**Waste 2025 Conference Abstract Submission**

**(for face-to-face Conference which includes live broadcast)**

Legislative reforms for mandatory battery product stewardship

*My presentation is relevant to the following topic area(s).*

***\*\*\* SELECT A MAXIMUM OF 4 TOPIC AREAS ONLY \*\*\****

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|  | **Aboriginal community waste management**  (projects, results, planning, what else to be done) |  | **National, state and local issues** (policies, strategies, responses, opportunities, challenges) |
|  | **Circular economy** (case studies, right to repair, material traceability, new materials targeted, climate change impacts) |  | **Organics** (food only vs FOGO, implementation strategies, new services) |
|  | **Collections** (innovations, new systems, vehicles, challenges) |  | **Plastics** (plastics recycling, plastics recovery schemes, small & large scale plastics projects) |
|  | **Container deposit schemes** (new schemes, new containers, innovations) |  | **Problem waste** (solar panels, batteries, textiles) |
|  | **Disaster waste management** (bushfires, floods, pandemic) |  | **Procurement, tenders & contracts** (from start to finish, procurement approaches, tender processes and waste service contracts) |
|  | **Economics** (business cases, data gathering, planning for financial impacts, reviews & analyses) |  | **Product stewardship & extended producer responsibility** (current & planned schemes, new materials to be captured by schemes, local schemes for recovery) |
|  | **Education** (behaviour change, community engagement, social media, planning FOGO education) |  | **Project Planning** (projects currently planned, challenges and barriers, planning controls and conditions, project management) |
|  | **Energy from waste** (projects, case studies) |  | **Regional issues** (regional responses to waste settings, collaboration, joint projects) |
|  | **Hazardous waste** (asbestos, clinical & medical, illegally dumped hazardous waste, systems for managing hazardous materials) |  | **Resource recovery** (recycling, C&I/C&D, organics & other material recovery, emerging markets, insights & updates) |
|  | **Infrastructure & planning** (FOGO capacity, new material recovery planning) |  | **Social enterprise** (new entrants, recent endeavours, case studies) |
|  | **Innovative projects** (sustainability innovations, artificial intelligence, case studies) |  | **Strategic waste planning & policy** (stakeholder engagement, strategy development, waste policy impacts and opportunities) |
|  | **Landfill & facility management** (facility operations management, strategic planning, compliance) |  | **Technology in waste management** (AI, early adopters, innovations, improvements to services due to technology, barriers) |
|  | **Legislation, regulations & levies** (major updates, monitoring & enforcement, response to changes in regulations) |  | **Waste projects** (project management, business cases, grant delivery, case studies) |
|  | **Litter & illegal dumping** (prevention, new management systems & innovative & smart initiatives, surveillance) |  | **Other** |

**Proposed Panel Discussion** -Proposed topic & participants suitable for key issues that may be addressed by a Panel of presenters. For this category suggest your topic & who you will arrange to attend and present (maximum of 5 panel members).

**Presenter information**

**Presenter name:** Phoebe Ashe

**Presenter position:** Acting Director, Circular Economy Policy

**Presenter organisation:** NSW Environment Protection Authority

**Presenter email address:** phoebe.ashe@epa.nsw.gov.au

**Presenter phone number:** N/A

**Presenter mobile number:** 0472 875 243

**Biography**

Phoebe has worked in the NSW Government across contaminated sites, waste, product stewardship, biodiversity and land management since studying science and law. After seconding to the Office of the NSW Minister for Environment and Heritage and working for a Judge at the Land and Environment Court, Phoebe returned to the NSW EPA as a leader setting up Return and Earn, NSW’s beverage container deposit scheme. As Acting Director Circular Economy Policy she currently leads circular economy policy development including product stewardship work on batteries.

**Abstract Summary**

Battery-related fires pose ongoing threats to Australia’s waste and resource recovery sector. In response to this issue, the NSW Government committed to legislating for mandatory product stewardship for batteries in 2025. This presentation will provide an update on implementing mandatory product stewardship for batteries, including the legislation introduced into Parliament in March, and the next phases of this work.

**Abstract**

The rapid evolution in battery technology and growth in the market presents some significant challenges to achieving a circular economy. Batteries are now found in a wide range of small consumer electronics, while larger batteries are becoming more common in vehicles and to back up renewable energy.

Market analysis conducted for the NSW EPA in 2024 revealed that the number of embedded lithium-based batteries is expected to increase by over 400% to 2049-50. Meanwhile, it was estimated that the total volume of battery waste in Australia will increase by 500% over the next 25 years, reaching over 650,000 tonnes of waste.

The most immediate challenge facing Australia’s waste and resource recovery sector is battery related fires. NSW Fire and Rescue report that lithium-ion batteries are the fastest growing fire risk in NSW. Battery fires have already claimed lives in NSW, including a fatality in Western Sydney from an e-bike fire in February. The impacts facing Australia’s waste and resource recovery industry from battery related fires are also significant, as evidenced by the damage from a battery-related fire to Canberra’s recycling facility in December 2022.

While there are existing voluntary product stewardship arrangements for some battery types, the existing approach is not sufficient to respond to these challenges. In response, Australia’s Environment Ministers tasked NSW with preparing a draft Regulatory Impact Statement (RIS) in 2024 to evaluate options for mandatory product stewardship for batteries. This work was conducted in partnership with the Victorian Department of Energy, Environment and Climate Action.

Following consideration of the draft RIS at the December 2024 meeting of Environment Ministers, the NSW Minister for the Environment committed to legislating for mandatory product stewardship for batteries in 2025.

In March 2025, the NSW Government introduced into Parliament the Product Lifecycle Responsibility Bill 2025. This Bill aims to strengthen and expand NSW’s legislative framework for product stewardship, enabling comprehensive action to deliver mandatory product stewardship for batteries.

The primary objectives of the Bill in relation to batteries include:

* Supporting increased safe and convenient disposal options for batteries, helping to divert batteries from kerbside bins and reducing the risk of fires
* Creating a level playing field for businesses, ensuring there are no ‘free riders’ who benefit from, but don’t participate in, product stewardship schemes
* Improving the design of batteries to make them safer, complementing recent work by NSW Fair Trading to establish lithium-ion battery design standards for e-mobility devices
* Supporting increased communications and behaviour change to drive increased safe battery disposal
* Increasing the amount of batteries available for recycling, incentivising investment in battery recycling capacity and supporting a circular economy.

This presentation will outline the intent of the approach to mandatory product stewardship for batteries and provide an update on the next phases of work, including making regulations.