

Media Release

Technology available to achieve COAG waste crisis goals

13 August 2019: The professor who invented 'green steel' technology that diverts millions of vehicle tyres from landfill says her newer Microfactory™ technology is a ready-made answer to the Council of Australian Governments goal announced through Prime Minister Scott Morrison to deal with the nation's current waste and recycling crisis.

UNSW Sydney's Scientia Professor Veena Sahajwalla commended COAG for [agreeing](#) to establish a timetable to ban the export of waste plastic, paper, glass and tyres, while building Australia's capacity to generate high value recycled commodities, demand and capability in industry.

"The heads of governments in Australia tasked Environment Ministers to advise on a proposed timetable and response strategy following consultation with industry and other stakeholders, and the Prime Minister said the timetable would be left up to the States, but I can't help thinking that scientifically developed methods such as our Microfactory™ technology is ready to go from lab scale to commercial scale to accelerate the COAG goals," she said.

"Importantly, this type of microrecycling science not only addresses the waste and environmental issues, but creates a whole new circular economy where materials are kept in use for as long as possible and can help local manufacturers create new products and items from reformed waste."

Professor Veena and her team of scientists, engineers and materials experts through their microrecycling science have invented processes that can reform waste items like glass and textiles including clothing and into flat ceramic [building products](#) and can also transform [electronic waste](#) into valuable plastic filament for 3D printing and metal alloys.

"This coordinated decision to ban the exporting of our recyclable materials to countries that are increasingly resistant to taking our waste is a real game-changer in terms of enabling the spread of home-grown research innovations for the benefit of local industries," Veena said.

"For example, we can take almost all waste plastic and turn it into a new, highly valuable commodity, 3D plastic filament, which is now mostly imported from overseas. We can deploy this Microfactory™ technology in rural and regional areas where waste is stockpiled and bring local industries and councils together to create new solutions".

"In fact, we should accept from overseas selected waste resources that contain valuable materials so that we could transform them into niche materials and in turn export them by using our Microfactory™ technology to deliver clean and sustainable materials to the world."

Professor Nicholas Fisk, UNSW Deputy Vice Chancellor (Research), said: "It's time to rethink attitudes to all of the materials we discard and instead see them as renewable resources if we want to reduce our reliance on finite resources with major impact on the environment. This UNSW innovation promises to boost local manufacturers by providing novel opportunities through new supply chains."

Background: 1) link to information on [Microfactory™ technology](#); 2) links to [video](#) and [audio](#) grabs by Veena, [infographics](#) on survey results to community attitudes to waste and recycling, and Microfactory™ [b roll](#); 3) [link](#) to background on 'green steel' technology.

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