

FOGO Waste Diversion potential: Real world policies and performance outcomes

FACTSHEET

The NSW Government has adopted targets to halve the amount of organic waste sent to landfill and achieve an 80% average recovery rate across all waste streams, by 2030.

Achieving high rates of diversion of waste from landfill is key to meeting State and Commonwealth climate change and waste management policy goal.

Food Organics and Garden Organics (FOGO) programs play a fundamental role in reducing landfill waste and associated landfill gas (LFG) emissions. Drawing on real-world data from New South Wales (NSW) kerbside bin audits, this Fact Sheet provides insights into the factors that affect diversion efficiency and explains how council policies can help ensure successful outcomes from FOGO programs.

FOGO diversion efficiency: Real-world data

The NSW Environment Protection Authority (EPA) engaged Rawtec Pty Ltd to [review and analyse kerbside audit results from councils across NSW](#). The analysis focused on the performance of kerbside residual waste and organics recycling services, including diversion of food and garden material from landfill, diversion efficiency, and FOGO bin contamination levels.

An analysis of this data, consistent with findings from nationwide studies, shows significant variation in diversion rates for food and garden organics programs.



Diversion efficiency rates provide a useful benchmark for understanding the potential of FOGO programs:

Food waste diversion rates range from as little as 5% to 73%, with an average result of 41%, influenced by factors like service design, bin size, and education.

Garden organics diversion rates range from 87% to 99.9%, with an average result of 98%, showing consistently high performance across councils for this waste type.

Diversion scenarios with averages

As part of its landfill emissions capacity building work, Hunter JO has used the EPA data to develop three realistic FOGO policy scenarios that councils could aim for - representing average, high, and best practice diversion efficiencies. Relating diversion efficiency levels to service configurations as described in the EPA report, the practices needed to achieve each of these diversion efficiency levels can then mapped out. The % figures used in these scenarios have also been used to facilitate scenario modelling of landfill emissions using the NGER Solid Waste Calculator.

Scenario (diversion efficiency level)	Food %	Garden %	Average % (unweighted)
AVERAGE Average of entire sample (as reported in EPA kerbside audit report)	41%	98%	69.5%
HIGH Ambitious mid-point between average and best practice	57%	99%	78%
BEST PRACTICE Uppermost value in the sample from EPA kerbside audit report	73%	100%	86.5%

Practices required to achieve different diversion levels

AVERAGE DIVERSION SCENARIO

Practices required

- Basic community engagement**
Implement an initial education campaign focusing on the proper use of FOGO bins.
- Basic collection services**
Maintain standard bin sizes and collection frequency. Introduce food waste collection but without additional tools like kitchen caddies or liners.

41%
FOOD

98%
GARDEN

***70%**
FOGO DIVERSION

Policy ambition

Suitable for councils just beginning to implement FOGO services or those with limited resources and facing substantial challenges with food waste diversion.

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HIGH DIVERSION SCENARIO

Practices required

- **Sustained community engagement**
Ongoing education and basic outreach programs during establishment phase. Behaviour change can take time - FOGO services in place longer than one year have much higher food diversion rates than those established less than one year.
- **Optimised collection services**
Adjust collection frequencies and bin sizes based on waste generation patterns. In addition to FOGO bin provision, results can be improved by reducing residual waste

57%
FOOD

99%
GARDEN

***78%**
FOGO DIVERSION

collection frequency and/or providing smaller residual waste bins (120/140 litre).

Policy ambition

Ideal for councils looking to improve FOGO diversion efficiency beyond NSW Government targets by addressing both service design and community engagement more strategically.

BEST PRACTICE DIVERSION SCENARIO

Description

This scenario aligns with the weighted average (67.22%) and assumes balanced performance for both food and garden organics diversion.

Practices required

- **Advanced community engagement**
Launch and maintain comprehensive and educational campaigns using diverse media, including workshops, community events, and digital platforms.
- **Advanced collection services**
Tailor collection schedules, bin sizes, and service configurations to maximise both food and garden organics diversion for all dwelling types (including special

73%
FOOD

100%
GARDEN

***86%**
FOGO DIVERSION

arrangements for apartments). The service configuration that has the highest food waste diversion potential is small (120/140 litre) residual waste bins collected fortnightly and large (240 litre) FOGO bins collected weekly. Provide kitchen caddies and compostable liners to all households.

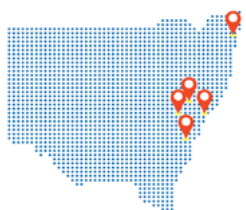
Policy ambition

This scenario is suitable for councils aiming for leadership in waste diversion and environmental sustainability, where achieving aggressive diversion efficiency aligns with bold climate change and circular economy goals.

In addition to the practices described above, it has been shown that diversion efficiency is higher in councils with access to adequate local composting and anaerobic digestion facilities with the capacity to handle large volumes of organics, while ensuring minimal contamination and high-quality output.

Real-world examples

Several NSW councils have demonstrated how best practices align with above average diversion rates.



Lismore Council

Reached 86% diversion by ensuring strong participation in both food and garden organics, backed by sufficient processing capacity.



Upper Hunter Shire Council

Achieved a 40% reduction in landfill waste and a 35% increase in organic waste collection through community education and improved collection services, with 75% resident participation.



Lake Macquarie City Council

Achieved a 64% diversion rate by focusing on the reduction of garden and park waste sent to landfill.



Mid-Western Regional Council

Reached a 50% reduction in landfill waste and a 45% increase in organic waste processing by targeting residential and commercial sectors, saving approximately \$500,000 in landfill levies and waste management costs.



Shellharbour City Council

Achieved 80%+ diversion through advanced community engagement, optimised collection services, and adequate infrastructure investment.