



## **Coffs Harbour Waste Conference 2023 Summary**

Marking its 27th year, the 2023 Coffs Waste Conference was held on the 9th, 10th and 11th of May. It welcomed more than 670 delegates and 135 speakers from all sectors of the waste industry, including local and state government, the private and not-for-profit sectors, as well as academia and research organisations. The theme of this year's conference was "Working together for a better future".

Greg Freeman opened the conference by warmly welcoming all sponsors, exhibitors, speakers and delegates, recognising their support for the event.

Keynote speakers Costa Georgiadis, Rebecca Gilling and Cate McQuillen delivered some really insightful observations and thought-provoking concepts regarding the themes of circularity, nature, connectedness, collaboration and partnerships to work together for a better future. Collaboration was a key theme running through each of the keynotes – highlighting the important role it plays in moving the industry forward to drive change.

True to his customary style, Costa provided an enthusiastic and energetic opening to the conference. Both as himself and his alter ego 'Costa the Garden Gnome'. He spoke about the importance of language, one example he suggested is to rename bins to banks so we all appreciate the resources that go into them rather than thinking it's about disposal of waste. Key takeouts were - don't complicate the message, have a narrative, collaborate.

Rebecca's message was summed up in the phrase "Live in nature's interest, don't eat into its capital." Rather than the current waste hierarchy our actions should reflect the ladder of circularity and the 10 Rs - recover, recycling, repurpose, remanufacture, refurbish, repair, re-use, reduce, rethink, refuse.

Cate spoke about the need for a collaborative conversation. She reflected on the African Proverb that says, "If you want to go fast - go alone, if you want to go further - go together". She summed up engagement, education and behaviour change as incorporating heart alignment, to knowledge alignment, to action. Key points were – "Change the story, change the world and change the storyteller, change the world".

### ***Tuesday 9<sup>th</sup> May***

Following the keynotes, three streams ran concurrently throughout the day covering topics of: Education (Part 1, 2, 3), Container Deposit Schemes, Landfill, Social Enterprise, Rural and Regional Waste Management, Disaster Waste Management and Revolutionary New Startup – Award Finalists. The key highlights from each are noted below.

#### ***Education (Part 1)***

The presentations focused on different aspects of shifting behaviour to support more sustainable waste practices including grassroots circular economies and how these can reduce waste and improve community connection, behaviour change tools that can be integrated into communication resources aimed at reducing contamination, leveraging user experience



research to design waste services to meet the needs of communities, and presented insights and trends from recent behavioural reports on recycling.

### ***Container Deposit Schemes***

This panel session focused on the evolution of Australia's Container Deposit Scheme landscape and what the future of the schemes looks like. Updates were provided from the NSW EPA, Exchange for Change, coordinators of the NSW and ACT container deposit schemes, TOMRA Cleanaway, the network operator for NSW's container deposit scheme, 'Return and Earn' and Reloop Pacific.

### ***Landfill***

The Landfill session explored an interesting array of projects related to landfilling and transfer stations. First, the benefits of phytocaps (& Chuck Norris) were explained along with interesting recent findings from a phytocap trial. The session moved to geosynthetics where a timeline of their use and evolution was detailed for use in landfills across the world. The necessary management of leachate in extreme weather conditions was detailed before the session ended with several case studies focusing on best practice design and planning for regional waste transfer stations. The session was wrapped up with several very interesting questions from the audience.

### ***Education (Part 2)***

The session kicked off with a look at how leveraging research to find solutions to halving household food waste can be achieved. This included having a dedicated space in the pantry, fridge or kitchen bench for food that needs to be used first. The second presentation provided some key elements in communicating with consumers - know what's in it for the audience, keep the messaging uncomplicated, don't greenwash and keep your consumers engaged. The third presentation provided learnings from waste education from the waste audit of a lifetime. Bel left the audience with this message "Start simple, start small, start somewhere and fail until you've nailed it". The final presentation focused on REDcycle's collapse, calling it a wakeup call for Australia, along with an article by the journalist Liam Mannix which referred to "consumption as the real problem, not recycling".

### ***Social Enterprise***

The audience was treated to a great session that explored how social enterprises can successfully support a circular economy, while also providing additional benefits to communities such as employment, partnerships, connection and engagement. The importance of education was an underlying theme.

### ***Rural and Regional Waste Management***

The Rural and Regional Waste Management session delved into the challenges facing remote and regional communities, presenting some innovative and exciting projects that have seen many beneficial outcomes. The session kicked-off with a focus in West Arnhem Land and how collaboration and governance is addressing the logistical cost of connecting to end-markets. Soft plastics are an issue everywhere however, more so in rural areas such as Albury where collection and processing, along with commercial sector buy-in, presents further challenges to recycle this material. The incredible Roads to Home Program showcased the great community building work that can be achieved through collaborating with Aboriginal Communities to boost road infrastructure. The session concluded with a great presentation explaining how product



stewardship does not work for rural areas for legacy tyres, and that “no one can fund the risk” that this material stream presents to the environment. There was great interest in the session with a number of interesting questions raised at the end.

### ***Education (Part 3)***

The value of waste education was the focus of first presentation in this session, providing an evaluation of the current data about the effectiveness of council waste education initiatives, followed by an example of a Council communications program focused on building awareness about safely disposing of hazardous waste, the consequences of unsafe practices, and how to correctly dispose of specific items. Social marketing - a branch of marketing that is focused on delivering sustained behaviour change in individuals or communities that benefit a person or society, was the focus of the next presentation and provided examples of waste projects that had incorporated this approach. The final presentation centered around the comprehensive community engagement and education campaign that Randwick City Council rolled out pre, during and post-implementation of the new FOGO service to all households and the different tactics that were used to achieve 28% reduction in red-bin content and 98% increase in organics recycling with only 1.5% contamination.

### ***Disaster Waste Management***

Different perspectives of waste management during a disaster were covered in this session, including learnings from the delivery of NSW bushfire recovery programs and the Aboriginal lands cleanup program, the importance of planning for management of donations during a disaster, planning for the management of disaster waste and resilience building and a case study on the continuing cleanup efforts related to the 2019 bushfires in the Macleay Valley, NSW and some of the challenges faced. Several great questions were raised to conclude an extremely relevant session.

### ***Revolutionary New Start Up – Awards Finalists***

The four finalists of this year’s Revolutionary New Start Up awards gave an overview of their business.

**Revolve ReCYCLING** - They recover, recycle, repair and redeploy end-of-life bicycles, e-bikes and scooters, and employ disadvantaged people in the process. All refurbished bikes are donated to disadvantaged kids.

**Optimal Site Performance** – Provides operational and process support with a primary focus on landfill, transfer station, and material recovery facility operations, they also support equipment maintenance and downtime event planning.

**Resource Hub Consulting** – Provides remote administrative support to clients in the waste sector including specialised waste levy consulting.

**Boxhead Plastics** - Locally collects, recycles, and remanufactures scrap plastic car bumper bars using innovative processes that repurpose low grade plastic waste car bumper bars into products such as golf tees and coasters.



## **Wednesday 10<sup>th</sup> May**

Keynote presentations to kick off Wednesday included how the NSW EPA is leading the state towards a clean and resilient future, along with highlights of the *2022 National Waste Report*. An innovative example of creating sustainable materials and products from waste was presented, which focused on the economic benefit of recycling hard to recycle plastics through developing micro factories using difficult materials to create usable products. The need to change the language that is currently being used to recognise that waste is a valuable resource was highlighted. Improving how products are designed to better recover these resources and sustainably provide the raw materials that will be needed in the future and partnerships between businesses and Councils were discussed. In addition, the importance of partnerships and moving up the value chain and needing to be in the driver's seat to transform waste resources through collaboration and innovation were key takeaways.

Three streams ran concurrently throughout the day covering topics of: Strategic Waste Outlook, Multi-Unit Dwellings, Technology, Soft Plastics, Waste Services Procurement and Litter and Illegal Dumping. The key highlights from each topic are noted below.

### **Panel Discussion 1: Waste Outlook – Infrastructure & investment**

Experts discussed a number of key topics the industry is facing, including waste infrastructure plans and where new capacity is being pursued, how infrastructure planning is developed, considerations for investment decision making processes, the current settings guiding waste infrastructure planning and the challenges for service providers in establishing waste infrastructure. Sustainable procurement and exports bans were two key areas highlighted during the discussion.

Panel members talked about key issues such as procurement, export bans, infrastructure capability gap, feedstock supply, planning consents and offtake commitments. The importance of social licence was highlighted. One panel member raised the need to ban landfills (not supported by others), provides certainty to industry and facilitates alternatives like Energy from Waste. Also suggested was increase in the Container Deposit Scheme value and extending eligible containers. There was a strong call for standardisation in data collection and targets nationally.

### **Panel Discussion 2: Championing Change – The Business Case for Food Waste Action**

The private sector plays a crucial role in reducing food waste. Some of the Australian businesses championing food waste action discussed the challenges, benefits and possibilities of the Australian Food Pact and Sector Action Plans.

### **Strategic Waste Outlook**

Perspectives from the NSW EPA and industry representatives were provided, including changes to the NSW resource recovery framework to support the transition to a circular economy over the next two decades, the importance of infrastructure being in place to meet the future waste needs, aligning the supply and value chains, the need to imbed resilience into waste planning processes and infrastructure given the increasing frequency and magnitude of natural disasters,



the role of eco-design in improving resource recovery outcomes and the role social licence to operate can play to address community concerns.

### ***Multi Unit Dwellings***

Increasing population densification in the greater Sydney region is leading to increasing high-rise MUDs developments. This session provided insights into waste management in MUD's, some of the challenges faced and options being explored to overcome these. Notable takeaways included increasing communication and behavioural considerations with respect to transient, culturally and linguistically diverse (CALD populations); household density in some suburbs is increasing rapidly and therefore more waste being generated; FO versus FOGO still not certain for some Councils and/or groups of Councils; "one size does not necessarily fit all approach" is being discussed more; options such as on-site FO composting and dehydration are being trialled with promising results; waste chutes within high-rise MUDs (RFBs) pose an issue as residents can be dis-incentivised to take FO to the basement; and increased collection vehicle movements in congested urban environments is becoming a real issue of contention (amenity, carbon emissions etc.).

### ***Technology***

Innovation was the theme for this session. It showcased how technology is improving infrastructure to make recycling more convenient and efficient, how artificial intelligence is being leveraged by Councils to reduce contamination and improve overall performance of kerbside recycling, highlighted how sanitising waste can reduce the amount of material being sent to landfill and some of the different technologies that can be employed to improve sorting at the MRF and re-process plastics.

### ***Soft Plastics***

Plastics are prevalent in all sectors of the economy. The sessions focused on the magnitude of the soft plastics problem, challenges presented and what is being done to address the issue, including actions to improve circularity. Immediate priorities were identified, including elimination of soft plastics through bans and voluntary standards, better design for recycling and boosting demand for products manufactured from soft plastics.

### ***Waste Services Procurement***

The NSW EPA provided an overview of the new joint procurement facilitation service that is being rolled out, while some very useful industry insights were provided on preparing and issuing tenders for procurement of collection contracts. The concept of harmonisation to realise greater resource recovery and reduce contamination was presented, along with a case study on performance-based contracting and the importance of collaboration in achieving improved waste diversion on campus at Curtin University in WA.

### ***Litter and Illegal Dumping***

All Councils face dealing with litter and illegal dumping. This session presented different perspectives, including how a metro NSW Council reduced illegal dumping in hot spot areas between 16% and 90% by moving dumped household items onto their booked bulky waste clean-up service. Other presenters spoke about reducing cigarette butt litter in public spaces during peak holiday periods, utilising customised resources to educate visitors, which saw a 40% reduction in litter; provided an overview of the 2020-21 Annual Illegal Waste Survey, highlighting emerging trends that can be leveraged in designing programs and responses to





illegal waste; and a model that is available to Councils to estimate the cost of cigarette butt litter and ways that they can recover these costs.

### ***Thursday 11<sup>th</sup> May***

The keynote address focused on the role reuse plays in a circular economy. Although reuse sits at the top of the waste hierarchy, it is not supported by government policy. Discussion focused on what is needed to harness highest order waste hierarchy options like reuse to support the transition to a circular economy.

Three streams ran concurrently throughout the day covering topics of: Circular Economy, Organics and FOGO, Innovation and Waste Projects, Product Stewardship, Collection Initiatives and Challenging Waste. The key highlights from each topic are noted below.

#### **Panel Discussion 3: The Past, Present and Future**

The panel took a walk down memory lane, with some key players in the waste industry providing a 20-year retrospective on some of the key changes within the industry from their unique perspectives. Looking to the future, they discussed what lies ahead for the industry, including the challenges yet to be faced.

#### **Panel Discussion 4: The Challenges of Delivering a Circular Economy**

This panel explored how the concept of circular economy translates into action for the waste management industry and how circular economy principles can drive environmental, social and economic outcomes. It recognised that there are challenges, but also enormous opportunities. The integral role of behaviour change, design for repair and pull through procurement were highlighted. A notable remark from one of the panelists was "We have to stop thinking straight!".

#### ***Circular Economy***

The Circular Economy session touched on a variety of topics, including the importance of collaboration between research, industry and government to drive investment in the circular economy, which was highlighted in the presentation on the Victorian governments \$515M investment in the state's waste and recycling industry. Material Flow Analysis was presented as a way to track the 'what', 'who', 'where', 'when' and 'how' of waste and materials and how knowing this can identify new opportunities in a circular economy. The next presentation explored how Australian technology is providing value-creation and allowing key end markets for recycled materials to develop. The *Behavioural Roadmap to Circular Consumption* was presented for the first time which set out a comprehensive suite of circular consumption behaviours required for the transition and indicate initial priorities. The final session on buying into the circular economy focused on putting circular procurement into practice and how to make circular procurement "business as usual" in both private and public sectors.

#### ***Organics and FOGO***

The session touched on different aspects of FOGO services. First up, the NSW EPA presented on delivering the state's organics net zero emission goal and the role FOGO plays in this, including the challenges that lie ahead and that mandates alone will not achieve the target. An organics processing services provider then gave an overview of how the company is strategically gearing up for the anticipated future demand in source separated organics



processing services. This was followed by a presentation on the findings of a research project that looked into the food waste behaviours of Adelaide households, to inform the design and delivery of more targeted education, behaviour change and incentive-based programs. NSROC presented findings from research projects that were undertaken to estimate the volume of food waste presented across different demographics and dwelling types. Results showed that food waste comprised about 35% of residual waste varying by dwelling type, however most remained in the red lid bin.

### ***Innovation and Waste Projects***

The session covered a variety of innovative projects including the results following Recycle Mate's first 12 months of helping Australians to recycle by simply taking a photo of the item. Regional circular opportunities were explored within the second presentation focusing on the Illawarra Shoalhaven region. The third presentation demonstrated the excellent and colourful use of recycled glass for road and pedestrian surfaces. This was followed up by a deep-dive into textile recycling in SSROC through a local government lens and finally, the session was bookend with a (very quick, but appreciated) overview of the textile auditing approach and results from the SSROC textile project.

### ***Product Stewardship***

This session provided insights into different aspects of product stewardship and reiterated the need for such programs. Product stewardship supports development of a circular economy and starts with good design and responsible product development. Generally, its benefits are considered to include reduced waste generation, improve environmental outcomes and retention of embedded value within the productive economy. It is a response to "polluter-pays" models and the export ban on specific waste stream for overseas processing, ensuring design and innovation responds to the requirements for circularity. Presenters spoke about efforts being made to develop or improve national product stewardship programs for clothing, dry cell batteries, tyres and mattresses, some of which currently present under a "voluntary" system.

### ***Collection Initiatives***

The session provided an overview of different waste collection initiatives and included an outline of considerations to be made when preparing and planning for waste collection services. A very informative presentation was given highlighting a range of considerations to address new challenges that councils are facing when planning for implementation of food organics collection services in apartment buildings, including service delivery options available and planning controls required. The innovative Curbylt program presentation explored how soft plastic collections can work. It also delved into how industry can restore consumer trust and better communicate recycling outcomes through greater transparency. A bin-less waste storage and collection solution in the form of a Localised Automated Waste Collection System (LAWCS) showed how innovative solutions are being leveraged to collect waste in high density areas of Australia's largest city.

### ***Challenging Waste***

As it suggests, this session looked into how challenging waste can be better managed within Australia. The session started with an excellent project that focused on designing out waste from a Queensland children's hospital. The next speaker delved into the challenges faced by the furnishings industry and how its gone from "fast furniture" to more sustainable practices. To assist in better tracing of hazardous wastes, the third presentation explained the joint NSW-Qld



Integrated Waste Tracking Solution project which hopes to ease administrative burdens both for government and industry. The last speaker discussed their great achievements to divert engineered timber from landfill through education, awareness and financial incentives to secure supply for viable long-term recycling markets.

### ***Collabor-date***

The conference ended on a lighter-note and with several laughs as brave 'collabor-daters' pitched their ideas for their ultimate collaboration to the audience. Facilitated by fantastic hosts and voice-over extraordinaire Scrapboy, the audience was treated to three fantastic pitches. The first focused on mobile phone applications that compile waste audit data. The second pitch was a council advertising its collaborative EOI regarding operating circular, resource recovery facilities. The last pitch focused on interest from industry regarding partnership to use reusable cutlery and crockery at community events. A great way to end, what had been an excellent conference.

### ***Overall Takeaways***

There was one clear theme that emerged over the three days – collaboration – and the need for us to all work together to change the narrative and to shift the way we see and speak about waste. Critical to this is our connection to our communities and the vital role they play in our essential sector.

The shifting of language that we have traditionally used, was highlighted as a useful tool to change behaviors across the industry – for example “bins’ to “banks” and “waste” to “resource”.

Change is needed. In the words of Rebecca and Cate “We can’t recycle our way out of this”. “The same old, same old, isn’t going to get us to where we need to be”.

The conference provided a chance for us as individuals, and as an industry, to learn, reflect and determine what change we can collectively make for a better future.

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