingcovenant.org.au/documents/item/1224>
⁷ Source: <https://www.sustainability.vic.gov.au/Business/Investment-facilitation/Recovered-resources-market-bulletin>
⁸ Source: https://www.epa.sa.gov.au/environmental_info/container_deposit
⁹ Source: https://returnandearn.org.au/press_releases/3-billion-reasons-to-celebrate/
¹⁰ Source: <http://statements.qld.gov.au/Statement/2019/11/1/one-billion-containers-returned-in-first-year-of-scheme>
¹¹ Source: <https://www.mediastatements.wa.gov.au/Pages/McGowan/2019/07/WAs-new-container-deposit-scheme-to-launch-on-June-2-2020.aspx>
¹² Source: <https://dipwve.tas.gov.au/Documents/Draft%20Waste%20Action%20Plan.pdf>
¹³ Source: <https://www.theage.com.au/national/victoria/victoria-will-get-cash-for-cans-container-deposit-scheme-20200201-p53wun.html>
¹⁴ Source: <https://www.environment.gov.au/protection/waste-recovery/publications/national-waste-policy-action-plan>
¹⁵ Source: https://www.wmra.asn.au/Public/Press_Releases/WMAA_ACOR_call_for_inaugural_Australian_Circular_Economy_Recycling_Action_Plan.aspx
¹⁶ Source: <https://www.liberal.org.au/latest-news/2019/05/03/cleaner-environment-all-australians>
¹⁷ Source: <http://reports.weforum.org/toward-the-circular-economy-accelerating-the-scale-up-across-global-supply-chains/>
¹⁸ Source: <https://www.ellenmacarthurfoundation.org/explore/the-circular-economy-in-detail>