**Waste 2017 Abstract Submission**

Compost Revolution: data-driven lessons from 5 years on the front lines of Australia’s largest residential composting program

*My presentation is relevant to the following topic area(s).*

🞎 Circular economy 🞎 Overseas experiences

X Collection (inc MUD’s, transient population areas) 🞎 Problem/Hazardous waste (inc asbestos, clinical &

🞎 Container Deposit Schemes medical, ocean plastics, paint, tyres etc)

X Economics (inc business cases, data gathering, 🞎 Product Stewardship

monitoring performance) 🞎 Regional issues

X Education (inc community engagement) X Recycling (inc CRC’s, collection)

🞎 E-Waste 🞎 Regulations and levies

🞎 Grants (outcomes and processes) X Social enterprise

X Infrastructure (inc major waste grants, EfW, organics) 🞎 State based issues (eg. Fit for the Future NSW)

X Innovative projects (case studies preferred) 🞎 Technology

X Landfill (inc operations, regulations) 🞎 Tenders and contracts

🞎 Litter and/or illegal dumping (inc litter initiatives) 🞎 Other

X Organics (inc collection, processing)

**Presenter information**

**Presenter name:** David Gravina

**Presenter position:** CEO

**Presenter organisation:** Revolution Apps Pty Ltd

**Presenter email address:** dg@compostrevolution.com.au

**Presenter mobile number:** 0408080461

**Presenter name**: JP Williamson

**Presenter position:** Regional Organic Waste Officer

**Presenter organisation:** Waverley, Randwick, and Woollahra Councils

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**Biography**

David Gravina: David is an entrepreneur-activist, self-confessed geek and passionate advocate of co-designing with communities. He has founded a number of social impact ventures including Digital Eskimo, Australia’s first purpose-driven design agency (acquired in 2015 and rebranded as Future Friendly), the social good advocacy platform Do Gooder and Revolution Apps, which operates the Compost Revolution in partnership with the 3 Council Project, the NSW EPA and over 30 councils across Australia.

JP Williamson: Bio to be confirmed

**Abstract Summary**

The Compost Revolution is an innovative and effective program deployed by councils to educate residents and maximise uptake of home composting solutions. Integrated online education, support and delivery logistics, data-driven community engagement, and full impact monitoring provide a scalable model for significant and measurable resource recovery. Data show that councils who invest more in infrastructure and engagement achieve cost-neutrality and even save money on waste collection. With consistently positive feedback from participants, the program allows councils to better understand the motivations, challenges, associated behaviours, and demographical data of participants, serving as a powerful tool for reducing waste and empowering enduring sustainable behavioural change.

**Abstract**

The Compost Revolution is an innovative, data-driven, and engagement-focused initiative designed with councils to educate and equip residents to adopt in-home organics processing through the use of compost bins, worm farms, and bokashi bins. The program inspires, builds, and reinforces habits so that organic recycling becomes an integral and sustained part of the solution to reducing food waste and associated greenhouse gas emissions.

Australia has a critical shortage of organic processing infrastructure, which is the primary bottleneck for improved recycling rates in our society. Moreover, councils often suffer from limited sustainability education budgets and a shortfall in capacity to develop and implement projects, while residents are often too time-poor or disengaged to attend workshops. The Compost Revolution model successfully addresses these gaps by providing a highly-engaging easy-to-use digital platform with national coverage customisable for individual councils. The full service includes council and resident support, delivery logistics, ongoing product development, a schools program, promotional support with an emphasis on active community engagement, and real-time monitoring of tutorial compliance and environmental impact.

The program was created and piloted by Randwick, Waverley, and Woollahra councils (3 Councils) in partnership with the NSW E­­PA in 2010. Since then the program has successfully diverted 3,700 tonnes of waste, saved 5,900 tonnes of greenhouse gas emissions, and saved nearly $1 million in landfill costs. It has trained 74,000 residents in composting methods and equipped 16,000 households across 51 primary council areas with ongoing funding support from select councils and the NSW Environmental Trust Love Food Hate Waste program.

Approximately half of residents use worm farms, with bokashi bins fast emerging as a popular and viable option, particularly for MUDs. Given the expense and challenges of green bin food waste collection options, municipal organics recovery experts have emphasised the significant role that worm farms and bokashi bins can play in multi-unit dwellings even in conjunction with a central food waste collection system as they accelerate and decentralise the organics recycling process.

A strategic focus on comprehensive online training, resident experience, high-quality composting gear, and community-building through direct communication and social media have helped support high retention rates among residents. 2016 survey data from 1,529 respondents (18% response rate) indicate a program retention rate of 94% and that concern about waste in landfill, improving gardens, and concern about climate change are the primary motivations for residents to begin composting.

Our data indicate that councils who invest more in infrastructure and engagement achieve cost-neutrality and even save money on haulage and landfill within 3-5 years. An integrated approach to community engagement – including council mail-outs, rates notices, council websites, word of mouth, and optimised content that ensures high ranking in online searches – is key to scaling up organics recycling. The 3 NSW Eastern Suburbs councils have achieved and surpassed cost-neutrality where savings from landfill avoided exceeded the costs to administer, promote and provide infrastructure. In fact, the 3 Councils have saved over $140,000 and reduced the cost of waste per tonne by 57% since inception 6 years ago. While pilot programs across the country are show promising results, the greatest potential for councils lies in a longer-term commitment to large-scale implementation. With a significant upfront investment councils can expect to break even then begin saving money within 3-5 years, with benefits accruing long into the future as residents continue to compost.

The Compost Revolution offers councils an opportunity to build more resilient communities and help resource-lean local governments meet waste and CO2 reduction targets by delivering significant and measurable resource recovery with long-term environmental benefits and cost savings.