VLGA Waste Forum
Reshaping the Conversation

This issue of Discuss comes from the VLGA Waste Forum - Reshaping the Conversation held on Thursday 25 October 2018, moderated by Sebastian Klein from Delivery ZCE at Moreland Energy Foundation Ltd

Our Panelists

ARC Laureate Professor Veena Sahajwalla is revolutionising recycling science to enable global industries to safely utilise toxic and complex wastes as low-cost alternatives to virgin raw materials and fossil fuels. As Founding Director of UNSW's Centre for Sustainable Materials Research and Technology, Veena and her team are working closely with industry partners to deliver the new science, processes and technologies that will drive the redirection of many of the world's most challenging waste streams away from landfills and back into production; simultaneously reducing costs to alleviating pressures on the environment.

She is reimagining the global supply chain by demonstrating the viability of 'mining' our overburdened landfills to harness the wealth of useful elements like carbon, hydrogen and materials like silica, titania and metals embedded in our waste. By using precisely controlled high-temperature reactions – that selectively break and reform the waste into previously unimaginable value-added green materials and products. She is building an unparalleled portfolio of new science and engineering that is overcoming many of the technical limitations and cost barriers of conventional recycling that currently leaves much of our waste behind.

Scientia Professor Veena Sahajwalla believes materials are becoming increasingly complex, especially as they are becoming mixed with other materials (e.g. different types of plastics and glass in one product). However, traditional recycling has not kept pace with material development. This is particularly so in Australia, leading to a lack of technology-driven solutions to resource recovery. Australia is missing out on the precious resources that can be recovered from valuable products. The current waste crisis presents an opportunity for small niche recyclers to create value and purpose for our economy.

Matt Genever – Director Resource Recovery from Sustainability Victoria leads the integration of SV's statewide waste strategies and programs that deliver infrastructure and markets for Victoria's growing waste and resource recovery industry. Matt has spent more than 15 years working across the waste and resource recovery sector, in government, industry and not-for-profit roles. A recognised leader in the industry, Matt brings knowledge across a broad range of waste and recycling issues, from policy and regulation, through technology, materials efficiency and markets for waste-derived commodities.

Matt believes we need a structural re-think about waste and resource recovery – a circular economy is the government's focus. In the short term, the government needs to support the recycling industry. In the medium term, there needs to be an investment in R&D and investments in recycling infrastructure and policy levers (e.g. procurement of recycled materials). Long-term solutions need to focus on innovation.

Gayle Sloan CEO of Waste Management Association of Australia is keen for the focus to away from waste and on resources and the opportunities they present. Market demand for recycled products and product stewardship need to be generated. There is a need for greater cooperation between federal and state governments. A carrot and stick approach is needed including product labelling with recycled local materials and phasing out of single-use plastics.

Rob Millard CEO of the Metropolitan Waste Management and Resource Recovery Group would like councils to work with their community to divert waste from landfill. 44% of organics still end up in landfill. There are alternatives to landfill, such as organic composting, resource recovery and waste to energy. However, we still need to maintain our waste hierarchy: refuse and reuse should prioritise over recycling.

So where to from here?

The panel asked councils to consider the following as possible initiatives or questions they can ask themselves in reshaping the conversation regarding waste and resource recovery.

- What high value products can be made from our resources? Can we examine what can be made to meet market demands for high value products? (e.g. activated carbon instead of organic composting)
- What local demand can we generate and link it with procurement frameworks?
- Be prepared to have complex conversations with our communities in education and awareness raising.
- Can we factor in the cost of resource recovery/product stewardship into our procurement and contract management?
- The road to circular economy will be slow and require actions from governments agencies and local councils. This can be led by CEOs and councils and facilitated by purchasing and contracting arrangements.
- Council can re-think procurement focusing on value (including consideration of social and environmental values of products and materials) rather than purely on price.
- Contracts and tenders can include questions on product stewardship and end of life resource recovery of products and materials.
- There is a role for government to link start ups with resource recovery and business incubators to commercialise outcomes and valuable products.