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MARSDEN JACOB ASSOCIATES

Talks Live

Tackling single-use plastics

Policy, progress and the path forward

19 November 2024

Talks Live

The **Marsden Jacob Talks Live** webinar series brings people together to discuss pressing issues across environment, energy, water, circular economy and recycling, agriculture and earth resources and other sectors in Australia and internationally.

These free webinars are open to everyone. We aim to share best practices and bring you the latest research and thinking. Our focus in these events is on encouraging open, positive and collaborative discussion.

We encourage you to share your questions, opinions, experience and interests. We also welcome your thoughts on future topics for our webinar series.

Each live event includes a presentation hosted by Marsden Jacob experts, followed by an open Q&A session.

Marsden Jacob Associates acknowledge the Traditional Custodians of the lands and waters across Australia where we conduct our business. We also pay our respects to their Ancestors and Elders past and present, and emerging.

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Who are we?

Dr Peter Kinrade

Associate Director

PhD (Environmental Economics) (Melb.), MEnvSt (Tas.), BCom (Economics) (Melb.)

- 35+ years assessing the economics and policy of circular economy, climate change and other environmental issues for governments, environment NGOs and private sector clients.
- Recent work includes analysis and design of container deposit schemes and analysis of policies to phase out single-use plastics in NSW, TAS, VIC, WA and some Pacific Island countries.
- Recently led a study for NSW EPA into carbon abatement opportunities from shifting to a circular economy.

Alex Hegarty

Consultant

BSc (Marine Science/Natural Resource Management) (Hons) (W.Aust.)

- Broad skills and in-the-field experience across public policy and integrated environmental management.
- Experience includes community consultation, non-market valuation of environmental resources, and biodiversity and conservation research and analysis.
- Previously worked for the Department of Primary Industries and Regional Development and the Australian Government's National Environmental Science Program, which funds environment and climate research.

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Why this topic? And why now?

The impacts of single-use plastics (SUPs), including microplastics, are one of the greatest environmental challenges facing the global community – arguably just behind climate change and biodiversity loss.

The challenges of SUP management are being recognised both internationally and across Australia:

- Negotiations are in progress through the UN to develop a legally binding international agreement (or treaty) on plastic pollution.
- 'Problematic and unnecessary' SUPs were on the Australian Government's Product Stewardship Priority List and are now a key driver of proposed Packaging Regulation reforms.

Why are single-use plastics (SUPs) a problem?

SUPs consumed globally

Of the 400 million tonnes of plastics produced globally every year, more than a third (140 million tonnes) was plastic packaging and single-use material designed for immediate disposal.

SUPs consumed in Australia

1.1 million tonnes of SUPs consumed annually in Australia, 75,000 tonnes (6%) of SUPs are deemed 'problematic' and 'unnecessary'

SUPs in the marine environment

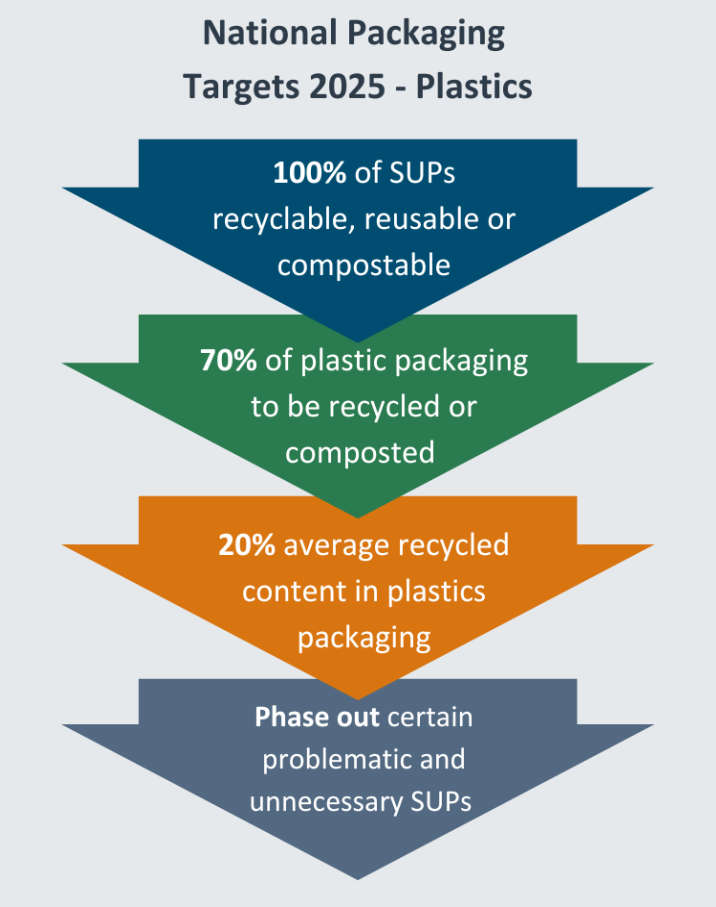
In Australia, up to 10% of SUPs leak into the environment, often ending up in oceans.

- Marine litter.
- Microplastics in the environment.
- Some SUPs contain hazardous chemicals.
- Some SUPs are difficult to recycle.

SUPs – the state of play

What is Australia currently doing about SUPs?

- There are currently a range of policies and actions aimed at tackling SUPs nationally.
- 2018 – ***National Packaging Targets 2025***.
- Plans helping to deliver these targets:
  - ***2020 Our Packaging Future*** (APCO)
  - ***2021 National Plastics Plan*** (Australian Government)
  - ***2023 Action Plan for Problematic and Unnecessary SUP Packaging*** (APCO).



SUPs – the state of play

Progress has been made, however:

- Most targets aren't being met.
- There is limited consistency with bans between jurisdictions.
- Many SUPs identified as problematic are not being addressed by state/territory governments.

Target type	Target by 2025	Actual (%)
SUPs recyclable, reuseable or compostable	100%	?
Recycling and composting rate for single-use plastics	70%	~20%
Average recycled content	20%	~8%
Phase out rate of designated problematic plastics	100%	~33%

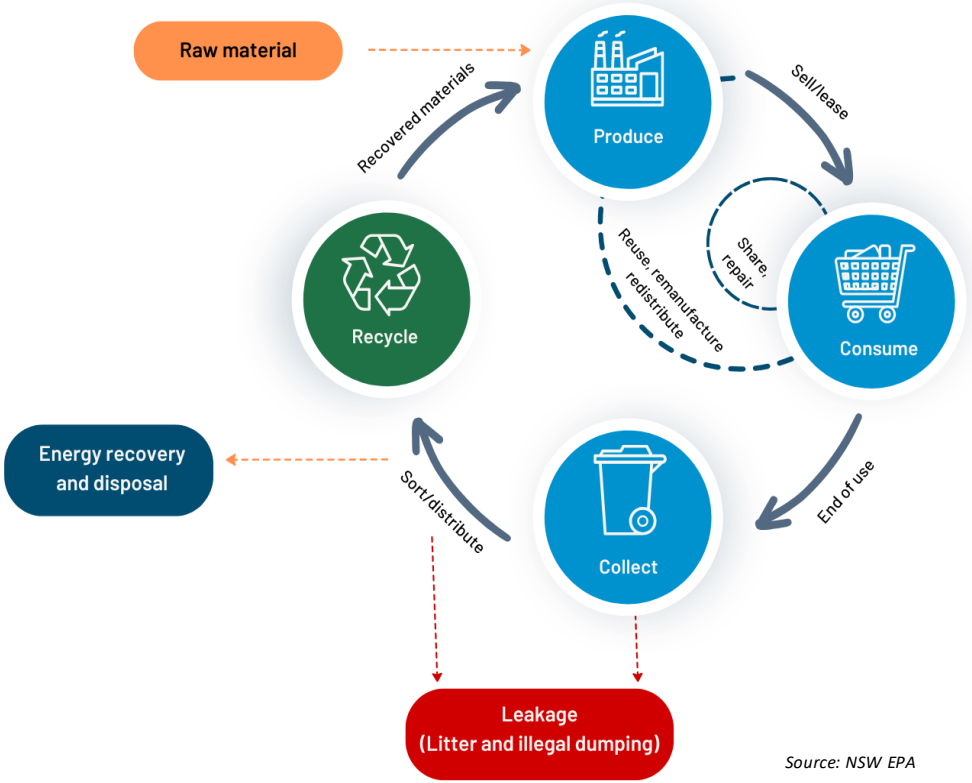
Source: Marsden Jacob Associates

How can we improve?

The need for clear objectives and principles

Possible objectives include:

- **Precautionary principle** – prevent irreversible environmental harm from SUPs.
- **Circular economy** – maximise circular value through designing for reuse, recycling and production and supply efficiency.
- **National consistency**/harmonisation.
- **Cost effectiveness**.



Source: NSW EPA

A national product stewardship (PS) scheme?

Case for a well-designed PS scheme

- ‘Reforming Packaging Regulation’ process suggests shortcomings with current plan have been recognised.
- Options being considered include further bans, other mandatory requirements such as packaging design and/or a PS scheme.

Key features of a well-designed PS scheme:

- Full coverage of all target material supplied to market in Australia (likely to require co-regulatory or regulatory scheme).
- Set targets and benchmarks.
- Levy material at sufficient rate to cover all scheme costs, including collection, sorting and reprocessing.
- Good consumer access to collection and drop-off points.
- Well supported by design requirements, market development and consumer education.
- Good governance including Board representative of entire supply chain, independent Chair and independent audit.

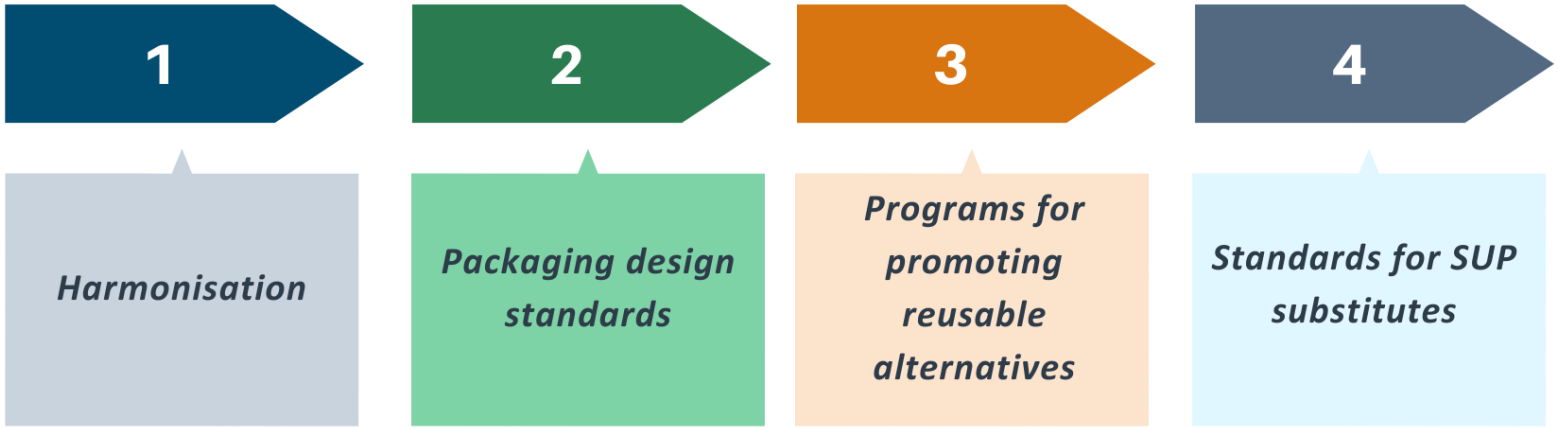
Promoting recycling

The following should be considered to promote high-order recycling through or along-side a PS scheme:

- **Incentives** built into scheme to promote higher value reuse and higher order recycling, especially of harder to recycle materials.
- **Nationally consistent minimum recycled content** requirements to drive markets for recycled plastics.
- **Government procurement policies** also to help drive markets for recycled plastics.
- **Harmonised collection systems** for packaging (including plastics), supported by further investment in drop-off, sorting and recycling infrastructure.

What else needs to happen to make this work?

Alongside a well-designed product stewardship scheme, we will need:

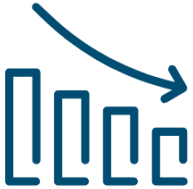


Harmonise bans on problematic plastics

- **Policy landscape in Australia**: Various state government bans, levies, and voluntary initiatives (e.g., 2018 supermarket ban on lightweight plastic bags).

- **Challenges**: Disparities between state policies and inconsistent definitions. Targeted plastics vary across jurisdictions.

National Register:
Establish a unified national register to list plastics banned across all states, reducing confusion and regulatory discrepancies.



Agreed phase-out dates:
Set standardised timelines for phasing out specific plastics to give businesses and consumers clarity and time for adjustment.

Benefits:

- **Economic efficiency**: A standardised policy reduces costs for suppliers managing multiple regulations.
- **Consumer clarity**: Unified policies across states help consumers understand what plastics are banned or restricted.

Packaging design standards

- **Set national standards on acceptable polymer types** to limit harmful plastics, aligning with sustainability goals.
- **Encourage designs that support recyclability and reuse**. Include guidelines for eco-friendly and minimalistic packaging.

Benefits:

- ✓ **Supports a circular economy** by reducing waste.
- ✓ **Promotes innovation** through sustainable packaging design.

Coca-Cola (universal bottle)

Standardised packaging

A reusable PET bottle which is standardised across multiple soda brands in Latin America, introduced by Coca-Cola in 2018.

Users return empty bottles to retailers who store them and then give them back to Coca-Cola upon delivery of a new order. Coca-Cola takes the multi-branded mix of bottles back to a bottling facility where paper labels are washed off and bottles are cleaned, refilled, and rebranded with a fresh label.

Operations optimisation: Creating a universal bottle design across all brands simplifies logistics and reduces stock space. This has allowed new retail channels to accept reuse models.

Benefits: This return system avoids the production of 1.8 billion single-use bottles in Latin America per year while GHGs are reduced by up to 47% compared to single-use PET bottles, taking into account bottle production, increased transport, and water use during washing. Water use, including cleaning, is reduced by 45% compared to single-use PET bottles, because the major water footprint comes from the production of new bottles.

Source: The Ellen MacArthur Foundation, Unlocking a reuse revolution: scaling returnable packaging

Programs for promoting reusable alternatives

Reusable items

Implement a coordinated national strategy to promote reusable items, including incentives for consumers and businesses.

Benefits:

- ✓ Reduces reliance on single-use items.
- ✓ Cost effective.

Programs already in use

Standards for SUP substitutes

- Bans on SUPs need to be supported with standards for alternatives and substitutes to **ensure adoption of substitutes does not create unintended consequences**.
- Supporting infrastructure may also be needed.

Benefits:

✓ **Ensures substitutes are genuinely sustainable, safe and compatible** with recycling waste management systems.

Standards for substitutes like:

Coated paper

Bio/compostable plastics

Parting insights

- Governments should agree on and proceed with national packaging reforms, with particular emphasis on SUPs.
- Reforms should be underpinned by some clear objectives and principles.
- A well-designed PS scheme is likely to be an important aspect of reforms.
- PS should be supported by other reforms, potentially including:
    1. Harmonised SUP bans.
    2. Packaging design standards, including for SUP substitutes.
    3. Schemes to promotion reuseable alternatives.
    4. Policies to drive markets for recycled plastics.
- Reforms should be consistent across Australia and with the international 'legally binding instrument' on plastic pollution.

Q&A time

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Product stewardship should be supported by:

The team

We have a highly experienced circular economy team.

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Circular economy expert

Rod Carr

Environmental policy and markets specialist

Dr David Rogers

Economist and economic modeller

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