



City of
Melville

FOGO 3-bin system two years on – What does it look like?

A look into what the transition to the 3-bin FOGO system looks like two-years on for the City of Melville and what you can expect

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Introduction

- You can run and hide.....but for how long. Going FOGO is inevitable for a lot of municipalities
- Australia has one of the world's most disproportionate waste generation volumes relative to population, and implementing FOGO is critical to some in improving poor residential material recovery rates
- But what does it look like once the dust has settled? How well does it improve kerbside recovery rates?

This presentation looks at Melville's two years later:

- What does the normalised version of the FOGO 3-bin system look like?
- How well has it contributed to recovery rates?
- What should you be mindful of based on what worked well and not so well?
- What additional value can FOGO services deliver?

Presentation

1. A Background into Melville's Roll-out
2. Knowing your audience
3. The key aspects
4. The resident's response
5. Results
6. Going beyond the bin
7. Summary
8. Question time



A Background into Melville's Roll-out:

- After running a trial between 2017-2019 with 6,700 dwellings, the City of Melville rolled out the remaining 33,500 single unit dwellings to the FOGO 3-bin system in July 2019, concluding in October 2019.
- 97% of MUDs and approx. 20% of retirement villages are now also on the 3-bin FOGO system.
- The collection methodology moved from **weekly general waste and recycling collections** to:
 - **Lime green-lid** FOGO bin (240L) **Weekly**
 - **Red-lid** General Waste bin (140L) **Fortnightly**
 - **Yellow-lid** Recycling Bin (240L/360) **Fortnightly**
 - Also, a 7L kitchen caddy for the collection of organic waste generated in the kitchen
- A 240L **red-lid** general Waste option is also offered to residents based on a needs assessment/content audit. Typically this relates to households with larger families or medical reasons.

Bin System	Resources recovered	Typical recovery rate
2-Bin system 	<ul style="list-style-type: none">✓ Recyclables✓ Bulk verge waste	 33% diversion from landfill
3-bin Garden Organics (GO) system 	<ul style="list-style-type: none">✓ Garden waste✓ Recyclables✓ Bulk verge waste	 48% diversion from landfill
3-bin Food Organics Garden Organics (FOGO) system 	<ul style="list-style-type: none">✓ Food waste✓ Garden waste✓ Recyclables✓ Bulk verge waste	 66.5% diversion from landfill



Knowing Your Audience

- Know the age demographics and preferred methods of communication for your residents.
E.g.
 - Print mail
 - Email
 - Social media
 - Annual calendars
 - Magazine articles
 - Newsletters
 - E-news

Going beyond print and electronic communication, the City went to the lengths of offering shopping centre interactive displays and pre, during and post rollout information sessions to intimately present in detail the who, what, how and why of the need for FOGO.



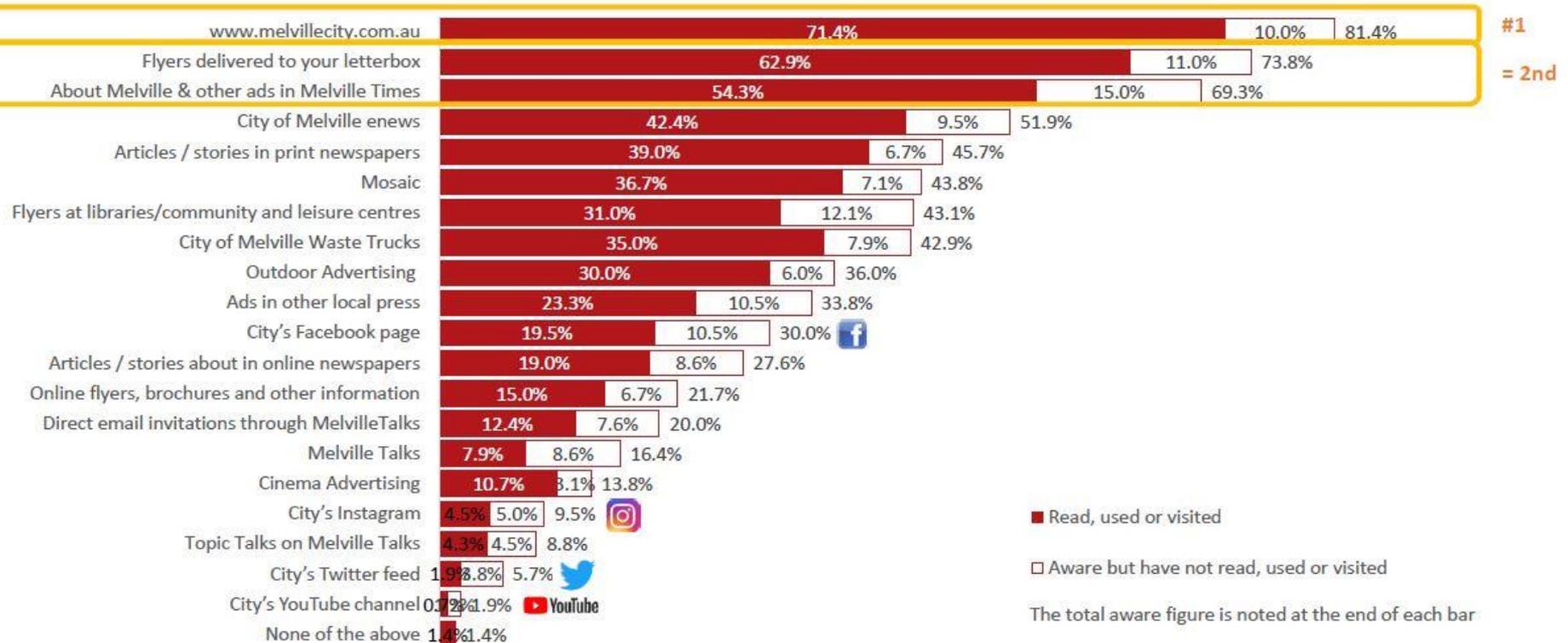


Knowing your audience – cont'd

- One of the key aspects identified by the City, and critical to an effective roll-out, is the marketing and communication to the residents, and how successfully and effectively it is received.

The City's website is the go to source of information for residents and ratepayers.

Awareness and readership, usage or visitation of communication tools





The Key Aspects – Communication and Information

- **Your residential address list and datasets**
How good, or not so good this is, will determine how many tears are shed – Check, re-check, and check again
- **The Waste Education Officer**
An invaluable resource
- **Internal organisational buy-in**
The importance of organisational advocates - Equipping your teams, and as many internal advocates as you can is one of the most important tools in your toolkit!
- **School Waste Education Programs**
Primary and High School education programs
- **Follow-up/post roll-out residential information sessions**
- **Community events and sustainable events policies**





The Resident's Response

- The questions and complaints will come, embrace it!
- 2017 General Enquiry – Waste: 392 + FOGO General Enquiry: 668 = **TOTAL: 1060**
- 2018 General Enquiry – Waste: 380 + FOGO General Enquiry: 571 = **TOTAL: 951**
- 2019 General Enquiry – Waste: 520 + FOGO General Enquiry: 489 = **TOTAL: 1009**
- 2020 General Enquiry – Waste: 637 + FOGO General Enquiry: 156 = **TOTAL: 793**
- Some people complain because they just want more information, or just because they can...
- The power of social media and self regulation





Results

- The WA State Government '*Waste avoidance and resource recovery strategy 2030*' target for material recovery:
 - 2020: Previously: 65% material recovery
Amended to: Recover energy only from residual waste
 - 2025: Increase material recovery to 70%
 - 2030: Increase material recovery to 75%
- Pre-FOGO roll-out material recovery (including trial of 6,700 homes) was approx. 53-59%*
*(General Waste was pre-sorted – not all landfilled)

Financial Yr 2020/2021

	Data Source	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	YTD
Diversion Rate														
MSW Diversion %	Red + FOGO	58.83%	59.92%	59.63%	59.50%	55.41%	61.16%	56.32%	57.89%	59.49%	58.99%	58.24%	58.64%	58.70%
Recyclables Diversion %	Yellow	85.15%	85.00%	85.00%	85.00%	84.95%	84.96%	85.00%	85.00%	85.07%	85.00%	85.00%	87.10%	85.17%
Kerbside Diversion %	R + FOGO + Y	65.71%	66.22%	65.74%	65.41%	62.77%	67.05%	63.71%	64.69%	65.69%	65.12%	65.00%	65.71%	65.25%
Vergeside Diversion %		100.00%	100.00%	44.36%	44.08%	43.19%	45.74%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	72.69%
Overall Diversion %		68.40%	68.89%	62.34%	61.59%	59.31%	64.90%	66.08%	67.39%	70.02%	68.72%	69.58%	68.77%	66.12%

- FY21 **FOGO-General Waste** ratio average: 2.1 : 1
(20,523T **FOGO** : 9,900T **GW**)



Results – cont'd

- **Significant reduction in waste to landfill**
- **FOGO disposal rates are significantly cheaper than landfill rates (doesn't attract landfill levy)**
 - FY18 vs FY20 annual GW + FOGO disposal costs = 38.58% reduction
- **Sub-3% FOGO contamination rates**
- **Behaviour change initiatives and culture reduces overall volumes and therefore, operating costs**
- **Resource Recovery Group's (formerly SMRC) expertise in FOGO processing has resulted in a highly efficient operation and best-practice resources recovery rates**
- **Supports the FOGO market and scale-of-economy will provide future savings as more LGAs come on board**
- **The residents have become more engaged and committed to waste minimisation**
- **LGAs are able to claim FOGO derived compost material as a carbon reduction measure, particularly if using material in their own gardens and parks**
- **The amount of free liners used by residents is very modest**
 - This is believed to be a combination of a small amount maybe not using them, and the majority a result of the responsible use of liners



Going Beyond The Bin

- **Commercial FOGO services**
 - Commercial FOGO services to capture commercial FOGO waste (e.g. cafes, restaurants, hairdressers, lawn-mowing businesses etc.)
- **Doggie Dunnies** (Made by Woodlands)
 - A trial is currently underway capturing public area dog waste
- **Organisational FOGO diversion**
- **Public area FOGO bins**
- **Compostable liner retail options**
- **FOGO derived compost**
 - FOGO derived compost, is now available in retailers for residents and consumers to purchase





Summary

- **So to answer the question, FOGO 3-bin system – What does it look like?
The new norm becomes exactly that, the new norm**
- **The industry and supporting networks play a huge part in the success of the roll-out and the continued success**
- **Engage with your stakeholders as much and as frequently as you can**
- **Deliver effectively - Not everybody learns the same way**
- **Have faith in your well-engaged and informed residents**
- **Be flexible and dynamic – Things will go wrong, roll with it**
- **Compliment the services**
- **Don't stop the education**
- **Communicate the wins – If you can show this tangibly, this is highly impactful**



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Questions?