WWW (what, where and why)
of household food waste behaviour

The challenge

According to the National Food Waste Baseline 2.3 million tonnes of household food waste or 92% currently goes to landfill each year. Typically, food waste constitutes between 30-50% of the residual bin even when Food Organic Green Organic (FOGO) collection is in place. Diversion of food waste away from the residual bin and landfill represents the single biggest financial and environmental opportunity for councils, with savings in the order of $150/tonne in South Australia.

For local government waste management agency East Waste, this represents 18,000 tonnes and $2.7 M p.a. Further, in a circular economy context it is known that for every 10,000 tonnes of waste recycled, 9.2 full time jobs are created compared to 2.8 jobs when sent to landfill.

In addition, our Australian Household Attitudes and Behaviours National Benchmarking Study Summary Report identified a significant gap between self-reported food waste quantities and actual food waste volumes generated in Australian homes.

This highlights a lack of general knowledge or awareness in this space and the underlying need to understand the behavioural drivers that will reduce food waste in households.

Gaining a deeper understanding of the waste behaviours and attitudes of individual households across the community is critical.

Our plan

Building on existing international research, the project will utilise detailed micro-waste auditing, ongoing waste disposal monitoring technology (bin weighing), and novel household surveys from a broad cross-section of the community, to develop a comprehensive report on household food waste bin behaviour, including drivers of behaviour and opportunities to deliver household behaviour change.

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The improved understanding of food waste behaviour will allow research partners to design efficient programs to reduce household food waste from entering landfill.

Having a deeper understanding of varying in-house waste behaviours across households (and communities) will allow for the identification of key drivers that may reduce household food waste and improve household bin disposal behaviour. This in turn allows for:

· reduced council waste disposal costs which in turn may reduce council rate costs on residents, and/or facilitate improved service delivery

· improved waste resource quality (and subsequently reduced processing costs and input losses to produce saleable products) through reduced contamination across all bins

· increased volume of soil improvement products produced by the composting industry for application onto land, improving farming soil quality and structure, ultimately increasing growers' yields

· increased integrity (and ability to showcase) an already well established local circular economy

· reduced generation of greenhouse gases from food waste rotting in landfill

· enable the delivery of effectively tailored waste-education programs, which maximise return on investment and reduce resource investment

· inform state and local government waste policy.

Ultimately the project aims to successfully change household food waste behaviour in the long-term to achieve the recycling of food waste into a valuable commodity as opposed to sending it to landfill. And whilst this project will be focussed on Adelaide, similar benefits can be expected for councils in other Australian cities.

Timeline
May 2020 - July 2022

Project leader
Professor Sarah Wheeler
University of Adelaide

Participants

EastWaste

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Government of South Australia
Green Industries SA

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