

Friday 1 November 2024

Treasurer, Hon Jim Chalmers, MP
Productivity Commission, Chair, Danielle Wood

Dear Minister and Commission Chair,

Thank you for commencing this investigation and I hope that it results in key findings that set Australia on a new course to improve the productivity of products used by businesses and community for a stronger, fitter society, economy and environment.

I am fortunate to work in industry and government, now over 30 years, and hold many NED positions on boards. I have contributed to some seminal projects that have contributed to the transition of sectors and Australia to a more sustainable and viable future. Currently this includes consulting in establishing a stewardship scheme for soft plastic packaging with the Australian Food and Grocery Council, leading brands and retailers, now formally registered as Soft Plastic Stewardship Australia Ltd. I have also contributed to key policies and programs within governments as consultant, panel and board expert on industry supply chains, manufacturing, circularity and renewable energy.

Through these I have direct experience and invaluable insights into the challenges and ways to turn Australia from high consuming, high waste and high emissions, with all associated real and hidden financial, environmental and social costs. My vision is that through smart measures (strategies, regulations, financial instruments, training and education) we will unlock and restore Australia's capacity to become ingenious, highly inventive, globally competitive, with optimised investment and capital into a highly productive economy and society.

Impact of poorly designed products

Toxic pollution, environmental degradation and climate change are exacerbated by the poor design of products and materials that we allow to be sold into the Australian market. Seventy percent of the impact of the product is locked in at its design stage. Increasingly products have been designed with built-in obsolescence, irreparability and non-recyclability – factors that we currently allow.

These are design features that we can easily and should change in Australia through a range of good strategic measures such as the following:

- mandating minimum standards for product performance with industry-approved certifications,
- mandating membership to currently voluntary product stewardship schemes where there are large numbers of liable parties,
- requiring lifespan disclosure labels on priority products (particularly electronic goods and clothing),
- introducing Buying for good procurement programs that equalise cost and quality, and
- fixing perverse financial incentives for wanton consumption vs efficiency and improved productivity (for example flat rate registration, stimulus programs without requirements for high efficiency and circularity, and instant write-off vs reuse or repair).

Urgency for Change

With resource scarcity already undermining national and global economies and stability, and the impacts of climate change already pummelling the world, Australia is well behind in ensuring better design products are incentivised and prioritised for sale to Australians. Positively Australia has recognised its natural endowment of renewable energy enabling us to become, as Prof Ross Garnaut predicted, a renewable energy superpower, cutting our emissions and energy costs to global best-in-class.

As one of the highest consuming nations of manufactured products and materials, it is imperative that Australia and Australians develop and adopt new measures now for lesser costs and painful shocks in transition. We also have the natural endowment in being an affluent, politically and economically stable economy and population on an island nation and so we can easily enact laws and regulations that prioritise efficiency, reuse, repair, and low emissions – far more easily than most other nations – if we choose to do so.

Key Report – [Eco-design for Environmental Good](#)

In 2021 the Australian Government commissioned a groundbreaking study investigating the directions for improved design of goods into the Australian market. The commissioned team comprised Arcadis, myself as One Planet Consulting and project-lead RMIT University, with the report published in [March 2023](#). The project involved extensive stakeholder consultation in co-development and analysis of global research and 10 recommendations with leading stakeholder groups in Australia.

Four industry sectors were identified as priorities for meaningful action in Australia and detailed investigations were undertaken to produce overarching principles and measures to influence design of products in Australia. The four sectors were:

Buildings, Electronic Goods, Textiles and Plastics.

Full details on these features and action priorities for these sectors is available in the report.

We identified four Levers that need to be utilised to result in systematic change:

- Policy, strategies and targets
- Regulations
- Financing
- Training and education.

These levers are undertaken principally by governments, but not only governments; they are also by industry associations, education/research institutions, international stakeholders and non-profit organisations. All have a collective responsibility to progress forward with better standards, training, certifications and distribution of products, with governments also holding responsibility for laws and regulations that move stakeholders' actions from voluntary to mainstream practice.

Our key findings are that:

- Australia has many voluntary measures but has not taken the next steps to embed and mainstream these excellent measures via policy, educational, financial and legal and regulatory mandatory mechanisms. This is in marked contrast to many other nations that have used voluntary programs to test and refine and with then governments moving to mandate practices and thereby lifting minimum performance standards for the benefit of all parties.
- Our report examined and recommended 10 actions for a range of stakeholders across sectors to improve the design of products available in the Australian market for lower product-based environmental impact and/or improve environmental performance.
- The measures proposed would improve and extend the life of products sold into the Australian market thereby narrow the loops (reduce the demand for materials), slow the loops (e.g. extending useful product life) and then close the loops (e.g. reusing products and materials multiple times), as well as regenerating (e.g. using non-toxic materials and regenerating ecosystems).

- Based on international and Australian experience we and those many Australian experts and stakeholders we consulted were of the view that recommended measures will help reinvigorate key manufacturing sectors, modernise the recycling sector, increase resource security/ productivity, and strengthen Australia’s competitive position in the circular low emissions economy. Based on international experience, they would also contribute benefits to consumers, local businesses, the local environment, economy and society.

Through a global scan into these four industry sectors we identified and mapped actions in various nations along the innovation diffusion curve. We assess measures that take small-scale good circular innovations so they become broad-scale mainstream practice.

Through comparisons we found gaps. It was clear that Australia was excellent at voluntary innovations, such as grants and prizes for innovation, but comparatively globally poor on taking those improvements so they become mainstream practice. To move beyond the Tipping Point, Australia needs to mature its approaches by mainstreaming and embedding enabling practices like formal Procurement Schemes, Extended Producer Schemes, laws, regulations and financial sector-wide levers.

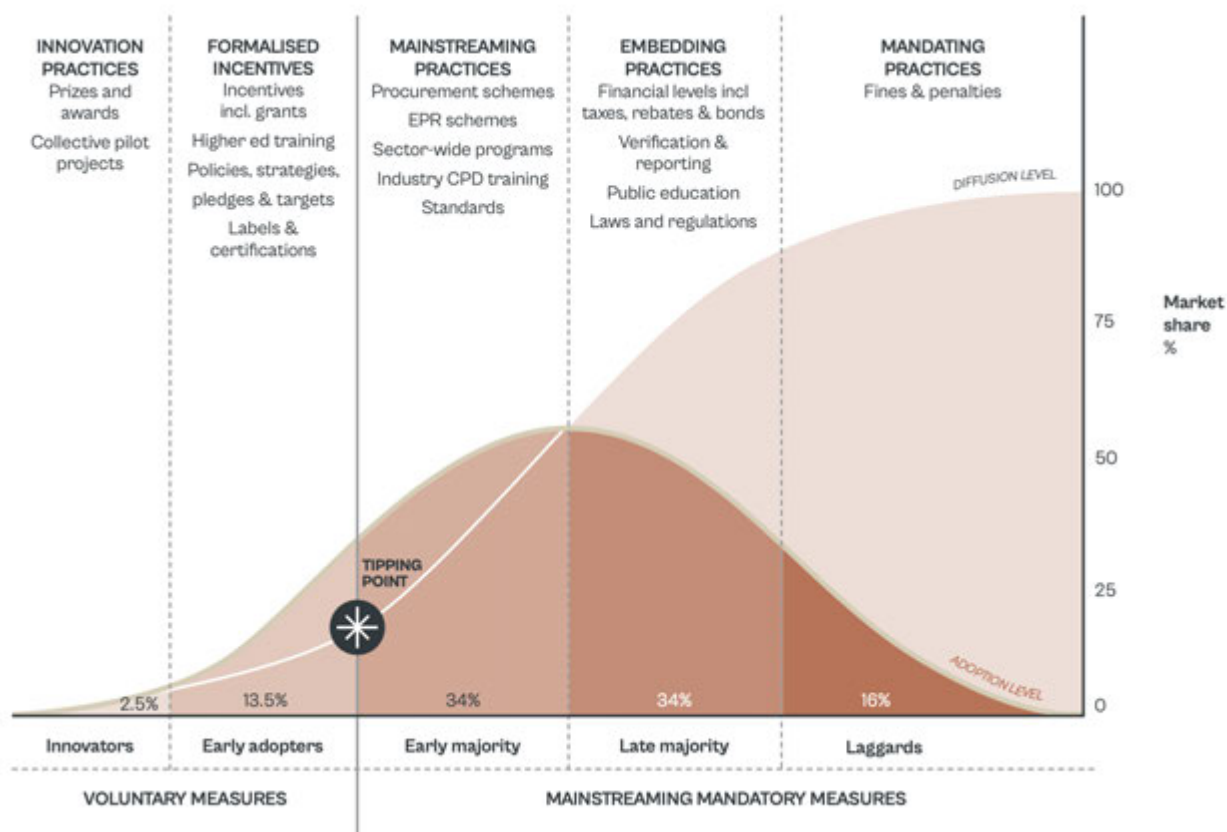


Figure 1. Maturity curve: from innovation to mainstream. Cumulative measures that accelerate adoption of good practice. Adapted by H Millicer from E Rogers (1962, 2020)

Another significant realisation was that most of our policies, strategies, programs fail to separate out and prioritise products over materials and resource recovery. It is vital that we appreciate that a simplified diagram can obscure reality. For all those in *product* supply chains, from designers, manufacturers, brands, retailers and consumers, plus repairers, resellers, the world is about making, selling and using finished products like clothing, electronic goods, furniture; it is not about materials. The language in waste policy is vastly different to the language and orientation of most people who think in terms of product.

To represent this clearly we created a new diagram, revising the Ellen Macarthur and UNEP diagrams, showing the supply chain as it really is with a Product domain and a separate Materials domain. We then showed who is responsible for what, with their roles and powers to influence the products sold in Australia

at different points along the supply chain. It shows that governments, industry/professional bodies and education/training institutions have overarching roles, whereas others are directly involved in delivery.

This separation greatly assists identify the actions required to improve product and material flow in Australia and therefore policies, strategies and programs.

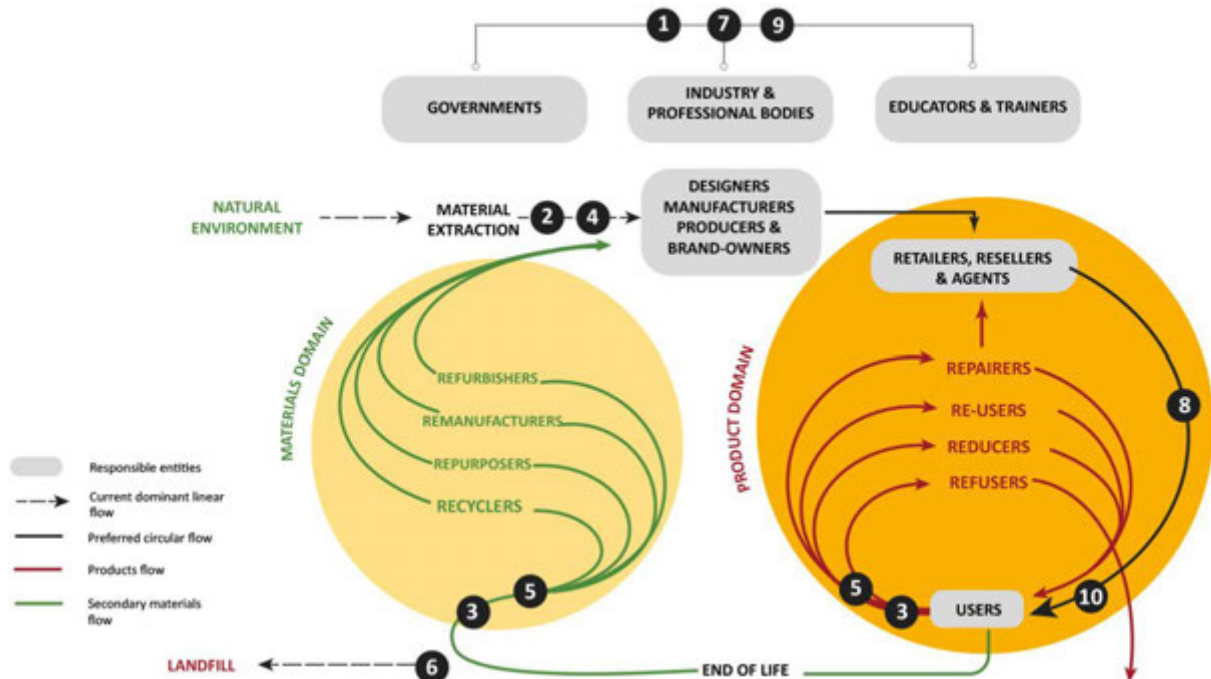


Figure 2. Levers, responsible actors, their roles and points of influence (in Summary Report, adapted from Eco-design for Environmental Good, H Millicer 2023).

10 Recommended actions for Australia

These are the 10 recommended actions arising through the consultations. The report also describes which actions are particularly important for positive impact in the four sectors. For example, in the building industry, priority levers are 1, 4 and 5, in textiles they are 1, 4, 5 and 8, and electronic goods they are 1, 2, 3, and 8.

- 1 **Circular Australia Strategy for eco-design product**
- 2 **Improve Stewardship and introduce EPR**
- 3 **Activate Reuse and Repair Reset Program**
- 4 **Align product standards and specifications with global best**
- 5 **Establish Eco-Design Innovation Fund for national circular, supply chains**
- 6 **Accelerate recycling by raising landfill fees on priority products**
- 7 **Financial and regulatory mechanisms addressing negative externalities**
- 8 **Buy for Good Program procurement for government and industry**
- 9 **Learning and Upskilling Program for Environmental Good**
- 10 **Public education**

In terms of Australia’s progress on these recommendations, some are underway. The table below sets out current status and gaps for action.

| Report Recommended 10 Levers 2022-23 | CE Min Adv Group Interim Report Other pending actions and status |
|--|--|
| Eco-design Circular Strategy | <ul style="list-style-type: none"> • National CE Framework (& possibly targets) • Emission declaration in financial reporting, TCFD and ISSB reporting • Investigation into Director duties • Integrating climate and circularity into sector plans |
| Improve stewardship with EPR | <ul style="list-style-type: none"> • Government consultation on regulatory reform for packaging. No action improving other stewardship programs as yet for membership, eco-modulation, targets. • Most are voluntary programs, with struggling membership, financial capacity and consequently minimal impact. |
| Activate Reuse & Repair Reset program | <ul style="list-style-type: none"> • Only voluntary programs with no regulatory or financial capacity to reform products or supply chains for circularity, only in renewable energy generation. • ABCB has capacity to update NCC with embodied carbon & CE |
| Align to global best specs & standards | <ul style="list-style-type: none"> • IChEMS in place • Under investigation, measures to be determined. |
| Eco-Design Innovation fund for supply chains | No collaborative programs to enable and deliver systemic reform of products or supply chains for circularity |
| Raise landfill fees on recyclables | Minimal to zero action to reform landfill levies to improve business case for separation of materials from landfill |
| Apply financial & regs on negative externalities | Vastly underutilised levers to improve circularity, from vouchers, rebates, taxes, regulations, minimum standards. Small action in investment classes, eg Green Bonds, PPAs |
| Buy for Good procurement program | Vastly underutilised capacity with procurement (govt and private sector), even in specifying existing Australian industry-endorsed product standards, certifications and eco-labels |
| Learning and Upskilling | Small starts with voluntary offerings for circularity, such as Building industry training, furniture, however not part of core curriculum |
| Public education | Generally only local government campaigns on litter, recycling and what hazardous material goes to landfill. No public campaigns, messaging or programs on reuse, repair. |

In conclusion, I commend the government for its investigation and open consultation on circular economy opportunities. This will stimulate sectoral and public debate on a vital area and lead to good decisions for a better future for Australia.

I look forward to contributing further in any ways as may be appropriate to assist Australia achieve success.

Warmest regards,

Helen Millicer *GAICD, Churchill Fellow, BA, GradDipBus, CertCarbon, CertSustainableInvesting*

CEO, [One Planet Consulting](#)

Consultant, Australian Food and Grocery Council, Soft Plastic Stewardship Australia

Co-Founder, [ClimateWise Associations](#) – Climate and Emissions program for Australia's Associations

NED, [Tasmanian Waste and Resource Recovery Board](#)

NED Board Nominee and CRC Bid Expert [Solving Plastic Waste CRC](#)

Chair, Churchill Trust Australia, Selection Panel Victoria (Agriculture, Commerce and Logistics)

2023 projects:

Project Co-Lead Consultant, Australian Government, [Enabling Product Design for environmental good](#)

Guest Conference Program Curator, SPE ANZ 2022, and [Oct 10-11 2023](#)

Member, Expert Assessment Panel, RMF Grant, NSW EPA, 2023

Member SPE, Renew, WMRR, AICD, WOB

[Helen Millicer - Linked In](#)

[Churchill Report – circularity and plastics](#)



[Summary of report](#)

If you want to go fast, go alone. If you want to go far, go together.