**Waste 2025 Conference Abstract Submission**

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

Why Waste It? Plastics Upcycling Program for Primary Schools

*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) |
| [x]  | **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:** Sally Eriksen

**Presenter position:** Sustainability Education Officer

**Presenter organisation:** Ku-ring-gai Council

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**Presenter mobile number:** 0475962239

**Biography**

Sally Eriksen currently works as the Sustainability Education Officer for Ku-ring-gai Council, responsible for the ‘Smart Schools’ program which encourages the implementation of environmental education programs in Ku-ring-gai schools and early learning settings.

She is also an experienced primary school teacher, environmental leader and speaker, with unique insider knowledge about sustainability in schools.

Sally was the Winner of ‘2023 Emerging Leader in Environmental Education’ at the 2023 NSW Environmental Education Awards for her outstanding contributions to environmental education in NSW.

She is on the management committee of Permaculture Sydney North, and loves nothing better than promoting sustainability in her local community.

Sally enjoys composting, worm-farming, growing food for her family and treading lightly on the Earth.

She is a mad recycler and loves to re-purpose discarded items, such as an old TV cabinet which she transformed into her own street library, named Suzi.

**Abstract Summary**

The Why Waste It? Plastics Upcycling Program is a unique and innovative school program, educating the next generation about plastic waste while actively involving them in creating an upcycled plastic classroom ruler.

Developed by Ku-ring-gai Council and designers/recyclers Defy Design, the program is free for schools and involves a mini workshop by Defy Design experts and Sally Eriksen.

Prior to the workshop the students collect plastics from home which are made into rulers by Defy Design. These rulers are presented to students at the workshop.

It is highly successful program and is currently being offered as a template for other Councils.

**Abstract**

The Why Waste It? Workshops inspire action within the field of sustainability education. They change the way we view waste and motivate Councils, schools and plastic manufacturers to collaborate.

The educational program has been curriculum-linked to suit Year 3 and 4 students in Ku-ring-gai primary schools. It contains learning activities for teachers to introduce waste concepts to their students before and after the workshops, all connected to the Geography, Science and English curriculums. With Sustainability as a Cross-Curriculum Priority, as well as more sustainability concepts included in the updated Science and HSIE syllabuses, the program supports teachers to implement sustainability programs in the classroom.

Ku-ring-gai Council has partnered with a local plastics upcycler to develop a program where the students are engaged in upcycling their plastic waste into useful new products. Students collect their own plastic which is delivered to the plastics manufacturer and upcycled into classroom rulers.

The program includes educational modules sent to the teachers to explore waste concepts such as the impact waste has on the environment, how to avoid wastage and the ‘Waste Hierarchy’, outlining the best ways to deal with waste by Avoiding, Reducing, Re-using, Repairing and Recycling waste. There are many alternatives to the way we purchase and dispose of plastic waste.

Hands-on Upcycling Waste workshops, held at the school, demonstrate the upcycling process for the students who then receive their rulers at the conclusion of each workshop. The workshop series is funded and delivered by Council as part of our NetZero Ku-ring-gai program.

One of the most innovative aspects of the program is that Ku-ring-gai Council has paid for the production of a heavy-duty ruler mould used by Defy Design to make the rulers which reduces the overall cost of manufacturing. We are working with other Councils to use the mould free of charge to replicate the upcycling/workshop program in their own LGA’s.

**The purpose of the program**

The core aim is to educate the next generation in a fun, innovative way with tangible, real-world results. We believe in the importance of waste education in primary schools to inform school communities and raise awareness of the consequences of waste on the environment when not disposed of properly.

**The key findings of the program**

* Students are much more engaged when they are actively involved in the process ie. Collecting their own plastics and seeing the ruler produced from this waste at the end of the workshop.
* Many students and teachers aren’t aware of where to recycle plastic.
* Not many people know that plastic is made from oil, a fossil fuel, the processing of which contributes to Climate Change
* Many people don’t care to recycle or upcycle.
* Students have really enjoyed the ‘Waste Hierarchy’ an infographic which lists the most preferable to least preferable ways to deal with plastic waste.

**Relevance to Waste Management**

The program educates school communities to be mindful about the plastic they purchase and what they do with it. By reducing the plastic waste-stream we are not only raising awareness of plastic’s harmful effects on the environment, but giving students an interest in and practical solutions to create a circular economy.

**Resource recovery**

The program has been run in 4 primary schools in Ku-ring-gai, upcycling over 20 kg of plastic waste into 500 rulers for kids.

**Practical Solutions**

We have extended the Why Waste It? program by offering it to other LGA’s that can roll out a similar program using the ruler mould free of charge. Willoughby City Council has already taken advantage of this.