NP3003

COMPOST AND FERTILISER USE IN AUSTRALIAN HORTICULTURE: NETWORKS AND PRACTICES

Research Context and Questions

Approximately half the municipal waste that goes to landfill is food waste. Recycling this food waste into compost should help our transition to low carbon living by:

- reducing the emission of greenhouse gases
- improving carbon storage
- promoting a closed-loop approach to resource recovery and reuse.

Who are the actors and what are the practices involved in the networks co-creating systems to use composted urban food and organic "wastes" in commercial horticulture?

What drivers and barriers exist for horticulturalists (the end-users of compost) to engage with these systems?

How is the market for compost made from municipally-collected recycled organics being developed?

Methodology

This research is in progress. The methods I am using are:

- analysis of documents about the use of compost in peri-urban horticulture
- in-depth interviews with horticulturalists, agronomists, government agents and recycled organic industry representatives
- observations of compost's creation, its horticultural use, and compost-related educational events

Coding these data sets will provide detailed information for case studies about *how* the compost market is being developed, *who* and *what* is involved, what *drives* their interactions, and what *barriers* exist.

Results

Preliminary research results show that compost made from urban-derived organics and used in peri-urban horticulture is created and used in socio-technical systems of people, practices, living and non-living things, knowledges and technologies.

Conclusions

Compost creation and use on a commercial scale happens in a complex network of actors and practices.

There is no point in collecting municipal food and garden materials to turn into compost if the prospective users are uninterested, or have serious concerns about the product's safety, reliability or cost.

Anticipated impacts

This PhD is connected to the CRC-LCL project "Carbon reductions from composting food waste for food production – fitting recycling models to urban forms" (RP 2019).

This research will assist in the creation of a robust market for compost made from food scraps and green waste, which will help develop municipal food waste collection and composting schemes.

End-users are crucial to the successful recycling of urban organic materials and their reuse as compost in horticulture.

Investigating compost market development requires attention to end-users, standards and supply chains.

Further information

www.foodcompostfood.org
foodcompostfood
foodcompostfood
wwww.lowcarbonliving.com.au

Contact

Katharine Thornton
Swinburne University of Technology
E kjthornton@swin.edu.au
P 0415 605 829

Compost spreading in Gippsland, Victoria, September 2017, photo by Kate Thornton