

23 July 2025

Green Industries SA
PO Box 1047
ADELAIDE SA 5001

Dear Green Industries SA

Submission to consultation for *Accelerating SA's transition to a circular economy: South Australia's Waste Strategy 2025-2030*

The Australian Academy of Technological Sciences and Engineering (ATSE) is a Learned Academy of independent, non-political experts helping Australians understand and use technology to solve complex problems. Bringing together 900 of Australia's leaders in applied science, technology and engineering, ATSE provides impartial, practical and evidence-based advice on how to achieve sustainable solutions and advance prosperity.

ATSE thanks Green Industries SA for the opportunity to make this submission towards South Australia's Waste Strategy 2025-2030. South Australia's efforts to move towards a circular economy provide significant opportunities to reduce waste and pollution, maintain resource efficiency and value, and protect the integrity of natural ecosystems. Realising these opportunities requires using and enabling the best possible technological innovations in the waste management and resource recovery sectors.

We commend to you ATSE's report, [*Towards a Waste Free Future: Technology Readiness in Waste and Resource Recovery*](#), for consideration in finalising the strategy. This report outlines a pathway to move from a linear to a circular economy, identifying emerging technologies and determining the waste and resource recovery sector's readiness for this transition. A copy of the summary report is attached to this letter, with the full report available on [ATSE's website](#).

In formulating this work, ATSE consulted widely with a diverse range of stakeholders across Australia's waste management and resource recovery sectors.

This report was guided by a working group of distinguished ATSE Fellows, in collaboration with research practitioners and industry experts. The report provides four overarching recommendations for establishing a more robust circular economy:

1. A paradigm shift towards waste avoidance, including ensuring that products are designed for reuse, repair, parts replacement, upgrading, and trade-in for remanufacture.
2. A systems approach to resource productivity and recovery, which emphasises the role and interests of all stakeholders within a product's lifecycle.
3. Using big data and analytics to improve information quality, transparency, and inform decision making.
4. Creating a long-term policy and regulatory framework with targeted government investment to facilitate investment certainty.

In addition to the issues discussed in *Towards a Waste Free Future*, ATSE also makes the following recommendations for the current consultation:

1. Legislate a 'right to repair' as part of the *Repair* strategy.
2. Develop a more comprehensive strategy for specifically addressing e-waste, the fastest growing waste stream globally, including local initiatives before a national regulated product stewardship scheme is developed.

ATSE would be willing to connect Green Industries SA with circular economy experts from our Fellowship to provide deeper expertise if useful. For further information, please contact:
academypolicyteam@atse.org.au.

Yours sincerely,

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