**Waste 2024 Conference Abstract Submission**

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

Key Infrastructure supporting NSW Government’s Waste and Sustainable Materials Strategy

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

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| [ ]  | **Aboriginal community waste management** (projects, results, planning, what else to be done) | [ ]  | **National waste policies & programs** (new schemes, opportunities & recent results) |
| [ ]  | **CDS** (new schemes, new containers, innovations) | [ ]  | **Organics** (food only vs FOGO, implementation strategies, new services) |
| [ ]  | **Circular economy** (case studies, right to repair, trials, new materials targeted) | [ ]  | **Plastics** (plastics recycling, plastics recovery schemes, small and large scale plastics projects) |
| [ ]  | **Climate change** (new innovations, strategies & policies) | [ ]  | **Problem & hazardous waste** (asbestos, clinical & medical, illegally dumped hazardous waste, systems for managing hazardous materials) |
| [ ]  | **Collections** (innovations, new systems, vehicles, challenges) | [ ]  | **Procurement** (recent process developments, case studies, planning) |
| [ ]  | **Disaster waste management** (bushfires, floods, pandemic) | [ ]  | **Project Planning** (projects currently planned, challenges and barriers, planning controls and conditions, project management) |
| [ ]  | **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) | [ ]  | **Recycling & resource recovery** (post China Sword, and export bans, market insights & updates) |
| [ ]  | **Energy from Waste** (projects, case studies) | [ ]  | **Regional issues** (regional responses to waste settings, collaboration, joint projects) |
| [ ]  | **Grants** (major waste grants, outcomes & processes) | [ ]  | **Social enterprise** (new entrants, recent endeavours, case studies) |
| [x]  | **Infrastructure & planning** (FOGO capacity, new material recovery planning) | [ ]  | **State based issues** (policies, strategies, responses & challenges, border transitions) |
| [ ]  | **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, facility budgeting) | [ ]  | **Technology** (innovations, must haves, how technology will improve or assist with waste responsibilities, AI) |
| [ ]  | **Legislation, regulations & levies** (major updates, monitoring & enforcement, response to changes in regulations) | [ ]  | **Tenders & contracts** (planning, implementation, contract management, innovations, systems & approaches) |
| [ ]  | **Litter & illegal dumping** (prevention, new management systems & innovative & smart initiatives, surveillance) | [ ]  | **Waste projects** (planned waste infrastructure, how to plan & scope, budgeting, understanding what is required, governance & process planning, case studies) |
|  |  | [ ]  | **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:** Michael Bonanno

**Presenter position:** Technical Manager

**Presenter organisation:** Cleanaway

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**Biography**

*Insert biography here (max 150 words)*

**Abstract Summary (100 words)**

Cleanaway has two significant waste processing assets coming into the Sydney market with a combined value of $280m. The Western Sydney MRF, due for completion in March 2025, will be a best-in-class recycling facility that addresses the ongoing and escalating industry risks of feedstock quality, offtake purity and fire safety. The Eastern Creek Organics facility is undergoing a $40m upgrade and is a key asset for the mandate on FOGO collection and processing, having already secured nearly 40% of its intended capacity. Learn about what you can expect as a processing partner and how to secure access to these facilities.

**Abstract (400-600 words)**

Cleanaway’s BluePrint 2030 has “Strategic Infrastructure Growth” as a key pillar, supporting the NSW Government’s Waste and Sustainable Materials Strategy. Cleanaway is investing in infrastructure across Australia, including Energy from Waste facilities in Victoria and Queensland, and resource recovery infrastructure in the Sydney basin. For NSW, the investment includes the new Western Sydney MRF (WSMRF), which is currently in the final stages of construction, as well as the Eastern Creek Organics facility, currently transitioning from advanced MSW processing to FOGO processing with investment to increase capacity and improve the environmental amenity on site. With these two key projects, at a combined investment of almost $280M, Cleanaway is well placed to service the NSW community for many years to come.

Cleanaway expects the Western Sydney MRF project to be fully commissioned midway through 2025. The project is a purpose-built site, ideally located near the M4/M7 interchange. Working with industry, regulators, and equipment partners, Cleanaway set out to build a facility that met industry expectations for material purity and reliability.

Designed in conjunction with Australian Bale Press and representing a total capital expenditure of circa $70 million, The Western Sydney MRF will deploy the latest in optical sorter technology to deliver a purity far exceeding COAG requirements, ensuring the waste generated by residents continues to have reliable pathways to the recycling market. Underpinning these pathways are a suite of local plastic recycling facilities that pelletise PET / HDPE / PP and reuse the food-grade resin in the manufacturing of new products, including bottles via the Albury / Altona Circular Plastics Australia facilities. Cleanaway continues to pursue other opportunities to recycle waste domestically.

As part of Cleanaway’s commitment to environmental sustainability, the WSMRF site is designed to harvest the sun, reuse the rainwater, and contain all fire water onsite via an automated stormwater shut-off valve and underground containment system.

Having already secured startup volume for the Western Sydney MRF from our foundation partner, Blacktown City Council, Cleanaway is now seeking additional processing volumes. We encourage those interested in accessing the facility to contact us.

The Eastern Creek Organics (ECO) facility was acquired by Cleanaway in 2022. The facility is currently undergoing an expansion to process 300,000t/a of FOGO waste, with investment in significant equipment upgrades for improved decontamination and product quality. Recognising the increasing focus of development approvals on improving the environmental amenity for the local community, the investment includes covering the outdoor maturation pad to reduce leachate and odour potential of the site.

Cleanaway recognises the modern reality that processing waste has an ever-increasing risk of fire and is investing in protection of its key assets. Our facilities are being upgraded to deliver the highest fire safety standards, incorporating fire suppression systems, water cannons, thermal imaging, VESDA air sampling and bunker walls that provide a 90-minute compartmentalisation of receival, processing, and storage areas.

Contamination of feedstock and the related quality of commodities is an ongoing concern that both ECO and WSMRF are acutely aware of and are seeking to address though best-in-class processing equipment, processes, and community education.

Fairfield, Blacktown, and Parramatta have already secured nearly 40% of ECO’s processing capacity. With the FOGO mandate imminent, the remaining capacity is expected to be quickly allocated, leaving many councils in the region to rely on yet to be built infrastructure to process their FOGO waste.