Value of Organics Education

WSROC engaged MRA to quantify the value of education for the provision of food organics and garden organics (FOGO) services, specifically economic returns on funding community education about FOGO.

Methodology

Data sources:
- WSROC councils
- NSW WARR 2020-21
- Other Australian LGAs

→ Analysis of ed. spend and contamination

Ed. spend = direct funding of activities, resources, collateral & staff

→ Graph recycling and FOGO ed. spend vs contamination

Analyse by council size & performance

→ Calculate return on investment (ROI) through avoided landfill costs as a result of ed. spend

Create interactive ROI model

Limitations

Total investment (inc. management labour & contractor contributions) unavailable & excluded

Behaviour change outcome cannot be attributed to education program alone

Contamination was only metric used as data is available & measures system performance

Case Study: Albury City Council

In 2019-2020, Council spent ~$60,000 within an existing program and in-house expenditure) to target the remaining food in the general waste bin.
A targeted campaign focused on reminding the community that all food should go into the FOGO service.
As a result, FOGO generation increased from 7.7kg/hh/yr to 9.1 kg/hh/yr (18% increase), close to a 3,000 t increase in FOGO capture resulting in an overall reduction of $230,000 in processing costs.

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Results

FOGO
- 86% councils contamination is <2%
- Best fit: $10/hh = ~0.75% contamination reduction

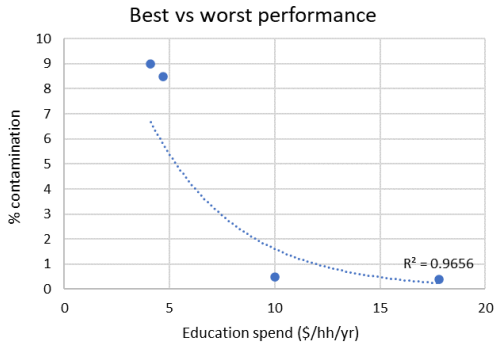
FOGO & Recycling
Best fit: $10/hh = ~3% overall contamination reduction

Council Size
To achieve 1.5% contamination:
- Smaller council = $6/hh/yr
- Larger council = $9/hh/yr

Larger councils spend more due to:
- Difficulty impacting behaviour with ed.
- Diverse community = complex comms
- Difficulty reaching whole community

Using the most reliable datasets, to achieve <2% contamination, education spend needs to be >$8/hh/yr.

Above $12/hh/yr there is little additional gain in reduced contamination.



>7%
contamination with little education

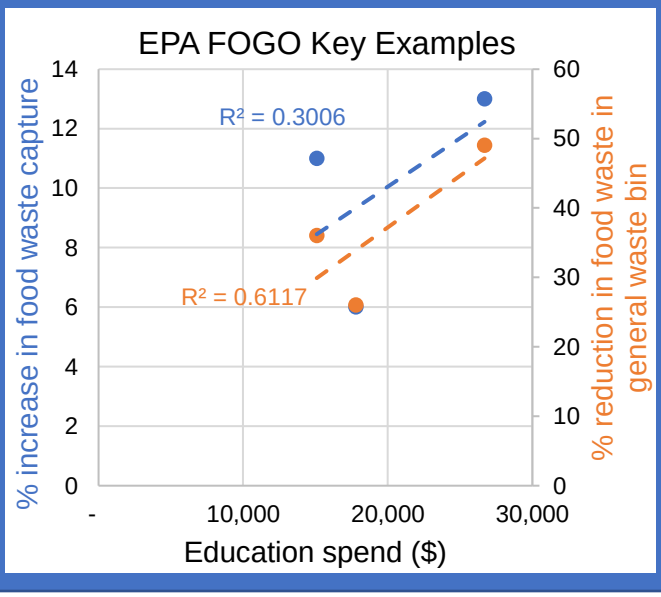
2-3%
contamination with some education

<2%
contamination with extensive education

Case Study: NSW EPA FOGO Deep Dive

Individual councils were provided $10,000 to implement a targeted intervention program. Councils made in-kind contributions to staff time & collateral development.

Results of this included increased food waste recovery (by 8-23%) & contamination decreased by 2.1% down to 0.5%.



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Cost of contamination

Contamination increases the cost of FOGO processing in 2 ways:

1. Contract Contamination Penalty

- 15% gate fee penalty for 3-5% contamination = extra $24/t
- For 10,000t FOGO, contamination <3% saves $240,000

2. Contamination Processing

- Collection & processing = ~$275/t
- Every tonne of contamination prevented there is $275 in avoided costs to invest in education

Social & environmental benefits

80%
residents shown FOGO campaign were likely to put food in FOGO

77%
residents want to take more climate action

78%
residents don't believe they have impact on climate action

Education campaigns:

- Normalise acceptable behaviours
- Encourage behaviours by providing knowledge and peer influence
- Increase community cohesion through inclusion of CALD audiences

FOGO participation can lead to:

- Increased sense of personal climate change action
- Increased sense of community contribution
- Increased satisfaction with Council services
- Reduction in food waste

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In-kind council contributions

The design and development of a FOGO education program is often outsourced to community engagement contractors. However, significant in-kind expenditure is also required to implement the program.

Role	Responsibilities	% FTE	
		Lead-up & 1st year	On-going
WARR Education Officer	Assist in design, production & distribution of material Assist in audits/bin tagging/contamination monitoring and reporting Prepare household info Attend promotional events/pop-ups Coordinate contractor and council activities	150%	50%
WARR Team Lead	Develop and manage program budget Manage education officer(s) activities Manage contractor and contract Manage program implementation Approval of collateral	50%	30%
WARR Manager	Oversee program implementation Procurement Resolve conflicts and issues Manage internal Council reporting, inc. CEO and Councillors	20%	10%
Customer service	Respond to customer queries and complaints	+ 50% on BAU	+5% on BAU
Comms team	Design and production of collateral, briefings, letters (or assist, if external contractor is engaged) Approve collateral Work with external comms consultant (if engaged) Develop and maintain website and social media	+100% on BAU	+10% on BAU
CEO/CFO	Briefings and oversight	5%	1%