Positive outlook for organics markets in NSW

"Innovators are developing new markets that are realising higher market prices. If these markets can continue to grow, eventually it should lead to councils being charged lower prices." – Rod Carr, Director, Marsden Jacob Associates

Background

In 2020 the NSW Environment Protection Authority (EPA) commissioned Marsden Jacob Associates (MJA) and Jackson Environment and Planning to provide an update of its 2018 study into organics markets in NSW.

The research provides a point-in-time snapshot of the current supply and demand drivers of organics recycling in NSW. The update shows supply is continuing to meet demand and the market is continuing to grow. However, producing higher quality products is critical to achieving higher prices and expanding the market further.

The study analysed the EPA and NSW council data and included interviews with the organics industry. This fact sheet summarises the findings.

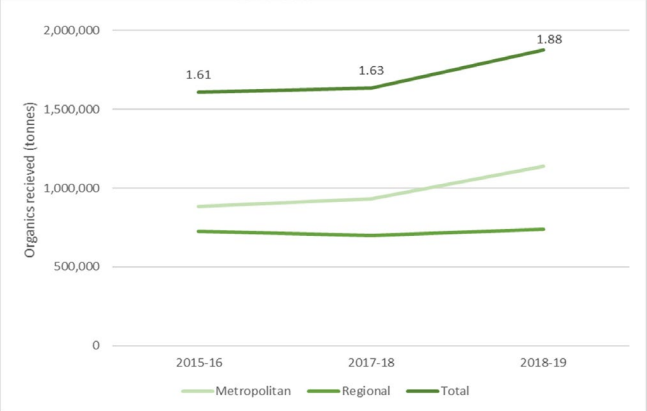
Research scope

The research focused on these organic materials:

- garden organics from arborists, land clearing or felling operations
- kerbside and public drop-off garden organics
- combined food and garden organics (FOGO)
- commercial and industrial (C & I) food waste.

Supply

Analysis of data from the EPA's Waste and Resource Recovery Portal (WARRP), Waste and Resource Recovery (WaRR) report and AORA survey for 2018–19 shows the best estimate of total supply was 1.88 million tonnes and demand was 1.37 million tonnes. This is a significant increase from the 2015–16 figures of 1.61 million tonnes and 1.19 million tonnes respectively.



Best estimate of supply into processing facilities, 2015–16 to 2018–19. Source: MJA analysis of WARRP (2017–18 and 2018–19) and AORA survey (2017–18).

The increase was highest in the Metropolitan region, and the most likely driver of this result was an increase in councils across NSW expanding FOGO and GO collection services.

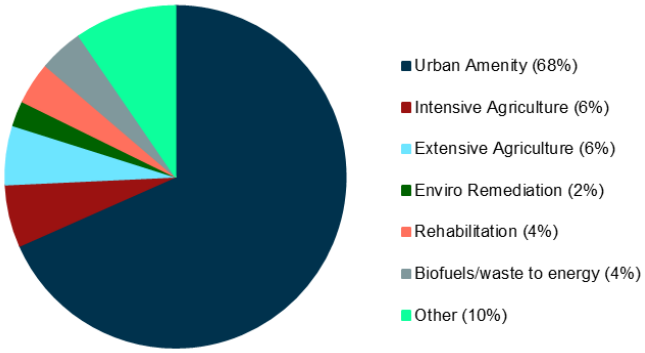
Organic processing facilities report that the tonnage of Food Organics and Garden Organics (FOGO) collected from councils that have recently introduced the service is growing year on year. Based on 2018–19 data, the proportion of councils with an organics service collection is 66%, an increase of more than 10% since 2015–16.

Demand

Urban amenity remains the key source of demand, accounting for 68% of the organics market. The Western Sydney Regional Organisation of Councils (WSROC) region contributes the largest supply and demand in the market with more than 30% of all supply transported to facilities in this

region. WSROC is a net importer of recycled organics and demand is largely driven by urban and industrial development.

The agriculture market is the second-largest end-use market, and growth is accelerating. Research indicates the location of facilities has a strong influence on end-use markets. Composters in regional NSW are favouring agricultural markets over urban amenity markets, as the demand in these areas is higher.



Estimated demand for organics by end market 2018–19. Source: MJA analysis of WARRP (2018–19) and AORA (2014–15) data.

In some cases demand is outstripping supply, particularly in high-value tree crops such as macadamias and avocados. Industry analysis is finding that the return on investment for compost application in these markets can be as little as two years, with benefits delivered for five or more years.

Market opportunities

As the urban amenity market continues to grow, the market is becoming increasingly discerning, so higher quality product is critical. Organics processing businesses that invest in technology to create high-quality products receive higher prices and strong demand.

Agricultural demand is available to meet supply, however differentiated compost products are needed to achieve higher prices, with an emphasis on carbon, nutrient and soil health benefits.

Composted products that have been differentiated from synthetic fertilisers and raw manures are realising up to $100 per tonne as a biological soil health product for agriculture. In some cases up to $200 per tonne has been achieved.

Market barriers

There are several barriers to organics market expansion, including drought, contamination and the current focus on gate fees by many producers.

The drought from 2017–2020 affected supply and demand and caused the collected garden organics (GO) to be incredibly dry. These drier inputs required significant additional processing, water input and a longer processing time.

Contamination management in source-separated FOGO and GO streams is a constant challenge, which requires extra time and resources and impacts the quality of composted products. Ongoing education is critical to ensure the community understands how to use the FOGO service correctly.

Gate fees remain a key source of revenue (up to 70–80%) for organics processors, and are generally relied on to cover processing costs to keep the price of end products down. As a result, the current gate fee model is not incentivising investment into market development. Increasing the focus on quality can lead to higher prices for composted products.

Funding and grants

The EPA grant programs have supported increased supply, processing capacity, product quality and market growth. Between 2015 and 2019, a total of 28 new or upgraded organics processing facilities were funded, with those completed now contributing to the diversion of organics from landfill. Twenty-four councils were funded to deliver new or upgraded organics collection services, with the majority moving to FOGO.

The Waste and Sustainable Materials Strategy (WaSM) 2041, released in June 2021, introduced new requirements for councils to provide a source-separated organics collection to all households by 2030 and for all larger food-waste generating businesses to source-separate food waste by 2025. To achieve this, the NSW Government will provide $69 million to support councils and businesses to transition to FOGO or food only (FO) services.

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