

**DCS526 FOOD ORGANIC AND GARDEN ORGANIC (FOGO)**

<b>AGENDA REFERENCE:</b>	<b>D-22-055473</b>
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<b>EXECUTIVE:</b>	<b>P Melling, Director Development Services</b>
<b>DATE OF REPORT:</b>	<b>6 May 2022</b>
<b>FILE REFERENCE:</b>	<b>GO/6/0012-008</b>
<b>ATTACHMENTS:</b>	<b>Yes (x1) Confidential Confidential - FOGO Costs</b>

**EXECUTIVE SUMMARY:**

The purpose of this report is to seek a Council decision on the future of the Food Organic and Garden Organic (FOGO) trial for the 2022-23 financial year.

**EXECUTIVE RECOMMENDATION:**

That Council by Simple Majority pursuant to Section 5.20 of the Local Government Act 1995 RESOLVES to:

1. APPROVE the continuation of the Food Organic and Garden Organic (FOGO) kerbside collection trial involving 500 households for the 2022-2023 period to enable contamination reduction efforts and information gathering to continue; and
2. MAKE provisions in the FY2022-23 Annual Budget of an amount of \$185,000 for the trial continuation.

**PROPONENT:**

The proponent is the City of Greater Geraldton.

**BACKGROUND:**

Council at its Ordinary meeting held on 28 May 2019, Item No. DCS412 - Food Organic and Garden Organic (FOGO) Trial, approved Officers undertaking a (FOGO) trial of 500 households across the City. The trial subsequently commenced in 2020. The trial has been challenging and a very steep learning curve for the households, Council Officers and contractors involved. The trial involved:

- Selecting 500 households across various suburbs.
- Provision of 500 bins and associated kitchen FOGO bins.
- Providing advice on what items can be put into the FOGO bin
- Arranging collection of the bins on a weekly basis.
- Collecting the material and taking it to the Meru hard stand area.
- Picking the contamination material out of the organic material.
- Shredding the material to break down its size.
- Placing the shredded material in the concrete bunkers.
- Add water and turn the piles on a regular basis using a water truck and front end loader.
- Sampling the composted material for compliance with Australia Standards.

The major issues encountered through the trial included:

- Low bin presentation rates.
- High contamination rates.
- Development of a successful composting system.
- The COVID-19 pandemic.
- Recruitment difficulties.
- Increasing costs.
- Lack of specialist knowledge.

Originally, the intention was to slowly increase the number of households being serviced by the program. However, because of these challenges, the trial has not been expanded. The average bin presentation rate over the trial period has been 58%. Hence, on average of the 500 bins in the trial, only 290 were presented to the kerb for collection.

Including contamination, an average of 11kg per bin per dwelling per week has been collected. This equates to approximately 170 tonne of organic material being collected per annum and diverted away from landfill at a cost of \$185,000. By way of comparison, the total tonnage of material placed in the landfill per annum is approximately 49,000 tonnes. This figure is anticipated to increase to 68,000 tonnes by 2030. Based on a kerbside waste audit carried out by Bowman and Associates in 2019 of 200 dwellings within the City, FOGO was estimated to comprise of approximately 18% of the total waste stream.

The contamination rate measures the percentage of material that cannot be composted and must be removed prior to composting being undertaken. The contamination rate has steadily increased from 20 percent to a current average of 50 percent. This figure is much higher than the average 3-5% contamination rates provided by other monitored FOGO trials across Australia. The Council approved the engagement of an education Officer to assist residents with issues. However, education and engagement with trial participants has been minimal to date due to challenges in successfully recruiting and the impacts of COVID-19.

The City's newly recruited Resource Recovery and Engagement Officer will be undertaking engagement sessions and another round of bin tagging over the coming weeks. Bin tagging is an educational tool to provide residents with direct individualised feedback on the content of their bin to reduce contamination. This program will assist in identifying households that are consistently underperforming, with a potential consequence of having their bin removed from the trial service.

The processing of the collected organic material has also proved challenging. Sampling of the first batch was conducted in June 2020. Regular testing since this time has been undertaken and to date the produced compost has not met Australian Standards and as such cannot be on sold or provided to the community (Department of Water and Environmental Regulation (DWER) licensing requirements).

In order to address the processing issues, the City engaged composting consultants to review the process and provide recommendations. The subsequent report stated that the process was doing well considering the low levels of expertise and resources. It went on to suggest that increased input (more organic material) would assist with heat generation and ultimately compliance. However to date, compliant compost has not been produced at the Meru Facility. Council should also appreciate that if the trial was to expand to cover more and more of the City, the process to manage the increasing volumes of organic material would need to change. Currently, the City is basically using the same method that home gardeners use to produce compost. As more material is received, the City would need to utilise windrows which require specialist machines to water and turn and potentially a digester. As the establishment and maintenance of these systems is expensive, Officers investigated providing the City's organic material to an existing commercial operation for processing.

To allow Officers to provide further advice to the Council through the trial period, the City has commenced work with a Perth composting contractor. The City's FOGO material is collected each day from the trial participants on the same day as the general waste collection. The material is placed on the FOGO pad at Meru landfill. The contamination is removed via hand picking or with machinery if high risk items are present such as nappies or syringes. The contamination is placed into a skip bin for disposal to landfill. The daily FOGO material is then stored in a concrete bunker which is covered with green waste to act as a bio-filter to reduce odour, pest access and windblown litter. When the bunker is at capacity, it is transported by Go Organics to their Gingin facility for further processing. The contractor places the FOGO material into an enclosed forced aeration system for two weeks and then it is placed in windrows for 12 weeks. From there it is ground, screened, blended and the final product bagged. The first batch of FOGO material was provided to the specialist on 1 March 2022. The City will soon receive bagged FOGO compost. Costs associated with this process are provided in Confidential Attachment No. DCS526.

The transportation of waste over reasonable distances is not ideal, but not uncommon, especially for regional councils. It is understood that recyclables (plastics and cardboard) are transported to Perth from Kalgoorlie, Broome and Karratha. Resource Recovery Group formally Southern Metropolitan Regional Council which includes City of Fremantle, City of Melville and Town of East Fremantle send FOGO material from Booragoon to GO Organics in Gingin.

In making its decision on the future of the FOGO trial, the Council should consider the environmental, social and financial implications of a FOGO service being provided to all of the City (triple bottom line). These considerations are detailed later within this report.

The continuation of the 500 household FOGO trial will provide an opportunity for the education program to be undertaken in an environment with reduced COVID-19

restrictions to evaluate if it can have a positive impact on the contamination rates. The program continuation will also allow an increased period of time for the City to determine if the compost specialist will consistently produce a quality end product for sale.

## **COMMUNITY, ECONOMY, ENVIRONMENT AND LEADERSHIP ISSUES:**

### **Community:**

With respect to social implications, the Community Survey undertaken in August 2020 revealed that of the 750 respondents, 93% advised that waste issues should be a priority for the city. Waste minimisation is a key priority at a State Government, Local Government and community level. FOGO is one of the opportunities available to assist the City to meet its waste minimisation objectives; however it is important that this is also undertaken in a cost effective manner. The continuation of the trial will “test” the FOGO model in a regional context, where conditions are drier and transport costs (financial and environmental) are important considerations.

### **Economy:**

For the City to provide a FOGO service, Council would need to agree to a significant financial investment. This investment may encourage other Mid West Councils to adopt similar systems and have the potential to create jobs. The continuation of the FOGO trial will enable the City to objectively assess if this model works, or if there are alternative waste minimisation opportunities that achieve higher levels of waste diversion and reduction.

### **Environment:**

With respect to environmental implications, by extrapolating the figures provided above, rolling out FOGO across the city would divert approximately 10,000 tonnes of waste from landfill per annum (17,000 bins, 11kg per week, 20% contamination, plus grass cuttings) and provide an end product that would be beneficial to the region. Hence there are significant positive impacts to the environment by diverting waste from landfill and reusing the end product to create a circular economy. A circular economy is one of the guiding concepts outlined in the State Waste Strategy 2030 to assist with creating recycling solutions.

The City’s licence for the Meru Landfill Facility from the Department of Water and Environmental Regulation has provisions for the continuation of the FOGO trial.

**Leadership:**

In making this decision, Council needs to consider triple bottom line considerations (social, environmental and financial implications). Information on these considerations is provided within the body of this report.

*Disclosure of Interest:*

No Officer involved in the preparation of this report has a declarable interest in this matter.

**RELEVANT PRECEDENTS:**

Council at its Ordinary meeting held on 28 May 2019, Item No. DCS412 - Food Organic and Garden Organic (FOGO) Trial, approved a Food Organic and Garden Organic (FOGO) trial of 500 households across the City.

**COMMUNITY/COUNCILLOR CONSULTATION:**

The City undertook a community waste survey in 2020. The results of this survey informed the development of the City of Greater Geraldton Strategic Waste Management and Recycling Action Plan which has been adopted by Council.

The FOGO trial was approved by Council resolution May 2019.

**LEGISLATIVE/POLICY IMPLICATIONS:**

The City must adhere to its landfill License conditions under the *Environmental Protection Act 1986*. The City has a category 67A license for compost manufacturing and soil blending for 20,000 tonnes per annum.

The continuation of the program is in line with the *State Waste Strategy 2030* recovery targets to increase municipal solid waste material recovery to 55% in major regional centres by 2025.

The City's *Strategic Waste Management and Recycling Action Plan 2020-2030* has a recommended target for a roll out of a two bin system including FOGO.

**FINANCIAL AND RESOURCE IMPLICATIONS:**

In 2019-20, the City invested approximately \$250,000 (capital) to establish the concrete bunkers at Meru and a further \$110,000 in operational expenses.

In 2020-21, the City invested approximately \$50,000 (capital) and a further \$290,000 in operational costs. The estimated cost to extend the trial in 2022-23 for 500 households is \$185,000.

The Confidential Attachment No. DCS526 provides the Councillors with commercial prices for various aspects of the operation should it be rolled out across all properties that currently are eligible for a bin service. Councillors should note that the figure provided is approximate only and intended to give an indication. The indicative price is between \$3.5 million and \$4 million per annum. The reduction in landfill cell creation and filling increases the waste cell's longevity. The City's current number of residential properties (excluding vacant residential) is approximately 17,000 if the cost of FOGO was recovered by ratepayers then based on the above indicative prices each household would incur a \$205 - \$235 charge annually. This figure is not currently represented in the City's Long Term Financial Plan.

**INTEGRATED PLANNING LINKS:**

<b>Strategic Direction: Economy</b>	<b>Aspiration: A healthy thriving and resilient economy that provides opportunities for all whilst protecting the environment and enhancing our social and cultural fabric.</b>
Outcome 2.4	A desirable place to live, work, play, study, invest and visit
<b>Strategic Direction: Environment</b>	<b>Aspiration: Our natural environment has a voice at the table in all our decisions. We are a leader in environmental sustainability.</b>
Outcome 3.1	A City that is planned, managed and maintained to provide for environmental and community wellbeing.
Outcome 3.2	Regional leader in adapting to climate change.
Outcome 3.3	A well-maintained, SMART, sustainable, liveable City valued by the community.
<b>Strategic Direction: Leadership</b>	<b>Aspiration: A strong local democracy with an engaged community, effective partnerships, visionary leadership and well informed decision-making.</b>
Outcome 4.1	Meaningful customer experiences created for the people we serve.

**REGIONAL OUTCOMES:**

There are no impacts to regional outcomes.

**RISK MANAGEMENT:**

There have been a number of risk challenges faced in undertaking this trial. The body of this report details the major challenges faced and the subsequent action taken to try and address them. In making its decision, some further risks that Council may face include:

- There is a reputational risk to the City should the community expectation of delivering on its adopted *Strategic Waste Management & Recycling Action Plan 2020-2030* not be met, including the requirements of the State Waste Avoidance & Resource Recovery Strategy 2030.
- There is a reputational and financial risk to the City should the Council determine to continue the trial and it is unsuccessful.
- There is a financial risk/requirement should Council determine to roll out the program to additional dwellings.

**ALTERNATIVE OPTIONS CONSIDERED BY CITY OFFICERS:**

The following options were considered by City Officers:

1. DISCONTINUE the FOGO kerbside program trial. This decision could be made by Council if it decides the community is unable or unwilling to finance the expenses associated with rolling out the trial in the medium to long term.
2. CONTINUE the FOGO trial in the 2022-23 period and increase the number of participating households. This alternative was not recommended due to the current high contamination rates that needs to be addressed prior to expanding the trial.

*Cr Tanti moved a motion different from the Executive Recommendation to discontinue with FOGO.*

*During the debate Cr Keemink foreshadowed the Executive Recommendation should the motion be lost.*

**COUNCIL DECISION**

**MOVED CR TANTI, SECONDED CR PARKER**

**That Council by Simple Majority pursuant to Section 5.20 of the Local Government Act 1995 RESOLVES to:**

- 1. DISCONTINUE the Food Organic and Garden Organic (FOGO) kerbside collection trial.**

**LOST 3/9**

Time: 5:30 PM

Not Voted: 0

No Votes: 9

Yes Votes: 3

<b>Name</b>	<b>Vote</b>
<b>Mayor Van Styn</b>	<b>NO</b>
<b>Cr. Clune</b>	<b>NO</b>
<b>Cr. Colliver</b>	<b>NO</b>
<b>Cr. Cooper</b>	<b>NO</b>
<b>Cr. Critch</b>	<b>NO</b>
<b>Cr. Hall</b>	<b>NO</b>
<b>Cr. Keemink</b>	<b>NO</b>
<b>Cr. Librizzi</b>	<b>NO</b>
<b>Cr. Parker</b>	<b>YES</b>
<b>Cr. Reymond</b>	<b>YES</b>
<b>Cr. Tanti</b>	<b>YES</b>
<b>Cr. Thomas</b>	<b>NO</b>

*As the alternative motion was lost, the Executive Recommendation became the substantive motion.*

**COUNCIL DECISION**

**MOVED CR KEEMINK, SECONDED CR COLLIVER**

**That Council by Simple Majority pursuant to Section 5.20 of the Local Government Act 1995 RESOLVES to:**

- 1. APPROVE the continuation of the Food Organic and Garden Organic (FOGO) kerbside collection trial involving 500 households for the 2022-2023 period to enable contamination reduction efforts and information gathering to continue; and**
- 2. MAKE provisions in the FY2022-23 Annual Budget of an amount of \$185,000 for the trial continuation.**

**CARRIED 9/3**

Time: 5:36 PM

Not Voted: 0

No Votes: 3

Yes Votes: 9

<b>Name</b>	<b>Vote</b>
<b>Mayor Van Styn</b>	<b>YES</b>
<b>Cr. Clune</b>	<b>YES</b>
<b>Cr. Colliver</b>	<b>YES</b>
<b>Cr. Cooper</b>	<b>YES</b>
<b>Cr. Critch</b>	<b>YES</b>
<b>Cr. Hall</b>	<b>YES</b>
<b>Cr. Keemink</b>	<b>YES</b>
<b>Cr. Librizzi</b>	<b>YES</b>
<b>Cr. Parker</b>	<b>NO</b>
<b>Cr. Reymond</b>	<b>NO</b>
<b>Cr. Tanti</b>	<b>NO</b>
<b>Cr. Thomas</b>	<b>YES</b>